# Evaluation of Demonstration Projects to End Childhood Hunger (EDECH): The Chickasaw Nation Packed Promise Project 

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Ronette Briefel
Gregory Chojnacki
Vivian Gabor*
Philip Gleason
Rebecca Kleinman
Nicholas Redel
Michael Cavanaugh
Charlotte Cabili
Breanna Wakar
Sarah Forrestal
*Gabor \& Associates Consulting, LLC

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Food and Nutrition Service
3101 Park Center Drive
Alexandria, VA 22302
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## Submitted by:

Mathematica Policy Research 1100 1st Street, NE, 12th Floor
Washington, DC 20002-4221
Telephone: (202) 484-9220
Facsimile: (202) 863-1763
Project Director: Ronette Briefel
Reference Number: 50034.11M

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## GLOSSARY OF ACRONYMS AND ABBREVIATIONS

| AAPOR | American Association for Public Opinion Research |
| :--- | :--- |
| BL | Baseline |
| BLS | Bureau of Labor Statistics |
| CATI | Computer-assisted telephone interview |
| CEP | Community Eligibility Provision |
| CI | Confidence interval |
| CNNS | Chickasaw Nation Nutrition Services |
| CONSORT | Consolidated Standards of Reporting Trials |
| EBT | Electronic benefits transfer |
| EDECH | Evaluation of Demonstration Projects to End Childhood Hunger |
| ERS | Economic Research Service |
| FDPIR | Food Distribution Program on Indian Reservations |
| FI-A | Food insecurity among adults |
| FI-C | Food insecurity among children |
| FI-HH | Food insecurity among household |
| FNS | Food and Nutrition Service |
| FRP | Free or reduced-price |
| FS-C | Food security among children |
| FU | Follow-up |
| FPL | Federal poverty level |
| FY | Fiscal year |
| GED | General Education Development |
| HH | Household |
| IRB | Institutional Review Board |
| IT | Information technology |
| ITO | Indian Tribal Organization |
| MIS | Management information system |
| NA | Not applicable |
| NHANES | National Health and Nutrition Examination Survey |
| NSLP | National School Lunch Program |
|  |  |


| ODC | Other direct costs |
| :--- | :--- |
| OMB | Office of Management and Budget |
| OOP | Out-of-pocket spending |
| RCT | Randomized controlled trial |
| SBP | School Breakfast Program |
| SE | Standard error |
| SFSP | Summer Food Service Program |
| SNAP | Supplemental Nutrition Assistance Program |
| SSI | Supplemental Security Income |
| TANF | Temporary Assistance for Needy Families |
| UPS | United Parcel Service |
| USDA | United States Department of Agriculture |
| VLFS | Very low food security |
| VLFS-C | Very low food security among children |
| WIC | Special Supplemental Nutrition Program for Women, Infants, and Children |

## EXECUTIVE SUMMARY

This evaluation report describes the vision, implementation, and impacts on child food insecurity and other outcomes of the Chickasaw Nation Packed Promise project. The evaluation was carried out under the Childhood Hunger Demonstration grants funded by the U.S. Department of Agriculture's (USDA) Food and Nutrition Service (FNS) in 2015-2018.

## The problem: Food insecurity among children

Food security is defined as access by all people at all times to enough food for an active, healthy life (Economic Research Service [ERS] 2017a). When a household does not have enough money or other resources to buy food, food intakes are reduced and eating patterns are disrupted, leading to food insecurity and its social, developmental, and nutrition consequences, especially for children (National Research Council and Institute of Medicine 2013; Nord and Parker 2010). National estimates indicate that more than one in five families ( $22 \%$ ) with incomes eligible for free school meals or the Supplemental Nutrition Assistance Program (SNAP) in 2016 experienced food insecurity among children (FI-C), ${ }^{1}$ and $41 \%$ experienced food insecurity among the household as a whole (FI-HH) (Coleman-Jensen et al. 2017). Rates of food insecurity among American Indians and people living in Tribal communities are higher than comparable national populations (Gordon and Oddo 2012; Gundersen 2008; Pardilla et al. 2013).

A potential solution: Monthly home-delivery of food boxes containing shelfstable foods and $\mathbf{\$ 1 5}$ for purchasing fresh or frozen fruits and vegetables, for eligible children in low-income households.

The 2010 Child Nutrition reauthorization called for the development of innovative strategies to "reduce the risk of childhood hunger or provide a significant improvement to the food security status of households with children" and an independent evaluation of the effectiveness of these strategies using rigorous experimental designs and methodologies to produce scientifically valid evidence of project impacts on food security (U.S. Congress, P.L. 111-296, 2010). USDA awarded a $\$ 9.7$ million grant to the Chickasaw Nation Nutrition Services (CNNS), which implemented the 25-month Packed Promise project from February 2016 through February 2018. The target population was households with school-age children (both Native American and nonNative American) who were eligible for free school meals or attended a school that participated in the Community Eligibility Provision (CEP), in which all school children receive free school meals. The project was implemented in 40 school districts ( 115 schools) in 12 counties within the Chickasaw Nation territory in Oklahoma.

The primary goals of Packed Promise were to reduce childhood food insecurity and hunger, increase families' consumption of nutritious foods, increase the diversity of foods in the home, and ultimately improve diet quality and well-being among children. To fulfill these goals, households could order one food box per eligible child to be shipped to their home each month.

[^0]Each food box contained shelf-stable foods, including 6 protein-rich items, 2 dairy items, 4 grain foods, 4 cans of fruit, and 12 cans of vegetables. It also contained a $\$ 15$ Fresh Check for purchasing fresh or frozen fruits and vegetables. The checks were functionally similar to Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) cash value vouchers and redeemable through the end of the project at a WIC-authorized store or participating farm stands or farmers' markets in the study counties. Households ordered their food boxes online every month through a website developed for the project or by telephone with project staff.

## The evaluation

Study design. The evaluation conducted by Mathematica Policy Research used a rigorous randomized controlled trial (RCT) design to estimate Packed Promise's impact on the primary study outcome-food insecurity among children-and other outcomes, including food security among adults and the household as a whole, children's diet quality, food spending, and participation in nutrition assistance programs. Households with children in the 40 demonstration school districts that met the other project eligibility criteria-children age 4 or older who were eligible for free meals or attended a CEP school-were invited to enroll in the project by giving consent. A total of 4,875 households actively consented to the project. After the enrollment period, 20 school districts were randomly selected for the treatment group and 20 for the control group, which did not receive any additional benefits. Enrolled households with children in the treatment districts (Packed Promise households) could receive the benefits for each month the children continued to attend treatment school districts during the 25 -month intervention.

- Study outcomes. The key study outcome was FI-C, as measured by the 30-day USDA food security survey module (ERS 2017b). Key secondary outcomes were (1) other measures of household food insecurity, (2) household participation in other nutrition assistance programs, (3) household food expenditures, (4) food shopping, and (5) children's diet quality. Information on outcomes was collected through two follow-up surveys-the first administered after the first year of the project and the second near the end of the project.
- Survey methods. Among the 4,875 enrolled households, 4,750 were randomly selected for the evaluation sample, with 2,143 households from the school districts assigned to the treatment group (treatment households) and 2,607 from the districts in the control group (control households). ${ }^{2}$ Treatment and control households were administered the baseline telephone survey ( $\mathrm{n}=2,836$ ), a follow-up survey at the end of the first year of implementation to measure household outcomes ( $\mathrm{n}=2,852$ ), and a second follow-up survey approximately six months later ( $\mathrm{n}=2,794$ ). Survey data were weighted to be representative of the 4,875 households that were eligible for and consented to participate in the project.
- Quantitative and qualitative analytic methods. To estimate impacts, outcomes among households assigned to the treatment and control groups were compared, controlling for their baseline characteristics through use of a regression model. For both the implementation and cost studies, descriptive tabulations were used to address the key research questions on

[^1]implementation planning and operations, and the resources needed to implement Packed Promise. A summary of findings based on focus groups with participants highlighted their views on the online ordering system, home delivery, food box contents and use, and project outreach.

- Study population. At baseline, $53 \%$ of households with children in the evaluation sample experienced food insecurity $(\mathrm{n}=2,855)$ in the last 30 days, higher than the national proportion of families with food insecurity whose children were eligible for free lunch in the last 12 months ( $41 \%$; Coleman-Jensen et al. 2017). The percentage of households in the evaluation sample that experienced FI-C and very low food security among children (VLFSC) were $37 \%$ and $2.7 \%$, respectively-both higher than the national proportion of families eligible for free lunch and experiencing FI-C and VLFS-C ( $22 \%$ and $2.6 \%$, respectively). Eighty percent of households reported income at or below $130 \%$ of the Federal poverty level (FPL), the threshold used to certify students to receive free school meals. ${ }^{3}$ The average household size among the evaluation sample at baseline was 4.4 members, with an average of 2.5 children under 18 years or 18 or older but still in high school, and 2.2 eligible children, i.e., 4 years and older. Approximately $57 \%$ of respondents were non-Hispanic white and $27 \%$ non-Hispanic other race or multiracial; $13 \%$ identified as Native American. ${ }^{4}$ The employment rate, defined as any adult in the household employed during the last 30 days, was $76 \%$. Median household income in the last 30 days was approximately $\$ 1,700$. The majority of households said a child had received a free school breakfast or lunch in the last 30 days ( $85 \%$ and $95 \%$, respectively). Almost half of respondents ( $45 \%$ ) said the household had received SNAP, and 7\% reported Food Distribution Program on Indian Reservations (FDPIR) benefits in the last 30 days.


## The findings: Impacts of the Packed Promise project on children and households

Impacts on food security among children. The key objective of the Packed Promise project was to reduce the rate of FI-C through the provision of food boxes with shelf-stable foods and Fresh Checks delivered to children's homes. Packed Promise did not reduce FI-C in treatment group households, its key objective (Exhibit ES.1). Although the rate of FI-C was a bit lower among treatment households ( $29 \%$ compared to $30 \%$ in control households at the first follow-up survey, and $28 \%$ compared to $29 \%$ in the second follow-up survey) the differences were not statistically significant. This was the case at both the first follow-up survey conducted after a year of implementation and the second follow-up survey conducted after 18 months. Rates of VLFS-C were low for both groups; treatment households had a VLFS-C rate of $2.3 \%$, compared with $2.9 \%$ among control households at the first follow-up, with no significant

[^2]difference between the groups. Nor was there strong evidence that impacts differed for any of the population subgroups examined.

Examining the FI-C measure suggests the project had beneficial effects on some of the individual child items in the 18 -item food security scale. For example, the project reduced the percentage of parents reporting that 'children were not eating enough' and that 'children were hungry' by two percentage points each at both follow-up periods. Yet, the results on the individual items did not amount to significant impacts on the rate of FI-C overall.

## Exhibit ES.1. Impact of the Packed Promise project on food insecurity among children



Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first and second follow-up surveys. Estimates are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Estimates are regression adjusted to account for households' baseline characteristics.
FI-C = food insecurity among children.
Impacts on food security among adults and households. The evidence from the evaluation did not find that the project led to a decline in FI-C. The project did somewhat improve food security for adults (FI-A) and the household as a whole (FI-HH). At the first follow-up survey, the rate of FI-A was $35 \%$ in the treatment group compared with $38 \%$ in the control group. Treatment households also experienced a significantly lower level of FI-HH, at $41 \%$ versus $43 \%$ among control households. However, these differences did not persist at the second follow-up survey approximately six months later, when there were no significant
differences between the two groups in these outcomes, with one exception relevant to parentsthere was a three percentage point reduction among parents in treatment households reporting they were worried the food would run out before they got money to buy more compared to parents in control households at the second follow-up (Appendix Exhibit D.11). Some studies show that the pathway through which household food insecurity has negative impacts on children is through parental stress and parenting practices (Chilton et al. 2013; Coleman-Jensen et al. 2013; National Research Council and Institute of Medicine 2013). Reduced worry or parental stress could benefit children in other ways not measured by the evaluation.

It is worth noting that food insecurity rates were declining among demonstration households across the three time points covered in the evaluation, as well as among low-income households with children nationally (Coleman-Jensen et al. 2017, 2018). The FI-C rate among households in the treatment group declined substantially during the period covered by the Packed Promise project, from $38 \%$ before it started to $31 \%$ at the time of the first follow-up survey and $30 \%$ at the second follow-up survey (unadjusted descriptive rates). However, the decrease in FI-C experienced by treatment households was matched by a similar decrease among control households. This decline may be associated with improving economic conditions in the demonstration area. During the Packed Promise project, the average unemployment rate in the 12 project counties fell from $5.2 \%$ in January 2016 (just before the project started) to $4.5 \%$ in March 2017 (during the first follow-up survey) and $3.9 \%$ in September 2017 (during the second followup survey) (BLS 2018). Median household income also increased during this period-for example, from $\$ 1,700$ to $\$ 2,000$ per month in the control group, and from $\$ 1,720$ to $\$ 1,900$ in the treatment group.

Impacts on food spending and food shopping. Packed Promise led to a modest decline of $\$ 22$ in households' monthly out-of-pocket food expenditures. The decline in out-of-pocket food spending was small relative to the value of additional food coming into treatment households from the project. For example, the average household with 2.2 eligible children could have received a food box with an estimated value of $\$ 117$ (2.2 times the $\$ 53$ value of the foods and Fresh Checks in each food box per eligible child $=\$ 117$ ), and $61 \%$ of households did receive this value in a typical month. Patterns of shopping behaviors regarding shopping frequency and distance traveled for grocery shopping were similar among treatment and control households at both follow-up surveys. The average one-way distance traveled was about 10 miles in the treatment group and 11 miles in the control group. Approximately $6 \%$ of the treatment group and $7 \%$ of the control group reported traveling 30 or more miles to do grocery shopping at the time of the first follow-up survey.

Impacts on nutrition program participation. The project led to increases in households' reported participation in some nutrition assistance programs, including SNAP, FDPIR, and WIC. Treatment households were significantly more likely than control households to participate in SNAP or FDPIR-50\% at the time of the first follow-up survey compared with $43 \%$ in the control group, with similar results from the second follow-up survey. Treatment households also participated in the Summer EBT for Children program at a substantially higher rate than control respondents ( $68 \%$ and $57 \%$, respectively, at the first follow-up survey, and $67 \%$ and $56 \%$,
respectively, at the second follow-up). ${ }^{5}$ This is likely attributable to the fact that during the months that the Summer EBT for Children program was operational, CNNS sent a text message to all Packed Promise participants with the Summer EBT for Children application link. In addition, as appropriate, the project staff made referrals to other CNNS nutrition programs including FDPIR, WIC, and Summer EBT for Children.

Impacts on children's diet. Finally, the project led to small and statistically significant increases in children's consumption of fruits and vegetables as well as whole grains, but without any significant change in their intake of added sugars or sugar-sweetened beverages (Exhibit ES.2). Although the impact on daily diet was small in terms of absolute amounts consumed, the project led to a $4 \%$ increase in children's daily fruit and vegetables consumption, and a $9 \%$ increase in daily whole grains consumption. These food groups were targeted in the food boxes and could be purchased with Fresh Checks. The project's impact on daily consumption translates to three cup equivalents ${ }^{6}$ of fruit and vegetables, one slice of whole wheat bread, and 0.4 cups of cooked whole grain pasta over the course of the month for an average child in the typical treatment household.

## Exhibit ES.2. Impact on children's food consumption at the first follow-up survey



Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey ( $\mathrm{n}=2,750$ ). Estimates are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.

[^3]Notes: Daily amounts are measured in cup eq. for fruits and vegetables and oz eq. for whole grains, as defined by the 2010 Dietary Guidelines for Americans. Treatment group estimates are based on all households eligible to receive food boxes, regardless of receipt.
*Treatment-control difference is statistically significant at a 0.05 level of significance, one-tailed test.
Cup eq. = cup equivalent; oz eq. = ounce equivalent.

## Implementation and costs of the Chickasaw Nation Packed Promise project

The evaluation included an analysis of project implementation and costs, based on a review of grant documents and materials, ongoing communications with grantee staff, site visits and interviews during the planning and implementation periods, and focus groups with participants.

The project successfully delivered the Packed Promise food boxes to participating households throughout the implementation period. Doing so required developing a new and complex infrastructure for food ordering and home delivery. Its success depended on having staff and partners with the right expertise and equipment, and maintaining a strong collaboration. To this end, the project was a partnership between CNNS and Feed the Children, which provided warehousing capacity for the food and experience in food purchasing, packaging, and shipping. Feed the Children provided expertise in logistics, leveraged bulk purchasing of food and shipping services, and had prior relationships with shipping companies. It also used its large network of volunteers to help package the food boxes, provided warehouse capacity for food storage, and brought knowledge of quality control systems for assembling the food boxes. CNNS had prior experience in managing large projects and drew on its familiarity with the target community, relationships with schools, and experience in customer service.

Packed Promise was successful in maintaining a moderately high level of household participation, suggesting that households appreciated the benefits and ordering was accessible. Analysis of administrative data revealed that nearly all households (97\%) ordered a box at least once. The estimated participation rate averaged $61 \%$ and ranged from $52 \%$ to $69 \%$ across months, excluding the first and last months which reflected start-up and close-out activities. Many households ordered food boxes intermittently rather than ordering for consecutive months and then dropping out. Additionally, most of the delivered Fresh Checks (76\%) were redeemed, although the reasons that they were not redeemed in $24 \%$ of cases are unclear. Reasons provided include that participants were unsure where to redeem them, the vendor staff did not know how to handle the checks, and they were saving them up to use in the summer to support local farm stands. Most of the redeemed checks were used in full. Focus group discussants remarked that, for the parents, the benefit helped them make ends meet, thus lifting an emotional burden, and for the children in some households, the box was a special gift to which they could look forward and enjoy. In addition, an extensive ongoing outreach effort, coupled with sufficient staff available to take phone orders or resolve ordering issues, mitigated challenges households may have encountered in ordering or receiving a box.

Although the project was successful in many ways, staff and households described a few possible reasons for why some households did not place a monthly order. In particular, because households had to actively order their food box every month, outreach was critical, yet staff often had outdated household contact information. Second, although participants tended to consume all or most of the shelf-stable foods, it is possible that some of the households that dropped out completely or ordered intermittently did so because they did not want or need all of
the foods. Another consideration was that the check format (a paper voucher) left small amounts on every redeemed check unspent, which added up; this format may also have contributed to nonredemption. Finally, some nonparticipation was due to the fact that households may have moved and no longer had a child in a treatment district, or the only eligible child in the household graduated high school. These households were no longer eligible for the project and could not order benefits.

The cost analysis found that approximately $\$ 5.9$ million (61\%) of the total grant award was spent during the evaluation period (February 2015 - March 2018). Including the estimated value of donated or in-kind resources, the total project cost was $\$ 6.4$ million. Labor costs accounted for $\$ 1.7$ million ( $27 \%$ ) of these costs, whereas the shelf-stable foods and redeemed Fresh Checks in the food boxes, as well as other direct costs (ODCs) (such as printing and computer equipment) accounted for the remaining $\$ 4.7$ million ( $73 \%$ ). In fact, Packed Promise's largest single cost category was the food boxes, which indicates that the majority of the spending went toward benefits to the households. CNNS and Feed the Children's costs to build, stock, and distribute food boxes totaled $\$ 4.3$ million. This represents $67 \%$ of the project's total cost; Fresh Checks accounted for $16 \%$ of the total cost of the food boxes. On average, the cost per participating household for the Packed Promise project was $\$ 3,103$.

## Conclusion

This study examined the impact of the Chickasaw Nation Packed Promise project, which aimed to reduce FI-C by providing food boxes containing nutrient-dense foods and produce checks to children eligible for free school meals for a $25-m o n t h$ intervention period. These food boxes were delivered to treatment households' homes based on their monthly orders. Nearly all (97\%) treatment households ordered at least one food box, and participation averaged at least $61 \%$ over the 25 -month period. Participant satisfaction was high, based on focus group discussions and survey reports finding that $80 \%$ of households reported eating most or all of the foods in the box; only $1 \%$ said the food was wasted.

Using a rigorous random assignment design, the study found that the Packed Promise project reduced FI-A and FI-HH after one year of the project but had no impact on the main outcome of FI-C. A lack of impacts on FI-C may have been due to households in the treatment and control groups being able to address some of their food needs through participation in other nutrition programs, including SNAP or FDPIR, school meals, Summer EBT for Children, backpack programs, and emergency or community programs. These households may also have benefitted from more favorable economic conditions than those that existed before the project began. Another possible explanation is that benefits went to the entire household even though the motivation for the project was to reduce FI-C. The delivery of the food boxes to the household may have benefitted all of its members generally but also may have limited the extent to which the children in treatment households benefitted specifically.

The project reduced household monthly out-of-pocket food spending by $\$ 22$ per month, suggesting that the total value of the food coming into treatment households increased (although by not as much as the total value of the average Packed Promise benefit). Considering participation and redemption rates, out-of-pocket spending, and estimated food value, the average monthly benefit of participation may have been closer to $\$ 10$ per child in an average
household than the maximum value of $\$ 53$. The project increased children's daily consumption of fruits and vegetables and whole grains by approximately $4 \%$ and $9 \%$, respectively, and had no impact on daily added sugars or sugar-sweetened beverage consumption.

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## I. THE PACKED PROMISE PROJECT

This evaluation report describes the vision, implementation, and impacts on child food insecurity and other outcomes of the Packed Promise project. This project was carried out by the Chickasaw Nation Nutrition Services (CNNS) under the Childhood Hunger Demonstration grants funded by the U.S. Department of Agriculture's (USDA) Food and Nutrition Service (FNS) from 2015 through 2018. The project implementation period spanned February 2016 through February 2018; the evaluation period continued through March 2018.

The demonstration was designed to reduce food insecurity among low-income children eligible for free school meals as well as their families. Packed Promise operated in 12 rural counties within the Chickasaw Nation jurisdictional boundaries in Oklahoma. ${ }^{7}$ Households in the intervention group were eligible to receive one monthly food box shipped directly to their home for each eligible child in the household. To receive their food boxes, participants were required to place an order through the Packed Promise website or by calling the project's toll-free telephone support line. Each FNS-approved food box contained a variety of shelf-stable foods, a $\$ 15$ Fresh Check ${ }^{8}$ to purchase fresh or frozen fruits and vegetables, a recipe card, and informational handouts including a nutrition education brochure. The project was a partnership between CNNS and Feed the Children, which provided warehousing capacity for the food and expertise in food purchasing, packaging, and shipping.

## A. Introduction

Access to adequate healthy food is important to children's nutrition, psychosocial development, and health (National Research Council and Institute of Medicine 2013; ColemanJensen et al. 2013). Households in poverty often struggle to meet the food needs of household members. A household's ability to do so-its food security ${ }^{9}$-is a function of available resources (money to buy food and other resources), competing demands for those resources, and the cost of acquiring food (Nord and Coleman-Jensen 2014).

[^4]USDA's FNS administers 15 nutrition assistance programs designed to ensure that low-income Americans do not go hungry and have access to healthful and nutritionally adequate diets (FNS 2016a). Despite high participation in the National School Lunch Program (NSLP), the Supplemental Nutrition Assistance Program (SNAP), the Food Distribution Program on Indian Reservations (FDPIR), and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), rates of food insecurity among low-income

> In 2016, just under one in five families with incomes eligible for free school meals (22\%) experienced food insecurity among children (FI-C), and $41 \%$ experienced food insecurity in the household as a whole (FIHH) (Coleman-Jensen et al. 2017). households with children remain a concern. ${ }^{10}$ To address this concern, the 2010 Child Nutrition reauthorization called for the development and independent outcome evaluation of innovative strategies to "reduce the risk of childhood hunger or provide a significant improvement to the food security status of households with children," including alternative models of service delivery or benefit levels (FNS 2018b; U.S. Congress, P.L. 111-296 2010). USDA awarded grants to States and Indian Tribal Organizations (ITOs) in February 2015 to develop and implement their strategies for reducing childhood food insecurity. Two ITOs-Chickasaw Nation and Navajo Nation-were selected to operate demonstration projects. Both ITOs conducted projects in rural areas among populations in which the prevalence of diabetes is at least $15 \% .^{11}$ The legislation also provided $\$ 40$ million to USDA to conduct and rigorously evaluate the Childhood Hunger Demonstration projects. The resulting Evaluation of Demonstration Projects to End Childhood Hunger (EDECH) study independently evaluated the implementation and impacts of four of the grantees' demonstration projects (USDA 2018b). This report, one of four, presents results from the EDECH study for the Chickasaw Nation.

The EDECH study investigated the project's impacts on food insecurity among children-the primary outcome. The EDECH evaluation of Packed Promise had six research objectives, which are addressed in this report (Exhibit I.1).

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## Exhibit I.1. Overview of the EDECH evaluation design

| Study component | Sample | Data sources | Main outcomes |
| :---: | :---: | :---: | :---: |
| Objective 1. To describe the demonstration project in detail |  |  |  |
| Implementation | CNNS agency director, project director, manager, and staff; State and local partner organizations | Document review; inperson interviews | Project vision; project components; planning process; stakeholders' roles |
| Objective 2. To describe the processes involved in the implementation and operation of the demonstration project |  |  |  |
| Implementation | CNNS agency director, project director, manager and staff; State and local partner organizations; parents/guardians | In-person interviews; parent/guardian focus groups | Project components; implementation processes; project challenges and successes; staff and participants' perceptions and experiences |
| Objective 3. To determine the impact of the demonstration project on the prevalence of food insecurity |  |  |  |
| Impact | Parents/guardians | Baseline and two follow-up household surveys; administrative data; findings from Objectives 1 and 2 | FI-C; adult and household-level food insecurity among households with children |
| Objective 4. To determine how impacts on food insecurity among children and households with children vary by relevant factors |  |  |  |
| Impact | Parents/guardians | Baseline and two follow-up household surveys; findings from Objectives 1 and 2 | FI-C by household income, household composition, race/ethnicity, and other factors |
| Objective 5. To determine the impact of the demonstration project on additional household outcomes potentially related to food security |  |  |  |
| Impact | Parents/guardians | Baseline and follow-up household surveys; findings from Objectives 1 and 2 | Participation in nutrition assistance programs; food shopping, preparation, and spending patterns; dietary quality (measured by food frequency) |
| Objective 6. To determine the demonstration's cost and effectiveness |  |  |  |
| Cost | Project staff and CNNS agency and partner organizations | Document review; inperson interviews; cost workbooks; administrative data | Total project costs; component costs of ongoing operations and how they relate to the impact observed |

CNNS = Chickasaw Nation Nutrition Services; FI-C = food insecurity among children.

## B. The Packed Promise project

The primary goals of the Packed Promise demonstration project were to reduce childhood food insecurity and hunger, increase children's consumption of nutritious foods, increase the diversity of foods in the home, and ultimately improve diet quality and well-being among children. The demonstration was also an opportunity to explore whether partnering with an experienced, national nonprofit organization could be a successful-and possibly replicable-public-private partnership model for the inexpensive, home delivery of food.

To fulfill these goals, each month CNNS and its partner, Feed the Children, filled the food box orders of eligible households and shipped one food box per eligible child to their homes. Each food box contained shelf-stable foods selected by CNNS's registered dieticians, including 6 protein-rich items, 2 dairy items, 4 grain foods, 4 cans of fruit, and 12 cans of vegetables.

Food items were pre-assembled into five types of boxes by Feed the Children staff and volunteers (see Appendix Exhibit C.1). Each month, participants could choose from five food box options that contained different combinations of these foods. Households ordered their food boxes online through a website developed for the project or by telephone with project staff. The boxes also contained a nutrition education handout, a recipe, and a $\$ 15$ Fresh Check for frozen or fresh fruits and vegetables that participants could redeem at any of 38 WICauthorized stores or farmers' markets in the study counties. The checks, which functioned in a way similar to WIC cash value benefit vouchers, were valid through February 2018.

CNNS was awarded $\$ 9,718,832$ to provide an estimated 2,100 eligible households and 4,500 children ages 4 and older with monthly home delivery of one food box per eligible child. The target population was households with children ages 4 and older (both Native American and nonNative American) who were eligible for free school meals or attending a Community Eligibility Provision (CEP) school where meals are free. ${ }^{12}$ The project was implemented in 40 school districts ( 115 schools) in 12 counties within the Chickasaw Nation, each of which was randomly assigned to the treatment or control condition, as described below. Only school districts with a Native American student population of $14 \%$ or greater were selected for inclusion in the demonstration project. ${ }^{13}$ Approximately 9,408 households with 19,756 children were potentially eligible for the project; 4,875 households with 10,185 children provided active consent (described in the next section) to participate in the evaluation as either treatment or control households.

## C. Evaluation design

The centerpiece of the evaluation design for estimating the Packed Promise project's impacts was a randomized controlled trial (RCT), with school districts as the unit of random assignment. This design used random assignment to ensure that households in the project's treatment and control groups were statistically equivalent at the beginning of project implementation, with the only difference being that households in the treatment group were eligible to receive the benefits provided by Packed Promise and those in the control group were not. RCTs are considered the gold standard of evaluation design, producing rigorous evidence on project impacts. Based on this design, the study evaluated the project's impacts on household outcomes. It also examined the project's implementation and costs. Appendix A presents details of the study approach to sampling, random assignment, and analysis methods; Appendix B includes a description of the data collection methods and data sources used to evaluate the project.

[^6]Conducting the study's RCT involved three steps: (1) identifying eligible school districts; (2) randomly assigning school districts (and their schools) to the treatment or control group; and (3) measuring outcomes among households with children attending schools in treatment and control districts, and comparing them during and near the end of the implementation period. The school districts eligible for the project were in 12 counties located within the jurisdiction of the Chickasaw Nation in Oklahoma.

These school districts were randomly assigned to a treatment group that received project benefits or a control group that did not. In other words, the project conducted random assignment at the school district rather than the household level (the latter would have involved individual households randomly assigned to either the treatment or control group). Each school district had an equal chance of being assigned to either of the two groups. As expected due to random assignment, the households in the treatment and control groups had similar characteristics at the outset of the project (see Appendix A.1). ${ }^{14}$ Because the groups were equivalent before the project's implementation, any differences in outcomes at the end of the implementation period could be attributed to the impact of the Packed Promise demonstration project.

In conducting random assignment, districts were first matched into pairs with similar characteristics. Twenty-six out of 40 districts were matched to another district within the same county, and 14 were matched to a district in a different county. Within each pair, one school district was randomly assigned to the treatment group and the other to the control group. Households eligible for the evaluation sample included those in school districts participating in the evaluation that had a child age 4 or older enrolled in a public school and income eligible for free school meals (or attending a CEP school where meals are served at no cost in schools and school districts in low-income areas), and that consented to participate in the demonstration. The initial evaluation sample included 4,750 households, with 2,143 from 20 school districts assigned to the treatment group and 2,607 from 20 districts assigned to the control group. (Note: some of these households later were determined to be ineligible-see Appendix Exhibit A. 1 for details.)

The impact study measured the impacts of receiving project benefits on household outcomes. The key study outcome was food insecurity among children (FI-C), as measured by the USDA's 30-day survey module (see Appendix B.1). Key secondary outcomes were (1) measures of adult and household food insecurity (FI-A, FI-HH), (2) household participation in nutrition assistance programs, (3) household food expenditures, (4) food shopping, and (5) diet quality. Information on outcomes was collected through two follow-up surveys-the first administered after the first year of the project and the second near the end of the 25-month

[^7]project. To estimate impacts, outcomes among households assigned to the treatment and control groups were compared at two follow-up times, controlling for baseline characteristics of households using a multivariate regression framework. ${ }^{15}$ Although given the random assignment design, a simple comparison of mean outcomes between the treatment and control groups would result in an unbiased estimate of project impacts, controlling for baseline characteristics improved the statistical power of these estimates. ${ }^{16}$ Data on baseline characteristics were obtained from a baseline survey administered a few months before the beginning of the implementation period.

One key aspect of the evaluation design is that an active consent process was used to enroll households in the study. Before randomization, all potentially eligible households received a consent form through their schools; it explained that if their school district was selected to participate in the Packed Promise project, they would be eligible to receive home-delivery food boxes. Households were enrolled in the study if they submitted an active consent form to CNNS and were determined eligible according to the criteria described above. Therefore, the participants in the study were self-selected and may not have reflected the broader population of children eligible for free school meals in the 40 study school districts regarding their household needs, interest in receiving home-delivered meals, or other household characteristics.

Another unique aspect of the evaluation of Packed Promise compared to the other three EDECH project evaluations is that it examined a lengthier intervention that lasted 25 months, allowing the evaluation an opportunity to follow households for a longer period. To determine impacts of this sustained intervention, the design involved two follow-up surveys-one fielded at the end of the first year of implementation and a second fielded approximately six months later.

The implementation study described the design and implementation of the Packed Promise project by documenting project activities, challenges, and successes; it was used to help interpret the project impacts. As part of the implementation study, in-person interviews were conducted with CNNS agency directors/managers and partners before project implementation, after nine months of implementation, and again near the end of the second year of implementation. The goals of these visits were to describe and assess (1) project outreach and recruitment strategies during the start-up and early implementation periods, and (2) service provision during the implementation period. The second-year follow-up interviews focused particularly on changes to project implementation, such as efforts to maximize retention in the intervention and increase participant satisfaction. Focus groups with parents and guardians in treatment districts were also conducted to describe participants' experiences and satisfaction with Packed Promise. These data sources were complemented with administrative and management information system (MIS) data to assess the fidelity of project implementation, service take-up rates, and the nature and intensity of services that project participants received.

[^8]For the cost study, information on Packed Promise project costs was collected and analyzed to determine the resources needed for implementation. CNNS completed standardized cost accounting worksheets. For both the implementation and cost studies, descriptive tabulations were used to address the key questions.

Exhibit I. 2 provides a timeline of project activities for CNNS's planning and 25-month implementation periods, and key evaluation activities. Data collection covered the full period, with the survey periods and site visits coinciding with the beginning, middle, and end of the project.

Exhibit I.2. Timeline for the Packed Promise project


Source: Evaluation of Demonstration Projects to End Childhood Hunger.
Note: The demonstration lasted for 25 months during the 2016-2017 and 2017-2018 school years. The period shown above matches the evaluation period. Random assignment of school districts began in November 2015.
${ }^{\text {a }}$ The baseline survey was conducted from November 2015 through February 2016; the first follow-up survey was conducted from January through June 2017; and the second follow-up survey was conducted from August through November 2017.
${ }^{\mathrm{b}}$ Administrative data were collected on (1) enrollment and participation in Summer EBT for Children benefits for households with children attending demonstration schools, and (2) participation in Summer Food Service Program sites in the demonstration area. These programs were not part of the Packed Promise project benefits.
${ }^{\text {c }}$ MIS data were collected on monthly food boxes ordered (number and type per household) and redemptions for monthly produce checks that were part of the food boxes.
BL = baseline survey; EBT = electronic benefits transfer; FU1 = first follow-up survey; FU2 = second follow-up survey; MIS = management information system.

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## II. PACKED PROMISE PROJECT IMPLEMENTATION AND COSTS

This chapter describes the Packed Promise project's design, implementation, and costs to document the activities and factors that may have influenced its impacts. The chapter includes information on eligibility criteria, benefits, household perceptions of and participation in the project, and costs. Staff perceptions of Packed Promise's successes, challenges, and lessons, as well as households' experiences and satisfaction with the project, are instructive for understanding its impacts on participating households, and for other States, tribes, or funders seeking to learn from the Packed Promise experience.

Data sources are described in more detail in Appendix B. In brief, the main data sources to support the implementation analyses were (1) three site visits that involved interviews with project and partner staff (Cavanaugh and Gabor 2017; Gabor and Melia 2017; Gabor and Redel 2016); (2) four focus groups with project participants (treatment group households); (3) quantitative data on service delivery, take-up of the food boxes, and Fresh Check redemption; and (4) reviews of grantee documents, including the grant application, quarterly progress reports to FNS, and operational materials (such as lists of the shelf-stable food items and sample recipes included in the food boxes). Cost data derive from detailed, standardized cost accounting worksheets that the three main project partners completed quarterly.

## A. The demonstration project

## 1. Overview of the demonstration area

CNNS selected 12 rural counties within the Chickasaw Nation's jurisdictional boundaries as the project area because of their isolation and high rates of food insecurity. The tribe is headquartered in Ada, Oklahoma. Its territory stretches across 7,648 square miles of rural southcentral Oklahoma and encompasses all or parts of 13 Oklahoma counties (The Chickasaw Nation 2017). The demonstration school districts for this project were located in 12 of these counties. According to 2010 U.S. Census Bureau data, about 52,000 individuals self-identified as American Indian or Alaska Native members of The Chickasaw Nation, about 28,000 of whom identified as belonging only to this tribe (U.S. Census Bureau 2012). Among the target counties, Pontotoc County has the highest percentage of Native Americans (17\%) (U.S. Census Bureau 2018d). The Chickasaw Nation is not located on a reservation; rather, the tribal population is dispersed throughout rural south-central Oklahoma, overlapping with non-Native populations. As a result, CNNS provides nutrition services to both Native and non-Native residents within its territory, and views itself as a strategic partner in the development of the local community as a whole.

To address the limited access to nutritious and affordable foods in these rural communities, CNNS conceived of Packed Promise in the summer of 2014 as a monthly, home-delivered benefit. Packed Promise was designed to address food security and dietary quality, and influence children's at-home eating patterns through home delivery of shelf-stable, nutrient-dense foods. Staff conceived home delivery as a solution to the challenges that many rural families face in accessing food. According to CNNS staff and household focus group discussants, a lack of reliable transportation or money for gasoline and limited selection and higher prices at small local grocery stores were two main challenges to food access in the region. Grocery stores could be far away for some households. On average, $18 \%$ of residents in the 12 target counties had low
access to food in 2015, indicating that they lived more than 10 miles from the nearest grocery store; $3 \%$ were residing in an area with low access without a car (ERS 2018). Staff and focus group discussants reported it was not uncommon for individuals in the area to drive more than 30 miles to reach the nearest supermarket (such as Walmart) or FDPIR distribution site. In addition, local grocery stores tended to be small, with limited produce, higher prices, and lower quality compared to supermarkets that were farther away.

Packed Promise was implemented in an area where there is substantial food insecurity and poverty. In 2016, the rate of food insecurity among all children in the 12 targeted counties ranged from $18 \%$ to $26 \%$; in 10 of the counties, more than $20 \%$ of children were food insecure (Feeding America 2018). In the five years leading up to Packed Promise (2012 to 2016), approximately $22 \%$ of Native American families with children in the 12 targeted counties were living below the poverty level, ranging from $14 \%$ to $36 \%$ across the counties (U.S. Census Bureau 2018a). These rates were similar to State and national trends at the time. Approximately 23\% of Oklahoma children were food insecure in 2016 (Feeding America 2018), and $23 \%$ and $21 \%$ of all families in the State and nation, respectively, were living below poverty (U.S. Census Bureau 2018b).

Federally provided food resources for families in the region help to combat hunger, including SNAP, FDPIR, WIC, school meals, the Summer Food Service Program (SFSP), and the Summer EBT for Children. The latter two programs-SFSP and Summer EBT for Children-are available for children eligible for free or reduced-price (FRP) school meals and intended to substitute for school meal programs during the summer months. SFSP provides free meals and snacks to children and teens in low-income areas during the summer months (FNS 2018f). Summer EBT for Children, which CNNS operated, was a continuing pilot program operating in the demonstration area in the summers of 2016 and 2017. It provided households with a monthly EBT benefit of $\$ 30$ or $\$ 60$ per eligible child in 2016 and $\$ 30$ per eligible child in all households in 2017 that could be used to purchase foods similar to the monthly WIC food package ${ }^{17}$ (FNS 2018i).

In summer 2016, before the Packed Promise implementation began, less than a quarter of the Packed Promise school districts (9 of 40) had operating SFSP sites; this number was fairly evenly divided between treatment and control school districts (see Appendix Exhibit E.1). All but four demonstration school districts (two treatment and two control) were participating in Summer EBT for Children in summer 2015 (Appendix Exhibit E.2). (Appendix E provides additional information about these summer programs as context for interpreting results from the second follow-up survey, which asked about participation in these programs in July and August, for August and September interviews, respectively.) Yet despite the availability of year-round nutrition assistance, food insecurity has persisted. CNNS designed Packed Promise to fill a perceived gap in the services available to the Chickasaw people.

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## 2. Nature of benefits

## a. Eligibility criteria

The following criteria governed eligibility for Packed Promise: (1) households had to have a child age 4 or older attending one of the 20 school districts randomly selected for the treatment; (2) the child had to be eligible for free school meals or attend a CEP school in which all children received such meals; and (3) enrollment in the project required active consent (consent is discussed in Section B.1). Enrollment in the project occurred in August 2015 at the start of the school year. Enrolled households could receive one monthly food box for each eligible child. For example, if a household that qualified for free school meals had four children attending a treatment school district, it could receive up to four monthly food boxes. All 40 school districts ( 20 of which comprised the treatment group and 20 the control group) were located within the Chickasaw Nation in the 12 counties identified for the demonstration and had Native American student populations of $14 \%$ or greater. During the evaluation period, eligible households were offered the Packed Promise benefits each month for 25 months-from February 2016 through February 2018.

Enrolled households lost project eligibility if they no longer had a child attending school in one of the treatment school districts. If the child who qualified for benefits graduated from high school, the household stopped receiving benefits on behalf of that child in August following graduation. Although no new households could gain eligibility for Packed Promise past the initial enrollment window, one already enrolled could gain an eligible child if a younger child reached school age. If a child attending a treatment school lost eligibility for free school meals and the school was not a CEP school, the child retained eligibility for Packed Promise and its originally assigned status.

CNNS worked with school district partners at the beginning of each school year and on an ongoing basis to identify any children who might have lost or gained eligibility. For example, it updated its list of eligible households throughout the normal course of conducting outreach. If repeated reminders to households to place a food box order were not successful, CNNS periodically connected with school administrators to confirm whether those households were still in a treatment school or had moved away, thus disqualifying the child from receiving a food box.

There were 4,875 eligible and consenting households in the full set of 40 school districts. Nearly all $(97 \%$, or $\mathrm{n}=4,750)$ were selected for the evaluation and are the basis of the impact analysis in Chapter III (the sampling and random assignment process are described in detail in Appendix A). Households were randomly assigned to the treatment group ( $\mathrm{n}=2,143$ ) or control group ( $\mathrm{n}=2,607$ ) based on their school district. This report uses "treatment and control" to refer to the evaluation sample, and "Packed Promise households" to refer to the entire set of households that could receive the benefits.

## b. Benefit description

Each Packed Promise food box contained shelf-stable foods, one $\$ 15$ Fresh Check, informational handouts, and recipes. The shelf-stable foods are described first, followed by the Fresh Checks and additional items.

Shelf-stable foods. According to project staff, the food items represented a balance between the goals of providing a variety of nutrient-dense, child-friendly items (such as chocolate pudding), and new, healthful foods to introduce to the children (such as whole wheat pasta, whole wheat crackers, and hummus) while remaining within the project's budget for purchasing, packing, and shipping the foods. (For a full list of the food items in each box and a Fresh Check illustration see Appendix Exhibit C.1.) Because the foods were shelf stable, a household could consume them at a fairly steady pace or save them up over a number of months. A committee of Chickasaw Nation registered dieticians chose the foods, with input from Feed the Children and FNS. As part of this process, CNNS reviewed The Final Rule Nutrition Standards in the NSLP and School Breakfast Program (SBP), alongside the Dietary Guidelines for Americans and MyPlate recommendations (for individuals ages 2 and older).

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& \text { benefits } \\
& \text { Eligible Packed Promise households } \\
& \text { could receive one food box per eligible } \\
& \text { child each month for } 25 \text { months. Each } \\
& \text { food box contained a } \$ 15 \text { Fresh Check } \\
& \text { redeemable for fresh or frozen produce, } \\
& \text { a list of vendors accepting Fresh } \\
& \text { Checks, recipes and nutrition education } \\
& \text { handouts, and approximately } 25 \text { to } 30 \\
& \text { pounds of food that included the } \\
& \text { following: } \\
& \text { - } 6 \text { protein-rich items } \\
& \text { - } 2 \text { low-fat dairy items } \\
& \text { - } 4 \text { grain items } \\
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Based on this review, the committee identified protein,
Chickasaw Nation Packed Promise

benefits $|$\begin{tabular}{l}
Eligible Packed Promise households <br>
could receive one food box per eligible <br>
child each month for 25 months. Each <br>
food box contained a \$15 Fresh Check <br>
redeemable for fresh or frozen produce, <br>
a list of vendors accepting Fresh <br>
Checks, recipes and nutrition education <br>
handouts, and approximately 25 to 30 <br>
pounds of food that included the <br>
following: <br>

- 6 protein-rich items <br>
- 2 low-fat dairy items <br>
- 4 grain items <br>
- 4 cans of fruit <br>
- 12 cans of vegetables <br>
(encompassing at least 9 different <br>
types of vegetables)
\end{tabular} grain, and vegetable food groups as having the biggest potential for nutrient gaps among foodinsecure students. Dairy and fruits already were offered at every school meal, so there was less focus on those food groups. The committee also sought to include primarily low-fat, minimally processed packaged food choices with low to moderate sodium content.

The food items were pre-assembled into five distinct boxes, from which eligible households chose each month. Each box had a distinguishing name consistent with the theme and branding of the Packed Promise project, such as Promise for Hope, Promise for Tomorrow, Promise for Courage, Promise to Dream, or Promise to Believe. The contents of each box remained relatively consistent throughout the duration of the project with two notable exceptions. First, in June 2017, CNNS modified the contents of two prearranged food boxes to better reflect participants' tastes. According to CNNS staff, clients ordered these boxes least frequently at the time, and focus group participants expressed dislike of certain prevalent items. Most notably, households indicated a dislike of hummus and low-fat tuna, and felt there was an overabundance of tomato products in the boxes. As a result, CNNS replaced hummus and tuna with new proteins, including mixed nuts and canned salmon in one box, and pumpkin seeds and canned turkey in the other; it also expanded the variety of vegetables to replace some tomato products. Second, early in the implementation period, CNNS and Feed the Children also made minor adjustments to how the boxes were packed and the packaging of certain food containers to reduce instances of boxes arriving with spilled foods. For example, they switched to packing the milk containers in the center of the boxes instead of the perimeter and purchased more durable containers of hummus. Households could order replacement food boxes if items arrived damaged.
\$15 Fresh Checks. The $\$ 15$ Fresh Checks supplemented the shelf-stable items with fresh or frozen fruits and vegetables. Households could redeem the checks at any WIC-authorized store, farmers' market, or farm stand in the target counties. The checks functioned similar to WIC cash
value benefit vouchers and were valid through February 2018. That is, the Fresh Checks worked like a coupon or voucher, in that households did not receive cash back for any unused amount remaining on the check. For example, if a household used the check to purchase $\$ 12$ worth of produce, it forfeited $\$ 3$; if it purchased $\$ 16$ worth of produce, it was responsible for paying $\$ 1$ out of pocket. Because each Fresh Check could be redeemed through the end of the project (February 2018), households did not need to redeem the check in the month it was received. For example, some focus group discussants described saving the Fresh Checks they received over multiple months, allowing them to buy more fresh or frozen produce during their visits to larger supermarkets farther from home.

The shelf-stable foods and Fresh Checks were the main project benefits. In addition to them, each food box also contained the following:

- Recipe cards. The recipes incorporated ingredients from the food boxes. The project began with 24 recipes, and CNNS added 24 more to the Packed Promise website during the second year of implementation in response to requests for greater variety. Most of the recipes were developed by the CNNS registered dietitian for the SNAP Nutrition Education program, with some additional recipes added to incorporate more of the types of food included in the Packed Promise food boxes. Examples included enchilada bake, pear granola muffins, bell pepper snack cups, and breakfast banana split.
- Informational handouts. Each food box contained one nutrition education brochure, a food box catalog, a sheet describing how to order a food box, and a list of Fresh Check-accepting vendors. These materials were also available on the Packed Promised website. The nutrition education handouts covered a range of topics targeted to families with school-age children, including family mealtimes, tips for healthy meals and snacks for teens, how to deal with a picky eater, and eating healthy on a budget.


## 3. Benefit ordering and delivery process

Households did not automatically receive a food box each month. Rather, they had to proactively order a box each month. CNNS did not create an option for automatic recurring shipments during the evaluation period in order to compel participants to confirm or update their shipping address when placing their orders, thereby preventing any delivery challenges stemming from participants failing to update their addresses. Eligible households ordered food boxes on the Packed Promise website or by calling a CNNS project specialist, who in turn ordered online for them. The website was intended as the primary order method. Feed the Children's in-house web developer created the website using Magento, an enterprise online store platform popular with many e-commerce sites. The website rollout revealed initial user challenges, so Feed the Children made some structural improvements in the second project month (including redoing the front end of the website) to make it easier to navigate and simpler for households to understand how many boxes they could order each month. As discussed in Section C.3, Feed the Children recommended considering a more customizable e-commerce platform and conducting more usability testing before going live.

For the first 13 months of the project, households could place orders during a 30-day period beginning an assigned week of the month. Some households, therefore, had a monthly benefit period spanning two calendar months (such as mid-September to mid-October). This staggered ordering schedule was intended to help evenly distribute the volume of ordering and shipping
across the month. However, this process created confusion among participants and CNNS staff because managing staggered ordering schedules and determining when each household was late in ordering became too complicated. (As stated in Section B.2, staff called late households and encouraged them to place an order by phone.) To address this confusion, beginning in March 2017 (one month into the second year of implementation), staff modified their systems so all households could order food boxes beginning on the first day of the month. As a result, CNNS staff reported that the proportion of orders in the first half of the month improved, allowing them to focus on placing reminder calls to households in the second half of the month.

Feed the Children managed a complex supply chain to obtain, store, package, and ship the food boxes. It purchased the food items in bulk quantities (and at low cost) from food manufacturers, brokers, and retail outlets, and stored the foods in its warehouse in Oklahoma City. Once a month, staff and volunteers worked in an assembly line to package a large number of boxes. The preassembled boxes were stored in the warehouse and shipped out in batches every few days as orders came in-usually within one week after an order was placed. The boxes were delivered directly to the household's address via United Parcel Service (UPS) shipping or, for some very rural households, to another location the household indicated was convenient and secure (such as "In front of the cattle [gate] at end of the road."). In spring 2016, Feed the Children started using the U.S. Postal Service to deliver the boxes to those households where UPS would not ship (for example, for some very rural homes, boxes were delivered via the U.S. Postal Service to a rural Post Office Box). The delivery procedures worked smoothly, with few instances of errors. Staff reported that participants rarely called to report they did not receive their box; in such cases, CNNS sent a replacement box.

## 4. Grantee organizational structures, partners, and staffing

## a. Lead and partner agencies

CNNS led the administration of Packed Promise and provided project management and oversight of its partners. CNNS is a tribal agency that offers nutrition information and support through programs such as FDPIR and WIC. The staff roles at CNNS included a half-time project director, a full-time project manager, a full-time technology/special project coordinator, and three full-time project specialists. The project manager led the day-to-day project activities, coordinated with partners, and monitored and supported implementation. The three full-time specialists conducted all outreach efforts, took phone orders, and worked with Feed the Children to troubleshoot any online or delivery issues.

Feed the Children was a committed and engaged partner throughout the start-up and implementation periods. Based in Oklahoma City, approximately 90 miles from CNNS, Feed the Children acquires and delivers emergency food packages, educational supplies, medicine, clothing, and other necessities to individuals and families both domestically and internationally. It learned of this grant opportunity independently and contacted CNNS about partnering. Feed the Children's primary demonstration responsibilities were to create and maintain the food ordering website (with specifications from CNNS), acquire the food, store and package the food, and ship food boxes to participants' homes by managing a contract with UPS. Feed the Children also contributed to the project design, promoted the project goals, and provided data and expertise to support implementation. For example, it helped determine the contents of the food boxes by providing input on whether items could be obtained at a reasonable price. Its
involvement was pivotal to successful project implementation. It provided expertise in logistics, leveraged bulk purchasing of food and shipping services and prior relationships with shipping companies (UPS and the U.S. Postal Service) to serve more households at a lower cost, used its large network of volunteers to help package the food boxes, provided warehouse capacity for food storage, and brought knowledge of quality control systems for assembling the food boxes.

Solutran, based in Minneapolis, Minnesota, provided payment processing of the Fresh Checks and real-time electronic banking services (such as access to transaction data and check images). CNNS amended its contract with Solutran for the WIC Farmers' Market Nutrition Program to include Packed Promise. Solutran provided monthly data on household check redemption to CNNS and reviewed and audited payments for quality control.

Finally, schools and school districts were partners in recruitment and instrumental in distributing Packed Promise project information and collecting active consent and enrollment forms. CNNS has a history of working with nearly all of the school districts in the demonstration and engaged them throughout this study. Schools and school district leadership provided updated household addresses and telephone numbers to assist CNNS outreach efforts.

## b. Communication and collaboration between agencies and staff

CNNS, Feed the Children, schools and school districts, and other partners communicated and collaborated extensively during start-up and implementation. CNNS established memoranda of understanding (MOUs) with all 40 school districts as well as contracts with Feed the Children and Solutran. Communication occurred mainly between CNNS and Feed the Children, both of which maintained relatively small, tight-knit teams that relied on frequent, informal communications via email or telephone on an as-needed basis. For example, during the start-up phase, the CNNS project manager met often with staff at Feed the Children to discuss which items to include in the food boxes; the teams worked to identify nutritious foods that could be easily sourced and priced within the project budget. Respondents described these informal communications as an asset because they allowed the team to address problems quickly and with flexibility. The partners also held monthly meetings in person or by conference call. In addition, CNNS led ongoing contacts with schools via phone, email, and in-person visits throughout the implementation period.

Both CNNS and Feed the Children emphasized the importance of strong project management, and stressed that organization and communication were key to ensuring that the project ran smoothly. Staff shared a high regard for one another and a deep commitment to the mission of ending childhood hunger, enabling the two organizations to build trust and a collaborative working relationship. Feed the Children and CNNS leadership praised this collaborative approach and cited it as an essential reason for successful project implementation.

## B. Client engagement and participation

## 1. Recruitment and consent

The project conducted outreach through the schools and used an active consent process to enroll eligible households. CNNS distributed consent forms through the schools' standard student enrollment packets at the start of the 2015-2016 school year. The consent materials informed households about the demonstration, eligibility criteria, evaluation objectives, potential
risks and benefits, and procedures; the materials also asked that households consent to participate in the evaluation and provide contact and other information to determine whether they were eligible for free school meals. For households in the evaluation sample, verbal consent was also obtained at the beginning of each survey. Households could receive project benefits even if they opted out of the evaluation.

Schools actively recruited households during the enrollment period-July through September 2015-using several approaches. In addition to distributing consent forms in students' enrollment packets, CNNS encouraged schools to place an announcement and copy of the consent form on the school's webpage, post the enrollment deadline on the school's Facebook page, send additional copies home in students' backpacks, and send texts and automated reminder calls to parents. CNNS also staffed a booth at school enrollment events in the summer to answer questions and obtain completed consent forms.

By the end of September 2015, CNNS had received consent forms from 4,875 eligible households with 10,185 eligible children, or nearly half of the potentially eligible population (that is, those eligible for free school meals or attending a CEP school) in the demonstration area. CNNS sent a letter to enrolled households in districts subsequently selected for the control group to notify them of their assignment and encourage continued participation in the surveys. It sent enrolled households in treatment districts a congratulatory letter along with food ordering instructions and a catalog illustrating the types of food items in the five food box choices.

## 2. Outreach to participants

Participants were required to place their food box order each month to receive Packed Promise benefits, and CNNS invested significant effort in providing individualized outreach to encourage households to order. Outreach consisted of automated text messages, phone calls, and emails from a project specialist. Recognizing early on that many households might not remember to order each month, beginning in April 2016, CNNS contracted with a text messaging firm to send households an automated text reminder each month when they became eligible to order and again one week later if they had not yet ordered; if the text message did not go through, the system attempted to send an automated voice message instead. In addition, three full-time project specialists were dedicated to conducting personalized outreach and ordering support. They called all households that had not yet ordered after the second automated text reminder and emailed those that could not be reached by phone. Project leaders asked these staff to contact 30 households a day to remind them to order and offer to place their order for them at that time. Records show that staff called or emailed approximately $25 \%$ of households each month, or about 500 households (Appendix Exhibit C.2). CNNS staff also contacted the treatment school administrators approximately every three to four months for updated school enrollment and household contact information.

Ongoing communication with households helped maintain participation in the demonstration. Focus group discussants credited the project's multiple reminder contacts as key in helping them remember to order each month; some noted that without the reminders they would have forgotten to order. According to the discussants and project staff, participants especially appreciated the text reminders, which many said immediately prompted them to order. CNNS staff felt that texts were "by far the best form of outreach." Staff noted that almost immediately after automated text messages went out a surge occurred in incoming telephone
calls and website traffic. CNNS specialists were also instrumental in assisting households in ordering food boxes over the phone and troubleshooting any online ordering issues. Focus group discussants universally praised the staff at CNNS and found them consistently respectful, responsive, friendly, and helpful. One focus group participant succinctly expressed group sentiments in saying, "The staff are amazing."

Despite the positive reaction to CNNS's outreach from those households that could be reached by text or phone, others could not be reached. Starting near the beginning of the second demonstration year, CNNS changed its outreach strategy to focus on participants who had ordered a food box within the past six months. Households that had not done so because they were ineligible or simply did not place an order had their online accounts deactivated. CNNS staff reported that they deactivated household accounts only after making a substantial effort to reach nonparticipating households, including specialists making three final attempts to reach them by phone. CNNS staff verified that at least 148 households were deactivated because they had not ordered for six months and 20 to 25 of these households subsequently contacted CNNS to have their accounts reactivated.

## 3. Project participation

This section describes the share of Packed Promise households that received food boxes, the amount they received, and how much of the Fresh Checks they spent. Data are mainly from the food ordering website, UPS shipment data, and banking data on check redemption, reflecting all 25 months of the demonstration period. These data sources are supplemented with household reports in the surveys and focus groups. The implementation and cost analyses in this chapter are based on the September 2016 eligible sample of 2,054 consenting Packed Promise households, ${ }^{18}$ with the exception of one analysis (utilization of food items, Appendix Exhibit C.5), which is based on treatment households that responded to the follow-up surveys. Exhibits II. 1 through II. 3 provide key findings on receipt and spending of Packed Promise benefits.

## Exhibit II.1. Household take-up of food boxes

| Outcome | All 25 months (SE) | Year 1 <br> (Feb. 2016 Jan. 2017) (SE) | Year 2 <br> (Feb. 2017 - <br> Feb. 2018) (SE) |
| :---: | :---: | :---: | :---: |
| Share of households that ordered a food box |  |  |  |
| Households that ordered at least 1 food box (\%) | 97.0 | 96.3 | 81.4 |
| Mean proportion of households that ordered a food box monthly (all households) (\%) | 61.3 | 65.3 | 57.5 |
| Mean number of months that households ordered a food box (all households) | 15.3 (0.18) | 7.8 (0.08) | 7.5 (0.11) |
| Quantity of food boxes households ordered |  |  |  |
| Total number of food boxes households ordered | 74,176 | 39,482 | 34,694 |
| Mean number of food boxes households ordered | 36.1 (0.64) | 19.2 (0.33) | 16.9 (0.34) |
| Mean number of food boxes households ordered monthly |  |  |  |
| In all months (all households) | 1.4 (0.03) | 1.6 (0.03) | 1.3 (0.03) |
| In all months (among households that ordered at least 1 food box) | 1.5 (0.03) | 1.7 (0.03) | 1.3 (0.03) |

[^10]| Outcome | All 25 months (SE) | $\begin{gathered} \text { Year } 1 \\ \text { (Feb. 2016 - } \\ \text { Jan. 2017) (SE) } \end{gathered}$ | Year 2 <br> (Feb. 2017 Feb. 2018) (SE) |
| :---: | :---: | :---: | :---: |
| In months households ordered a food box | 2.3 (0.03) | 2.4 (0.03) | 2.2 (0.03) |
| Median number of boxes ordered, when placing an order (\% of households): |  |  |  |
| 1 box | 33.2 | 31.7 | 31.0 |
| 2 boxes | 34.7 | 34.7 | 35.9 |
| 3 boxes | 21.2 | 21.3 | 21.7 |
| 4 or more boxes | 10.9 | 12.2 | 11.4 |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, Chickasaw Nation MIS database, Magento and UPS shipping records, 2016-2018. Tabulations were prepared by Mathematica Policy Research.
Notes: The full sample size ( $n=2,054$ ) is used for all columns and represents the number of households that were eligible for Packed Promise benefits as of September 2016 and consented to participate in the evaluation. This number overestimates the participation rate before September 2016 and underestimates it afterwards, particularly during the last school year, because the calculation includes households that lost eligibility for the project.
Dates of food box orders were based on the dates the orders were placed. Due to rolling monthly eligibility in the first 13 project months, households could have placed orders for two 30 -day benefit periods during one calendar month. The monthly participation rate calculations were based on whether a household placed any order during a calendar month, and therefore undercount two orders placed in the same calendar month. On the other hand, some households may have placed orders for replacement boxes during a month. These replacement orders were removed from the data analysis when possible. Starting in March 2017, households' benefit period aligned with calendar months.
MIS = management information system; SE = standard error; UPS = United Parcel Service.

- Nearly all households ( $\mathbf{9 7 \%}$ ) selected for Packed Promise received food boxes for at least one month and typically received them for $\mathbf{1 5}$ months. Most households tried a food box at least once during the demonstration. The estimated percentage of households that ordered a box in an average month was $61 \% .{ }^{19}$ Monthly participation (Appendix Exhibit C.3) was fairly stable across the two years. The average monthly participation rate in Year 2 was only modestly lower than in Year 1: 65\% of households ordered a food box in an average Year 1 month, compared with $58 \%$ in Year 2. Lower average participation rates in Year 2 likely reflect, in part, lower rates of eligibility-perhaps especially in the last five months of the project, following an update to the pool of eligible households. ${ }^{20}$ A second reason for declines in participation, of course, is that some eligible households no longer wanted or needed the contents of the food boxes. About $60 \%$ of households received their last boxes in the last two project months (not shown), also suggesting that participation leveled off at this rate. The fact that many of the households that tried the boxes did not order the first month- $86 \%$ of households participated in the first month (Appendix Exhibit C.3) whereas $97 \%$ ordered at some point-could suggest it took households some time to

[^11]understand when or how to order food boxes, especially considering they originally ordered during an assigned week-a practice later abandoned because it was confusing.

- Many households ordered food boxes intermittently. The difference between a $97 \%$ rate for participating or ordering food boxes at least once and a relatively stable $61 \%$ monthly participation rate suggests that many households ordered food boxes intermittently rather than ordering for consecutive months and then dropping out. Indeed, at least $39 \%$ of households let two or more calendar months elapse between orders at least once (Appendix Exhibit C.4). The share would be even larger if it included households that let one month elapse between orders. Among the households with a gap of two calendar months or more between orders ( $\mathrm{n}=785$ households), $61 \%$ never let more than three calendar months elapse between orders. It is not possible to determine what share of households did not participate in a given month because they lost eligibility (for instance, if the household moved) versus declined to order a box. This analysis suggests a mix of both. That is, in a given month, some households were likely ineligible, some had completely stopped ordering even though they remained eligible, and others chose not to order in that month but resumed later. The reasons a household might deliberately space out their orders were not clear but might suggest some households were building up a stock of certain items and wanted space to use them up before ordering again. ${ }^{21}$
- Households ordered two to three boxes, on average, when they placed an order. Considering that target households had an average of 2.2 eligible children, this finding suggests that they ordered the number of boxes for which they were eligible, on average. In total, 74,176 boxes were shipped to households, or 36 boxes per household. In the first year, $60 \%$ of orders were placed online; in the second year, there was an even split between phone and online orders (Appendix Exhibit C.5). Anecdotal reports from staff and households suggest that some participants found it faster to place orders on the phone with project specialists, who were both friendly and quick. Appendix Exhibit C. 6 shows the characteristics of households based on their ordering patterns.
- Most treatment households consumed all or most of the shelf-stable items they received. ${ }^{22}$ As of the first follow-up survey (roughly the start of the second year), $80 \%$ of the treatment households reported eating all or most of the items each time they received the box, $19 \%$ reported eating some of the items, and only $1 \%$ reported eating none or nearly none of the items (Appendix Exhibit C.7). Nearly half of the households (49\%) reported eating at least some of the items another time. Yet, there was very little food waste- only $1 \%$ of households discarded any items. The patterns were similar for households responding to the second follow-up survey (which occurred in fall 2017) but with a slight decline in consumption and rise in donations to family and friends. Focus group discussants similarly

[^12]reported that they tended to use all or nearly all the food and give away items they did not want.

## Exhibit II.2. Household take-up of Fresh Checks

| Outcome | All 25 months (SE) | Year 1 <br> (Feb. 2016 Jan. 2017) (SE) | Year 2 <br> (Feb. 2017 Feb. 2018) ${ }^{\text {a }}$ (SE) |
| :---: | :---: | :---: | :---: |
| Share of households that redeemed a Fresh Check |  |  |  |
| Households that received at least one Fresh Check (\%) | 97.0 | 96.3 | 81.4 |
| Households that redeemed at least one Fresh Check (\%) | 87.7 | 83.3 | 78.9 |
| Amount of Fresh Checks households received |  |  |  |
| Average monthly amount received (\$) |  |  |  |
| In all months (all households) | 21.67 (0.38) | 24.03 (0.41) | 19.49 (0.39) |
| In all months (among households that received any Fresh Checks) | 22.34 (0.39) | 24.94 (0.41) | 23.96 (0.41) |
| In months household received a Fresh Check | 34.31 (0.40) | 35.83 (0.43) | 33.59 (0.43) |
| Amount of Fresh Checks households redeemed |  |  |  |
| Average monthly amount redeemed (\$) |  |  |  |
| In all months (all households) | 15.27 (0.32) | 14.50 (0.31) | 15.98 (0.36) |
| In all months (among households that received any Fresh Checks) | 15.74 (0.32) | 15.05 (0.32) | 19.57 (0.39) |
| In months household received a Fresh Check | 22.06 (0.36) | 19.68 (0.36) | 27.47 (0.49) |
| Households with Fresh Check amounts left over (\%) (among households that received any) |  |  |  |
| \$0 remaining | 0.7 | 0.6 | 0.3 |
| \$0.01 to \$45.00 remaining | 19.7 | 26.2 | 34.9 |
| \$45.01 to \$105.00 remaining | 27.0 | 31.6 | 22.6 |
| \$105.01 to \$210.00 remaining | 26.9 | 25.8 | 14.2 |
| \$210.01 to \$405.00 remaining | 17.3 | 13.0 | 5.0 |
| \$405.01 or more remaining | 8.4 | 2.8 | 23.0 |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, Chickasaw Nation MIS database, Magento, UPS, and Solutran records, 2016-2018. Tabulations were prepared by Mathematica Policy Research.
Note: $\quad$ The full sample size ( $n=2,054$ ) represents the number of households that were eligible for Packed Promise benefits as of September 2016 and consented to participate in the evaluation (3 households withdrew consent).
Because Fresh Checks were distributed in each food box, receipt of checks was conditional on ordering food boxes. Thus, the percentage of households that received a Fresh Check is equivalent to the percentage of households that ordered a food box, and the dollar amount of Fresh Checks received is equivalent to $\$ 15$ times the number of food boxes received. Fresh Check receipt dates reflect the dates food boxes were ordered. Redemption dates reflect the date on which the vendor cashed the check at the bank, rather than the date the household redeemed the check at the vendor. Replacement checks mailed to households were included in the counts when the replacement was redeemed and the original check was not ( $\mathrm{n}=20$ replacement checks).
a Year 2 includes checks that households redeemed by February 2018 and vendors deposited in March 2018.
MIS = management information system; UPS = United Parcel Service.

## Exhibit II.3. Amount of Fresh Checks redeemed

| Outcome | All 25 months (SE) | Year 1 <br> (Feb. 2016 - <br> Jan. 2017) (SE) | Year 2 <br> (Feb. 2017 Feb. 2018) ${ }^{\text {a }}$ (SE) |
| :---: | :---: | :---: | :---: |
| Proportion of Fresh checks redeemed for any value (among Fresh Checks received) (\%) | 75.6 | 64.9 | 87.5 |
| Mean amount redeemed per check (among Fresh Checks received) (\$) | 10.56 (0.02) | 11.19 (0.03) | 9.86 (0.04) |
| Proportion of Fresh Checks redeemed (among Fresh Checks received) (\%) |  |  |  |
| \$15 (\$0 remaining) | 37.8 | 39.0 | 36.6 |
| \$10 to 14.99 | 33.9 | 36.9 | 30.3 |
| \$5 to 9.99 | 3.4 | 3.8 | 3.0 |
| \$0.01 to 4.99 | 0.4 | 0.4 | 0.4 |
| \$0 (\$15 remaining) | 24.5 | 19.8 | 29.7 |
| Mean amount redeemed per check (among Fresh Checks redeemed) (\$) | 13.98 (0.01) | 13.95 (0.01) | 14.03 (0.01) |
| Proportion of checks redeemed (among redeemed checks) at: (\%) ${ }^{\text {b }}$ |  |  |  |
| Walmart Supercenter | 64.0 | 64.8 | 63.1 |
| Medium-to-large store (such as Super-C Mart) | 27.8 | 27.1 | 28.7 |
| Small store | 6.2 | 6.2 | 6.2 |
| Farmers' market or farm stand ${ }^{\text {c }}$ | 2.0 | 1.9 | 1.9 |
| Sample size |  |  | 74,176 |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, Chickasaw Nation MIS database, Magento, UPS, and Solutran records, 2016-2018. Tabulations were prepared by Mathematica Policy Research.
Note: $\quad$ The full sample size ( $n=74,176$ ) represents the number of Fresh Checks issued to households. Replacement checks mailed to households were included in the counts when the replacement was redeemed and the original check was not ( $\mathrm{n}=20$ replacement checks).
${ }^{\text {a }}$ Year 2 includes checks that households redeemed by February 2018 and vendors deposited in March 2018.
${ }^{\text {b }}$ Small stores are defined as a rural vendor with annual WIC sales up to $\$ 100,000$, or an urban vendor with annual WIC sales up to $\$ 15,000$, three registers or less, and not a chain store. Medium-to-large stores are defined as a rural vendor with annual WIC sales of $\$ 100,000$ or more and six or more registers, or an urban vendor (defined as population $>20,000$ ) with annual WIC sales over $\$ 15,000$ and/or chains of three or more.
${ }^{\text {c }}$ Farmers' markets and farm stands operate seasonally. During Year 1, households could redeem Fresh Checks at farmers' markets and farm stands for four months (July through October 2016), and during Year 2, this vendor was available for six months (the full season, which operates May through October).
MIS = management information system; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

- Receipt of Fresh Checks mirrors receipt of food boxes, with households that ever ordered a food box receiving \$22 worth of Fresh Checks a month, on average, and \$34 on average in months they received a box. Because Fresh Checks were distributed in each food box, receipt of checks was conditional on ordering boxes. Thus, the percentage of households that received a Fresh Check is equivalent to the percentage of households that ordered a food box, and the dollar amount of Fresh Checks received is equivalent to $\$ 15$ times the number of food boxes received. Households received $\$ 22$ for fruits and vegetables
per month, on average, or $\$ 34$ in the months they ordered a box, across the full 25 -month implementation period (Exhibit II.2).
- Most households ( $\mathbf{8 8} \%$ ) redeemed at least one of their checks, and most checks (76\%) were redeemed. ${ }^{23}$ Households received about $\$ 34$ a month on average (in months they ordered a box) and spent $\$ 22$, which includes about 18,100 unredeemed checks, or onequarter of the checks issued (Exhibits II. 2 and II.3). By the end of the demonstration, about half of the households ( $53 \%$ ) had $\$ 105$ or more worth of benefits remaining, equivalent to at least seven Fresh Checks (Exhibit II.2); this includes checks that were never redeemed and those that were redeemed for less than $\$ 15$. Seven checks is approximately $20 \%$ of the checks that households received, on average, given that households ordered an average of 36 total food boxes over the 25 month project (Exhibit II.1).
- Most redeemed checks were used in full. The $\$ 15$ Fresh Checks were redeemed for $\$ 14$, on average, when they were redeemed (Exhibit II.3). About half of the redeemed checks were used in full and another $45 \%$ had less than $\$ 5$ remaining. These findings indicate that households received nearly the full value out of every check they redeemed. Because households were not issued change when they used a check, this suggests that households strategically avoided forfeiting small amounts with each purchase. Still, small amounts unspent added up, contributing to the total sums that households had left over from checks that were never spent and those not fully spent.

Discussions with 46 treatment households during four focus groups-although not representative of all treatment households and likely excluding those with substantial transportation, time, or telephone barriers-offer a glimpse into how participants perceived the Packed Promise benefits. Overall, focus group discussants, almost all of whom were actively participating at the time of the focus groups, were very satisfied with Packed Promise. Most important, many credited the project for ensuring they had enough to feed their children and other household members for the month. Several shared personal stories about previously having to go without food so there would be enough for their children. As one discussant noted: "Before we started getting this, towards the end of the month on food stamps, you're getting really creative with what you have...This kinda makes the ends meet. It's not much, but...I'll just be straight honest with you, before I got this program there were times I didn't eat, just to make sure they did. And now it's not like that." Parents and caregivers also described the emotional relief that having this food supplement afforded them. ("Your emotional and mental stability lifts up because you know you can feed your kids.")

In addition to the extra food, focus group discussants appreciated several other aspects of the project. First, they greatly appreciated the home delivery. It was a major convenience to them and had a positive emotional impact on their children, who were excited and grateful to receive this "present" at the door. Chickasaw Nation staff and parents shared stories of eager children carefully putting the food away or likening the arrival of a box to Christmas morning. Second, because each child received a box, it seemed to them that having their own box of food and voucher was a special gift, which made the items more valuable. As one discussant described it,

[^13]"We have an argument over who gets what with each check...so now we bring two checks, he gets his and she gets hers...and they say, 'you can't touch it (mom), it's ours. '" Third, the Fresh Checks enabled children to pick out their own fruits and vegetables, which caregivers felt made it more likely they would eat healthfully. Fourth, the children enjoyed the food items. The majority of discussants emphasized that their children ate nearly all of the items, and at least some children replaced unhealthy snacks with healthier ones. Finally, discussants liked the ability to select among different food box combinations; also, although they identified certain items as being included too much (like tomato-based products), they enjoyed the food, too. They felt the food boxes included sufficient variety and quantity that families could cook a variety of meals: "You can make a meal from scratch if you have the staples, [and] most of the boxes have the staples ..." Their satisfaction aligns with the survey reports described above, which indicate that most treatment group households consumed all or most of the foods.

Given the importance of Packed Promise to many families, focus group discussants and staff also conjectured about the reasons households did not participate. Discussants theorized that Packed Promise might be most suited to caregivers willing to cook and shape meal preparation and planning around the contents of the box. Others indicated that the variety of foods may have worn thin for some families after a while. ("In the beginning, it was great. We thought of every recipe there was, but now I think we're on a year now, I don't know...So, the cans just aren't getting used as much.") Staff suggested that households lacking consistent telephone numbers or limited Internet access might have been the hardest to retain. Finally, it is unclear why many of the Fresh Checks were never redeemed, especially given their popularity among focus group discussants. It is possible some families did not know where to redeem them, some store clerks did not know how to apply them, or perhaps families saved them too long or had difficulty keeping track of them.

## C. Successes and challenges in the design and implementation of Packed Promise

In rural and remote areas, low-income families with school-age children may not have easy access to well-stocked grocery stores. Packed Promise offers a promising model for the home delivery of healthy foods to this population. The lessons learned from the demonstration can help to inform other communities as they address food insecurity among families. This section draws on the preceding analyses of interview, focus group, and Packed Promise benefit data to summarize Packed Promise's key successes and challenges, some of which relate to the project's design (that is, decisions around what to distribute to whom, and how); others relate to implementation (the ability to execute those plans).

## 1. Successes: What worked well and why

The Packed Promise team accomplished its goal of delivering the Packed Promise food boxes to participating households throughout the implementation period. This accomplishment required two related achievements, each described below: (1) a logistical and operational feat involving many steps and people, and (2) a strong working relationship between the main partners.

- Feed the Children and CNNS had the right expertise to successfully deliver food boxes to households. Feed the Children staff and volunteers had to source the food at low prices,
obtain and store bulk food in its warehouse, arrange for volunteers to package the boxes to meet demand, manage a relationship with UPS and the U.S. Postal Service to ship the boxes, maintain the food ordering website, and resolve technical glitches in ordering and shipping. The fact that operations went smoothly, notwithstanding a few hiccups, highlights the essential logistical expertise that Feed the Children contributed. Additionally, CNNS had prior experience in managing large projects, such as the Summer EBT for Children, and drew on its familiarity with the target community, relationships with schools, and experience in customer service. It also staffed the project appropriately, hiring three full-time project specialists and a project manager.
- The strong collaboration and communication between CNNS and Feed the Children enabled them to harness their respective expertise. The partnership was a true collaboration. The two organizations built the project together from the ground up over 9 months and worked collaboratively throughout the subsequent 25 -month implementation period to ensure smooth operations and address challenges as they arose. Staff had a high regard for each other's expertise and a deep commitment to the project and the mission of ending childhood hunger. In the words of one Feed the Children staff: "It was a perfect marriage, the mission, what we were accomplishing through this program. Everyone had $100 \%$ buy in; this is something we want to do and we want to make sure we do it right and effectively." The partnership also required substantial communication. The partners met frequently via biweekly telephone meetings and on an ad hoc basis when specific ordering or delivery issues arose. This high degree of communication allowed them to address problems quickly, whether they were systemic issues (such as the need to change the packing of certain items) or problems with a single order (for example, troubleshooting as to why an order did not arrive).

The second major success concerns the relatively stable participation rates, suggesting that households were receptive to the benefits and ordering was accessible.

- Packed Promise maintained a moderate level of household participation. Nearly all households ( $97 \%$ ) tried a box at least once, and the estimated participation rate averaged $61 \%$ a month, a respectable rate that indicates most households could access and valued the benefits. Many households ordered food boxes intermittently rather than ordering for consecutive months and then dropping out. Additionally, most of the issued Fresh Checks ( $76 \%$ ) were redeemed, and most of the redeemed checks were used in full.
- Achieving these participation rates required long-lasting satisfaction with the benefits, significant outreach, and ease of ordering. Feedback from focus group discussants and staff, along with the moderate and generally stable participation rate over 25 months, suggest that most households enjoyed the food boxes-both the shelf-stable foods and the Fresh Checks. To the parents or caregivers, the benefit helped them make ends meet, thus lifting an emotional burden. To the children, the box was a special gift just for them, to which they could look forward and take pride. According to some accounts, the selection of shelf-stable items included enough staples to plan a meal around and included nutritious snacks the children enjoyed; as one caregiver stated: "The box gives you the basic stuff you need. It's not everything, but it's a big help for us, because you add stuff to it to make it work." Focus group discussants and responses to the follow-up surveys indicate that households tended to consume all or most of the shelf-stable foods and give away what they
did not want. In addition, the extensive outreach effort, coupled with staff who were available and eager to take phone orders or resolve ordering issues, mitigated challenges households may have had in remembering to order a box, navigating the online ordering system, or ultimately ceasing to order because of an error. One woman provided this anecdote: "I had an issue once with an order that never arrived...Instead of [the CNNS specialist] putting me on hold or talking to another person or getting back to me 50 days later... she was right on top of it."


## 2. Challenges

Although the project was successful in many ways, staff and households suggested several possible reasons for why some households did not place a monthly order. The following reasons were those most commonly mentioned:

- Staff often had outdated household contact information. Unlike other FNS nutrition assistance programs, households had to proactively order their benefits each month, the success of which relied on a multipronged and intensive outreach effort, with half of the food boxes ordered by telephone. CNNS staff reported that many households changed their telephone contact information after they enrolled or were otherwise hard to reach when staff needed to remind them and help them order. Contact records showed that staff encountered an invalid telephone number $15 \%$ of the time they attempted to call households (out of nearly 12,000 phone call attempts for which the outcome of the call was documented; Appendix Exhibit C.2). Although CNNS staff reported routinely reaching out to the schools to obtain updated contact information for hard-to-reach households, the schools did not always have newer information. Thus, the hardest-to-reach households may have been disproportionately represented among those that stopped participating. Outside of an evaluation context, partners suggested that the project's launch ideally should have occurred closer to the time of household enrollment (which ended five months prior) to reduce the number of those whose phone numbers changed between enrollment and launch.
- Some participants may not have liked or wanted to use all of the shelf-stable foods. Despite reports from focus group discussants that they liked having a choice of five different combinations of shelf-stable foods and liked the foods themselves, they also uniformly would have preferred more choice or tailoring of the boxes to match their food preferences. According to focus group discussants, even after CNNS made some improvements in the shelf-stable items to respond to participants' preferences, they still reported certain items as either stacking up in their cupboards or given away to other families in need. Survey responses also suggest that households tended to give away some food. This circumstance may have been especially true for households receiving more than one box. Thus, it is possible that some of the households who dropped out completely or ordered intermittently did so because they did not like, use, or need all of the foods in the boxes.
- Intermittent technology system issues delayed food box shipments and may have deterred some households from ordering. Even though the online ordering system was fully functional for nearly all of the demonstration, during a few periods, moderate or severe technology system issues impeded the ordering process or the translation of food box orders to Feed the Children's warehousing and shipping division. Although CNNS and Feed the Children addressed these concerns quickly once they were identified, Feed the Children staff
noted that it was possible these experiences may have deterred some participants from ordering in later months.


## 3. Recommendations and lessons learned from staff and households

CNNS, Feed the Children, and project participants felt that the project was well implemented and households appreciated the benefits. Their input and experiences suggest the following lessons learned about what could be replicated, what challenges could continue for any home delivery benefit program, and what could be improved if the project were to be implemented in other locations.

The key to the project's success was inclusion of the right partners and ongoing communication and collaboration. This kind of project requires developing a new and complex infrastructure for food ordering and home delivery, thus calling for a strong State or tribal lead agency and key partner who are committed, innovative, and ready to adapt and tailor the project based on local resources available, food preferences, and other factors. A partner similar to Feed the Children would be needed for its expertise in purchasing bulk foods at cost and warehousing, packing, and shipping the boxes through existing physical infrastructure, a large volunteer network, and shipping contracts.

Staff and focus group discussants suggested that households be allowed to place food box orders for several months at a time. This option would still allow monthly delivery of food boxes, but would simplify the ordering process for participants and potentially increase access to the food benefits for households who want and need them but forget to order and cannot be contacted. This approach would also reduce the level of effort required for project outreach, with staff resources focused instead on periodic contact with households to update their household information and make changes in their food box choices if desired. (After the demonstration period, CNNS implemented this change while it continued to deliver benefits through a no-cost project extension.)

CNNS staff and focus group discussants strongly recommended that the Fresh Check benefit be provided as an EBT card rather than a paper check. The check format limited households' ability to use the full benefits provided. For every $\$ 15$ check redeemed, households spent $\$ 14$, contributing to the total amounts unspent. As one family reported "...the problem with that is, when you use them, you have to get $\$ 15$ worth, and if you get $\$ 13$ worth, then you lose that $\$ 2$. You have to go over and you can only go over so much..." CNNS staff suggested it would be easier for both participating households and retailers if the Fresh Check benefit was offered in the form of an EBT card, similar to the WIC program. This change would make it easier for households to fully redeem this benefit.

Partners recommended that more time and resources be invested up front to improve the ordering system's client usability and prevent minor ordering and delivery errors. Both partners agreed that more time for project development might have avoided the minor ordering and delivery glitches that occurred in the first few months. Feed the Children staff also provided several specific recommendations for early investments in project design, including: (1) usability testing of the online food ordering system; (2) using an ordering site that would allow for greater customization, and (3) investing in an address validation system to avoid delivery errors that resulted from information being entered into the system incorrectly or incompletely.

Finally, to improve project design and retention, focus group discussants recommended offering ongoing opportunities for feedback. CNNS also recognized that surveys and focus groups with both participants and those who leave the project could help determine why people choose to participate or not, and how to improve the food box contents. For example, participants may share preferences for certain food items or a larger variety. CNNS conducted such a survey in April and May 2018, after the evaluation period concluded.

## D. Cost of implementing the Packed Promise project

The objective of the cost analysis was to describe the resources required to launch and deliver the Packed Promise project, and estimate the cost of those resources (in dollar terms). Analysis of project costs was based on a detailed listing of all resources that participating organizations used to deliver the Packed Promise project services. Appendix B. 6 describes the methods used for the cost study.

The following sections present the costs of the Packed Promise intervention. Section D. 1 presents the total cost, which includes labor and other direct costs (ODCs). Section D. 2 presents the costs incurred by each organization involved in Packed Promise, including (1) CNNS, (2) Feed the Children, and (3) participating school districts. The costs

## Packed Promise costs

Including the estimated value of donated or in-kind resources, the total cost was $\$ 6,374,527$. Labor costs accounted for $27 \%$ of the total costs; food boxes and ODCs such as printing and computer equipment accounted for the remaining $73 \%$. $7 \%$ of costs were donated or provided in kind to the project.

Food boxes represented the largest cost, accounting for $67 \%$ of the project's total cost. Fresh Checks accounted for 16\% of the total food box cost. presented include each organization's labor costs and ODCs, except for those associated with the provision of food boxes. These costs are related to the benefits received by project participants; they have been broken out and presented as a separate category to distinguish the total costs for providing food boxes from other costs associated with the launch and delivery of Packed Promise services. (The cost of food boxes includes costs associated with distributing and redeeming the Fresh Checks.) All sections distinguish between start-up costs (those associated with preparations for providing project benefits incurred during the project start-up period of February 1, 2015 to January 31, 2016) and implementation costs (those that were ongoing and associated with providing services during the period of February 1, 2016 to March 31, 2018). All costs are summarized in Appendix Exhibit C.8.

## 1. Total labor and other direct costs, by time period

The Federal grant award was for $\$ 9,718,832$. The project reported a total paid cost of $\$ 5,900,009$, or $61 \%$ of the value of the grant through the end of the evaluation period (March 2018). The key reasons for the difference between the project's funding and expenditures involves the time period of the data collection, as the project planned to continue service provision beyond the date of the final cost report for the evaluation.

Including the estimated value of donated or in-kind resources, the total project cost was \$6,374,527. ${ }^{24}$ Across all participating organizations, labor costs accounted for \$1,697,797 (27\%) of the total cost, whereas ODCs, including the cost of food boxes, accounted for the remaining $\$ 4,676,730(73 \%)$ (Exhibit II.4). ${ }^{25}$ Approximately 7\% (\$474,518) of costs were donated or provided in kind to the project.

Exhibit II.4. Total costs, by component


Source: The Packed Promise project cost data collection instruments. Total costs include both start-up and implementation costs. Start-up costs cover February 1, 2015 to January 31, 2016. Implementation costs cover February 1, 2016 to March 31, 2018. The first quarter of the implementation period includes cost data for only two months-February and March of 2016. All others are calendar quarters and include three months of cost data. The grantee continued to provide services after the evaluation period ended on March 31, 2018, so the costs shown in this report do not include those for closing out operations or associated with the extension of the benefits period. Tabulations were prepared by Mathematica Policy Research.
Note: Labor and ODC estimates include both paid costs and the estimated value of volunteer or in-kind resources.
ODC = other direct costs.
Exhibit II. 5 shows the total cost during the start-up and implementation periods. Start-up costs accounted for $19 \%$ of the total project costs, including $28 \%$ of the total labor costs and $15 \%$ of the total ODCs. Implementation costs accounted for the remaining $81 \%$ of project costs. Exhibit II. 6 presents these costs as per-household estimates. On average, the cost per participating household ( $\mathrm{n}=2,054$ ) for the Packed Promise project was $\$ 3,103 .{ }^{26,27}$

[^14]Exhibit II.5. Total start-up and implementation costs, by component


Source: The Packed Promise project cost data collection instruments. Start-up costs cover February 1, 2015 to January 31, 2016. Implementation costs cover February 1, 2016 to March 31, 2018. The first quarter of the implementation period includes cost data for only two months-February and March of 2016. All others are calendar quarters and include three months of cost data. The grantee continued to provide services after the evaluation period ended on March 31, 2018, so the costs shown in this report do not include those for closing out operations or associated with the extension of benefits. Tabulations were prepared by Mathematica Policy Research.
Note: Labor and ODC estimates include both paid costs and the estimated value of volunteer or in-kind resources.
ODC = other direct costs.

Exhibit II.6. Per-household start-up and implementation costs, by component


Source: The Packed Promise project cost data collection instruments. Start-up costs cover February 1, 2015 to January 31, 2016. Implementation costs cover February 1, 2016 to March 31, 2018. The first quarter of the implementation period includes cost data for only two months-February and March of 2016. All others are calendar quarters and include three months of cost data. The grantee continued to provide services after the evaluation period ended on March 31, 2018, so the costs shown in this report do not include those for closing out operations or associated with the extension of benefits. Tabulations were prepared by Mathematica Policy Research.
Note: Labor and ODC estimates include both paid costs and the estimated value of volunteer or in-kind resources.
ODC = other direct costs.

## 2. Organization and activity costs

This section presents the costs incurred by each organization involved in Packed Promise, including (1) CNNS, (2) Feed the Children, and (3) participating school districts. As noted above, the costs presented for each organization exclude those related to the provision of food boxes, which is presented as a separate category; Fresh Checks are shown as a component cost of the food boxes. Exhibit II. 7 shows the total costs for each organization. Exhibit II. 8 shows the total costs for each organization by time period (that is, start-up versus implementation periods).

Both CNNS and Feed the Children incurred costs related directly to the provision of food boxes, including the shelf-stable foods and Fresh Checks, as well as other costs for administering the project. Excluding their costs associated with the provision of food boxes, CNNS's other labor costs and ODCs accounted for $23 \%(\$ 1,482,725)$ of total project costs; Feed the Children's other labor costs and ODCs accounted for $9 \%(\$ 577,224)$ of the project total. Participating school districts reported modest labor costs $(\$ 18,211)$ for certifying students' eligibility and processing consent forms. Most of the labor costs and ODCs not associated with the provision of food boxes were incurred during implementation (70\%) rather than the start-up period (30\%).

CNNS's and Feed the Children's ODCs related to food boxes represent Packed Promise's largest single cost category. These ODCs accounted for $\$ 4,253,586$ of total project costs (Exhibit II.8), and include the costs of the shelf-stable foods and redeemed Fresh Checks, as well as packaging, postage, and bank fees. When combined with $\$ 42,780$ for food box labor, CNNS's
and Feed the Children's costs to build, stock, and distribute food boxes totaled $\$ 3,594,914$, plus another $\$ 701,453$ to redeem the Fresh Checks, ${ }^{28}$ for a total food box cost of $\$ 4,296,366$. This represents $67 \%$ of the project's total cost. On its own, Fresh Check ODCs comprised a notable percentage of the total project costs (11\%). Appendix Exhibits C. 9 and C. 10 shows the perhousehold costs for organizations and activities over the course of the project and by time period.

## Exhibit II.7. Total costs by organization or activity



Source: The Packed Promise project cost data collection instruments. Start-up costs cover February 1, 2015 to January 31, 2016. Implementation costs cover February 1, 2016 to March 31, 2018. The first quarter of the implementation period includes cost data for only two months-February and March of 2016. All others are calendar quarters and include three months of cost data. The grantee continued to provide services after the evaluation period ended on March 31, 2018, so the costs shown in this report do not include those for closing out operations or associated with the extension of benefits. Tabulations were prepared by Mathematica Policy Research.
Notes: Labor and ODC estimates include both paid costs and the estimated value of volunteer or in-kind resources. Both CNNS and Feed the Children incurred costs related directly to the provision of food boxes, as well as other costs for administering the project. CNNS and Feed the Children labor costs and ODCs presented in this figure reflect those for administering the project, excluding those associated with providing food boxes. Food box costs reflect CNNS's and Feed the Children's labor costs and ODCs for packaging, stocking, and shipping the food boxes. ODCs for the Fresh Checks, which include redemption values and bank fees, are shown as a component of the food box costs.
Feed the Children reported $\$ 370$ in ODCs, and school districts reported $\$ 18,211$ in labor costs for certifying students' eligibility and processing consent forms. These cost do not appear as bars in the chart because of their relatively small size.
CNNS = Chickasaw Nation Nutrition Services; FTC = Feed the Children; Food boxes = labor costs or ODCs associated with the provision of food boxes, including the shelf-stable foods and Fresh Checks; Fresh Checks = labor costs and ODCs associated with check redemption and bank fees; ODCs = other direct costs.

[^15]Exhibit II.8. Total costs by organization or activity, by time period


Source: The Packed Promise project cost data collection instruments. Start-up costs cover February 1, 2015 to January 31, 2016. Implementation costs cover February 1, 2016 to March 31, 2018. The first quarter of the implementation period includes cost data for only two months-February and March of 2016. All others are calendar quarters and include three months of cost data. The grantee continued to provide services after the evaluation period ended on March 31, 2018, so the costs shown in this report do not include those for closing out operations or associated with the extension of benefits. Tabulations were prepared by Mathematica Policy Research.
Notes: Labor and ODC estimates include both paid costs and the estimated value of volunteer or in-kind resources. Both CNNS and Feed the Children incurred costs related directly to the provision of food boxes, as well as other costs for administering the project. CNNS and Feed the Children labor costs and ODCs presented in this figure reflect those for administering the project, excluding those associated with providing food boxes. Food box costs reflect CNNS's and Feed the Children's labor costs and ODCs for packaging, stocking, and shipping the food boxes. ODCs for the Fresh Checks, which include redemption values and bank fees, are shown as a component of the food box costs.
Start-up costs included: Feed the Children reported \$370 in ODCs; school districts reported \$18,211 in labor costs for certifying students' eligibility and processing consent forms; and CNNS reported $\$ 5,311$ in ODCs for printing Fresh Checks. These costs do not appear as bars in the chart because of their relatively small size.
CNNS = Chickasaw Nation Nutrition Services; FTC = Feed the Children; Food boxes = labor costs or ODCs associated with the provision of food boxes, including the shelf-stable foods and Fresh Checks; Fresh Checks = labor costs and ODCs associated with check redemption and bank fees; ODCs = other direct costs.

## III. THE IMPACTS OF THE PACKED PROMISE PROJECT ON FOOD SECURITY AND OTHER OUTCOMES

This chapter describes the households in the Packed Promise project and its impacts on child food insecurity and other outcomes. It first describes the baseline characteristics of households in the evaluation sample. The chapter then presents evidence on how the project affected outcomes for these households during the implementation period, including indicators of their food insecurity; food spending and shopping behavior; and other outcomes that provide relevant context, such as participation in other nutrition assistance programs. Data sources are detailed in Appendix B. In brief, the baseline and two follow-up surveys were the data sources used to support the impact analyses. The survey response rates were $62 \%, 62 \%$, and $61 \%$ at baseline, first follow-up, and second follow-up, respectively (see Briefel et al. 2018 and Appendix A.2).

## A. Household characteristics at baseline

This section reports the baseline characteristics of consenting households that responded to the baseline survey conducted in the period November 2015-February 2016. Estimates were weighted to be representative of the population of households in the Packed Promise project demonstration area that signed and returned a consent form and met the project's eligibility criteria-households with at least one child attending a demonstration school and eligible for free meals or attending a CEP school. Appendix A. 1 presents supplemental exhibits on household characteristics at baseline, including a comparison of these characteristics for the treatment and control groups, showing that they were similar across these groups for those households that completed the follow-up surveys. ${ }^{29}$ Appendix B presents further methodological details about the survey and its administration.

## 1. Baseline household demographic characteristics and socioeconomic status

The demographic characteristics and socioeconomic status of households at baseline are presented in Exhibit III.1. ${ }^{30}$ Household size was calculated as the number of household members who share food by purchasing and preparing meals together-the definition used by SNAP and FDPIR. The mean household size was 4.4 members. On average, 2.5 of the household members were children, defined as 18 years old or younger or still in high school if older than age 18. Most of the children-on average 2.2 per household-were enrolled in the local school system. This aligns with the school-age population the project served, specifically, children age 4 or older who were eligible for free meals or attended a CEP school were eligible for Packed

[^16]Promise benefits. Of the households, $20 \%$ had one child, $35 \%$ had two children, and $45 \%$ had three or more children.

## Exhibit III.1. Household characteristics at baseline

## Characteristic

## Mean (SE) or percentage

## Household size

| Mean number of household members who share food | $4.4(0.03)$ |
| :--- | :--- |
| Mean number of children in household | $2.5(0.02)$ |
| Mean number of children enrolled in local school system | $2.2(0.02)$ |
| Percentage of households with: |  |

1 child 19.6
2 children ..... 35.1
3 or more children ..... 45.3
Any household adult employed in last 30 days ..... 75.6
Last month household income ${ }^{\text {a }}$
Median (\$) ..... 1,699 (53)
Mean (\$) ..... 1,970 (73)
No income ..... 3.1
At or below poverty line (including no income) ..... 64.0
At or below $130 \%$ of poverty line ..... 80.0
At or below $185 \%$ of poverty line ..... 92.3
Above 185\% of poverty line ..... 7.7
Sources of nonwage income
Reported receiving TANF ..... 5.2
Reported receiving Social Security ..... 22.2
Reported receiving SSI ..... 15.3
Reported receiving veterans benefits ..... 2.7
Reported receiving unemployment insurance or workers' compensation benefits ..... 2.7
Reported receiving child support payments ..... 23.1
Reported receiving financial support from family and friends ..... 14.5
Reported receiving any other income besides earnings ..... 1.0
Reported none of the above ..... 42.3
Sample size ..... 2,859

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2015-2016 baseline survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration at baseline and were prepared by Mathematica Policy Research.
Note: Estimates are percentages unless otherwise noted. Calculations are based on the respondents to the baseline survey. Missing values were excluded from the calculations. Household income was missing for $3.0 \%$ of observations. For all other variables, missing values ranged from 0.0 to $1.4 \%$ of observations.
a Includes all earnings, Social Security, pensions, veterans benefits, unemployment insurance, workers' compensation benefits, child support, payments from roomers and boarders, TANF, and SSI for all household members.
SE = standard error; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families.

Three-fourths of households (76\%) had at least one adult who was employed in the last 30 days. Median household income (before taxes) in the last 30 days was $\$ 1,699$ (the mean was $\$ 1,970)$. Sixty-four percent of households had incomes at or below the Federal poverty line (FPL), including 3\% that reported no income. ${ }^{31}$ Eighty percent of households reported income at or below $130 \%$ of the FPL-the threshold used to certify children to receive free school meals; an additional $12 \%$ had incomes above $130 \%$ but at or below $185 \%$ of the FPL-the income range used to certify children to receive reduced-price school meals. Eight percent of households had incomes above $185 \%$ of the FPL. ${ }^{32}$

Respondents also reported receipt of various nonwage sources of income. The majority of households received income from at least one nonwage source; only $42 \%$ of households did not receive any income from such sources. The most common source was child support payments (23\%), followed by Social Security (22\%), Supplemental Security Income (SSI; 15\%), or financial support from family and friends ( $15 \%$ ). Less common sources included Temporary Assistance for Needy Families (TANF; 5\%), unemployment insurance or workers' compensation benefits ( $3 \%$ ), or veterans benefits ( $3 \%$ ).

## 2. Baseline participation in nutrition assistance programs

Nearly half ( $45 \%$ ) of respondents said their household received SNAP benefits in the last 30 days (Exhibit III.2). Participation was lower for both WIC (20\%) and FDPIR (7\%). ${ }^{33}$ Sixteen percent of households received food from a food pantry, emergency kitchen, or other community program that served meals or provided food. There were no significant differences in the proportion of treatment and control households participating in nutrition assistance programs at baseline (Exhibit A.2).

Large proportions of households reported that children participated in the NSLP or SBP or received free or reduced-price meals in the past 30 days: $95 \%$ for lunch and $85 \%$ for breakfast. Fewer households had children who received backpacks containing food (18\%), ${ }^{34}$ snacks at an afterschool program (16\%), or supper at school (6\%).

[^17]
## Exhibit III.2. Reported program participation, food security, and out-of-pocket food expenditures at baseline

| Characteristic | Mean (SE) or per |
| :---: | :---: |
| Household nutrition benefit program participation ${ }^{\text {a }}$ |  |
| Reported currently receiving SNAP | 45.1 |
| Reported receiving WIC | 19.6 |
| Reported currently receiving FDPIR | 6.6 |
| Reported receiving food from pantry, emergency kitchen, or other community program | 15.9 |
| Children's nutrition program participation |  |
| Reported receiving FRP SBP | 84.5 |
| Reported receiving FRP NSLP | 95.3 |
| Reported receiving supper at school | 6.2 |
| Reported receiving backpack program | 18.0 |
| Reported receiving food at afterschool program where snacks are offered | 15.5 |
| Household food security status |  |
| Secure | 47.4 |
| Insecure | 52.6 |
| VLFS-HH | 25.0 |
| Adult food security status |  |
| Secure | 52.7 |
| Insecure | 47.3 |
| VLFS-A | 24.8 |
| Child food security status |  |
| Secure | 63.2 |
| Insecure | 36.8 |
| VLFS-C | 2.7 |
| Reported monthly household mean out-of-pocket food expenditures (\$) | 362 (9) |
| Reported monthly per-person mean out-of-pocket food expenditures (\$) |  |
| Total out-of-pocket expenditures ${ }^{\text {b }}$ | 87 (3) |
| Food expenditures at supermarkets, grocery stores, and other types of stores ${ }^{\text {c }}$ | 70 (2) |
| Expenditures at restaurants ${ }^{\text {d }}$ | 21 (1) |
| Sample size | 2,859 |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2015-2016 baseline survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration at baseline and were prepared by Mathematica Policy Research.
Note: Estimates are percentages unless otherwise noted. Calculations are based on the respondents to the baseline survey. Missing values were excluded from the calculations. Household food security was missing for four observations. Program participation questions generally reflected current participation at the time of the interview, defined as "during the last 30 days." Food security was measured using the 30 -day survey module. VLFS is a subcategory within the food-insecure category. Questions about food expenditures were asked about the last 30 days.
${ }^{\text {a }}$ Calculated for all households as a descriptive variable and not limited only to those households eligible for a specific program listed.
${ }^{\mathrm{b}}$ Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days. Excludes purchases made with SNAP and WIC. The sum is not equal to the sum of the two means because of missing data. If expenditures at either stores or restaurants are missing, then the total is missing.
${ }^{\text {c }}$ Out-of-pocket expenditures on food at supermarkets, grocery stores, and other stores. Excludes purchases made with SNAP and WIC.
${ }^{d}$ Includes carryout, drive through, and all types of restaurants.
FDPIR = Food Distribution Program on Indian Reservations; SE = standard error; SNAP = Supplemental Nutrition Assistance Program; VLFS-A = very low food security among adults; VLFS-C = very low food security among children; VLFS-HH = very low food security among household; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

## 3. Baseline food security status

Exhibit III. 2 shows the baseline food security status over the past 30 days among households and children eligible for Packed Promise benefits. (Appendix A. 1 shows these characteristics separately by treatment status.) Before implementation of the Packed Promise project, $53 \%$ of households experienced food insecurity. Forty-seven percent of households experienced FI-A, and $37 \%$ experienced FI-C. Rates of VLFS, a subcategory within the food-insecure category, were $25 \%, 25 \%$, and $3 \%$ among households, adults, and children, respectively.

## 4. Baseline monthly food expenditures

Respondents were asked about their household spending on food in the last 30 days; mean out-of-pocket expenditures per person were calculated based on their responses. The average total out-of-pocket spending on food per household was $\$ 362$, excluding purchases made with SNAP and WIC. On average, households spent a total of $\$ 87$ per person per month on food. Respondents reported spending an average of $\$ 70$ per person out of pocket on food purchased at supermarkets, grocery stores, or other types of stores, and an average of $\$ 21$ per person at restaurants.

## B. Impacts on food insecurity

The primary question motivating this study is whether the Packed Promise project reduced FI-C. This section examines the impacts of the food boxes delivered by the project on FI-C, FIA, and FI-HH. To provide context for understanding these impacts, this section also presents information about changes in household circumstances (potential triggers of food insecurity) and households' access to help and support in the community (Chilton et al. 2013; Edin et al. 2013; Hoisington 2002).

This study measured food security using surveys administered at three points in time-at baseline (prior to project implementation), at the beginning of the second year of project implementation and again in the middle of the second year of implementation. ${ }^{35}$ In each survey, data on food insecurity were collected using the USDA's 18-question module; these data reflect a 30-day reference period. Gathering information on food security at two points in time after implementation had begun allowed the study to assess whether the project had an impact on food insecurity after one year of implementation and test whether that impact persisted at the time of the second follow-up survey. This chapter presents impact findings from the first follow-up survey; impacts measured for the second follow-up survey are presented in Appendix D. Both follow-up survey rounds are discussed in this chapter. Appendix E includes administrative data on summer nutrition programs.

## 1. What was the impact of the project on the prevalence of food insecurity?

The Packed Promise project did not lead to a reduction in FI-C. The estimated rate of child food insecurity was $29 \%$ among treatment households, compared with $30 \%$ among control households; this difference was not statistically significant (Exhibit III.3). The project also did not significantly reduce the rate of VLFS-C. Treatment households had a VLFS-C rate of $2.3 \%$,

[^18]compared with $2.9 \%$ among control households. It also did not significantly reduce the rates of FI-C or VLFS-C measured at the time of the second follow-up survey (Appendix Exhibit D.1).

The project did, however, lead to significant reductions in FI-A and FI-HH as a whole. At the time of the first follow-up survey, $35.1 \%$ of treatment households and $37.9 \%$ of control households reported FI-A; the difference of 2.8 percentage points was statistically significant (Exhibit III.3). Treatment households also exhibited a significantly lower level of FI-HH as a whole ( $40.5 \%$ versus $42.9 \%$ among control households). However, these impacts on food security did not persist (Appendix Exhibit D.1). At the time of the second follow-up survey, households in the treatment and control groups had similar rates of FI-A ( $32.9 \%$ and $33.3 \%$, respectively) and FI-HH ( $39.1 \%$ and $38.9 \%$ ), as well as FI-C ( $28.2 \%$ and $28.7 \%$ ). None of the differences in rates of food insecurity at the time of the second follow-up survey were statistically significant. At the time of both surveys, rates of VLFS among adults and households were not significantly different in treatment households compared to control households.

## Exhibit III.3. Impact of the Packed Promise project on food insecurity at first follow-up survey

|  | Treatment | Control | Difference ${ }^{\text {a }}$ | 95\% Confidence interval | p-value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Children |  |  |  |  |  |
| Secure | 70.7 | 69.9 | 0.8 | [-0.6, 2.2] | 0.123 |
| Insecure | 29.3 | 30.1 | -0.8 | [-2.2, 0.6] | 0.123 |
| VLFS-C | 2.3 | 2.9 | -0.6 | [-1.7, 0.5] | 0.149 |
| Adults |  |  |  |  |  |
| Secure | 64.9 | 62.1 | 2.8 | [0.9, 4.8] | 0.002 |
| Insecure | 35.1 | 37.9 | -2.8 | [-4.8, -0.9] | 0.002 |
| VLFS-A | 16.6 | 18.2 | -1.6 | [-3.7, 0.5] | 0.072 |
| Households |  |  |  |  |  |
| Secure | 59.5 | 57.1 | 2.4 | [0.6, 4.1] | 0.003 |
| Insecure | 40.5 | 42.9 | -2.4 | [-4.1, -0.6] | 0.003 |
| VLFS-HH | 17.3 | 18.6 | -1.4 | [-3.5, 0.8] | 0.105 |
| Sample size | 1,342 | 1,510 |  |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Food security was measured using the standard USDA 18-item survey module and a 30-day reference period. VLFS is a subcategory within the food insecure category. Households missing values for FI-C were excluded from the calculations. The p-value associated with each impact estimate is from a one-tailed test of statistical significance. Of the one-tailed tests not statistically significant at the $5 \%$ level, none would have been statistically significant if they had been specified as a two-tailed test. Regressions controlled for baseline measures of child and adult food insecurity and VLFS; the presence of a single adult in the household versus more than one; ages of children in the household; household income and employment status; respondent age, health status, race/ethnicity, and language preference; baseline participation in SNAP, FDPIR, WIC, Summer EBT for Children, school-based meal programs, or food pantries; and indicator variables for the month of follow-up survey response.
a Values may not reflect exact differences between columns 2 and 3 due to rounding.
EBT = electronic benefits transfer; FDPIR = Food Distribution Program on Indian Reservations; SNAP = Supplemental Nutrition Assistance Program; USDA = U.S. Department of Agriculture; VLFS-A = very low food security among adults; VLFS-C = very low food security among children; VLFS-HH = very low food security among household; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

When examining the individual items on the food security scale, there was some evidence that the project had beneficial effects. For example, the project reduced the percentage of parents reporting that they could not afford to eat balanced meals, children were not eating enough, and children were hungry (a 2 percentage point reduction for each of these three individual food security questions in the full 18 -item scale; see Appendix D.10). Among treatment households, $4 \%$ reported that children were hungry, compared to $6 \%$ of control households at the first followup. Findings at the second follow-up survey were consistent in direction and magnitude for survey items on children not eating enough and children were hungry (a 2-percentage point reduction) and a 3-percentage point reduction in being worried that food would run out (see Appendix D.11).
2. How did impacts on food insecurity among children vary by household characteristics?

Even if the project did not reduce FI-C among the eligible population as a whole, it might have led to reductions among subgroups defined by household composition, socioeconomic characteristics, or food insecurity at baseline. Exhibit III. 4 presents impacts on FI-C at the time of the first follow-up survey within these groups of households; impacts at the time of the second follow-up survey are presented in Appendix Exhibit D. 2 (and 95\% confidence intervals in Exhibit D.9).

Impacts on FI-C at the time of first follow-up survey did not differ significantly across different types of households. Although results from the first follow-up suggest that households with teens and those that reported FI-C at baseline benefited more from the project than other households, these patterns did not appear in the FI-C measures from the second follow-up survey. The only subgroup that consistently exhibited statistically significant reductions in FI-C at both time points was the one defined by the respondent race/ethnicity being either nonHispanic black or "non-Hispanic other," a category that includes Asians, Pacific Islanders, and those who reported two or more races. At the time of the first follow-up survey, treatment households in this subgroup reported a significantly lower level of FI-C (25\%) than control households ( $35 \%$ ). Considering the control group rate of FI-C, this subgroup had the highest risk of FI-C among the four groups defined by respondents' race and ethnicity.

## Exhibit III.4. Impact of the Packed Promise project on food insecurity among children at first follow-up survey, by subgroup

| Subgroup | Treatment |  | Control |  | Difference | p-value |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Sample } \\ & \text { size } \end{aligned}$ | FI-C | $\begin{aligned} & \text { Sample } \\ & \text { size } \end{aligned}$ | FI-C |  | Difference within subgroup | Differences between subgroups |
| Household composition |  |  |  |  |  |  | 0.828 |
| Two or more adults | 979 | 27.8 | 1,125 | 28.8 | -1.0 | 0.183 |  |
| Single adult | 355 | 33.9 | 371 | 34.1 | -0.3 | 0.462 |  |
| Number of children in household |  |  |  |  |  |  | 0.531 |
| 1 child | 273 | 29.5 | 288 | 27.9 | 1.6 | 0.742 |  |
| 2 children | 446 | 29.6 | 514 | 29.8 | -0.2 | 0.467 |  |
| 3 or more | 615 | 28.9 | 694 | 31.3 | -2.4 | 0.089 |  |
| Respondent race/ethnicity |  |  |  |  |  |  | 0.088 |
| Non-Hispanic white | 787 | 32.4 | 772 | 29.5 | 2.9 | 0.942 |  |
| Non-Hispanic American Indian/Alaska Native | 198 | 22.5 | 177 | 26.6 | -4.1 | 0.089 |  |
| Non-Hispanic black or other | 218 | 24.7 | 293 | 34.5 | -9.9 | 0.009 |  |
| Hispanic | 120 | 29.2 | 240 | 31.1 | -1.9 | 0.323 |  |
| Respondent level of education |  |  |  |  |  |  | 0.997 |
| Less than high school | 226 | 33.4 | 294 | 34.1 | -0.7 | 0.431 |  |
| High school, GED | 493 | 28.5 | 518 | 29.4 | -0.9 | 0.303 |  |
| Some college or higher | 604 | 28.6 | 671 | 29.4 | -0.8 | 0.310 |  |
| Baseline food security level among children ${ }^{\text {a }}$ |  |  |  |  |  |  | 0.410 |
| Secure (FS-C) | 645 | 14.0 | 757 | 15.4 | -1.4 | 0.169 |  |
| Insecure (FI-C) | 431 | 54.2 | 434 | 60.3 | -6.0 | 0.007 |  |
| Presence of a teenager in the household |  |  |  |  |  |  | 0.082 |
| Household has no teens | 618 | 25.5 | 713 | 23.4 | 2.1 | 0.874 |  |
| Household has 1 or more teens | 714 | 32.9 | 781 | 36.2 | -3.4 | 0.015 |  |
| Presence of a preschooler in the household |  |  |  |  |  |  | 0.533 |
| Household has no preschoolers | 977 | 32.0 | 1,086 | 32.0 | -0.1 | 0.479 |  |
| Household has 1 or more preschoolers | 355 | 22.3 | 408 | 24.8 | -2.5 | 0.210 |  |
| Household income |  |  |  |  |  |  | 0.471 |
| No income | 36 | 23.0 | 50 | 19.9 | 3.1 | 0.652 |  |
| At/below poverty threshold | 796 | 32.7 | 839 | 35.7 | -3.0 | 0.055 |  |
| $101 \%$ to $185 \%$ of poverty threshold | 395 | 28.0 | 429 | 25.6 | 2.3 | 0.798 |  |
| Above 185\% of poverty threshold | 87 | 13.5 | 155 | 17.2 | -3.7 | 0.168 |  |


| Subgroup | Treatment |  | Control |  | Difference | p-value |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sample size | FI-C | Sample size | FI-C |  | Difference within subgroup | Differences between subgroups |
| Reported SNAP or FDPIR <br> participation in last 30 days |  |  |  |  |  |  |  |
| Participates in SNAP or FDPIR | 665 | 33.5 | 690 | 33.0 | 0.4 | 0.605 |  |
| Does not participate in SNAP or FDPIR | 667 | 25.2 | 804 | 27.6 | -2.4 | 0.035 |  |
| Number of children in household who attend a local school |  |  |  |  |  |  |  |
| Household has 1 child in a local school | 350 | 27.8 | 355 | 26.6 | 1.2 | 0.642 |  |
| Household has more than 1 child in a local school | 727 | 28.6 | 839 | 33.7 | -5.1 | <. 001 |  |
| Sample size | 1,334 |  | 1,496 |  |  |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Food security was measured using the standard USDA 18-item survey module and a 30-day reference period. VLFS is a subcategory within the food insecure category. Households that were missing values for $\mathrm{FI}-\mathrm{C}$ were excluded from the calculations. Subgroups of households are defined using baseline information whenever available. For households missing baseline information (primarily those that responded to the follow-up survey but not the baseline survey), subgroup membership is defined using the follow-up value. This approach prevents loss of the households that completed a follow-up survey but not a baseline survey (roughly $20 \%$ of the analysis sample). The p-value associated with each impact estimate is from a onetailed test of statistical significance. Of the one-tailed tests not statistically significant at the $5 \%$ level, none would have been statistically significant if they had been specified as a two-tailed test. Regressions controlled for baseline measures of child and adult food insecurity and VLFS; the presence of a single adult in the household versus more than one; ages of children in the household; household income and employment status; respondent age, health status, race/ethnicity, and language preference; baseline participation in SNAP, FDPIR, WIC, Summer EBT for Children, school-based meal programs, or food pantries; and indicator variables for the month of follow-up survey response. See Appendix Exhibit D. 8 for the $95 \%$ confidence intervals for this exhibit.
${ }^{\text {a }}$ The subgroup is defined as the baseline level of food security among children. For example, the first row shows that among households with food secure children at baseline, there was no impact on $\mathrm{FI}-\mathrm{C}$ at follow-up (14\% in the treatment group versus $15 \%$ in the control group). The second row shows that among households with insecure children at baseline, there was a significant decrease in FI-C at follow-up (54\% in the treatment group versus 60\% in the control group).

EBT = electronic benefits transfer; FDPIR = Food Distribution Program on Indian Reservations; FI-C = food insecurity among children; FS-C = food security among children; GED = General Educational Development; SNAP = Supplemental Nutrition Assistance Program; USDA = U.S. Department of Agriculture; VLFS = very low food security; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

## 3. What was the relationship between changes in household circumstances and impacts on food insecurity?

The impact of the project on households' food security could be influenced by changes in circumstances, including the number of people living in a household, their employment status, or a disruptive event such as an eviction. Assessing whether these changes have occurred to differing degrees in the treatment group compared to the control group can shed light on whether differences in circumstances might influence how Packed Promise benefits may have affected
food security. Exhibit III. 5 presents the prevalence of these changes in household circumstances in the treatment and control groups as of the first follow-up survey; Appendix Exhibit D. 3 presents these results as of the second follow-up survey. ${ }^{36}$

Treatment and control households experienced changes in household membership and employment at similar rates in the six months before the first follow-up survey. Approximately $18 \%$ of treatment respondents reported a change in the number of people living in their household, compared with $17 \%$ in the control group. In addition, there were no significant differences between groups in the reasons contributing to the change in household size (Exhibit III.5). Nearly the same share of treatment households (30\%) as control households (28\%) experienced changes in employment or pay. Among the households that experienced such a change, those in the treatment group were 13 percentage points less likely than those in the control group to report a decrease in pay or hours-a difference that was statistically significant. ${ }^{37}$

A small share of treatment and control households experienced an eviction. Among households that experienced any change in composition, treatment households experienced a higher prevalence of evictions ( $1.6 \%$ ) than control households $(0.7 \%)$. The 0.9 percentage point difference was statistically significant, although eviction remained a rare event for households in both study groups.

## Exhibit III.5. Reported household changes in the six months before first

 follow-up survey|  | Treatment | Control | Difference | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of households with a change in number of people living in household (HH size) | 18.2 | 17.0 | 1.3 | 0.086 |
| Reasons for change in HH size (\%) ${ }^{\text {a }}$ |  |  |  |  |
| Percentage of households with the following: |  |  |  |  |
| Birth, new step, foster, or adopted child | 19.2 | 20.2 | -1.0 | 0.763 |
| Marriage, romantic partner | 6.5 | 6.0 | 0.5 | 0.825 |
| Family, boarder, other child, or other adult moved in | 37.1 | 29.3 | 7.8 | 0.069 |
| Family, boarder, other child, or other adult moved out | 38.1 | 43.5 | -5.4 | 0.171 |
| Separation or divorce | 5.5 | 8.0 | -2.5 | 0.219 |
| Death of HH member | 3.1 | 5.1 | -2.1 | 0.307 |
| HH member incarcerated | 1.2 | 0.7 | 0.5 | 0.389 |
| Sample member moved | 2.2 | 2.2 | -0.1 | 0.961 |
| Other ${ }^{\text {b }}$ | 0.9 | 1.8 | -0.9 | 0.542 |
| Percentage of households reporting an eviction | 1.6 | 0.7 | 0.9 | 0.016 |
| Percentage of households with a change in employment or pay | 30.0 | 28.0 | 2.0 | 0.299 |

[^19]|  | Treatment | Control | Difference | p-value |
| :--- | :---: | ---: | ---: | ---: |
| Percentage of households that: ${ }^{\text {a }}$ |  |  |  |  |
| Obtained a job | 24.6 | 18.3 | 6.3 | 0.116 |
| Changed jobs | 17.9 | 18.7 | -0.7 | 0.820 |
| Had an increase in pay or hours | 20.8 | 18.1 | 2.7 | 0.463 |
| Lost a job | 25.1 | 23.5 | 1.6 | 0.555 |
| Quit a job | 8.3 | 5.4 | 2.8 | 0.065 |
| Had a decrease in pay or hours | 16.2 | 28.8 | -12.6 | $<.001$ |
| Had seasonal work | 2.0 | 1.6 | 0.5 | 0.613 |
| Took temporary leave (maternity, workers' |  |  |  |  |
| compensation, disability) | 4.2 | 6.5 | -2.4 | 0.209 |
| Other | 1.2 | 1.6 | -0.4 | 0.635 |
| Of three categories of changes, number reported |  |  |  |  |
| in the past six months (\%) |  |  |  | 0.236 |
| None | 57.7 | 60.2 | -2.5 |  |
| One | 34.9 | 34.2 | 0.7 |  |
| Two | 7.2 | 5.4 | 1.8 |  |
| Three | 0.2 | 0.2 | -0.1 |  |
| Sample size | 1,325 | 1,489 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Chi-squared tests of independence were conducted to test for significant differences in proportions between the treatment and control groups for each characteristic.
${ }^{\text {a }}$ Calculated among households that reported a change. Multiple reasons could be reported.
${ }^{\mathrm{b}}$ Other reasons include the following: child went to college, different custody arrangements, evicted, personal issues.
${ }^{\text {c }}$ Other reasons include the following: change in job location, change in job shift, retirement.
${ }^{d}$ Includes changes in HH size, changes in employment or pay, and eviction.
HH = household.

## 4. What is the relationship between availability of supports and impacts on child food insecurity?

Households with more access to support from family, friends, and other community members may be less likely to experience food insecurity (Chilton et al. 2013; Edin et al. 2013). Accordingly, assessing the level of help that households can obtain from these sources may provide important context for understanding the impact of Packed Promise on food insecurity.

Treatment households reported slightly lower levels of help available from friends than control households at the time of the first follow-up survey. For example, $5 \%$ of treatment households reported that they could get all the help they needed from friends, compared to $7 \%$ of control households. However, treatment-control differences largely disappeared when the two groups were compared in the percentage of households reporting they could get either most or all of the help they needed (versus very little or no help). In particular, $21.5 \%$ of treatment households and $22.1 \%$ of control households reported being able to get most or all of the help they needed (not shown). In addition, there were no statistically significant differences in the level of support available from family and other community members between treatment and control households. There also were no significant differences between these households in reported access to help from family, friends, and the local community at the time of the second follow-up survey (Appendix Exhibit D.4).

## Exhibit III.6. Reported access to help from family, friends, and the local community at first follow-up survey

| Percentage of households reporting they could get help, if needed for a problem, from the following: | Treatment | Control | Difference | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Family living nearby |  |  |  | 0.268 |
| All of the help needed | 15.6 | 18.2 | -2.6 |  |
| Most of the help needed | 28.1 | 25.6 | 2.5 |  |
| Very little of the help needed | 30.8 | 32.1 | -1.3 |  |
| No help | 25.4 | 24.1 | 1.4 |  |
| Friends |  |  |  | 0.004 |
| All of the help needed | 4.4 | 6.9 | -2.5 |  |
| Most of the help needed | 17.1 | 15.2 | 1.9 |  |
| Very little of the help needed | 37.7 | 41.4 | -3.7 |  |
| No help | 40.8 | 36.6 | 4.2 |  |
| Other people in the community |  |  |  | 0.135 |
| All of the help needed | 3.1 | 4.5 | -1.4 |  |
| Most of the help needed | 12.2 | 13.6 | -1.4 |  |
| Very little of the help needed | 39.0 | 39.4 | -0.4 |  |
| No help | 45.7 | 42.5 | 3.2 |  |
| Sample size | 1,321 | 1,489 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Chi-squared tests of independence were conducted to test for significant differences in proportions between the treatment and control groups for each overall characteristic.

## C. Impacts on nutrition program participation, food spending, and nutritionrelated behavior

1. Did the project affect participation in nutrition assistance programs?

Differences between treatment and control households' participation in nutrition programs could affect measures of the project's impact on food insecurity. For example, if household interactions with CNNS staff when ordering food boxes made them more likely to enroll in SNAP, FDPIR, or WIC, then additional benefits from these programs might contribute to reductions in FI-C. Conversely, if receiving monthly food deliveries made households less likely to enroll in or recertify enrollment in nutrition programs, this circumstance might inhibit the project's effectiveness. This section presents results on participation in several nutrition programs to assess whether treatment and control households participated at different rates.

Treatment households were significantly more likely than control households to participate in SNAP or FDPIR, and they were also more likely to participate in WIC. Among treatment households, $50 \%$ reported receiving benefits from SNAP or FDPIR at the time of the first follow-up survey, compared with $43 \%$ in the control group (Exhibit III.7). Similarly, 19\% of treatment households and $16 \%$ of control households reported participating in the WIC program. The second follow-up survey results indicate the same pattern of higher participation in these programs among treatment households (Appendix Exhibit D.5). Also, a higher share of the treatment group (19\%) reported receiving food from a food pantry or similar community source than in the control group (14\%) (Exhibit III.7).

## Exhibit III.7. Reported participation in household and child nutrition programs at first follow-up survey

|  | Treatment | Control | Difference | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Household nutrition assistance program ${ }^{\text {a }}$ |  |  |  |  |
| Reported currently receiving SNAP or FDPIR (\%) | 50.0 | 42.6 | 7.5 | <. 001 |
| Reported receiving WIC (\%) | 19.3 | 15.8 | 3.6 | 0.005 |
| Reported none of the above nutrition programs (\%) | 43.0 | 49.8 | -6.9 | <. 001 |
| Children's nutrition program ${ }^{\text {a }}$ |  |  |  |  |
| Reported receiving FRP lunch (\%) | 89.5 | 89.7 | -0.2 | 0.906 |
| Reported receiving NSLP (including free, paid, and reduced-price) | 92.9 | 93.5 | -0.6 | 0.504 |
| Reported receiving FRP breakfast (\%) | 81.6 | 80.1 | 1.5 | 0.344 |
| Reported receiving SBP (including free, paid, and reducedprice) | 84.3 | 82.7 | 1.6 | 0.203 |
| Reported receiving supper (\%) | 6.9 | 7.3 | -0.4 | 0.553 |
| Reported receiving backpack program (\%) | 20.0 | 15.4 | 4.6 | <. 001 |
| Reported receiving food at afterschool program where snacks are served (\%) | 12.3 | 13.5 | -1.2 | 0.047 |
| Reported receiving food at another center, e.g., Head Start or daycare (\%) | 7.9 | 9.2 | -1.2 | 0.075 |
| Reported none of the child nutrition programs listed above ${ }^{\text {b }}$ (\%) | 4.7 | 4.9 | -0.2 | 0.782 |
| Mean number of 9 listed programs in which household reported participation ${ }^{\text {c }}$ | 2.9 | 2.8 | 0.1 | <. 001 |
| Reported receiving Summer EBT for Children in summer 2016 (\%) | 68.1 | 57.0 | 11.1 | <. 001 |
| Reported receiving food from a food pantry, emergency kitchen, or community program (\%) | 19.4 | 14.4 | 5.0 | <. 001 |
| Sample size | 1,341 | 1,510 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Program participation questions generally reflected current participation at the time of the interview, defined as "during the last 30 days." Reported p-values are drawn from two-tailed tests of statistical significance. Regressions controlled for baseline measures of household income and employment status; the survey respondent's age, race/ethnicity, health status, and preferred language; household size and presence of a teenager; and household participation in the program being analyzed at follow-up. Regressions also controlled for the month of survey response.
${ }^{\text {a }}$ Calculated for all households as a descriptive variable and not limited only to those eligible for a specific program listed.
${ }^{\mathrm{b}}$ Calculation excludes free meals or snacks at summer food programs due to the timing of data collection.
${ }^{\text {c }}$ Calculation excludes emergency and other community food programs.
EBT = electronic benefits transfer; FDPIR = Food Distribution Program on Indian Reservations; FRP = free or reduced-price; HH = household; NSLP = National School Lunch Program; SBP = School Breakfast Program; SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Households in the treatment group were also more likely to participate in some child nutrition programs. In particular, treatment respondents participated in Summer EBT for

Children at a substantially higher rate ( $68 \%$ ) than control respondents ( $57 \%$ ). ${ }^{38}$ They also received school backpacks containing food at a higher rate (20\%) than control group respondents $(15 \%)$. This pattern of differences also appeared in responses to the second follow-up survey. ${ }^{39}$ It is possible that these elevated levels of program participation could have contributed to the lower rates of FI-A and FI-HH observed in treatment households. In particular, because Summer EBT for Children and food backpacks both provide food to take home, they could benefit the household more broadly even though they are designed to feed children. Treatment and control households participated in school breakfast, lunch, afterschool snack, and supper programs at similar rates at both time points.

Overall, treatment households were more likely to report getting nutrition assistance from multiple sources, perhaps because household members learned about these programs and became more likely to enroll in them as a result of interactions with CNNS staff when ordering food boxes. However, CNNS staff reported that the personnel responsible for phone calls with Packed Promise recipients were different from those in charge of outreach related to these three household nutrition programs (SNAP or FDPIR and WIC) and so may have been less likely to provide information about them. If interactions with CNNS staff as part of Packed Promise did cause treatment households to enroll in or recertify eligibility for other programs at a higher rate, then the project may have caused an increase in nutrition resources received by those households above and beyond the food boxes, in turn contributing to the reductions in FI-A and FI-HH measured in the first follow-up survey. Alternatively, some of the difference between treatment and control households' reported participation may have been due to confusion about the difference between Packed Promise and other programs, which might have caused respondents to overreport their use of programs (such as Summer EBT for Children) ${ }^{40}$ and community resources (such as food pantries). It is less likely, however, that respondents would confuse Packed Promise with other programs that do not closely resemble it, such as SNAP or FDPIR. ${ }^{41}$ However, it is possible that participation in other food programs such as FDPIR or the Commodity Supplemental Food Program (CSFP) that provide similar foods to Packed Promise could have led to some households not wanting or needing all the items offered in Packed Fresh (FNS 2018a).

[^20]
## 2. What was the project's impact on out-of-pocket food spending?

If the food boxes with shelf-stable foods and Fresh Checks that were provided to households through the Packed Promise project replaced food the households otherwise would have purchased themselves, the intervention may have reduced food expenditures for treatment households. If this sort of substitution of project benefits for out-of-pocket food spending was substantial, it would reduce the chances that Packed Promise led to reductions in food insecurity. Exhibit III. 8 presents estimated impacts on food expenditure outcomes at the first follow-up survey.

Exhibit III.8. Reported monthly food expenditures at first follow-up survey

|  | Treatment | Control | $\text { Difference }{ }^{\text {a }}$ (SE) | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Total out-of-pocket food expenditures ${ }^{\text {b }}$ (\$) |  |  |  |  |
| Household mean | 374 | 396 | -22 (6) | <. 001 |
| Household median | 333 | 360 | -27 (6) | <. 001 |
| Per-person mean | 90 | 96 | -6 (1) | <. 001 |
| Per-person median | 78 | 85 | -7 (2) | <. 001 |
| Food expenditures at supermarkets, grocery stores, and other types of stores ${ }^{\text {c }}$ (\$) |  |  |  |  |
| Household mean | 292 | 313 | -21 (5) | $<.001$ |
| Household median | 276 | 300 | -24 (6) | <. 001 |
| Per-person mean | 70 | 76 | -6 (1) | <. 001 |
| Per-person median | 63 | 67 | -4 (2) | 0.016 |
| Expenditures at restaurants ${ }^{\text {d }}(\$)$ |  |  |  |  |
| Household mean | 82 | 83 | -1 (2) | 0.450 |
| Household median | 59 | 60 | -1 (1) | 0.278 |
| Per-person mean | 20 | 20 | -1 (0) | 0.212 |
| Per-person median | 13 | 13 | 0 (0) | 0.534 |
| Sample size | 1,338 | 1,505 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Questions were asked about the last 30 days. Reported $p$-values are obtained from two-tailed t-tests of statistically significant differences. Regressions controlled for baseline measures of household income and employment status; the survey respondent's age, race/ethnicity, health status, and preferred language; household size and the presence of a teenager; and household participation in the program being analyzed at follow-up. Regressions also controlled for the month of survey response.
${ }^{\text {a }}$ Difference column may not match the (Treatment minus Control) calculation exactly due to rounding.
${ }^{\text {b }}$ Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days. Excludes purchases made with SNAP and WIC.
${ }^{c}$ Out-of-pocket expenditures on food at supermarkets, grocery stores, and other stores. Excludes purchases made with SNAP and WIC.
${ }^{d}$ Includes carryout, drive through, and all types of restaurants.
SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

The project led to a significant reduction in households' total monthly out-of-pocket food expenditures and food expenditures at supermarkets, grocery stores, and other types of food markets. Mean household food expenditures were $\$ 374$ in treatment households and $\$ 396$ in control households. Treatment households thus spent $\$ 22$ less per month out of pocket on food
compared with control households. This average reduction in out-of-pocket spending is substantially less than the value of the food received by the average treatment household. ${ }^{42}$ There was no impact on spending at restaurants. Treatment households spent about $\$ 82$ per month, on average, at all types of restaurants, whereas control households spent $\$ 83$ per month. The median treatment household spent $\$ 7$ less per person out of pocket on food than the median control household at the first follow-up survey.

The project also reduced total monthly out-of-pocket food expenditures and food expenditures at supermarkets, grocery stores, and other food markets at the time of the second follow-up survey, but this effect was smaller. Mean total out-of-pocket monthly food spending was $\$ 387$ in the treatment group and $\$ 404$ in the control group-a difference of $\$ 16$ (see Appendix Exhibit D.6). The treatment-control difference in supermarket spending was $\$ 15$ monthly; there was no impact on restaurant spending. In addition, there was no impact on perperson median total out-of-pocket food expenditures or household median food expenditures at the second follow-up survey.

## 3. Did the project have an impact on shopping and food preparation?

Another way in which the Packed Promise intervention could have affected households is by changing several aspects of their food shopping and nutrition behaviors. First, treatment households may have traveled less often to do food shopping because food boxes were shipped directly to their homes and they were able to stockpile some food supplies for a longer period than before the demonstration. Second, households may have purchased foods at different grocery stores that carried the perishable items they needed and/or altered their shopping behavior in different ways based on the items in the food boxes. Finally, households may have changed their shopping behaviors or purchased other types of foods in association with redeeming Fresh Checks at WIC-authorized stores or participating farmers' markets and farm stands.

Patterns of shopping behaviors regarding shopping frequency and distance traveled for grocery shopping were similar among treatment and control households (Exhibit III.9). The average one-way distance traveled was about 10 miles in the treatment group and 11 miles in the control group. Approximately $6 \%$ of the treatment group and $7 \%$ of the control group reported traveling 30 or more miles to do grocery shopping at the time of the first follow-up survey. Findings for the second follow-up survey also showed no impact by the project on food shopping behaviors (see Appendix Exhibit D.7), nor did Packed Promise significantly affect the frequency of eating dinner as a family at either follow-up.

[^21]
## Exhibit III.9. Reported food shopping and family dinners at first follow-up survey

|  | Treatment | Control | Difference ${ }^{\text {a }}$ (SE) | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Mean number of times shopped for food in past 30 days | 7.5 | 7.2 | 0.2 (0.34) | 0.516 |
| Percentage that shopped at each frequency |  |  |  | 0.561 |
| Less than 5 times (or 0-4) | 43.7 | 44.5 | -0.8 |  |
| 5-9 times | 31.3 | 30.3 | 1.0 |  |
| 10-19 times | 16.9 | 18.4 | -1.5 |  |
| 20-30 times | 8.2 | 6.8 | 1.4 |  |
| Type of store where bought most of its groceries (\%) |  |  |  | 0.321 |
| Supermarkets/grocery stores | 35.3 | 40.1 | -4.8 |  |
| Discount stores | 62.0 | 57.5 | 4.5 |  |
| Dollar stores, warehouse clubs, farmers' markets, or other ${ }^{\text {b }}$ | 1.6 | 1.2 | 0.4 |  |
| Average distance to grocery shopping destination (one-way miles) ${ }^{\text {c }}$ | 9.6 | 10.9 | -1.3 (2.44) | 0.607 |
| Percentage traveling each distance to grocery shopping destination |  |  |  | 0.687 |
| 0-2 miles | 23.2 | 24.4 | -1.1 |  |
| $3-5$ miles | 22.4 | 18.9 | 3.5 |  |
| 6-10 miles | 25.3 | 19.5 | 5.8 |  |
| 11-19 miles | 14.3 | 17.3 | -3.0 |  |
| 20-29 miles | 8.9 | 12.6 | -3.8 |  |
| 30 or more miles | 6.0 | 7.3 | -1.3 |  |
| Distribution of the number of nights a week family typically sits down together to have dinner (\%) |  |  |  | 0.637 |
| Every night | 45.4 | 46.4 | -1.0 |  |
| 5 or 6 nights | 26.2 | 24.8 | 1.4 |  |
| 3 or 4 nights | 21.2 | 20.4 | 0.8 |  |
| 1 or 2 nights | 5.1 | 6.5 | -1.4 |  |
| Never | 2.1 | 1.8 | 0.3 |  |
| Sample size | 1,342 | 1,510 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: For continuous measures, reported p-values are obtained from two-tailed t-tests of statistically significant differences; for binary and categorical measures, $p$-values are drawn from chi-squared tests of independence.
${ }^{\text {a }}$ Difference column may not match the (Treatment minus Control) calculation exactly due to rounding.
${ }^{\mathrm{b}}$ Includes convenience store; ethnic food store; and other retailers, such as surplus store and local produce store.
${ }^{\text {c }}$ Reported miles ranged from 0 to 99 miles from home.
SE = standard error.
4. What was the impact of the project on children's dietary outcomes?

Children's dietary outcomes were measured for the same 30-day period as the food security outcomes in Chickasaw Nation's first follow-up survey only. Respondents answered questions about how often certain foods and food groups were consumed by one randomly selected child per household in the past 30-day period. These "food frequency" questions were used to assess
indicators of children's diet quality: fruits and vegetables (total and excluding fried potatoes), whole grains, and added sugars (total and from sugar-sweetened beverages). Scoring procedures were used to convert a respondent's reports of their child's consumption of specific foods into daily amounts of fruits and vegetables (in cup equivalents [cup eq.]), whole grains (in ounce equivalents [oz eq.]), and daily teaspoons of added sugars. These dietary measures are based on USDA's recommended daily intake for food groups and used by researchers to assess the population's adherence to dietary guidance (HHS and USDA 2015). ${ }^{43}$ A detailed summary of the scoring procedures developed by the National Cancer Institute (NCI) and the methods used to construct the dietary outcomes is in Appendix B.7.

Packed Promise led to small and statistically significant improvements in children's diets in terms of their intakes of fruit, vegetables, and whole grains (Exhibit III.10). Children in households from the Packed Promise treatment group consumed about one-tenth of a cup eq. (or $4-5 \%$ ) more fruits and vegetables per day than children in the control group, with or without fried potatoes. Mean consumption of fruits and vegetables combined was about 2.35 cup eq. per day-just under half of the recommended 5 or more cup eq. of fruits and vegetables per day-in the treatment group, and 2.25 cup eq. per day in the control group (HHS and USDA 2015). When examined separately, mean daily consumption of fruit was slightly higher than mean consumption of vegetables in both study groups ( 1.25 cup eq. per day of fruit versus 1.14 cup eq. vegetables in the treatment group, and 1.20 cup eq. per day of fruit versus 1.11 cup eq. per day of vegetables in the control group).

## Exhibit III.10. Impact of the Packed Promise project on children's dietary outcomes

| Dietary outcome (daily amounts) ${ }^{\text {a }}$ | Treatment ${ }^{\text {b }}$ | Control | Difference ${ }^{\text {c }}$ (SE) | p-value | Percentage difference |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fruits and vegetables (cup eq. per day) ${ }^{\text {d }}$ | 2.35 | 2.25 | 0.09 (0.028) | <. 001 | 4 |
| Fruits and vegetables, without fried potatoes (cup eq. per day) ${ }^{\text {d }}$ | 2.27 | 2.16 | 0.11 (0.030) | <. 001 | 5 |
| Fruits (cup eq. per day) ${ }^{\text {e }}$ | 1.25 | 1.20 | 0.06 (0.014) | <. 001 | 5 |
| Vegetables (cup eq. per day) ${ }^{\dagger}$ | 1.14 | 1.11 | 0.03 (0.009) | <. 001 | 3 |
| Vegetables, without fried potatoes (cup eq. per day ${ }^{f}$ | 1.05 | 1.01 | 0.04 (0.009) | <. 001 | 4 |
| Whole grains (oz eq. per day) ${ }^{\text {g }}$ | 0.73 | 0.67 | 0.06 (0.013) | <. 001 | 9 |
| Added sugars (tsp. per day) ${ }^{\text {h }}$ |  |  |  |  |  |
| Total from foods and beverages | 15.86 | 15.85 | 0.01 (0.145) | 0.905 | 0 |
| From sugar-sweetened beverages | 7.61 | 7.48 | 0.13 (0.150) | 0.176 | 2 |
| Sample size | 1,294 | 1,456 |  |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Food frequency questions were answered by parents or guardians for one selected child per household. See Appendix Exhibit D. 13 for the age and gender distribution of the selected children by study group. Data were analyzed using NCl's Dietary Screener Questionnaire in the NHANES (2009-10) data processing and scoring procedures for children age 2 and older. The median age of the randomly selected child within the

[^22]household for which dietary outcome data were collected was 10 years old in both study groups.
"Percentage difference" is impact as a percentage of control group level. The p-value associated with each impact estimate is from a two-tailed test of statistical significance. Households were excluded from analysis if they were missing data on the children's age or gender, no age-eligible children were reported in the household, or the respondent did not complete the food frequency survey section ( $n=75$ ). An additional 104 respondents completed some items in this survey section, but not all.
${ }^{\text {a }}$ Daily amounts are measured in cup equivalents (cup eq.) for fruits and vegetables and ounce equivalent (oz eq.) for whole grains, as defined by the 2010 Dietary Guidelines for Americans.
${ }^{\mathrm{b}}$ Treatment group estimates are based on all households eligible to receive food boxes, regardless of receipt. See Appendix Exhibit C. 1 for a full list of the food items in each type of Packed Promise food box.
${ }^{c}$ Difference column may not match the (Treatment minus Control) calculation exactly due to rounding.
${ }^{\text {d }}$ One cup equivalent is defined as 1 cup of raw or cooked fruit or vegetables, vegetable juice, or fruit juice, or 2 cups of leafy green vegetables.
${ }^{\mathrm{e}}$ One cup equivalent is defined as 1 cup of raw or cooked fruit or fruit juice.
${ }^{\text {f }}$ One cup equivalent is defined as 1 cup of raw or cooked vegetables or vegetable juice or 2 cups of leafy green vegetables.
${ }^{g}$ One oz. eq. of whole grains is 11 -ounce slice of bread; 1 ounce of uncooked pasta or rice; $1 / 2$ cup of cooked rice, pasta, or cereal; 16 -inch diameter tortilla; 15 -inch diameter pancake; 1 ounce of ready-to-eat cereal; or 3 cups of popped popcorn.
${ }^{\mathrm{h}}$ Teaspoons (tsp.) of added sugars are derived from reported frequencies of consuming sugar-sweetened beverages (soda, fruit-flavored drinks, and sugar or honey added to coffee or tea); cookies/cakes/pies/brownies; doughnuts/sweet rolls/Danish/muffins; and cereals. Questions on candy and ice cream consumption were not asked and therefore are excluded from the estimates.
$\mathrm{NCI}=$ National Cancer Institute; NHANES = National Health and Nutrition Examination Survey; SE = standard error of the difference.

Children receiving Packed Promise benefits consumed nearly three-fourths of an ounce eq. of whole grains per day-roughly one-tenth more than the control group (equivalent to one-tenth of a slice of whole wheat bread or one-tenth of a cup of ready-to-eat cereal). This difference represents a small change in the right direction toward children meeting the $2.5-3.5 \mathrm{oz}$ eq. recommended amounts of whole grains per day. Packed Promise had no impact on total daily consumption of added sugars from total foods and beverages or sugar-sweetened beverages, suggesting that any additional out-of-pocket spending was not used to buy more sugar-sweetened beverages, cereals, or baked goods with added sugars (sweet rolls, muffins, cakes, cookies, pies, and brownies) that were then consumed by children in the household.

Appendix Section D. 4 includes the results for additional analyses of dietary outcomes, such as the impact of Packed Promise on children's dietary outcomes by age group (Exhibit D.14, the impact of Packed Promise on children's mean daily frequency of reported consumption of specific foods and beverages (Exhibit D.15), and descriptive analyses of the treatment group's dietary outcomes based on ordering a food box in the 60 days before the survey (Exhibit D.16), and based on the pattern of food boxes ordered in the year before the first follow-up survey was administered (Exhibit D.17). In general, these results are consistent with the results in Exhibit III.10, showing that receiving the food boxes and Fresh Checks was associated with small but significant increases in fruits, vegetables, and whole grains - the items available in the food boxes or items that could be purchased with Fresh Checks.

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## IV. STUDY FINDINGS AND CONCLUSIONS

This chapter summarizes and discusses study findings from the evaluation of the CNNS Packed Promise project, including an assessment of project implementation (Chapter II) and impacts on food insecurity and diet among children (Chapter III). It first briefly describes the project's goals and design, and then summarizes and discusses the findings from the implementation and impact analyses. The chapter ends with a discussion of study limitations and conclusions.

## A. The Chickasaw Nation Packed Promise project

CNNS received a grant through the 2010 Child Nutrition reauthorization to implement the Packed Promise project. It was designed to address the food needs of low-income households by delivering food boxes containing nutritious shelf-stable foods and Fresh Checks directly to homes of eligible children. Fresh checks could be redeemed for fresh or frozen fruits and vegetables at WIC-authorized stores and participating farm stands and farmers' markets in the demonstration area. These deliveries addressed the fact that many homes were located in rural areas with limited access to grocery stores-particularly large supermarkets that carry a good selection of fresh produce and other nutritious items. The food boxes also included a check that could be redeemed for fresh or frozen fruits and vegetables at WIC-authorized stores and participating farm stands and farmers' markets in the demonstration area. The project objective was to provide substantial and nutritious foods to eligible children in low-income households each month in an effort to end childhood hunger by increasing food access, availability, food security, and diet quality.

The project targeted households at risk of food insecurity among children-those with children age 4 and older who were eligible for free school meals or attending a CEP school. Households had to actively consent to participate in the project and study evaluation. The demonstration included 40 school districts; 20 were randomly assigned to receive project benefits (the treatment group) and 20 were assigned to the control group. Households in the treatment group had to order food boxes each month, so the intervention required ongoing active participation. This requirement may have cut down on food waste from boxes sent to households that did not need or want them in a given month. It may also have impeded some households from obtaining the food boxes if they did not order in any month.

## How did the study work?

The study used an experimental design-the most rigorous way of estimating demonstration effects. Demonstration school districts in the Chickasaw Nation (located in 12 counties in south-central Oklahoma) were randomly assigned to a treatment group that received project benefits and a control group that operated under "business as usual." Eligible households with children enrolled in treatment school districts were included in the treatment group; those with children in control school districts were in the control group. These groups were followed through the project's implementation period, and their outcomes were measured about 12 and 18 months later based on survey data from two follow-up surveys. Because households in the treatment and control groups were similar at the beginning of the implementation period due to random assignment, later differences between the two groups in FI-C were attributed to the impact of the project, as were other outcomes.

CNNS aimed to promote healthy eating by providing food boxes designed to include (1) nutritious items (protein foods, fruits, vegetables,
whole grains, and healthy snacks such as low-fat popcorn and nuts) and not foods with limited nutritional value, and (2) \$15 Fresh Checks that allowed them to select their favorite fresh produce or frozen fruits and vegetables from qualified vendors. At the same time, CNNS allowed some choice for households, by allowing them to select from among five types of boxes that included different foods.

The project benefits were fairly generous, having been designed to provide a value of $\$ 53$ per eligible child to each enrolled household in each month. This amount included a value of $\$ 38$ for the foods included in the box, plus the $\$ 15$ Fresh Check. A typical household of two adults and multiple children (an average of 2.2 eligible children and 2.5 children total) was eligible for $\$ 106$ for two children or $\$ 159$ per month for three (or on average, $\$ 117$ per month across households of all sizes).

The evaluation of the CNNS Packed Promise project examined the characteristics of those households receiving benefits and their receipt of project benefits, and assessed project implementation over a 25-month period from February 2016 through February 2018, spanning parts of three school years. It also examined how the food boxes containing shelf stable foods and Fresh Checks affected key outcomes among households and children participating in the study. The primary focus was on how project benefits affected the households' levels of FI-C, but other outcomes (food security among adults and the household as a whole, nutrition assistance program participation, and children's diets) were also assessed by two follow-up surveys.

## B. Successes and challenges of the Packed Promise project implementation

Overall, CNNS developed an effective process for delivering nutrition assistance to participating households during the implementation period, and many low-income households in the demonstration area benefitted. This section describes aspects of the project's implementation that worked well and were important to its success, including household perceptions of and participation in the project, along with some challenges the Packed Promise team faced along the way.

## 1. Successes: What worked well and why

CNNS and Feed the Children had an effective partnership. The Packed Promise team accomplished its goal of delivering the food boxes to participating low-income households throughout the 25 -month project implementation. CNNS's partnership with Feed the Children provided the right expertise to successfully navigate sourcing foods at low prices, storing bulk foods in Feed the Children's warehouse, and shipping food boxes to meet demand. The project team solved logistical and technical issues in ordering and shipping, and communicated with project participants to obtain feedback, which was used to modify the types of food items and the ordering process over time. CNNS's prior experience in managing large demonstrations, such as the Summer EBT for Children demonstration, and its familiarity with the target community, relationships with schools, and experience in customer service, all contributed to successful implementation.

The outreach effort was extensive. Monthly outreach by contracted staff consisted of an automated text message, a second automated text message a week later if no order had been
placed, followed by a phone call or email, and eventually a call to the children's school to learn whether contact information had changed or the family had moved away. This level of outreach helped to maintain participation. In the words of one discussant: "For me it's the reminders... I get a text message and if I still don't order they call me and I like that because I forget..."

Packed Promise maintained a moderately high level of household participation. One indication of the success of and need for the program is that despite the need for households to take action each month to get the food boxes, participation remained at consistent levels throughout the implementation period. Although participation was not universal, nearly all treatment households (97\%) ordered at least one box, and most ordered boxes in many of the months during the implementation period. One discussant said: "My family, because we have so many children, there's times when we've had zero income and so many hardships, so if we saw food... Believe me when I heard about this program it was a blessing... So [when we saw the application] we jumped on it. "

Although nearly all households in treatment districts got at least one food box, $61 \%$ got one or more boxes in a typical month. ${ }^{44}$ The estimated participation rate averaged $65 \%$ in Year 1 and $58 \%$ in Year 2. These percentages may understate the level of participation in a given month because the foods received in one month could be saved and consumed the next month; also, Fresh Checks could be used at any time after they were received (up through the project end in February 2018). Thus, households may have placed an order in one or more months in a row, but then skipped a month and continued consuming the previously received shelf-stable foods. Consistent with this theory, many households (39\%) participated in the project intermittently, occasionally skipping two months but then resuming their orders. Some households did lose eligibility (for example, because they moved out of the area).

Households consumed most of the food they received in the boxes. At the time of the first follow-up survey, $80 \%$ of households reported eating all or most of the items in the boxes they received, and only $1 \%$ said they ate none of these items. If they did not consume the food in the month they received the box, they generally either consumed it later or gave it to family or friends. Similarly, when they used the Fresh Checks ( $76 \%$ of the time), they tended to redeem them for their full value, or close to it. However, they did not take full advantage of these checks, as about one-fourth $(24 \%)$ of the checks sent out in food boxes were not redeemed by the end of the demonstration in February 2018.

Participants were satisfied with the benefits. Participants who regularly ordered and attended the focus groups expressed a high level of satisfaction with the focus on nutritional quality in the content of the food boxes, staff help in ordering the boxes each month, and how the home delivery reduced the cost and time burden of shopping with children. According to some accounts, the selection of shelf-stable items included enough staples to plan a meal around and

[^23]nutritious snacks that the children enjoyed. One mother said: "I make a chicken soup with the chicken and vegetables that we get and some of the whole wheat pasta. My girls, they love it. Every week I have to make it on Friday. If we had to buy all those ingredients we couldn't afford it." The Fresh Checks were popular, and some parents reported positive effects on their children's fruit and vegetable consumption: "I love it, the kids like to go and pick out fruits and veggies... If the kids get to pick it they are more likely to eat it ..." and "My daughter's favorite thing out of there is the spinach and asparagus. She likes all the beans in it. Now she'll eat any vegetable whether it's canned or not..."

## 2. Challenges

Although the project was successful in many ways, staff and households noted several possible reasons for why some households did not place a monthly order. Reasons include poor household contact information, limited choices of food items in the boxes, and intermittent system issues that may have deterred households from ordering again. Unlike FNS nutrition assistance programs, households needed to proactively order their Packed Promise benefits each month. To encourage households to do this, CNNS used a multipronged and intensive outreach effort including mailings and reaching out to eligible households by telephone. However, many households changed their telephone contact information during the course of the project, and schools did not always have newer information available.

Despite reports from focus group discussants that they liked having a choice of five combinations of shelf-stable foods and liked the foods themselves, they also uniformly would have preferred more choice or tailoring of the boxes to match their food preferences. Even after CNNS made some improvements in the food box contents to respond to participants' preferences, they still reported certain items as either stacking up in their cupboards or being given away to other families in need (such as hummus, crackers, or tomato-based products). This circumstance may have been especially true for households receiving more than one box. Thus, it is possible that some of the households that dropped out completely or ordered intermittently did so because they did not like or use all of the foods in the boxes.

## 3. Costs

The Packed Promise project took three years to plan and implement, at a total cost of $\$ 6.4$ million. The cost analysis shows that the costs directly related to providing food boxes were nearly $\$ 4.3$ million (about $67 \%$ of total project costs) and those for providing Fresh Checks approximately $\$ 700,000$ (about $16 \%$ of the total cost of the food boxes). The remaining costs were related to planning for and administering the project. On average, the cost per participating household for the project was $\$ 3,103$, and the cost per eligible child was $\$ 1,410$. If food box benefits were expanded to a wider population, the per-household costs associated with them might decrease modestly due to economies of scale. However, significant reductions in the price per household would be unlikely because the foods and the cash value of checks comprised most of the total costs, presenting a potential challenge to expanding the benefits to a larger population.

Costs of implementation ${ }^{\text {a }}$
Total project costs: $\$ 6,374,527$
Total labor costs: $\$ 1,697,797$
Total other direct costsa: $\$ 4,676,730$
Food boxes
Total costs: \$4,296,366
Labor costs: $\$ 42,780$
Fresh Checks: $\$ 701,452$
Other direct costs ${ }^{\text {b }}$ : $\$ 3,552,134$
${ }^{\text {a }}$ Includes paid and donated or in-kind resources for the 12-month planning and 25-month implementation periods (February 2015 - February 2018).
${ }^{\mathrm{b}}$ Includes cost of shelf stable foods, printing, packing, and shipping costs, bank fees, along with Fresh Check redemptions through March 2018.

## C. Summary of impact results

The key objective of the Packed Promise project was to reduce the rate of FI-C through the provision of food boxes delivered to children's homes. Packed Promise did not reduce FI-C in treatment group households (Exhibit IV.1). Although the FI-C rate was a bit lower among treatment households than among control households, this difference was not statistically significant at either the first or second follow-up surveys (after a year of implementation and 18 months, respectively). Nor was there strong evidence that impacts differed for key subgroups. However, evidence exists that the project benefits affected participating households; it reduced rates of FI-A and FI-HH at the first follow-up survey. For example, the rate of FI-A was $35 \%$ in the treatment group compared with $38 \%$ in the control group, a difference that was statistically significant. However, this difference did not persist at the second follow-up survey.

Reductions in adult and household food insecurity likely benefit children indirectly. Some studies show that the pathway through which household food insecurity has negative impacts on children is through parental stress and parenting practices (Chilton et al. 2013; Coleman-Jensen et al. 2013; National Research Council and Institute of Medicine 2013). There is some evidence of this in Packed Promise. The project led to a three percentage point reduction among parents in treatment households reporting they were worried the food would run out before they got money to buy more compared to parents in control households at the second follow-up (Appendix Exhibit D.11).

When examining some of the other individual items on the child food security scale, there was some evidence that the project had beneficial effects. For example, the Packed Promise project led to a two point reduction in the percentage of parents reporting that children were hungry ( $4 \%$ of treatment households compared to $6 \%$ of control households at the first followup; Appendix D.10). This difference persisted at the second follow-up survey (Appendix D.11). This finding is supported by remarks by focus group discussants about Packed Promise: "You
know your kids aren't going to go to bed hungry at night." and "Your emotional and mental stability lifts up because you know you can feed your kids." Despite these comments and differences on some individual food security items ${ }^{45}$, results do not show that the project had significant impacts on the rate of FI-C overall.

Exhibit IV.1. Impact of the Packed Promise project on food insecurity among children


Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first and second follow-up surveys. Estimates are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Estimates are regression adjusted to account for households' baseline characteristics. Treatment-control differences for VLFS are statistically significantly greater than zero at the 0.05 level, one-tailed test. The comparison of FI-C at first follow-up included 1,334 treatment households and 1,496 control households. The comparison at second follow-up included 1,274 treatment households and 1,483 control households.
*Treatment-control difference is statistically significant at a 0.05 level of significance, one-tailed test.
FI-C = food insecurity among children.
Examining food insecurity rates across the three time points covered in the evaluation provides additional context for the impact findings. The FI-C rate among households in the treatment group declined substantially during the period covered by the Packed Promise project, from $38 \%$ before it started to $31 \%$ at the time of the first follow-up survey and $30 \%$ at the second

[^24]follow-up survey (Exhibit IV.2). ${ }^{46}$ However, the decrease in FI-C experienced by treatment households was matched by a similar decrease among control households.

## Exhibit IV.2. Changes in rates of food insecurity among children from baseline to first and second follow-up surveys



Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2016 baseline survey ( $\mathrm{n}=2,854$ ) and 2017 first and second follow-up surveys ( $n=2,830$ and $n=2,757$, respectively). Estimates are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Treatment-control differences are not statistically significantly greater than zero at the 0.05 level, one-tailed test. The analyses include all respondents at each survey round. Findings are adjusted for nonresponse and weighted to represent the target population at each survey round.

The project did have effects on some other outcomes. It led to a modest decline in households' out-of-pocket food expenditures. In other words, more food coming into a household meant people did not need to spend as much of their own money on food in stores. However, the decline in out-of-pocket food spending was fairly small relative to the value of additional food coming into treatment households because of the project. Specifically, there was a decline of $\$ 22$ in food spending in the typical treatment household, compared with an increase in food resources of $\$ 117$ for an average household of 2.2 eligible children (and a combined

[^25]value of the food box and Fresh Checks of $\$ 53$ per eligible child). The project also led to increases in households' rates of reported participation in some nutrition assistance programs, including SNAP or FDPIR, WIC, school backpack programs, and Summer EBT for Children, although it is not clear why the project led to these increases. One possibility is that the regular connection with Packed Promise led participating households to be more aware of other possible nutrition assistance programs. ${ }^{47}$

Finally, the project led to modest but statistically significant increases in children's consumption of fruits and vegetables as well as whole grains (Exhibit IV.3). Although the impact on diet was small, the findings represent a $5 \%$ increase in children's daily nonfried fruits and vegetables consumption, and a $9 \%$ increase in daily whole grains consumption. Children in treatment households had higher daily mean frequencies of intake of fruits, vegetables (including tomato products), and brown rice and other whole grains compared to children in control households. These findings were consistent with the emphasis on vegetables, fruits, and whole

Positive impacts on children's diet

Increase of 0.1 cup eq. of fruit and vegetables a day per child

Increase of 0.07 oz eq. of whole grains a day per child

No increase in sugar or sugar-sweetened beverages grains in the food boxes, and that fruits and vegetables could be purchased with Fresh Checks. The project did not lead to a significant change in children's intake of added sugars. Children's added sugar intake was examined to determine whether treatment households were increasing their out-of-pocket spending on sugar-sweetened beverages or other foods high in added sugars as a result of receiving project benefits, but this did not appear to be the case.

These findings do not capture any effects the project may have had on the food consumption of household members other than the selected child. The dietary findings reflect an average child in an average household in the Packed Promise project. The dietary outcomes and qualitative findings in Packed Promise are consistent with other studies that show that parents shield children from food insecurity in ways that protect children's diet quality (Hanson and Connor 2014).

[^26]Exhibit IV.3. Impact on children's food consumption at the first follow-up
survey survey


Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey ( $\mathrm{n}=2,750$ ). Estimates are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Notes: Daily amounts are measured in cup eq. for fruits and vegetables and oz eq. for whole grains, as defined by the 2010 Dietary Guidelines for Americans. Treatment group estimates are based on all households eligible to receive food boxes, regardless of receipt. See Exhibit III. 10 for additional food categories and analysis.
*Treatment-control difference is statistically significant at a 0.05 level of significance, one-tailed test.
A key question is why these project benefits failed to lead to improvements in FI-C, given that they were generous, used by most treatment households, and led to small dietary improvements among children (see Exhibit IV.4). Several potential factors might help shed light on these results. One is that the project operated during a period in which the food security situation was improving. The evidence for this is that in control households-which did not receive any additional benefits-rates of food insecurity declined substantially over the implementation period. For example, between baseline and the second follow-up survey, rates of food insecurity declined from $35 \%$ to $29 \%$ among children and $45 \%$ to $33 \%$ among adults. More generally, it was a period of economic expansion in the project area. The average unemployment rate in the 12 project counties fell from $5.2 \%$ in January 2016 (just before the project started) to $4.5 \%$ in March 2017 (during the first follow-up survey) and $3.9 \%$ in September 2017 (during the second follow-up survey) (BLS 2018). In the context of a growing economy and improving conditions for low-income households, some of the households that saw an improvement in FI-C due to project benefits also might have been helped by the improving economic conditions.

## Exhibit IV.4. Pathway from Packed Promise food box to household food security and children's diet

What is the average maximum monthly value of a food box?
\$53 per eligible child
\$117 per household
Did households participate?
Nearly all (97\%) ordered at least once
A 61\% average over 25 months
Among Fresh Checks received, 76\% redeemed
Among Fresh Checks used, $\$ 14$ of $\$ 15$ redeemed
What was the average estimated value of a food box used by households based on participation and redemption rates over time?
\$68 per month
How much did it reduce household monthly out-of-pocket food spending?
\$22 per month
How much did it increase the average value of food coming into households?
$\$ 46$ per month (average of 4.5 members)
How much did it increase the value of food for the average eligible child?
$\$ 10$ per month
How did it affect food security?
No impact on FI-C or VLFS-C
Lower rates of $\mathrm{FI}-\mathrm{A}$ and $\mathrm{FI}-\mathrm{HH}$ at first follow-up, not sustained at second follow-up
How did it affect children's diet?
0.1 cup eq. increase in daily fruits and vegetables (4\%)
0.07 oz eq. increase in daily whole grains (9\%)

No impact on added sugars or sweetened beverages

Another possible explanation is that benefits went to the entire household even though the motivation for the project was to reduce FI-C. The delivery of the food boxes to the household may have benefitted all of its members generally but also may have limited the extent to which the children in treatment households benefitted specifically. ${ }^{48}$ This explanation is consistent with the fact that although the project did not significantly reduce FI-C at the first follow-up survey, it did significantly reduce FI-A (and FI-HH) -some of the foods in the boxes or fresh/frozen

[^27]products purchased with the Fresh Checks likely went to adults in the household. This development would be consistent with a scenario that when times are tight, adults first restrict their own consumption before cutting back on what they feed their children (Coleman-Jensen et al. 2013). As one focus group discussant stated: "Before we started getting this, towards the end of the month on food stamps, you're getting really creative with what you have...This kinda makes the ends meet. It's not much but...I'll just be straight honest with you, before I got this program there were times I didn't eat, just to make sure they did. And now it's not like that."

This explanation implies that when times begin to improve or additional food resources become available, the adults can use those resources to resume a more typical diet for themselves. One focus group discussant said: "You can afford to buy more other nutritious food because you have a lot of the basics and bases." Another factor leading to adults consuming foods that came from the project is that in some cases, children may not have liked the foods in the food box, so adults ate them by default. This explanation is part of a larger context suggesting that even the fairly generous set of benefits provided by Packed Promise to treatment households may not have resulted in a large increase in the amount of food going to the typical child. For example, households did not order all potential food boxes, redeem all of the Fresh Checks, or consume all of the food in the food boxes. The end result is that the average monthly benefit of participation may have been closer to $\$ 10$ per child in an average household than the maximum value of $\$ 53$ (see the hypothetical case example in Appendix D.18). This logic may explain the relatively small effects on children's dietary intake and lack of substantial changes in FI-C, particularly if households participated less when the economy improved. Also, households for which FI-C persisted even in the expanding economy may have faced more challenging circumstances, meaning that a modest increase in the amount of food available in the household might not have had a measurable effect on FI-C.

## D. Limitations of the study and implications for future research

In thinking about this study and the lessons it provides, it is useful to keep in mind the context in which the Packed Promise project was implemented. A number of nutrition assistance programs were already available at the time of implementation, and many eligible households in the study sample took advantage of these programs-such as SNAP, FDPIR, WIC, or Summer EBT for Children. Even with this nutrition assistance, there were high levels of food insecurity in the eligible population, as discussed previously. So the Packed Promise project was intended to provide additional help to households at risk of food insecurity, in addition to existing nutrition assistance. Thus, the study did not assess the impact of Packed Promise food boxes relative to a counterfactual of no nutrition assistance to control households, but instead relative to a counterfactual of nutrition assistance from existing programs (but not from Packed Promise).

As with any study, analysis of the Packed Promise project shows that it faced challenges and had some limitations. Several issues are important to consider when interpreting the results of this study.

- The study results do not necessarily reflect what the impacts of the project would have been in other communities or if conducted at a different time under different circumstances. The Packed Promise project focused on low-income households with children eligible for free school meals living in 12 counties in south-central Oklahoma within the Chickasaw Nation
and attending school in one of 40 school districts participating in the demonstration. The study was conducted in a period of economic expansion, when local unemployment rates fell from $5.2 \%$ to $3.9 \%$ in the demonstration counties (BLS 2018). The impacts of a project like Packed Promise might have been very different if implemented during a recession. ${ }^{49}$
- Food security among children is a complex problem, and some aspects of the interplay between children's food consumption and that of other household members are challenging to capture through survey methods. Additional qualitative data may have helped explain how the food box items were used to meet the individual household members' needs and prepare meals, and why some households chose not to order food boxes or ordered more intermittently. Further information about the reasons for nonparticipation would be useful in improving a home food delivery program.
- There is qualitative data suggesting that some treatment households confused the Summer EBT for Children vouchers (which function like WIC EBT benefits) with the Packed Promise food boxes/produce vouchers because the sponsoring agency (CNNS) was the same for both projects. This confusion may have reduced participation in Packed Promise for some treatment households during the summer months if they believed the receipt of Summer EBT for Children vouchers meant they could not order the Packed Promise food boxes in those months.
- As with most studies of children's diet, the food consumption measures are based on parents'/guardians' reports of their children's usual food consumption, and may be subject to misreporting. To minimize this issue and improve accuracy, the food frequency questions selected for the evaluation were well-tested, derived from nationally representative data, and successfully fielded in other studies of children's diet, including the Summer EBT for Children evaluation. The 30-day reference period for measuring diet matched the 30-day food security measure which has greater temporal specificity than a 12-month period (Nord 2002).
- Packed Promise may have affected households in other ways not captured by data on FI-C. The project could have positively or negatively affected other aspects of households' and children's well-being, such as adults' food consumption, household access to health care, and adequacy of housing.

It would be useful to have additional information on the ways low-resource households in the demonstration changed how they planned and provided meals to their families. For example, monthly out-of-pocket food spending was $\$ 22$ lower in treatment households, but there was no impact on where households shopped for most of their groceries or how far they traveled, even though the deliveries to households of substantial amounts of specific kinds of foods might have been expected to affect these behaviors. It also is possible that Packed Promise affected household behaviors regarding the types or quantities of foods they purchased. The focus groups showed that participants expressed a high level of satisfaction with project benefits and valued access to more nutritious foods, but describing the dynamics between diet quality, food

[^28]preferences, food access, and expenditures is challenging. More qualitative research on lowincome households' decision making around food shopping and preparation and nutrition behaviors (such as introducing new and unfamiliar foods to children) could identify other ways to assist households in meal planning and budgeting beyond simply providing them with recipes.

Future research on household members' use of food boxes would be needed to explain why some low-income households improved their food security and others did not, despite having similar sociodemographic characteristics and levels of nutrition program participation and out-of-pocket food spending. The findings also suggest that future research is needed to examine the 30-day food security measure to investigate the possibility of (1) improving its sensitivity to change over time, (2) developing additional survey questions that better capture actual household conditions rather than changing perceptions (for example, to avoid situations where households become accustomed to being in need and give different responses the longer they have been in need), or (3) devising approaches to better understand how a given intervention affects the interaction between adults' and children's food consumption in the household. It is plausible that an intervention improves the food security of some but not all the children living in the household, depending on other nutrition assistance programs in which the children participate, but because the food security questions in the standard module ask about "any" child (or "any" adult), it may not detect variation in the severity of food insecurity across either category. As discussed above, it is also possible that other household circumstances-such as family dynamics or the health of household members-are related to childhood hunger in ways not captured by the 30 -day food security measure.

The Packed Promise findings provide useful information on the costs of obtaining, storing, and delivering food boxes; they also furnish data on participation in a home food delivery benefit above and beyond other nutrition assistance programs that also allows households some choice in the foods they receive. Even if the online ordering system was improved to simplify and maximize participation among those enrolled, translating and expanding the Packed Promise demonstration could give rise to issues on a larger scale, depending on the chosen delivery method and shipping costs.

## E. Conclusions

This study examined the impact of the Chickasaw Nation Packed Promise project, which aimed to reduce FI-C by providing food boxes containing nutrient-dense foods and produce checks to children eligible for free school meals. These food boxes were delivered to treatment households' homes based on their monthly orders. CNNS's attention to providing nutritious foods, to which the target population may have had little previous exposure (for example, certain types of vegetables, hummus), as well as choice in selection and protein-foods, contributed to moderately high rates of participation over a long period of time. Nearly all ( $97 \%$ ) treatment households ordered at least one food box, and the estimated participation rate averaged $61 \%$ over the 25 -month period.

Participant satisfaction was high, based on focus group discussions and survey reports that $80 \%$ of households reported eating most or all of the foods in the box and only $1 \%$ said the food was wasted. Overall, the project reduced FI-A and FI-HH after one year of the project but had no impact on FI-C. A lack of impacts on the latter may have been due to some households in the
treatment and control groups being able to address some of their food needs through participation in other nutrition programs, including SNAP or FDPIR, school meals, and Summer EBT for Children. These households may also have benefitted from more favorable economic conditions than those that existed before the project began. The project increased children's daily consumption of fruits/vegetables and whole grains by approximately $4 \%$ and $9 \%$, respectively, and had no impact on daily added sugars or sugar-sweetened beverage consumption. Thus, while the project had positive, if modest, effects on intakes of healthful foods, it did not lead to measureable effects on intakes of less healthy foods high in added sugars.

Food security is not a static situation; households experience better and worse times over the course of a year or across years on a food security continuum. Some households encounter health problems or job loss; others learn to adapt to having fewer resources for food, develop new coping skills, or experience a combination of factors that can improve or worsen food insecurity. Future research that addresses the interplay between household- and child-level nutrition benefits and food security measures may indicate ways to optimize the targeting, design, and delivery features of benefits to best serve families most in need, thus reducing children's food insecurity.

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## APPENDICES

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## APPENDIX A

## STUDY DESIGN AND ANALYTIC METHODS

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## A.1. STUDY DESIGN: SAMPLING, RANDOM ASSIGNMENT, AND ANALYSIS

This appendix describes the sampling design, random assignment, and analysis methods for the evaluation of the Chickasaw Nation Nutrition Services (CNNS) Packed Promise project. This design was used to estimate impacts of the project on household food security and other outcomes.

## A. Sampling design and random assignment

The target population for the Packed Promise project included households with children eligible for free school meals or attending a school where all children receive free meals (a CEP school), within one of the 40 school districts participating in the study in the 2016-2017 school year. The estimates from the study reflect the impacts of the project just for this population and as such may not be generalizable to other areas, points in time, or types of households. The set of 40 school districts included in the study were identified and recruited into the study, and CNNS obtained written active consent to participate in the demonstration project from eligible households at the start of the 2015-2016 school year. A list of these eligible and consenting households was provided to the study team in August 2015, and a sample was then selected for inclusion in the study. The baseline survey was then administered and the intervention period began in February 2016. ${ }^{1}$

Initial sampling: The initial set of eligible households included 9,408 households with a total of 19,756 children eligible for free meals (or in a CEP school) in a study district. Among this eligible population, 4,875 households with 10,185 children provided active consent to participate as either treatment or control households in the project evaluation. The analysis in this report is designed to be representative of this population. A random sample of 4,750 households was selected from this frame in fall 2015, and released to be administered the baseline survey starting in November 2015. This was a stratified random sample, stratified by school district.

The households in this original sample that were not later identified to be ineligible-for example, by not having a child enrolled in a study school as of spring 2016-formed the final evaluation sample. Among the 4,750 households in the original sample, 146 were later determined to be ineligible at baseline. The remaining 4,609 households formed the evaluation sample, and were targeted for both the baseline survey and two follow-up surveys. In other words, households were targeted for each of these rounds of the survey on the basis of being in this evaluation sample, regardless of whether or not they completed the previous rounds.

Two separate analysis samples examined in this report were created. One included the 2,852 households that completed the first follow-up survey, conducted about one year into the intervention period (in January-May 2017). The second analysis sample included the 2,794 households that completed the second follow-up survey, conducted about six months later (in August-November 2017). Sample weights were developed to help each analysis sample to remain representative of the full target population of eligible households that agreed to

[^29]participate in the Packed Promise project. The sample weights also minimized the risk that differential patterns of survey response would lead to systematic differences between the households included in the treatment and control groups of the study. See Appendix A. 3 for a description of the sample weights.

Random assignment: District-level assignment was used to determine which districts would be in the treatment group and participate in the Packed Promise project and receive project benefits, and which districts would be in the control group and not receive Packed Promise benefits but remain eligible for other nutrition assistance programs. In other words, clusters of households (those with children in specific districts) were assigned to either the treatment or control group. The study team randomly assigned the 40 study districts as follows. First, participating districts were matched into pairs having similar characteristics. Districts were matched on the basis of several characteristics, including district size, number of consenting households, percentage of students in the district eligible for free or reduced-price school meals, percentage below the poverty line, racial/ethnic distribution of district students, and presence of a backpack program in district schools (where eligible children are sent home with backpacks filled with food just before weekends and holidays). ${ }^{2}$ By matching districts into pairs with similar characteristics before random assignment, the design reduced the likelihood that differences between the schools assigned to the treatment and control schools would occur by chance. This type of matched pair random assignment design also improves the statistical power of the impact estimates and is recommended by Imai et al. (2009).

Within each matched pair of districts, one was selected randomly to be in the treatment group and its households would be able to receive Packed Promise benefits, while the other was assigned to the control group and its households would not receive these benefits. Households were assigned to the treatment or control group on the basis of whether or not they had a child enrolled in a treatment or a control district. If a household had children enrolled in more than one study district, they were defined to be in the treatment group if they had at least one child enrolled in a treatment district regardless of whether they had a child enrolled in a control district. However, this situation was rare. Initially, there were 2,143 eligible households assigned to the treatment group and 2,607 households assigned to the control group. Among these households in the evaluation sample, 1,342 treatment households and 1,510 control households responded to the first follow-up survey and were included in the main analysis sample for examining first follow-up outcomes. For the second follow-up survey, there were 1,288 treatment households and 1,506 control households that responded and were included in the main analysis sample for examining second follow-up outcomes. The actual survey respondent in a

[^30]household was an adult who lived in the household who was most knowledgeable about the household's food resources and their children's food choices (see Appendix B.1).

Characteristics of evaluation sample households assigned to the treatment and control groups. Random assignment, though at the district and not household level, should have helped to ensure that households in treatment and control groups had similar characteristics at baseline. To assess whether this was the case, this section presents baseline characteristics of these groups, using an approach similar to that used in the impact analysis. Characteristics of treatment and control group households in the full evaluation sample are shown first. A limited number of characteristics is available for all households in this sample; these characteristics are from administrative data available for the full sample frame.

Treatment and control households in the evaluation sample had similar characteristics at baseline, as expected in groups created by random assignment at the district level. The distribution of households by household size, language, and proportion white were similar in the treatment and control groups in the full evaluation sample (Exhibit A.1). There was a difference in the proportion of Native American (that is, American Indian or Alaska Native), Hispanic, and Mixed/Other Race households in the two groups.

## Exhibit A.1. Household characteristics by random assignment group among all sampled households in the Packed Promise project

| Characteristic | Treatment <br> $(\mathrm{n}=2,143)$ | Control <br> $(\mathrm{n}=2,607)$ |
| :--- | :---: | :---: |
| Household size (\%) |  |  |
| 2 | 69.2 | 71.0 |
| $3-4$ | 27.4 | 26.1 |
| 5+ | 3.4 | 2.9 |
| Ethnicity (\%) | 8.1 |  |
| Hispanic |  | 14.0 |
| Language (\%) | 98.2 | 94.6 |
| $\quad$ English | 1.8 | 5.4 |
| Spanish/Other | 37.8 | 30.6 |
| Race (\%) | 48.8 | 46.2 |
| American Indian/Alaska Native | 13.4 | 23.2 |
| White |  |  |
| Mixed/Other |  |  |

[^31]A more definitive set of comparisons of the characteristics of treatment and control households to determine whether the groups compared were equivalent would include a broader range of characteristics of these households and would also limit the comparisons to the sample used in the analysis (that is, households that completed a given round of the survey). The next set of tables compares baseline characteristics of households in the treatment and control groups among households that completed the baseline survey (Exhibit A.2), first follow-up survey (Exhibit A.3), and second follow-up survey (Exhibit A.4). In each case, the data are weighted using sample weights for that survey round-that is, the baseline weights are used for Exhibit A.2, first follow-up weights are used for Exhibit A.3, and second follow-up weights used for Exhibit A.4. ${ }^{3}$

Among households that completed the baseline survey, the treatment and control groups were similar in most characteristics. For example, no statistically significant differences were found in household composition, ages of children, respondent race, ethnicity or language preference. The rate of baseline child food insecurity also was not statistically significantly different between treatment and control households, although the level of baseline adult food insecurity was significantly lower in the treatment group (49\%) than in the control group (45\%), as was the rate of baseline food insecurity among households as a whole ( $55 \%$ versus $50 \%$ ) (Exhibit A.2). Overall, these were the only statistically significant differences among the measures of baseline equivalence. As described later in this appendix, the models used to estimate the impact of Packed Promise on food insecurity included controls for baseline food insecurity and several other household characteristics.

[^32]
## Exhibit A.2. Household characteristics at baseline for all households that responded to the baseline survey

| Baseline characteristic | Treatment | Control | Difference ${ }^{\text {a }}$ (SE) | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Household (HH) size |  |  |  |  |
| Mean number of HH members who share food | 4.4 | 4.5 | -0.1 (0.06) | 0.205 |
| Mean number of children in household | 2.5 | 2.6 | 0.0 (-0.02) | 0.542 |
| Household composition (\%) |  |  |  | 0.649 |
| Single adult household | 33.5 | 31.6 | 1.9 |  |
| Two-adult household | 66.5 | 68.4 | -1.9 |  |
| Respondent age |  |  |  | 0.280 |
| Respondent is under 40 | 65.9 | 62.9 | 2.9 |  |
| Respondent is 40 or older | 34.2 | 37.1 | -2.9 |  |
| Health status |  |  |  | 0.054 |
| Good or excellent | 67.5 | 70.7 | -3.3 |  |
| Fair or poor | 32.5 | 29.3 | 3.3 |  |
| Primary language |  |  |  | 0.252 |
| English | 95.9 | 92.9 | 3.0 |  |
| Spanish | 4.1 | 7.1 | -3.0 |  |
| Race/ethnicity |  |  |  | 0.402 |
| Hispanic, all races | 8.8 | 14.6 | -5.8 |  |
| Black or other, non-Hispanic | 17.1 | 18.1 | -1.0 |  |
| White, non-Hispanic | 58.7 | 54.6 | 4.1 |  |
| Native American, non-Hispanic | 15.4 | 12.7 | 2.7 |  |
| Number of children |  |  |  | 0.782 |
| Percentage of households with: |  |  |  |  |
| 1 child | 19.7 | 19.6 | 0.1 |  |
| 2 children | 35.5 | 34.8 | 0.7 |  |
| 3 or more children | 44.9 | 45.7 | -0.8 |  |
| Age of children (\%) |  |  |  |  |
| Less than 5 years | 32.5 | 32.6 | -0.2 | 0.929 |
| 5 to 11 years | 77.5 | 79.8 | -2.3 | 0.304 |
| 12 to 17 years | 53.6 | 52.9 | 0.7 | 0.753 |
| 18 years (or older if still in school) | 5.8 | 7.0 | -1.2 | 0.259 |
| Teenager in house |  |  |  | 0.654 |
| Household has teenager | 55.3 | 54.1 | 1.2 |  |
| Household does not have teenager | 44.7 | 45.9 | -1.2 |  |
| Mean number of household's children in demonstration schools | 2.2 | 2.2 | 0.0 (0.04) | 0.727 |
| Number of children in demonstration schools (\%) |  |  |  | 0.364 |
| 1 child | 31.9 | 29.6 | 2.3 |  |
| More than one child | 68.1 | 70.4 | -2.3 |  |
| Median HH income last month (\$) ${ }^{\text {b }}$ | 1,720 | 1,700 | 20 (139) | 0.886 |
| Household income ${ }^{\text {b }}$ |  |  |  | 0.467 |
| No income | 2.7 | 3.8 | -1.2 |  |
| At or below 75\% of poverty line | 42.4 | 42.5 | -0.2 |  |
| Above $75 \%$ but at or below $100 \%$ of poverty line | 18.7 | 17.9 | 0.8 |  |
| Above 100\% but at or below 130\% of poverty line | 16.7 | 15.4 | 1.2 |  |
| Above $130 \%$ but at or below $185 \%$ of poverty line | 12.9 | 11.6 | 1.3 |  |
| Above 185\% of poverty line | 6.7 | 8.7 | -2.0 |  |


| Baseline characteristic | Treatment | Control | Difference ${ }^{\text {a }}$ (SE) | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Any household adult employed in last 30 days (\%) | 74.8 | 76.4 | -1.6 | 0.354 |
| Sources of non-wage income |  |  |  |  |
| Reported receiving TANF | 5.5 | 4.9 | 0.5 | 0.717 |
| Reported receiving Social Security | 22.5 | 21.8 | 0.7 | 0.633 |
| Reported receiving SSI or supplemental security income | 15.6 | 15.0 | 0.5 | 0.808 |
| Reported receiving veteran's benefits | 2.9 | 2.5 | 0.4 | 0.651 |
| Reported receiving unemployment insurance or worker's compensation benefits | 2.1 | 3.4 | -1.3 | 0.118 |
| Reported receiving child support payments | 22.9 | 23.3 | -0.4 | 0.802 |
| Reported receiving financial support from family and friends | 14.1 | 14.9 | -0.9 | 0.641 |
| Reported receiving any other income besides earnings | 1.0 | 1.0 | 0.1 | 0.873 |
| Reported none of the above | 42.5 | 42.9 | -0.4 | 0.898 |
| HH nutrition benefit program participation (\%) ${ }^{\text {c }}$ |  |  |  |  |
| Reported currently receiving SNAP or FDPIR | 52.7 | 49.2 | 3.5 | 0.472 |
| Reported receiving WIC | 18.6 | 20.6 | -2.0 | 0.163 |
| Reported receiving food from pantry, emergency kitchen, or community program | 17.2 | 14.6 | 2.5 | 0.352 |
| Reported receiving free or reduced-price lunch | 95.2 | 95.5 | -0.3 | 0.763 |
| Reported receiving free or reduced-price breakfast | 84.7 | 84.3 | 0.4 | 0.880 |
| Reported receiving any other child program benefit (school backpack, supper at school, after school snacks, and day care) | 39.9 | 35.2 | 4.7 | 0.393 |
| HH food security status (\%) |  |  |  |  |
| Insecure | 54.9 | 50.4 | 4.5 | 0.010 |
| VLFS-HH | 25.3 | 24.6 | 0.7 | 0.642 |
| Adult food security status (\%) |  |  |  |  |
| Insecure | 49.2 | 45.3 | 3.9 | 0.027 |
| VLFS-A | 25.3 | 24.3 | 1.1 | 0.525 |
| Child food security status (\%) |  |  |  |  |
| Insecure | 38.3 | 35.3 | 3.0 | 0.109 |
| VLFS-C | 2.5 | 2.9 | -0.4 | 0.553 |
| Reported monthly HH mean out-of-pocket food expenditures (\$) | 355 | 369 | -14 (19) | 0.477 |
| Reported monthly per person mean out-ofpocket food expenditures (\$) |  |  |  |  |
| Total out-of-pocket expenditures ${ }^{\text {d }}$ | 85 | 89 | -4 (5) | 0.415 |
| Food expenditures at supermarkets, grocery stores, and other types of stores ${ }^{e}$ | 68 | 71 | -3 (5) | 0.521 |
| Expenditures at restaurants ${ }^{\text {f }}$ | 16 | 18 | -1 (1) | 0.234 |
| Sample size | 1,340 | 1,519 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2015-2016 baseline survey. Analysis sample includes respondents to the baseline survey, but tabulations are weighted to be representative of all eligible households in the Chickasaw Nation Packed Promise project and were prepared by Mathematica Policy Research.
Note: For continuous measures, reported p-values are obtained from two-tailed t-tests of statistically significant differences; for binary measures, p-values are from F-tests of independence. All statistical tests account for weighting and the complex sampling design.
${ }^{\text {a }}$ Difference column may not match the (Treatment minus Control) calculation exactly due to rounding.
${ }^{\text {b }}$ Includes all earnings, Social Security, pensions, Veteran's benefits, unemployment insurance, worker' compensation benefits, child support, payments from roomers and borders, TANF, and SSI for all household members.
${ }^{c}$ Calculated for all households as a descriptive variable and not constrained to only those households that are eligible for a specific program listed.
${ }^{\text {d }}$ Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days. Excludes purchases made with SNAP and WIC.
${ }^{e}$ Out-of-pocket expenditures on food at supermarkets, grocery stores, and other stores. Excludes purchases made with SNAP and WIC.
${ }^{f}$ Includes carryout, drive through, and all types of restaurants.
FDPIR = Food Distribution Program on Indian Reservations; HH = household; SE = standard error; SNAP = Supplemental Nutrition Assistance Program; SSI= Supplemental Security Income; TANF = Temporary Assistance for Needy Families; VLFS-A = very low food security among adults; VLFS-C = very low food security among children; VLFS-HH = very low food security among households; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

In the sample that completed the first followup survey, treatment and control group households did not differ on most baseline household characteristics that were measured. As observed at baseline, no statistically significant differences were found in household composition, ages of children, race, ethnicity or language preference (Exhibit A.3). The only significant difference was that treatment households were more likely than control households to experience baseline food insecurity at the household level (56\%) than control households (51\%). In estimating the impacts of Packed Promise on outcomes measured in the first follow-up survey, the model controlled for baseline characteristics including the level of household food insecurity.

Within this sample of respondents to the first follow-up survey (and for whom baseline characteristics are available), households had between four and five members, including between two and three children, on average. Approximately $75 \%$ of households had at least one member employed, and the median monthly income was between $\$ 1,700-\$ 1,800$. More than half of households received some form of non-wage income at baseline, and at least $43 \%$ of households received some type of household nutrition assistance program benefit. Between $35 \%$ and $40 \%$ of households reported baseline food insecurity among children, and nearly $50 \%$ of households reported baseline food insecurity among adults.

## Exhibit A.3. Household characteristics at baseline for those with a response to the first follow-up survey

| Baseline characteristic | Treatment | Control | Difference (SE) ${ }^{\text {a }}$ | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Household (HH) size |  |  |  |  |
| Mean number of HH members who share food | 4.4 | 4.5 | -0.2 (0.07) | 0.051 |
| Mean number of children in household | 2.5 | 2.6 | -0.1 (0.06) | 0.309 |
| Household composition (\%) |  |  |  | 0.407 |
| Single adult household | 33.9 | 30.3 | 3.7 |  |
| Two-adult household | 66.1 | 69.7 | -3.7 |  |
| Respondent age |  |  |  | 0.763 |
| Respondent is under 40 | 63.2 | 62.2 | 1.0 |  |
| Respondent is 40 or older | 36.8 | 37.8 | -1.0 |  |
| Health status |  |  |  | 0.096 |
| Good or excellent | 67.8 | 70.7 | -2.9 |  |
| Fair or poor | 32.2 | 29.3 | 2.9 |  |
| Primary language |  |  |  | 0.316 |
| English | 95.5 | 92.4 | 3.1 |  |
| Spanish | 4.5 | 7.6 | -3.1 |  |
| Race/ethnicity |  |  |  | 0.319 |
| Hispanic, all races | 9.1 | 16.3 | -7.2 |  |
| Black or other, non-Hispanic | 17.5 | 17.7 | -0.3 |  |
| White, non-Hispanic | 58.8 | 53.7 | 5.2 |  |
| Native American, non-Hispanic | 14.6 | 12.3 | 2.4 |  |
| Number of children |  |  |  | 0.186 |
| Percentage of households with: |  |  |  |  |
| 1 child | 21.2 | 18.7 | 2.5 |  |
| 2 children | 34.2 | 35.4 | -1.2 |  |
| 3 or more children | 44.6 | 45.9 | -1.3 |  |
| Age of children (\%) |  |  |  |  |
| Less than 5 years | 32.4 | 33.4 | -1.0 | 0.698 |
| 5 to 11 years | 77.2 | 80.3 | -3.1 | 0.155 |
| 12 to 17 years | 53.7 | 52.5 | 1.2 | 0.606 |
| 18 years (or older if still in school) | 5.6 | 6.4 | -0.8 | 0.463 |
| Teenager in house |  |  |  | 0.458 |
| House has teenager | 53.8 | 51.9 | 1.9 |  |
| House does not have teenager | 46.2 | 48.1 | -1.9 |  |
| Mean number of children in demonstration schools | 2.2 | 2.2 | 0.0 (0.05) | 0.336 |
| Number of children in demonstration schools (\%) |  |  |  | 0.135 |
| 1 child | 33.0 | 28.9 | 4.1 |  |
| More than one child | 67.0 | 71.1 | -4.1 |  |
| Median HH income last month (\$) ${ }^{\text {b }}$ | 1,700 | 1,800 | -100 (133) | 0.458 |
| Household income ${ }^{\text {b }}$ |  |  |  | 0.663 |
| No income | 2.9 | 3.5 | -0.6 |  |
| At or below 75\% of poverty line | 42.5 | 41.0 | 1.5 |  |
| Above $75 \%$ but at or below $100 \%$ of poverty line | 17.5 | 18.5 | -1.0 |  |
| Above $100 \%$ but at or below $130 \%$ of poverty line | 17.5 | 16.2 | 1.3 |  |
| Above $130 \%$ but at or below $185 \%$ of poverty line | 12.8 | 11.9 | 0.9 |  |
| Above 185\% of poverty line | 6.8 | 8.9 | -2.0 |  |


| Baseline characteristic | Treatment | Control | Difference (SE) ${ }^{\text {a }}$ | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Any household adult employed in last 30 days (\%) | 74.5 | 76.9 | -2.4 | 0.145 |
| Sources of non-wage income |  |  |  |  |
| Reported receiving TANF | 5.1 | 5.0 | 0.2 | 0.921 |
| Reported receiving Social Security | 22.4 | 22.6 | -0.3 | 0.872 |
| Reported receiving SSI or supplemental security income | 14.8 | 15.6 | -0.9 | 0.707 |
| Reported receiving veteran's benefits | 2.8 | 2.6 | 0.2 | 0.814 |
| Reported receiving unemployment insurance or worker's compensation benefits | 1.9 | 3.5 | -1.6 | 0.090 |
| Reported receiving child support payments | 23.1 | 22.2 | 0.9 | 0.540 |
| Reported receiving financial support from family and friends | 13.8 | 14.4 | -0.5 | 0.789 |
| Reported receiving any other income besides earnings | 1.1 | 1.1 | -0.1 | 0.852 |
| Reported none of the above | 43.7 | 44.2 | -0.5 | 0.890 |
| HH nutrition benefit program participation (\%) ${ }^{\text {c }}$ |  |  |  |  |
| Reported currently receiving SNAP or FDPIR | 51.0 | 48.1 | 2.9 | 0.592 |
| Reported receiving WIC | 19.1 | 21.8 | -2.7 | 0.105 |
| Reported receiving food from pantry, emergency kitchen, or community program | 16.9 | 14.9 | 2.0 | 0.418 |
| Reported receiving free or reduced price lunch | 95.4 | 95.7 | -0.3 | 0.752 |
| Reported receiving free or reduced price breakfast | 85.1 | 84.2 | 0.9 | 0.753 |
| Reported receiving any out-of-school food benefits such as a backpack, snack, or supper | 39.2 | 34.8 | 4.4 | 0.444 |
| HH food security status (\%) |  |  |  |  |
| Insecure | 55.9 | 50.6 | 5.3 | 0.010 |
| VLFS-HH | 25.0 | 25.3 | -0.3 | 0.857 |
| Adult food security status (\%) |  |  |  |  |
| Insecure | 49.3 | 45.8 | 3.5 | 0.098 |
| VLFS-A | 25.0 | 24.9 | 0.1 | 0.956 |
| Child food security status (\%) |  |  |  |  |
| Insecure | 39.7 | 36.3 | 3.4 | 0.078 |
| VLFS-C | 2.3 | 2.9 | -0.6 | 0.334 |
| Reported monthly HH mean out-of-pocket food expenditures (\$) | 352 | 366 | -14 (21) | 0.490 |
| Reported monthly per person mean out-ofpocket food expenditures (\$) |  |  |  |  |
| Total out-of-pocket expenditures ${ }^{\text {d }}$ | 85 | 87 | -3 (5) | 0.621 |
| Food expenditures at supermarkets, grocery stores, and other types of stores ${ }^{e}$ | 68 | 70 | -1 (5) | 0.761 |
| Expenditures at restaurants ${ }^{\text {f }}$ | 16 | 17 | -1 (1) | 0.275 |
| Sample size | 1,084 | 1,203 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2015-2016 baseline survey and 2017 first follow-up survey. Analysis sample includes respondents to the first follow-up survey, but tabulations are weighted to be representative of all eligible households in the Chickasaw Nation Packed Promise project and were prepared by Mathematica Policy Research.
Note: For continuous measures, reported p-values are obtained from two-tailed t-tests of statistically significant differences; for binary measures, p -values are from F-tests of independence. All statistical tests account for weighting and the complex sampling design.
${ }^{\text {a }}$ Difference column may not match the (Treatment minus Control) calculation exactly due to rounding.

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'b}\mp@subsup{}{}{\textrm{b}}\mathrm{ Includes all earnings, Social Security, pensions, Veteran's benefits, unemployment insurance, worker' compensation
benefits, child support, payments from roomers and borders, TANF, and SSI for all household members.
c}\mp@subsup{}{}{c}\mathrm{ Calculated for all households as a descriptive variable and not constrained to only those households that are eligible
for a specific program listed.
d Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days. Excludes
purchases made with SNAP and WIC.
e Out-of-pocket expenditures on food at supermarkets, grocery stores, and other stores. Excludes purchases made
with SNAP and WIC.
f Includes carryout, drive through, and all types of restaurants.
FDPIR = Food Distribution Program on Indian Reservations; HH = household; SE = standard error; SNAP =
Supplemental Nutrition Assistance Program; SSI= Supplemental Security Income; TANF = Temporary Assistance for
Needy Families; VLFS-A = very low food security among adults; VLFS-C = very low food security among children;
VLFS-HH = very low food security among households; WIC = Special Supplemental Nutrition Program for Women,
Infants, and Children.
```

In the sample that completed the second followup survey, treatment and control group households did not differ on most household characteristics that were measured. As observed at baseline, no statistically significant differences were found in household composition, ages of children, race, ethnicity or language preference (Exhibit A.4). The only significant differences were in rates of baseline food insecurity, as treatment households were more likely than control households to experience food insecurity in the household as a whole ( $55 \%$ versus $49 \%$ ) and among children ( $39 \%$ versus $35 \%$ ). All other household characteristics were similar between treatment and control. In estimating the impacts of Packed Promise on outcomes measured in the second follow-up survey, the model controlled for baseline characteristics including the levels of child and household food insecurity.

Exhibit A.4. Household characteristics at baseline for those with a response to the second follow-up survey

| Baseline characteristic | Treatment | Control | Difference (SE) ${ }^{\text {a }}$ | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Household (HH) size |  |  |  |  |
| Mean number of HH members who share food | 4.4 | 4.5 | -0.1 (0.08) | 0.066 |
| Mean number of children in household | 2.5 | 2.6 | -0.1 (0.06) | 0.232 |
| Household composition (\%) |  |  |  | 0.562 |
| Single adult household | 32.7 | 29.9 | 2.8 |  |
| Two-adult household | 67.3 | 70.1 | -2.8 |  |
| Respondent age |  |  |  | 0.902 |
| Respondent is under 40 | 63.3 | 63.0 | 0.4 |  |
| Respondent is 40 or older | 36.7 | 37.1 | -0.4 |  |
| Health status |  |  |  | 0.202 |
| Good or excellent | 67.3 | 70.1 | -2.7 |  |
| Fair or poor | 32.7 | 30.0 | 2.7 |  |
| Primary language |  |  |  | 0.213 |
| English | 95.8 | 92.2 | 3.5 |  |
| Spanish | 4.3 | 7.8 | -3.5 |  |
| Race/ethnicity |  |  |  | 0.260 |
| Hispanic, all races | 9.0 | 16.5 | -7.4 |  |
| Black or other, non-Hispanic | 17.9 | 17.6 | 0.3 |  |
| White, non-Hispanic | 58.6 | 53.8 | 4.8 |  |
| Native American, non-Hispanic | 14.5 | 12.1 | 2.4 |  |


| Baseline characteristic | Treatment | Control | Difference (SE) ${ }^{\text {a }}$ | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Number of children |  |  |  | 0.159 |
| Percentage of households with: |  |  |  |  |
| 1 child | 20.9 | 18.6 | 2.3 |  |
| 2 children | 35.5 | 34.9 | 0.6 |  |
| 3 or more children | 43.6 | 46.6 | -2.9 |  |
| Age of children (\%) |  |  |  |  |
| Less than 5 years | 32.6 | 33.8 | -1.2 | 0.508 |
| 5 to 11 years | 77.9 | 80.7 | -2.8 | 0.254 |
| 12 to 17 years | 52.9 | 52.3 | 0.6 | 0.786 |
| 18 years (or older if still in school) | 5.5 | 5.9 | -0.4 | 0.674 |
| Teenager in house |  |  |  | 0.437 |
| House has teenager | 56.2 | 54.4 | 1.8 |  |
| House does not have teenager | 43.8 | 45.6 | -1.8 |  |
| Mean number of children in demonstration schools | 2.2 | 2.2 | -0.1 (0.05) | 0.335 |
| Number of children in demonstration schools (\%) |  |  |  | 0.144 |
| 1 child | 32.6 | 28.4 | 4.3 |  |
| More than one child | 67.4 | 71.7 | -4.3 |  |
| Median HH income last month (\$) ${ }^{\text {b }}$ | 1,800 | 1,800 | 0 (145) | 0.999 |
| Household income ${ }^{\text {b }}$ |  |  |  | 0.918 |
| No income | 2.8 | 3.4 | -0.6 |  |
| At or below 75\% of poverty line | 41.2 | 41.8 | -0.6 |  |
| Above $75 \%$ but at or below $100 \%$ of poverty line | 18.1 | 17.6 | 0.5 |  |
| Above 100\% but at or below 130\% of poverty line | 17.2 | 16.5 | 0.8 |  |
| Above $130 \%$ but at or below $185 \%$ of poverty line | 13.7 | 13.0 | 0.7 |  |
| Above 185\% of poverty line | 7.0 | 7.7 | -0.7 |  |
| Any household adult employed in last 30 days (\%) | 75.2 | 76.7 | -1.6 | 0.290 |
| Sources of non-wage income |  |  |  |  |
| Reported receiving TANF | 4.7 | 5.2 | -0.5 | 0.674 |
| Reported receiving Social Security | 22.8 | 22.1 | 0.7 | 0.605 |
| Reported receiving SSI or supplemental security income | 15.2 | 14.8 | 0.4 | 0.832 |
| Reported receiving veteran's benefits | 2.9 | 2.7 | 0.2 | 0.838 |
| Reported receiving unemployment insurance or worker's compensation benefits | 2.1 | 3.6 | -1.5 | 0.153 |
| Reported receiving child support payments | 22.1 | 23.1 | -1.1 | 0.583 |
| Reported receiving financial support from family and friends | 12.5 | 14.7 | -2.2 | 0.262 |
| Reported receiving any other income besides earnings | 1.4 | 1.2 | 0.2 | 0.699 |
| Reported none of the above | 44.3 | 43.3 | 1.0 | 0.793 |
| HH nutrition assistance program participation (\%) ${ }^{\text {c }}$ |  |  |  |  |
| Reported currently receiving SNAP or FDPIR | 50.5 | 48.6 | 1.9 | 0.697 |
| Reported receiving WIC | 19.2 | 22.3 | -3.1 | 0.021 |
| Reported receiving food from pantry, emergency kitchen, or community program | 16.1 | 14.7 | 1.5 | 0.597 |
| Reported receiving free or reduced price lunch | 95.5 | 96.2 | -0.7 | 0.461 |


| Baseline characteristic | Treatment | Control | Difference (SE) ${ }^{\text {a }}$ | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Reported receiving free or reduced price breakfast | 84.4 | 85.0 | -0.6 | 0.848 |
| Reported receiving any out-of-school food benefits such as a backpack, snack, or supper | 40.6 | 34.8 | 5.8 | 0.303 |
| HH food security status (\%) |  |  |  |  |
| Insecure | 55.3 | 49.4 | 5.9 | 0.008 |
| VLFS-HH | 24.9 | 24.5 | 0.5 | 0.798 |
| Adult food security status (\%) |  |  |  |  |
| Insecure | 49.4 | 44.7 | 4.7 | 0.074 |
| VLFS-A | 24.9 | 24.0 | 0.9 | 0.639 |
| Child food security status (\%) |  |  |  |  |
| Insecure | 39.3 | 34.6 | 4.7 | 0.029 |
| VLFS-C | 2.0 | 2.7 | -0.7 | 0.156 |
| Reported monthly HH mean out-of-pocket food expenditures (\$) | 362 | 366 | -3 (20) | 0.867 |
| Reported monthly per person mean out-ofpocket food expenditures (\$) |  |  |  |  |
| Total out-of-pocket expenditures ${ }^{\text {d }}$ | 87 | 86 | 1 (5) | 0.912 |
| Food expenditures at supermarkets, grocery stores, and other types of stores ${ }^{e}$ | 70 | 69 | 1 (4) | 0.785 |
| Expenditures at restaurants ${ }^{\dagger}$ | 16 | 17 | -1 (1) | 0.460 |
| Sample size | 1,017 | 1,166 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2015-2016 baseline survey and 2017 second follow-up survey. Analysis sample includes respondents to the second follow-up survey, but tabulations are weighted to be representative of all eligible households in the Chickasaw Nation Packed Promise project and were prepared by Mathematica Policy Research.
Note: For continuous measures, reported p-values are obtained from two-tailed t-tests of statistically significant differences; for binary measures, p-values are from F-tests of independence. All statistical tests account for weighting and the complex sampling design.
${ }^{\text {a }}$ Difference column may not match the (Treatment minus Control) calculation exactly due to rounding.
${ }^{\mathrm{b}}$ Includes all earnings, Social Security, pensions, Veteran's benefits, unemployment insurance, worker' compensation benefits, child support, payments from roomers and borders, TANF, and SSI for all household members.
${ }^{c}$ Calculated for all households as a descriptive variable and not constrained to only those households that are eligible for a specific program listed.
${ }^{\text {d }}$ Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days. Excludes purchases made with SNAP and WIC.
${ }^{e}$ Out-of-pocket expenditures on food at supermarkets, grocery stores, and other stores. Excludes purchases made with SNAP and WIC.
${ }^{\mathrm{f}}$ Includes carryout, drive through, and all types of restaurants.
FDPIR = Food Distribution Program on Indian Reservations; HH = household; SE = standard error; SNAP = Supplemental Nutrition Assistance Program; SSI= Supplemental Security Income; TANF = Temporary Assistance for Needy Families; VLFS-A = very low food security among adults; VLFS-C = very low food security among children; VLFS-HH = very low food security among households; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Exhibits A. 2 through A. 4 were about baseline characteristics. Household and respondent characteristics at the time of the first follow-up survey were also examined to provide contextual information for interpreting impact analysis results. The characteristics of households in the treatment and control groups were similar at the time of the first follow-up survey, and none of the differences in characteristics were statistically significant (Exhibit A.5).

## Exhibit A.5. Household characteristics at the time of the first follow-up survey

| Characteristic at first follow-up | Treatment | Control | Difference (SE) ${ }^{\text {a }}$ | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Household (HH) size |  |  |  |  |
| Mean number of HH members who share food | 4.4 | 4.5 | 0.0 (0.06) | 0.480 |
| HHs that have more members than just those who share food (\%) | 1.1 | 1.3 | -0.2 | 0.631 |
| Mean number of HH members | 4.4 | 4.5 | 0.0 (0.06) | 0.489 |
| Number of children |  |  |  |  |
| Percentage of households with: |  |  |  | 0.464 |
| 1 child | 20.1 | 20.8 | -0.7 |  |
| 2 children | 34.3 | 32.8 | 1.5 |  |
| 3 or more children | 45.3 | 45.6 | -0.3 |  |
| Mean number of children in household | 2.5 | 2.5 | 0.0 (0.06) | 0.904 |
| Age of children |  |  |  |  |
| Less than 5 years | 27.4 | 26.5 | 0.9 | 0.736 |
| 5 to 11 years | 73.0 | 75.7 | -2.7 | 0.176 |
| 12 to 17 years | 60.5 | 57.4 | 3.1 | 0.181 |
| 18 years (or older if still in school) | 11.3 | 11.5 | -0.2 | 0.885 |
| Any household adult employed in last 30 days (\%) | 75.3 | 77.1 | -1.8 | 0.298 |
| Last month household income ${ }^{\text {b }}$ |  |  |  |  |
| Median (\$) | 1,800 | 2,000 | -200 (116) | 0.092 |
| Mean (\$) | 2,058 | 2,284 | -226 (125) | 0.078 |
| Percentage of households |  |  |  | 0.105 |
| No income | 2.4 | 3.2 | -0.8 |  |
| At or below 75\% of poverty line | 41.0 | 35.9 | 5.1 |  |
| Above $75 \%$ but at or below $100 \%$ of poverty line | 17.1 | 17.2 | -0.1 |  |
| Above 100\% but at or below 130\% of poverty line | 17.5 | 15.9 | 1.6 |  |
| Above $130 \%$ but at or below $185 \%$ of poverty line | 13.9 | 15.7 | -1.8 |  |
| Above 185\% of poverty line | 8.1 | 12.1 | -4.0 |  |
| Sources of income (\%) |  |  |  |  |
| Reported receiving TANF | 4.0 | 4.1 | -0.1 | 0.866 |
| Reported receiving Social Security | 22.8 | 22.8 | 0.0 | 0.985 |
| Reported receiving SSI or supplemental security income | 15.2 | 13.3 | 1.9 | 0.337 |
| Reported receiving veteran's benefits | 2.4 | 3.1 | -0.7 | 0.518 |
| Reported receiving unemployment insurance or worker's compensation benefits | 2.0 | 2.3 | -0.3 | 0.464 |
| Reported receiving child support payments | 23.0 | 22.6 | 0.4 | 0.840 |
| Reported receiving financial support from family and friends | 14.5 | 13.5 | 1.0 | 0.596 |
| Reported receiving any other income besides earnings | 1.1 | 0.7 | 0.4 | 0.266 |
| Reported none of the above | 43.6 | 45.3 | -1.7 | 0.615 |
| Sample size | 1,342 | 1,510 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Analysis sample includes respondents to the first follow-up survey, but tabulations are weighted to be representative of all eligible households in the Chickasaw Nation Packed Promise project and were prepared by Mathematica Policy Research.
Note: For continuous measures, reported p-values are obtained from two-tailed t-tests of statistically significant differences; for binary measures, $p$-values are from F-tests of independence. All statistical tests account for weighting and the complex sampling design.
${ }^{\text {a }}$ Difference column may not match the (Treatment minus Control) calculation exactly due to rounding.
${ }^{\mathrm{b}}$ Includes all earnings, Social Security, pensions, Veteran's benefits, unemployment insurance, worker' compensation benefits, child support, payments from roomers and borders, TANF, and SSI for all household members.
HH = household; SE = standard error; SSI= Supplemental Security Income; TANF = Temporary Assistance for Needy Families.

Respondent characteristics were also similar in the treatment and control groups at the time of the first follow-up survey (Exhibit A.6). Slight differences in respondent health status were observed, with control group respondents reporting slightly better health overall ( $\mathrm{p}=0.021$ ).

## Exhibit A.6. Demographics of respondents at the time of the first follow-up

 survey| Characteristic at first follow-up | Treatment | Control | Difference ${ }^{\text {a }}$ | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Gender |  |  |  | 0.862 |
| Male | 10.0 | 9.7 | 0.2 |  |
| Female | 90.2 | 90.3 | -0.2 |  |
| Age |  |  |  | 0.717 |
| Under 20 years | 0.0 | 0.1 | -0.1 |  |
| 20 to 29 years | 14.5 | 14.1 | 0.4 |  |
| 30 to 39 years | 45.3 | 43.9 | 1.4 |  |
| 40 to 49 years | 24.7 | 26.5 | -1.8 |  |
| 50 to 59 years | 9.7 | 9.2 | 0.5 |  |
| 60 years or older | 5.9 | 6.3 | -0.4 |  |
| Race/Ethnicity |  |  |  | 0.300 |
| Hispanic, all races | 8.9 | 14.8 | -5.9 |  |
| Black or other, non-Hispanic | 15.2 | 18.2 | -3.0 |  |
| White, non-Hispanic | 60.1 | 54.5 | 5.6 |  |
| Native American, non-Hispanic | 15.8 | 12.6 | 3.2 |  |
| Level of education |  |  |  | 0.194 |
| Less than high school | 17.9 | 20.0 | -2.1 |  |
| High school graduate (or GED) | 36.0 | 33.3 | 2.8 |  |
| Some college (including 2 year degree) | 33.4 | 36.0 | -2.6 |  |
| Four year college degree or higher | 12.7 | 10.7 | 2.0 |  |
| Marital status |  |  |  | 0.834 |
| Married | 45.4 | 47.7 | -2.3 |  |
| Living with partner | 9.6 | 8.8 | 0.8 |  |
| Separated or divorced | 27.2 | 26.2 | 1.0 |  |
| Widowed | 4.5 | 4.3 | 0.2 |  |
| Never married | 13.3 | 13.1 | 0.3 |  |
| Reported health status |  |  |  | 0.021 |
| Excellent | 9.4 | 11.4 | -2.0 |  |
| Very good | 25.3 | 21.9 | 3.4 |  |
| Good | 36.1 | 41.6 | -5.4 |  |
| Fair | 22.6 | 18.4 | 4.2 |  |
| Poor | 6.7 | 6.8 | -0.1 |  |
| Sample size | 1,325 | 1,487 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Analysis sample includes respondents to the first follow-up survey, but tabulations are weighted to be representative of all eligible households in the Chickasaw Nation Packed Promise project and were prepared by Mathematica Policy Research.
Note: $\quad$ F-tests of independence were conducted to test for significant differences in proportions between the treatment and the control groups for each characteristic. All statistical tests account for weighting and the complex sampling design.
${ }^{\text {a }}$ Difference column may not match the (Treatment minus Control) calculation exactly due to rounding.
GED = general educational development.
Household and respondent characteristics at the time of the second follow-up survey were also examined to inform the interpretation of impact analysis results. The characteristics of households in the treatment and control groups were similar at the time of the second follow-up survey (Exhibit A.7). There were a small number of household characteristics that differed between the two groups, however. The control group appears to have had slightly higher incomes at the time of the second follow-up survey, as shown by the higher proportion of control group households in higher income categories. The control group was also more likely to receive Social Security benefits and less likely to receive veterans' benefits.

## Exhibit A.7. Household characteristics at the time of the second follow-up survey

| Characteristic at second follow-up | Treatment | Control | Difference (SE) ${ }^{\text {a }}$ | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Household (HH) size |  |  |  |  |
| Mean number of HH members who share food | 4.4 | 4.4 | -0.1 (0.08) | 0.476 |
| HHs that have more members than just those who share food (\%) | 0.5 | 0.3 | 0.1 | 0.588 |
| Mean number of HH members | 4.4 | 4.4 | -0.1 (0.07) | 0.500 |
| Number of children |  |  |  |  |
| Percentage of households with: |  |  |  | 0.435 |
| 1 child | 19.4 | 20.2 | -0.8 |  |
| 2 children | 36.0 | 32.9 | 3.1 |  |
| 3 or more children | 43.6 | 45.6 | -2.0 |  |
| Mean number of children in household | 2.5 | 2.5 | 0.0 (0.1) | 0.830 |
| Age of children |  |  |  |  |
| Less than 5 years | 26.6 | 26.4 | 0.2 | 0.924 |
| 5 to 11 years | 71.3 | 73.4 | -2.1 | 0.241 |
| 12 to 17 years | 60.4 | 61.0 | -0.7 | 0.801 |
| 18 years (or older if still in school) | 13.1 | 12.3 | 0.8 | 0.633 |
| Any household adult employed in last 30 days (\%) | 75.2 | 76.7 | -1.5 | 0.271 |
| Last month household income ${ }^{\text {b }}$ |  |  |  |  |
| Median (\$) | 1,900 | 2,000 | -100 (96) | 0.306 |
| Mean (\$) | 2,118 | 2,309 | -191 (119) | 0.115 |
| Percentage of households |  |  |  | 0.003 |
| No income | 1.7 | 3.6 | -1.9 |  |
| At or below 75\% of poverty line | 38.5 | 35.6 | 2.8 |  |
| Above $75 \%$ but at or below $100 \%$ of poverty line | 18.7 | 15.2 | 3.6 |  |
| Above 100\% but at or below $130 \%$ of poverty line | 18.4 | 16.7 | 1.7 |  |


| Characteristic at second follow-up | Treatment | Control | Difference (SE) | p-value |
| :--- | ---: | :---: | :---: | :---: |
| Above 130\% but at or below 185\% of |  |  |  |  |
| poverty line | 13.9 | 16.3 | -2.5 |  |
| Above $185 \%$ of poverty line | 8.8 | 12.5 | -3.7 |  |
| Sources of income (\%) <br> Reported receiving TANF | 3.3 | 3.7 | -0.4 | 0.658 |
| Reported receiving Social Security <br> Reported receiving SSI or supplemental <br> security income | 24.5 | 20.8 | 3.7 | 0.023 |
| Reported receiving veteran's benefits | 14.6 | 12.3 | 2.4 | 0.150 |
| Reported receiving unemployment <br> insurance or worker's compensation <br> benefits | 1.6 | 2.8 | -1.2 | 0.023 |
| Reported receiving child support <br> payments | 1.7 | 2.0 | -0.2 | 0.625 |
| Reported receiving financial support from <br> family and friends | 21.8 | 21.8 | 0.0 | $>0.995$ |
| Reported receiving any other income <br> besides earnings <br> Reported none of the above | 11.3 | 12.4 | -1.1 | 0.476 |
| Sample size | 1.1 | 0.5 | 0.6 | 0.034 |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 second follow-up survey. Analysis sample includes respondents to the second follow-up survey, but tabulations are weighted to be representative of all eligible households in the Chickasaw Nation Packed Promise project and were prepared by Mathematica Policy Research.
Note: For continuous measures, reported p-values are obtained from two-tailed t-tests of statistically significant differences; for binary measures, $p$-values are from F-tests of independence. All statistical tests account for weighting and the complex sampling design.
${ }^{\text {a }}$ Difference column may not match the (Treatment minus Control) calculation exactly due to rounding.
${ }^{\mathrm{b}}$ Includes all earnings, Social Security, pensions, Veteran's benefits, unemployment insurance, worker' compensation benefits, child support, payments from roomers and borders, TANF, and SSI for all household members.
HH = household; SE = standard error; SSI= Supplemental Security Income; TANF = Temporary Assistance for Needy Families.

Respondent characteristics were also similar in the treatment and control groups at the time of the second follow-up survey (Exhibit A.8). There were no statistically significant differences in respondent characteristics at the time of the second follow-up survey.

## Exhibit A.8. Demographics of respondents at the time of the second follow-up survey

| Characteristic at second follow-up | Treatment | Control | Difference $^{\text {a }}$ | p-value |
| :--- | ---: | ---: | ---: | ---: |
| Gender |  |  |  | 0.613 |
| Male | 10.0 | 10.0 | 0.5 |  |
| Female | 89.5 | 90.1 | -0.5 |  |
| Age |  |  |  | 0.643 |
| Under 20 years | 0.1 | 0.3 | -0.3 |  |
| 20 to 29 years | 12.9 | 12.3 | 0.7 |  |
| 30 to 39 years | 43.6 | 45.3 | -1.7 |  |
| 40 to 49 years | 26.1 | 26.4 | -0.3 |  |
| 50 to 59 years | 10.6 | 9.5 | 1.1 |  |
| 60 years or older | 6.7 | 6.2 | 0.4 |  |


| Characteristic at second follow-up | Treatment | Control | Difference ${ }^{\text {a }}$ | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Race/Ethnicity |  |  |  | 0.223 |
| Hispanic, all races | 8.2 | 15.1 | -6.9 |  |
| Black or other, non-Hispanic | 16.4 | 17.4 | -1.0 |  |
| White, non-Hispanic | 59.3 | 55.3 | 4.0 |  |
| Native American, non-Hispanic | 16.1 | 12.2 | 3.9 |  |
| Level of education |  |  |  | 0.170 |
| Less than high school | 14.9 | 18.2 | -3.3 |  |
| High school graduate (or GED) | 38.6 | 34.7 | 3.9 |  |
| Some college (including 2 year degree) | 33.6 | 36.0 | -2.3 |  |
| Four year college degree or higher | 12.9 | 11.2 | 1.8 |  |
| Marital status |  |  |  | 0.578 |
| Married | 46.2 | 47.8 | -1.6 |  |
| Living with partner | 7.1 | 8.6 | -1.4 |  |
| Separated or divorced | 28.2 | 26.4 | 1.8 |  |
| Widowed | 5.4 | 3.6 | 1.8 |  |
| Never married | 13.1 | 13.6 | -0.5 |  |
| Reported health status |  |  |  | 0.106 |
| Excellent | 9.8 | 11.3 | -1.5 |  |
| Very good | 24.3 | 23.0 | 1.3 |  |
| Good | 35.1 | 38.4 | -3.3 |  |
| Fair | 24.0 | 20.3 | 3.7 |  |
| Poor | 6.9 | 7.0 | -0.1 |  |
| Sample size | 1,281 | 1,505 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 second follow-up survey. Analysis sample includes respondents to the second follow-up survey, but tabulations are weighted to be representative of all eligible households in the Chickasaw Nation Packed Promise project and were prepared by Mathematica Policy Research.
Note: F-tests of independence were conducted to test for significant differences in proportions between the treatment and the control groups for each characteristic. All statistical tests account for weighting and the complex sampling design.
${ }^{\text {a }}$ Difference column may not match the (Treatment minus Control) calculation exactly due to rounding.
GED = general educational development.
Exhibit A. 9 shows the average characteristics of respondents for each of the three survey round (treatment and control households combined).

## Exhibit A.9. Household characteristics at baseline and follow-up

| Characteristic | Mean (SE) or percentage |  |  |
| :---: | :---: | :---: | :---: |
|  | Baseline | First follow-up | Second follow-up |
| Household size |  |  |  |
| Mean number of household members who share food | 4.4 (0.03) | 4.4 (0.03) | 4.4 (0.04) |
| Mean number of children in household | 2.5 (0.02) | 2.5 (0.03) | 2.5 (0.03) |
| Median household income last month (\$) ${ }^{\text {a }}$ | 1,699 (53) | 2,000 (74) | 2,000 (81) |
| Any household adult employed in last 30 days | 75.6 | 76.2 | 76.0 |
| Household nutrition assistance program participation ${ }^{\text {b }}$ |  |  |  |
| Reported currently receiving SNAP or FDPIR | 50.9 | 47.4 | 43.1 |
| Reported receiving WIC | 19.6 | 17.0 | 19.7 |
| Reported receiving food from food pantry, emergency kitchen, or other community program | 15.9 | 17.3 | 15.9 |
| Adult food security status |  |  |  |
| Insecure | 47.3 | 37.5 | 34.2 |
| VLFS-A | 24.8 | 18.0 | 16.8 |
| Child food security status |  |  |  |
| Insecure VLFS-C | $\begin{array}{r} 36.8 \\ 2.7 \end{array}$ | $\begin{array}{r} 30.6 \\ 2.6 \end{array}$ | $\begin{array}{r} 29.1 \\ 2.6 \end{array}$ |
| Reported monthly out-of-pocket per-person mean food expenditures (\$) |  |  |  |
| Total out-of-pocket expenditures ${ }^{\text {c }}$ | 87 (3) | 92 (2) | 96 (2) |
| Food expenditures at supermarkets, grocery stores, and other types of stores ${ }^{\text {d }}$ | 70 (2) | 73 (2) | 75 (2) |
| Expenditures at restaurants ${ }^{\text {e }}$ | 17 (1) | 20 (0) | 21 (1) |
| Sample size | 2,859 | 2,852 | 2,794 |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2015-2016 baseline survey and 2017 first and second follow-up surveys. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and prepared by Mathematica Policy Research.
Note: Calculations are based on the full evaluation sample of treatment and control households that responded at each survey round. Program participation questions generally reflected current participation at the time of the interview, defined as "during the last 30 days." Food security was measured using the 30-day survey module. VLFS is a subcategory within the food insecure category. Questions about food expenditures were asked about the last 30 days.
${ }^{\text {a }}$ Includes all earnings, Social Security, pensions, veteran's benefits, unemployment insurance, workers' compensation benefits, child support, payments from roomers and borders, TANF, and SSI for all household members but does not include SNAP or WIC.
${ }^{\mathrm{b}}$ Calculated for all households as a descriptive variable and not constrained to only those households eligible for a specific program listed.
${ }^{\text {c }}$ Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days. Excludes purchases made with SNAP and WIC. The sum is not equal to the sum of the two means because of missing data. If expenditures at either stores or restaurants are missing, then the total is missing.
${ }^{d}$ Out-of-pocket expenditures on food at supermarkets, grocery stores, and other stores. Excludes purchases made with SNAP and WIC.
e Includes carryout, drive through, and all types of restaurants.
FDPIR = Food Distribution Program on Indian Reservations; SNAP = Supplemental Nutrition Assistance Program; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families; VLFS = very low food security; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

## B. Analysis approach

Descriptive analysis. This study included several descriptive analyses to provide an overview of the baseline characteristics of the sample, summarize key implementation outcomes, and describe project costs. These analyses used baseline survey, MIS (food box orders, Fresh Check redemptions, and outreach), cost, and administrative data, and the descriptive analyses employed varied by characteristic. For continuous variables, such as income or food expenditures, means or medians were calculated. For categorical characteristics such as education level or households' participation in SNAP or FDPIR, proportions or frequency distributions were calculated. In all of these analyses, appropriate statistical tests were used (t-tests for comparing means and F-tests for comparing frequency distributions and proportions) to identify statistically significant treatmentcontrol differences. In addition, the study's sampling weights were applied to the calculations, and the estimation of standard errors accounted for these weights as well as the clustering and stratification of households in the sampling and random assignment design.

Impact analysis. The approach to estimating project impacts compared outcomes among households assigned to the treatment group and those assigned to the control group. Because the study's primary outcome (food insecurity among children) is a binary variable, a logistic regression model was used to estimate project impacts. To test whether the results were sensitive to the modeling approach, a linear probability model was also estimated as an alternative approach (see Exhibits A. 12 and A. 13 and the discussion of results later in this appendix). The basic form of the model being estimated (whether through a logistic or linear regression) was:

$$
\begin{equation*}
y_{h s p}=\alpha_{p}+\delta T_{s p}+\beta \chi_{h s p}+\varepsilon_{h s p} \tag{1}
\end{equation*}
$$

where $y_{h s p}$ is the outcome of interest (such as food insecurity among children) for household $h$ in district $s$ and matched pair of districts $p ; \alpha_{p}$ is the regression intercept that varies by matched pair (a matched pair fixed effect); $T_{s p}$ is a binary indicator for whether the household's district was assigned to the treatment or control group (set equal to 1 for treatment households and 0 for control households); $\chi_{h s p}$ represents a set or vector of household characteristics; $\beta$ is a vector of regression coefficients for those characteristics; and $\varepsilon_{h s p}$ is the regression's residual. The parameter of interest is $\delta$, which represents the impact of the project - the benefits provided by Packed Promise over and above what was available to the control group-on the outcome.

Under well-implemented randomized control trial designs that identify equivalent treatment and control groups at baseline, even if randomization happened at a higher level than the observed unit, it may not be necessary to include covariates in the regression model to produce unbiased impact estimates. However, controlling for the characteristics of sample respondents can help to improve the precision of the impact estimates if those characteristics are associated with the outcome of interest, in this case (primarily) food insecurity among children, or if these factors are related to survey nonresponse. The model used to estimate impacts of the Packed Promise project included a set of covariates, including the baseline level of the outcome measure (that is, baseline food insecurity among children). Other baseline covariates in the model
included food insecurity among adults and very low food security among children and adults; the presence of a single adult in the household versus more than one; ages of children in the household; household income and employment status; respondent age, health status, race/ethnicity, and language preference; baseline participation in SNAP, FDPIR, WIC, Summer EBT for Children, school-based meal programs, or food pantries/kitchens/community food programs; and indicator variables for the month of follow-up survey response. The models used a consistent set of covariates for each estimated model, regardless of the outcome being examined in that model. This meant that some models included covariates that may have been less directly related to the dependent variable than other covariates (e.g., the food insecurity among children model included baseline measures of both food insecurity among children and adults). This was done to minimize the risk that any differences between the study's treatment and control groups-even those that arise by chance-would impact estimates of project impacts.

To address the fact that not all households in the evaluation sample had valid values of all variables included in the analysis, the following steps were used. First, households were dropped from the analysis of impacts on a particular outcome if they had missing data for that outcomethe dependent variable of the impact model (and we developed and used sample weights to account for survey non-response that led to most of the missing data on key outcomes). However, those households were included in the analysis if they had valid data for that outcome, regardless of whether they had valid data for other outcomes or for the covariates included in the model (including the baseline version of that outcome). This enabled us to better compare outcome values among households in the treatment and control groups for as many households as possible, thus minimizing the risk that missing data would create differences in the underlying (baseline) characteristics between the two groups, leading to bias in estimated impacts. One implication of this approach was the models that examined project impacts may have been based on different sample sizes for different outcomes, depending on patterns of missing data.

The second aspect of the strategy for addressing missing data involved households with valid outcome data but missing baseline data on a given model covariate (e.g., because they failed to complete the baseline survey or an item on that survey). In these cases, that household was included in the analysis with an imputed value of the variable. When possible, information from another data source was used to fill in missing values before addressing the remaining missing values as described below. In practice this was only feasible for the respondent language preference and ethnicity variables. For the remaining baseline covariates, missing data was imputed using an approach known as "dummy variable adjustment." (Puma et al. 2009).

The dummy variable adjustment approach involved two steps. The first step was to impute the missing values with valid values. A simple imputation was used, with all missing values for a given variable imputed with a single value. In this case, the missing values for baseline covariates were replaced with a value of zero. ${ }^{4}$ The second step was to create and include in the

[^33]impact regression a set of missing "flag" indicator variables to identify observations with missing data on each baseline covariate. In particular, when a household was missing the value of a covariate, that value was changed to zero so that the household could be included in the impact analysis. In order to account for the fact that the true value of that covariate for households with missing values was unknown (not zero), the model also included a binary missing value indicator variable. In principle, each covariate with missing values would have an indicator variable that could be included in the model, equal to one for a given household if the original value of the covariate was missing (and it had been imputed), and equal to zero otherwise. In practice, covariates capturing similar household characteristics were often missing for the same households. Thus, if a separate missing value indicator had been created for each covariate and all were included in the model, there would have been a severe problem with multicollinearity. As a result, single missing value indicator variables for related covariates were created and included in the model.

This approach was implemented by defining three missing flags. The most common reason for missing data on baseline covariates was that the household did not complete a baseline survey. In that case, a set of covariates would be missing. One of the missing value flags indicates when a household did not complete the baseline survey. In addition, a missing value flag for cases that had missing data on the baseline measure of monthly income was included. After accounting for households with missing baseline data with these missing value flags, no baseline variable was missing for more than $1.5 \%$ of remaining households. For each follow-up survey respondent sample, Exhibits A. 10 (first follow-up) and A. 11 (second follow-up) present the level of missing data for each covariate. The two columns on the left report the number and percentage of observations with missing data in the full follow-up respondent sample; the two right columns report the number and percent of follow-up survey respondents that had missing data after excluding those who did not respond to the baseline survey.

## Exhibit A.10. Cases with imputed baseline covariates, among the first followup survey respondents

|  | Total missing among first <br> follow-up survey completers | Missing due to item <br> nonresponse |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Covariate | Missing | Percentage <br> missing | Missing | Percentage <br> missing |
| Teenager in house | 4 | 0.1 | 3 | 0.1 |
| Child(ren) aged 5 to 11 in house | 568 | 19.9 | 3 | 0.1 |
| Child(ren) under age 5 in house | 565 | 19.8 | 0 | 0.0 |
| Single adult household | 566 | 19.9 | 1 | 0.0 |
| Respondent age is 40 or greater | 600 | 21.0 | 35 | 1.2 |
| Health status | 584 | 20.5 | 19 | 0.7 |
| Primary language | 565 | 19.8 | 0 | 0.0 |
| Race/ethnicity | 594 | 20.8 | 29 | 1.0 |
| Adult food insecurity | 567 | 19.9 | 2 | 0.1 |
| Child food insecurity | 569 | 20.0 | 4 | 0.1 |
| Household food insecurity | 568 | 19.9 | 3 | 0.1 |

[^34]| Covariate | Total missing among first follow-up survey completers |  | Missing due to item nonresponse |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Missing | Percentage missing | Missing | Percentage missing |
| Adult very low food security | 567 | 19.9 | 2 | 0.1 |
| Child very low food security | 569 | 20.0 | 4 | 0.1 |
| Household very low food security | 570 | 20.0 | 5 | 0.2 |
| A household member is currently employed | 577 | 20.2 | 12 | 0.4 |
| Monthly income | 628 | 22.0 | 63 | 2.2 |
| Total number of nutrition programs participating in | 598 | 21.0 | 33 | 1.2 |
| Reported currently receiving SNAP | 573 | 20.1 | 8 | 0.3 |
| Reported currently receiving FDPIR | 575 | 20.2 | 10 | 0.4 |
| Reported currently receiving SNAP or FDPIR | 575 | 20.2 | 10 | 0.4 |
| Received WIC | 571 | 20.0 | 6 | 0.2 |
| Did not participate in any household nutrition programs | 574 | 20.1 | 9 | 0.3 |
| Received FRPB | 568 | 19.9 | 3 | 0.1 |
| Received FRPL | 572 | 20.1 | 7 | 0.3 |
| Received SBP | 568 | 19.9 | 3 | 0.1 |
| Received NLSP | 568 | 19.9 | 3 | 0.1 |
| Received any food from a program outside of school hours | 572 | 20.1 | 7 | 0.3 |
| Received a food backpack | 567 | 19.9 | 2 | 0.1 |
| Received food at a daycare or other center | 567 | 19.9 | 2 | 0.1 |
| Received afterschool snacks | 574 | 20.1 | 9 | 0.3 |
| Received supper | 573 | 20.1 | 8 | 0.3 |
| Reported receiving summer EBT for children in previous summer | 580 | 20.3 | 15 | 0.5 |
| Did not participate in any child nutrition programs | 568 | 19.9 | 3 | 0.1 |
| Received food from a food pantry or other community program | 574 | 20.1 | 9 | 0.3 |
| Monthly out of pocket food spending | 601 | 21.1 | 36 | 1.3 |
| Monthly out of pocket food spending, per person | 601 | 21.1 | 36 | 1.3 |
| Monthly household spending at restaurants | 583 | 20.4 | 18 | 0.6 |
| Monthly spending per person at restaurants | 583 | 20.4 | 18 | 0.6 |
| Monthly household spending out of pocket at grocery stores | 591 | 20.7 | 26 | 0.9 |
| Monthly spending per person out of pocket at grocery stores | 591 | 20.7 | 26 | 0.9 |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey ( $\mathrm{n}=2,852$ ). Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation Packed Promise project and were prepared by Mathematica Policy Research.
${ }^{\text {a }}$ Based on research indicating that the presence of a teenager is an important determinant of child food insecurity, impact models used a measure of the presence of teenagers collected from the same follow-up survey as the food insecurity outcome. This results in a lower level of missing data.
EBT = electronic benefits transfer; FDPIR = Food Distribution Program on Indian Reservations; FRPB = free or reduced-price breakfast; FRPL = free or reduced-price lunch; NSLP = National School Lunch Program; SBP = School Breakfast Program; SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

## Exhibit A.11. Cases with imputed baseline covariates, among second followup survey respondents

| Covariate | Total missing among second follow-up completers |  | Missing due to item nonresponse |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Missing | Percentage missing | Missing | Percentage missing |
| Teenager in house ${ }^{\text {a }}$ | 1 | 0.04 | 1 | 0.04 |
| Child(ren) under age 5 in house | 611 | 21.9 | 0 | 0.00 |
| Single adult household | 613 | 21.9 | 2 | 0.1 |
| Respondent age is 40 or greater | 648 | 23.2 | 37 | 1.3 |
| Health status | 630 | 22.6 | 19 | 0.7 |
| Primary language | 611 | 21.9 | 0 | 0.0 |
| Race/ethnicity | 638 | 22.8 | 27 | 1.0 |
| Adult food insecurity | 613 | 21.9 | 2 | 0.1 |
| Child food insecurity | 615 | 22.0 | 4 | 0.1 |
| Household food insecurity | 614 | 22.0 | 3 | 0.1 |
| Adult very low food security | 613 | 21.9 | 2 | 0.1 |
| Child very low food security | 615 | 22.0 | 4 | 0.1 |
| Household very low food security | 616 | 22.1 | 5 | 0.2 |
| A household member is currently employed | 622 | 22.3 | 11 | 0.4 |
| Monthly income | 671 | 24.0 | 60 | 2.2 |
| Total number of nutrition programs participating in | 643 | 23.0 | 32 | 1.2 |
| Reported currently receiving SNAP | 619 | 22.2 | 8 | 0.3 |
| Reported currently receiving FDPIR | 621 | 22.2 | 10 | 0.4 |
| Reported currently receiving SNAP or FDPIR | 621 | 22.2 | 10 | 0.4 |
| Received WIC | 616 | 22.1 | 5 | 0.2 |
| Did not participate in any household nutrition programs | 620 | 22.2 | 9 | 0.3 |
| Received FRPB | 613 | 21.9 | 2 | 0.1 |
| Received FRPL | 617 | 22.1 | 6 | 0.2 |
| Received SBP | 614 | 22.0 | 3 | 0.1 |
| Received NLSP | 614 | 22.0 | 3 | 0.1 |
| Received any food from a program outside of school hours | 617 | 22.1 | 6 | 0.2 |
| Received a food backpack | 613 | 21.9 | 2 | 0.1 |
| Received food at a daycare or other center | 613 | 21.9 | 2 | 0.1 |
| Received afterschool snacks | 619 | 22.2 | 8 | 0.3 |
| Received supper | 619 | 22.2 | 8 | 0.3 |
| Reported receiving Summer EBT for Children in previous summer | 626 | 22.4 | 15 | 0.5 |
| Did not participate in any child nutrition programs | 614 | 22.0 | 3 | 0.1 |
| Received food from a food pantry or other community program | 619 | 22.2 | 8 | 0.3 |
| Monthly out of pocket food spending | 641 | 22.9 | 30 | 1.1 |
| Monthly out of pocket food spending, per person | 641 | 22.9 | 30 | 1.1 |
| Monthly household spending at restaurants | 626 | 22.4 | 15 | 0.5 |
| Monthly spending per person at restaurants | 626 | 22.4 | 15 | 0.5 |


|  | Total missing among second <br> follow-up completers | Missing due to item <br> nonresponse |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Covariate | Missing | Percentage <br> missing | Missing | Percentage <br> missing |
| Monthly household spending out of pocket at <br> grocery stores | 632 | 22.6 | 21 | 0.8 |
| Monthly spending per person out of pocket at <br> grocery stores | 632 | 22.6 | 21 | 0.8 |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 second follow-up survey ( $n=2,794$ ). Tabulations are weighted to be representative of all eligible households in the Chickasaw Packed Promise project and were prepared by Mathematica Policy Research.
${ }^{\text {a }}$ Based on research indicating that the presence of a teenager is an important determinant of child food insecurity, impact models used a measure of the presence of teenagers collected from the same follow-up survey as the food insecurity outcome. This results in a lower level of missing data.
EBT = electronic benefits transfer; FDPIR = Food Distribution Program on Indian Reservations; FRPB = free or reduced-price breakfast; FRPL = free or reduced-price lunch; NSLP = National School Lunch Program; SBP = School Breakfast Program; SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

In addition to the main analysis models that used imputation to address missing data, sensitivity analyses were conducted using two alternative approaches to addressing missing values among covariates. This analysis was conducted to assess whether our approach to addressing the fact that many baseline covariates included in the impact model have missing values for some households affects the impact estimates. One approach excluded all covariates from the analysis model except for the matched pair fixed effects (which have no missing values). In this model, there was no imputation of missing values so the results could not have been affected by this issue. A second approach included all covariates but removed from the analysis sample any observation with a missing value on any model covariate. This substantially reduced the analysis sample, but again meant that no imputation of baseline covariates was required. One additional sensitivity test involved estimating impacts using a linear probability model rather than a logistic regression model. This test shed light on whether the specification of the main impact model as a logistic regression model substantially affected the results. The results of these sensitivity analyses are presented in Exhibit A. 12 (first follow-up survey) and A. 13 (second follow-up survey).

For analyses of both follow-up surveys, the model that excluded all covariates except the matched pair fixed effects yielded similar estimated impacts on food insecurity and very low food security among children. The model that used a "listwise deletion sample," removing any observation with a missing value on any covariate, yielded an estimated impact on child food insecurity (at the time of each follow-up survey) with the same sign but a larger magnitude, which was statistically significant. At the time of second follow-up, the estimated impact on very low food insecurity among children was also larger than the main model estimate and statistically significant. However, the difference in impact estimates between the main and listwise deletion approaches could be due to a non-random sampling process; namely, households' decisions not to respond to the baseline survey. As a result, the main impact estimates and the model that excluded all covariates drew more completely on the strength of the study's random assignment design because it used the full sample of cases that were randomly assigned and had valid outcome data. In the case of the listwise deletion model, by contrast, some observations with valid outcome data were discarded.

Estimated impacts from the linear probability model were very similar to those from the main model. This implies that using a non-linear (logistic) or linear specification of the impact model did not substantially affect the results.

Exhibit A.12. Alternative estimates of the impact of the Chickasaw Nation Packed Promise project on child food insecurity at the first follow-up survey

|  | Treatment | Control | Difference $^{\text {a }}$ | p-value | Sample size |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Main impact model |  |  |  |  | 2,830 |
| Secure | 70.7 | 69.9 | 0.8 | 0.123 |  |
| Insecure (FI-C) | 29.3 | 30.1 | -0.8 | 0.123 |  |
| $\quad$ VLFS-C | 2.3 | 2.9 | -0.6 | 0.149 |  |
| Matched pair indicators |  |  |  |  | 2,830 |
| as only covariates | 68.9 | 69.9 | -1.0 | 0.917 |  |
| Secure | 31.1 | 30.1 | 1.0 | 0.917 |  |
| Insecure (FI-C) | 2.4 | 2.9 | -0.5 | 0.158 | 2,142 |
| $\quad$ VLFS-C |  |  |  |  |  |
| Listwise deletion sample | 73.5 | 69.9 | 3.6 | 0.001 |  |
| Secure | 26.5 | 30.1 | -3.6 | 0.001 | 2,830 |
| Insecure (FI-C) | 2.4 | 2.9 | -0.4 | 0.234 |  |
| $\quad$ VLFS-C |  |  |  |  |  |
| Linear probability model | 70.7 | 69.9 | 0.8 | 0.121 |  |
| Secure | 29.3 | 30.1 | -0.8 | 0.121 |  |
| Insecure (FI-C) | 2.5 | 2.9 | -0.4 | 0.208 |  |
| $\quad$ VLFS-C |  |  |  |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Packed Promise project and were prepared by Mathematica Policy Research.
Notes: Food security was measured using the standard USDA 18-item survey module and a 30-day reference period. VLFS is a subcategory within the food insecure category. The difference between the reported sample size of 2,830 for the main impact model and the first follow-up respondent sample size in Exhibit A.9, 2,852 , results from 22 households having not provided sufficient food security information to obtain a measure of FI-C at follow-up; those households were excluded from the analysis. The p-value associated with each impact estimate is from a one-tailed test of statistical significance. The number in the difference column may not exactly equal the treatment percentage minus the control percentage due to rounding.
${ }^{\text {a }}$ Difference column may not match the (Treatment minus Control) calculation exactly due to rounding.
FI-C = food insecurity among children; USDA = U.S. Department of Agriculture; VLFS-C = very low food security among children.

## Exhibit A.13. Alternative estimates of the impact of the Chickasaw Nation Packed Promise project on child food insecurity at the second follow-up survey

|  | Treatment | Control | Difference | p-value | Sample size |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Main impact model |  |  |  |  | 2,757 |
| Secure | 71.8 | 71.3 | 0.6 | 0.276 |  |
| Insecure (FI-C) | 28.2 | 28.7 | -0.6 | 0.276 |  |
| $\quad$ VLFS-C | 2.3 | 2.6 | -0.3 | 0.202 |  |
| Matched pair indicators |  |  |  |  | 2,757 |
| as only covariates | 70.4 | 71.3 | -0.9 | 0.797 |  |
| Secure | 29.6 | 28.7 | 0.9 | 0.797 |  |
| Insecure (FI-C) | 2.5 | 2.6 | -0.1 | 0.398 | 2,033 |
| $\quad$ VLFS-C |  |  |  |  |  |
| Listwise deletion sample | 73.1 | 71.3 | 1.8 | 0.024 |  |
| Secure | 26.9 | 28.7 | -1.8 | 0.024 | 2,757 |
| Insecure (FI-C) | 1.8 | 2.6 | -0.8 | 0.033 |  |
| $\quad$ VLFS-C |  |  |  |  |  |
| Linear probability model | 71.8 | 71.3 | 0.5 | 0.287 |  |
| Secure | 28.2 | 28.7 | -0.5 | 0.287 |  |
| Insecure (FI-C) | 2.4 | 2.6 | -0.2 | 0.292 |  |
| $\quad$ VLFS-C |  |  |  |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 second follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Packed Promise project and were prepared by Mathematica Policy Research.
Notes: Food security was measured using the standard USDA 18-item survey module and a 30-day reference period. VLFS is a subcategory within the food insecure category. The difference between the reported sample size of 2,757 for the main impact model and the second follow-up respondent sample size in Exhibit A.9, 2,794, results from 37 households having not provided sufficient food security information to obtain a measure of $\mathrm{FI}-\mathrm{C}$ at follow-up; those households were excluded from the analysis. The p-value associated with each impact estimate is from a one-tailed test of statistical significance. The number in the difference column may not exactly equal the treatment percentage minus the control percentage due to rounding.
${ }^{\text {a }}$ Difference column may not match the (Treatment minus Control) calculation exactly due to rounding.
FI-C = food insecurity among children; USDA = U.S. Department of Agriculture; VLFS-C = Very low food security among children.

The analysis used respondent weights that correspond to the survey's sampling design and adjust for survey nonresponse, as shown in Appendix A.4. Standard errors were calculated that used appropriate adjustments for these sample weights and complex sample design, and also accounted for heteroskedasticity in the sample (that is, did not assume that the amount of variance in the data was the same across subpopulations of survey respondents). Since random assignment was conducted at the district level, the standard errors for model 1 were adjusted for clustering. In other words, clusters of households (districts) were randomized, so if the characteristics of the households in one district differed from those in another, the outcome of a single random assignment - a single flip of a coin-could have a larger influence on the model estimates than if all households were randomly assigned separately. The calculation of the standard errors took into account this feature of the design. Because the study focused on a primary outcome that was specified in advance (food insecurity among children), it was not necessary to perform a multiple-comparisons adjustment for the principal (confirmatory) impact estimates.

For this primary outcome (and for other food insecurity outcomes), one-way hypothesis tests were conducted, where the null hypothesis was that the rate of food insecurity among children in the treatment group was not less than (that is, was greater than or equal to) the rate of food insecurity among children in the control group. The alternative hypothesis was that the rate of food insecurity among children was lower in the treatment group. One-way significance tests were conducted for this outcome because of the assumption that providing extra resources to a household would only lead to a reduction in food insecurity (if it had any effect at all), and would not be expected to lead to an increase in food insecurity. For all other outcomes, two-way hypothesis tests were conducted. A p $<0.05$ standard of statistical significance was used in all tests.

To ease interpretation of the impacts estimated using logistic models, exhibits of impact estimates present the impact as the marginal effect of the project - the difference between the treatment and control groups in the predicted probability of being in a given category (e.g., of the household experiencing food insecurity among children). The impact estimates are presented in this way rather than as logit coefficients or odds ratios to help with the interpretation of results. The average marginal effect was calculated by using the coefficients estimated in the logistic model to predict probabilities of the outcome (for example, child food insecurity) for every sample member under two scenarios: first, as if each sample member had been in the control group, and then as if each had been in the treatment group. Each sample member then received a calculated difference in predicted probabilities under the two scenarios, and the average marginal effect was calculated as the average of those differences, accounting for respondent weights. In each table of estimated impacts, the control mean or proportion is the weighted value in the control group within analysis sample; the treatment mean or proportion is the sum of the control group value plus the average marginal effect. For continuous outcomes, tables present the impact estimate calculated directly from the linear regression model, but the calculation of the control mean and treatment mean is otherwise the same as described here.

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## A.2. CONSORT FLOW DIAGRAM AND RESPONSE RATES

The Consolidated Standards of Reporting Trials (CONSORT) Flow Diagram (Exhibit A.14) shows the flow of participants from the recruitment stage, through consent, random assignment, and follow-up (Schulz et al. 2010). All participants selected for the evaluation were assigned to a treatment group or a control group (based on the randomized school districts) and contacted for the baseline, first, and second follow-up surveys.

## Exhibit A.14. CONSORT diagram for the Chickasaw Nation Packed Promise evaluation



Exhibit A. 15 shows the response rates among Chickasaw Nation participants overall, as well as by treatment group, for both rounds of follow-up. The follow-up response rate for all participants was $62 \%$ for the first follow-up and $61 \%$ for the second follow-up, and response rates by treatment group were similar to these overall rates. Response rates are based on standard definitions by the American Association for Public Opinion Research (AAPOR 2016). To calculate AAPOR response rate 4 , the numerator contains the number of completes, which includes partial interviews ${ }^{5}$; the denominator includes the number of completes, partials, and eligible noncompletes.

[^35]
## Exhibit A.15. Final follow-up survey response rates by treatment group

|  | Total <br> number of <br> cases in <br> evaluation <br> sample | Response <br> rate of all <br> cases (\%) | Number of <br> treatment <br> cases | Response <br> rate of <br> treatment <br> group (\%) | Number of <br> control <br> cases | Response <br> rate of <br> control <br> group (\%) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Survey round | 4,609 | 62.0 | 2,067 | 65.0 | 2,542 | 59.5 |
| Chickasaw Nation <br> first follow-up | 4,609 | 60.7 | 2,067 | 62.3 | 2,542 | 59.4 |
| Chickasaw Nation <br> second follow-up |  |  |  |  |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first and second follow-up surveys. Response rates calculated by Mathematica Policy Research using AAPOR response rate 4 (AAPOR 2016).
Note: See CONSORT Flow Diagrams in Appendix Exhibit A. 14 for additional details.
AAPOR = American Association for Public Opinion Research; CONSORT = Consolidated Standards of Reporting Trials.

## A.3. SAMPLE WEIGHTS FOR THE FOLLOW-UP ANALYSIS

This appendix describes the creation of sample weights for the analysis of follow-up data in the CNNS Packed Promise project. One set of weights was created for the sample of households that completed the baseline survey $(\mathrm{n}=2,836)$. Separate sets of weights were created for those that completed the first follow-up survey ( $\mathrm{n}=2,852$ ) and the second follow-up survey ( $\mathrm{n}=2,794$ ). The focus of this appendix and most of the analysis in this report is the first follow-up survey, with some attention also given the second follow-up survey; details about the baseline survey are available in the interim report (Briefel et al. 2018).

## A. General features of the sample weights

Sample weights are applied to an analysis sample in order to make the data for that sample representative of the eligible population. In the case of the analysis of the Packed Promise project, the population being generalized to includes the households potentially eligible for the demonstration services being offered as part of Packed Promise and that consented to participate in the project, which is a subset of the 4,875 households on the sampling frame. A randomized experimental design was used, so weights were created that make both the group of treatment households in the analysis sample and the group of control households in that sample representative of the broader household population.

If the sample included all households in the population, one can think of weights being equal to 1 for all sample households. In reality, the sample did not include all households in the population, so the sample weights were constructed to account for four key aspects of the study design and data collection-initial sampling, random assignment, eligibility determination, and follow-up survey nonresponse. For the two follow-up surveys, the initial sampling and random assignment aspects of sampling were identical, but eligibility determination and survey nonresponse could have differed.

The population of interest in Packed Promise included households with children eligible for free school meals or attending a school where all children receive free meals, within one of the 40 school districts participating in the study in the 2016-2017 school year. These households also had to provide written active study consent at the start of the 2015-2016 school year. In Packed Promise, clustered and blocked (stratified) random assignment of households was conducted, with households clustered into school districts and these districts then grouped into matched pairs. One school district in each pair was randomly assigned to the treatment group and the other to the control group. After a sample of households was selected, the households were assigned to the treatment or control group based on which school district their child(ren) attended, and then a baseline survey was conducted among them. The population contained 4,875 households, of which 4,750 were sampled and released to be administered the baseline and follow-up surveys (see Exhibit A.14). A follow-up survey was attempted for all households that were randomly assigned, regardless of whether they completed the baseline survey. ${ }^{6}$ The only exception to this were those determined to be ineligible during baseline data collection or known

[^36]to be ineligible on the basis of aging out of project school districts between the administration of the baseline and follow-up surveys.

Initial sampling (adjustment 1). Ultimately, the sample for which data were collected should be representative of the broader population of eligible households. From this population, a stratified random sample was selected where school districts made up the strata and, within strata, each household in the eligible population had an equal probability of selection. In practice, however, even if the same sampling ratio was used within each stratum, the actual proportion of households selected into the sample may differ from stratum to stratum due to rounding.

The initial sampling weight was constructed by taking the inverse of the probability of selection to ensure that the weighted size of the sample was equal to the population size. This initial sampling was identical in the creation of baseline weights and follow-up weights, and the probability of selection into the sample depended on stratum.

$$
p_{i j}^{s}=\operatorname{Prob}\{H H \text { i in stratum } j \text { selected and released into sample }\}=\frac{n_{j}^{s}}{N_{j}}
$$

The numerator represents the number of households in stratum (district) $j$ selected and released into the sample. The denominator represents the total number of households from that stratum in the population.

The weight for household $i$ in stratum $j$ that accounts for selection into the sample is:

$$
W_{i j}^{s}=\frac{1}{p_{i j}^{s}}
$$

Random assignment (adjustment 2). Randomly assigning households selected into the sample groups can be thought of as another stage of randomly selecting samples. In other words, the treatment group is a subsample of the full randomly selected sample, and so is the control group. If every household had exactly the same probability of being selected into the treatment group, there would be no need to adjust the weights for random assignment. In Packed Promise, however, clustered and blocked (stratified) random assignment was conducted, with households clustered into school districts and school districts grouped into matched pairs before one district (and the cluster of households with children in that district) in the pair was randomly assigned to the treatment group and the other to the control group. In one sense, the a priori probability of each household being assigned to the treatment group was 0.50 since each was part of a matched pair of districts and each district had an equal likelihood of being randomly assigned to the treatment group. In practice, however, among the households in a matched pair the a posteriori probability of being assigned to the treatment group for a given household was typically not 0.50 unless there was an equal number of sampled households in each of the two districts in a given matched pair.

Ultimately, the weights were applied separately to the treatment group and control group and the weighted samples within each of these groups generalize to the eligible population. For households that ended up in the treatment group, the weight from initial sampling (described
above) was divided by the probability of being assigned to the treatment group. For households in the control group, the weight was divided by the probability of being assigned to the control group (or one minus the probability of being assigned to the treatment group).

As stated above, a clustered and blocked randomization approach was used in the evaluation of Packed Promise. Households were first grouped into clusters based on school district. The districts were then grouped into blocks of two - these "matched pairs" of districts were matched on the basis of having similar characteristics. Each matched pair was then randomized separately, with the households in one of the two districts randomly assigned to the treatment group and the households in the other going into the control group. If any household had one child in a control district and another child in a treatment district; these households were assigned to the treatment group because the household received the project benefits on the basis of having one child in a treatment district. The probability of being assigned to the treatment group was first calculated by matched pair. For a given matched pair $k$, the probability of a household in that matched pair being assigned to the treatment group is:

$$
p_{k}^{T}=\operatorname{Prob}\{\text { household in pair } k \text { assigned to } T \text { group }\}=\frac{\sum_{i \in s c h_{k}^{T}} W_{i j}^{S}}{\sum_{\left(i \in s c h_{k}^{T}+s c h_{k}^{C}\right)} W_{i j}^{S}}
$$

Where $\operatorname{sch}_{k}^{T}$ denotes the treatment school district in matched pair $k$ and $\operatorname{sch}_{k}^{C}$ denotes the control school district in matched pair $k$. Note that if a household had multiple children in different school districts that were assigned to different matched pairs, the household would contribute to more than one matched pair's probability calculation. The probability of being assigned to the control group is equal to 1 minus the probability of being assigned to the treatment group.

As stated above, the calculation for the random assignment adjustment for a given household depends on whether the household was assigned to the treatment or control group, and how many different school districts the household has children attending. For treatment households with all children attending the same district in matched pair $k$, the adjustment for household $i$ is equal to:

$$
r a_{-} a d j_{i, k}^{T}=\frac{1}{p_{k}^{T}}
$$

Analogously, for control households with all children attending the same district, it is:

$$
r a_{-} a d j_{i, k}^{C}=\frac{1}{p_{k}^{c}}
$$

For households that had children attending two different school districts in different matched pairs, the calculations accounted for the probabilities for each matched pair. Thus, for households with one child attending a district in matched pair $k_{1}$ and a second child attending a district in
matched pair $k_{2}$, with at least one of these districts being assigned to the treatment group (which made these treatment households), the adjustment is equal to:

$$
r a_{-} a d j_{i, k_{1}, k_{2}}^{T}=\frac{1}{p_{k 1}^{T}+p_{k 2}^{T}-\left(p_{k 1}^{T} * p_{k 2}^{T}\right)}
$$

The denominator represents the probability that a household in matched pair $k_{1}$ is in the treatment group or a household in matched pair $k_{2}$ is in the treatment group. For households with children attending two different school districts in different matched pairs, neither of which was a treatment district (which made these control households), the adjustment is slightly different:

$$
r a_{-} a d j_{i, k_{1}, k_{2}}^{C}=\frac{1}{\left(p_{k 1}^{C} * p_{k 2}^{C}\right)}
$$

The denominator here represents the probability that a household in matched pair $k_{1}$ is in the control group and a household in matched pair $k_{2}$ is in the control group (and is the complement of the previous denominator). As such, the calculations control for the fact that households with children in multiple schools have a higher probability of being assigned to the treatment group.

After dividing the weight from the previous adjustment by the probability of assignment to the actual group the household was assigned to, one further adjustment was made. Without this adjustment, the weighted sum of the treatment group sample would be approximately equal to the total population size and the weighted sum of the control group sample would also be approximately equal to the total population size, depending on how the sampling weights were distributed across the randomization groups. Thus, the weighted sum of the full sample would be approximately equal to two times the population size. To re-size the weights, all weights were multiplied by 0.5 , or whatever was needed to get each randomization group's weight to add up to half the count of the eligible population. ${ }^{7}$ This adjustment for random assignment was identical in the creation of baseline weights and each of the two follow-up weights.

So the weight for treatment group household $i$ in district $j$ and pair $k$ that accounts for initial selection and random assignment is:

$$
W_{i}^{s, T}=\frac{1}{p_{i j}^{S}} * \frac{1}{r a_{-} a d j_{i, k}^{T}} * 0.5=\frac{0.5}{\left(p_{i j}^{S} * r_{-} a d j_{i, k}^{T}\right)}
$$

[^37]And for control group households it is:

$$
W_{i}^{s, C}=\frac{1}{p_{i j}^{S}} * \frac{1}{r a_{-} a d j_{i, k}^{C}} * 0.5=\frac{0.5}{\left(p_{i j}^{S} * r a_{-} a d j_{i, k}^{C}\right)}
$$

Eligibility determination (adjustment 3). The sample ultimately used for analysis differed from the sample initially selected for analysis because the analysis sample did not include households found to be ineligible (discussed in this step) as well as those that did not respond to the follow-up survey (discussed in adjustment 4). ${ }^{8}$ A household's eligibility was determined on the basis of their characteristics at baseline. Once households were determined to be eligible at baseline, there was no attempt to determine their ongoing eligibility status over time during the follow-up period as their household characteristics changed. ${ }^{9}$ Prior to selecting the sample, any eligibility information obtained was taken into account so that known ineligible households were excluded from the sample frame. However, some households were deemed ineligible after they were selected to be in the sample (due to updated information from administrative records or from baseline survey responses). There were also households in the sample that had an unknown eligibility status, which could have been due to the household not agreeing to complete the survey or to an inability to contact the household. These households with unknown eligibility status likely included some ineligible households, and this possibility was accounted for with an adjustment to the weights, giving more weight to sample members from groups with low rates of eligibility determination and less weight to those from groups with high rates of eligibility determination.

To perform this adjustment, at least some information on the characteristics of the full population of households was needed to provide some information about which sorts of households had higher versus lower eligibility determination rates. The challenge was that there was limited information available on the full population, though some household-level demographic information such as household size, language, ethnicity, and race was available. In addition to these first order variables, interaction terms were considered for inclusion in the

[^38]model predicting eligibility determination status (using Chi-square Automatic Interaction Detector ${ }^{10}$ ).

The adjustment for eligibility determination was set to the inverse of the probability of having a known eligibility status for the survey $\left(p_{i}^{e}\right)$, which was obtained from a stepwise regression model. This modeling took place separately for the treatment and comparison groups, and separately for each of the follow-up surveys. ${ }^{11}$ For example, if language was found to be a significant predictor of having a known eligibility status from the stepwise logistic regression, then an English-speaking household would have a different probability of having a known eligibility status (and thus a different eligibility determination adjustment) than a non-Englishspeaking household. This adjustment was applied to the respondents, eligible nonrespondents, and ineligible households, and the weight was set to 0 for the nonrespondents with undetermined eligibility. After this adjustment, the weights approximately added up to the sample frame, which included some ineligible households. However, after dropping the undetermined and ineligible households, the weights added up to the best estimate of the eligible population.

The process used to make this third adjustment was the same for the baseline weights and each of the two follow-up weights. However, the actual baseline eligibility statuses of some households may have been different in the different rounds of the survey. In other words, information on the eligibility statuses of households was updated between the time of baseline data collection when baseline weights were created and the time of follow-up data collection when the follow-up weights were created.

This eligibility determination adjustment was applied to the weight adjusted for initial sampling and random assignment (described above). For each of the follow-up surveys, the weight that includes adjustments for sampling, random assignment, and eligibility determination is:

$$
\begin{aligned}
& W_{i}^{s, T, e}=\frac{1}{p_{i j}^{S}} * \frac{1}{r a_{-} a d j_{i, k}^{T}} * 0.5 * \frac{1}{p_{i}^{e}}=\frac{0.5}{\left(p_{i j}^{S} * r a_{-} a d j_{i, k}^{T} * p_{i}^{e}\right)} \\
& W_{i}^{s, C, e}=\frac{1}{p_{i j}^{S}} * \frac{1}{r a_{-} a d j_{i, k}^{C}} * 0.5 * \frac{1}{p_{i}^{e}}=\frac{0.5}{\left(p_{i j}^{S} * r a_{-} a d j_{i, k}^{C} * p_{i}^{e}\right)}
\end{aligned}
$$

Follow-up survey nonresponse (adjustment 4). Not all eligible households selected to be in the sample completed each follow-up survey. A nonresponse adjustment to the eligibilityadjusted weights in the previous step accounted for this by giving more weight to responding sample members from groups with low response rates and less weight to those from groups with

[^39]high response rates. Similar to the eligibility determination adjustment, some information about both responding and nonresponding households was needed so that the sorts of households with higher and lower response rates could be determined. The actual adjustment to the weights was the inverse of a household's probability of responding to the survey-more specifically, the probability that a household with that set of characteristics responded to the follow-up survey $\left(p_{i}^{r 2}\right)$, where the probability was again determined by a stepwise logistic regression model. This modeling took place separately for the treatment and comparison groups, and separately for each of the follow-up surveys. ${ }^{12}$ In this model, the goal was to look for variables significantly associated with response. This adjustment was applied to the eligibility-adjusted sampling weights from the previous step for all respondents to each of the two follow-up surveys, and the weight was set to 0 for the eligible nonrespondents, who were then dropped from analysis.

As with the third adjustment, the process used to make this fourth adjustment was the same for the baseline, first follow-up, and second follow-up weights. Again, however, the actual adjustment for specific households may have differed because there could have been differences in households' response status on the baseline and follow-up surveys. Some baseline survey respondents were nonrespondents to one or both follow-up surveys, and some follow-up survey respondents did not respond to the baseline.

For each of the follow-up surveys, the weight that combines the adjustments for initial sampling, random assignment, eligibility determination, and follow-up survey nonresponse is:

$$
\begin{aligned}
W_{i}^{s, T, e, r} & =\frac{0.5}{\left(p_{i j}^{S} * r a_{-} a d j_{i, k}^{T} * p_{i}^{e}\right)} * \frac{1}{p_{i}^{r 2}}=\frac{0.5}{\left(p_{i j}^{S} * r a_{-} a d j_{i, k}^{T} * p_{i}^{e} * p_{i}^{r 2}\right)} \\
W_{i}^{s, C, e, r} & =\frac{0.5}{\left(p_{i j}^{S} * r a_{-} a d j_{i, k}^{C} * p_{i}^{e}\right)} * \frac{1}{p_{i}^{r 2}}=\frac{0.5}{\left(p_{i j}^{S} * r a_{-} a d j_{i, k}^{C} * p_{i}^{e} * p_{i}^{r 2}\right)}
\end{aligned}
$$

As with the baseline weight, a final adjustment was applied to the weight for each follow-up survey that involved multiplying each weight in the treatment group by the ratio of the target sum (of half of all eligible households in the population) divided by the sum of the current weights. An analogous procedure was used for the control group.

After applying and combining all weighting adjustments for a given set of weights, the weight distribution and associated design effect were examined to determine whether weight trimming was necessary to mitigate the impact of weighting on the variance of estimates, and to avoid the risk of any one household having undue influence on estimates due to a very high weight. No trimming was necessary for the baseline weights or either of the two follow-up weights in this site. At the end of the weighting process, each household that completed the first

[^40]follow-up survey has a positive first follow-up survey weight, and each household that completed the second follow-up survey has a positive second follow-up survey weight. In each case, the sum of the weights should equal the estimate of the full population of eligible households.

## A.4. NONRESPONSE BIAS ANALYSIS FOR THE FOLLOW-UP SURVEYS

There were four demographic variables that were available to measure all households' characteristics at baseline for Chickasaw Nation: household size, ethnicity, language, and race. In Chickasaw Nation, nearly all households on the frame were sampled, so the comparison of sampled households to those not sampled becomes less relevant. When looking at sampleweighted distributions between the eligible respondents and the nonrespondents at the first follow-up, there are no significant differences with regard to any of the four demographic variables (Exhibit A.16).

Comparing the sample-weighted distributions between the eligible respondents and nonrespondents at the second follow-up, there is a significant difference with regard to race. Nonrespondents at the second follow-up were more likely to be white than respondents, with $51 \%$ of nonrespondents identifying as white, versus $45 \%$ of respondents (Exhibit A.17). This difference in race disappears when the fully weighted sample of 2,794 respondents to the second follow-up is compared to the frame of 4,875 households. There are 0.1 percentage points more white households among the respondents than in the full frame ( $47.5 \%$ vs. $47.4 \%$ ). Furthermore, the distribution of all demographic variables is similar between the eligible respondents and the full frame for both the first and second follow-up survey.

Exhibit A.16. Characteristics in the Chickasaw Nation demonstration project based, first follow-up

|  | Unweighted |  |  | Sampling adjustment |  | Final weight |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Characteristic | $\begin{aligned} & \text { Frame } \\ & (n=4,875) \end{aligned}$ | Not sampled ( $\mathrm{n}=125$ ) | Sampled $(n=4,750)$ | Eligible respondents at first follow-up ${ }^{\text {a }}$ ( $\mathrm{n}=2,852$ ) | Nonrespondents at first follow-up ( $\mathrm{n}=1,752$ ) | Eligible respondents at first follow-up ( $\mathrm{n}=2,852$ ) |
| Household size (\%) |  |  |  |  |  |  |
| 2 | 70.4 | 76.8 | 70.2 | 68.6 | 71.8 | 68.7 |
| 3-4 | 26.5 | 20.0 | 26.7 | 27.9 | 25.5 | 27.9 |
| 5+ | 3.1 | 3.2 | 3.1 | 3.5 | 2.7 | 3.4 |
| Hispanic (\%) | 11.3 | 9.6 | 11.3 | 12.0 | 10.8 | 11.1 |
| Language (\%) English Other |  |  |  |  |  |  |
|  | 96.2 | 97.6 | 96.2 | 96.0 | 96.4 | 96.4 |
|  | 3.8 | 2.4 | 3.8 | 4.0 | 3.6 | 3.6 |
| Race (\%) |  |  |  |  |  |  |
| American Indian/ Alaskan Native | 33.7 | 28.8 | 33.8 | 34.1 | 33.5 | 34.6 |
| White | 47.4 | 49.6 | 47.4 | 46.5 | 48.2 | 47.6 |
| Mixed/Other | 18.9 | 21.6 | 18.8 | 19.4 | 18.3 | 17.8 |

Source: Household sample files provided by Chickasaw Nation following active consent procedures. Tabulations prepared by Mathematica Policy Research.
${ }^{\text {a }}$ There were 88 sampled households that were identified as ineligible, which were dropped from the analysis; however, a certain proportion of the nonrespondents included in this analysis are assumed to be ineligible.

* Difference between groups is statistically significant at the 0.05 level. Significance was tested for two sets of groups, sampled versus not sampled households (unweighted) and eligible respondents versus nonrespondents (sample weighted).


## Exhibit A.17. Characteristics in the Chickasaw Nation demonstration project, second follow-up

|  | Unweighted |  |  | Sampling adjustment |  | Final weight |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Characteristic | $\begin{aligned} & \text { Frame } \\ & (n=4,875) \end{aligned}$ | Not sampled ( $\mathrm{n}=125$ ) | $\begin{aligned} & \text { Sampled } \\ & (n=4,750) \end{aligned}$ | Eligible respondents at second follow$u p^{\text {a }}(\mathrm{n}=2,794)$ | Nonrespondents at second follow-up ( $\mathrm{n}=1,810$ ) | Eligible respondents at second follow-up $(n=2,794)$ |
| Household size (\%) |  |  |  |  |  |  |
| 2 | 70.4 | 76.8 | 70.2 | 69.6 | 70.3 | 69.2 |
| 3-4 | 26.5 | 20.0 | 26.7 | 27.1 | 26.7 | 27.5 |
| 5+ | 3.1 | 3.2 | 3.1 | 3.3 | 3.0 | 3.3 |
| Hispanic (\%) | 11.3 | 9.6 | 11.3 | 12.1 | 10.6 | 11.1 |
| Language (\%) |  |  |  |  |  |  |
| English | 96.2 | 97.6 | 96.2 | 96.2 | 96.1 | 96.6 |
| Other | 3.8 | 2.4 | 3.8 | 3.8 | 3.9 | 3.4 |
| Race (\%) |  |  |  |  |  |  |
| American Indian/ Alaskan Native | 33.7 | 28.8 | 33.8 | 35.6 | 31.3* | 34.8 |
| White | 47.4 | 49.6 | 47.4 | 44.9 | 50.5* | 47.5 |
| Mixed/Other | 18.9 | 21.6 | 18.8 | 19.5 | 18.2* | 17.7 |

Source: Household sample files provided by Chickasaw Nation following active consent procedures. Tabulations prepared by Mathematica Policy Research.
${ }^{\text {a }}$ There were 88 sampled households that were identified as ineligible, which were dropped from the analysis; however, a certain proportion of the nonrespondents included in this analysis are assumed to be ineligible.

* Difference between groups is statistically significant at the 0.05 level. Significance was tested for two sets of groups, sampled versus not sampled households (unweighted) and eligible respondents versus nonrespondents (sample weighted).


## APPENDIX B

DATA COLLECTION METHODS

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## B.1. SURVEY DATA COLLECTION METHODS

Sample members were contacted to complete three computer-assisted telephone interviews (CATI). The first survey was administered at baseline, prior to the start of the intervention. The two follow-up surveys were administered approximately 12 and 18 months ${ }^{1}$, respectively, after the start of the intervention. During the two rounds of follow-up data collection, field locators visited the demonstration area to find non-respondents. The following sections describe the instruments, obtaining Office of Management and Budget (OMB) clearance and institutional review board (IRB) approval, data collector training, and survey data collection.

## A. Survey contents

The purpose of the baseline survey was to describe the household characteristics of the eligible target populations before the start of each intervention. The purpose of the follow-up surveys was to measure experiences and outcomes among study households to allow for the estimation of the impacts of the intervention as well as mediating factors among both treatment and control households after the intervention was implemented. The surveys used at baseline and follow-up contain items used in other surveys, including national studies and studies of lowincome populations, along with items developed specifically for EDECH.

Child and household food security was measured with USDA's standard 18-item U.S. Household Food Security Survey Module, used to monitor food security in large-scale population studies such as the Current Population Survey and the National Health and Nutrition Examination Survey (NHANES), and used to assess food security in research studies (ERS $2017 \mathrm{a}, \mathrm{c}$ ). The USDA 18 -item food security survey module includes 10 questions about the whole household and adults, and 8 questions about children (ERS 2017b). A 30-day reference period was used to measure food security because it has less recall bias than a 12-month period; it can be measured contemporaneously with household income, food expenditures, and program participation; and the findings can be compared to other studies that also used a 30-day food security measure (e.g., Collins et al. 2016; Mabli et al. 2013; Nord and Prell 2011). In addition, the $12-$ month food security measure would cover a period that includes the baseline period before treatment households had the opportunity to receive project benefits.

The standard procedures for scoring item responses were used to classify households, adults, and children as experiencing food security, food insecurity, or very low food security (ERS 2017b). The EDECH study used the adult/child cross-classification method, which eliminates a misclassification that affects a small percentage of cases, and is consistent with the underlying statistical theory that if either any adult or any child in the household is food insecure, then the

[^41]household is as well (Nord and Coleman-Jensen 2014). Food security outcomes were not imputed. ${ }^{2}$

Dietary indicators of children's nutrition for one child per household was measured in the first follow-up. The food frequency questions in the 2009-2010 NHANES Multifactor Diet Screener were used to compare children's dietary outcomes between the treatment and control groups. The questions, which used a 30-day reference period for consistency with the food security reference period, asked the parent to report how often the randomly selected child age 2 years or older ate fruits and vegetables, foods and beverages containing added sugars, and whole grains (see Appendix B. 7 for details on coding, processing and construction of the dietary measures). ${ }^{3}$

Other relevant survey questions were adapted from the Summer EBT for Children evaluation (Collins et al. 2016) and the SNAP Food Security Study (Mabli et al. 2013) to measure food expenditures and program participation-critical intermediate outcomes in the causal chain leading to improved food security. Feedback from eight pretest participants and FNS and ERS reviewers informed revisions to the questionnaires. Exhibit B. 1 presents a highlevel overview of topics included in the surveys; the baseline and two follow-up instruments are in Appendices B.2, B.3, and B.4, respectively.

## B. OMB clearance and IRB approval

OMB clearance was obtained on August 20, 2015 (FNS 2015). The Chickasaw Nation IRB approved the local evaluation on July 8, 2015. The timing of gaining written consent forms signed at the beginning of the school year was not compatible with OMB clearance. As a result and in accordance with Chickasaw Nation's IRB, the telephone interviewers obtained verbal consent for the evaluation when the baseline survey was conducted. Participants could withdraw consent from the evaluation via an initial question asked by telephone. The same process was implemented in the subsequent two rounds of follow up data collection (13 of those reached in the sample of 4,750 opted out). However, households could receive project benefits even if they opted out of the evaluation.

## C. Telephone interviewer and field locator training

Prior to each round of survey data collection, telephone interviewers completed 16 hours of general and project-specific training. The 8 -hour general training ensured that interviewers were well-versed in establishing rapport, maintaining participant confidentiality, minimizing

[^42]nonresponse, and administering the CATI. The 8 -hour project-specific training covered the study background, data collection procedures and goals, refusal aversion techniques, and data security. Interviewers passed a certification test before they began to collect data.

During the follow-up data collection periods, field locators completed a 4-hour locating training that highlighted key aspects of the study, locating procedures and goals, and data security. Locators passed a certification test before they began to search for households in the demonstration area.

## Exhibit B.1. Key topics included in the EDECH household surveys

| Survey modules (topics) | Baseline questionnaire | First follow-up questionnaire | Second follow-up questionnaire |
| :---: | :---: | :---: | :---: |
| Food security (last 30 days) |  |  |  |
| Food security (among children, adults, and households) | X | X | X |
| Food insecurity and very low food security (among children, adults, and households) | X | X | X |
| Sociodemographic characteristics |  |  |  |
| Household size and composition | X | Q | Q |
| Ages of children (presence of teenager) | X | Q | Q |
| Employment of adult household members (last 30 days) | X | Q | Q |
| Household income (last calendar year, last month) and sources of income | X | X | X |
| Respondent demographics and self-reported health status | X | X | X |
| Nutrition assistance program participation and supports |  |  |  |
| Participation in nutrition assistance programs (SNAP, WIC, SBP, NSLP, and FDPIR) and other programs (free school suppers, school food backpacks, after school and child care programs, and summer food programs ${ }^{\text {a }}$ ) | X | X | X |
| Length of time on SNAP | X | X | X |
| Amount of SNAP benefit | X | X | X |
| Use of food banks, soup kitchens, or community or senior programs | X | X | X |
| Family, friend, and community support | X | X | X |
| Participation in Packed Promise services |  | X | X |
| Food expenditures and food access (last 30 days) |  |  |  |
| Food expenditures including out-of-pocket food costs | X | X | X |
| Food shopping, distance to supermarkets | X | X | X |
| Food behavior |  |  |  |
| Number of family dinners per week | X | X | X |
| Children's diet quality |  |  |  |
| School breakfast eating | X | X | X |
| Frequency of fast food consumption of household | X | X | X |
| Food frequency: consumption of fruits and vegetables, foods/beverages with added sugars, whole grains ${ }^{\text {b }}$ |  | X |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2015-2016 baseline survey and 2017 follow-up surveys for the Chickasaw Nation demonstration.
Note: " $X$ " indicates that the topic was included in the survey. " $Q$ " indicates that survey questions were included that asked about households' change in status since baseline.
a Summer food programs could include Summer EBT for Children, SFSP, Seamless Summer Option, or other free meals or snacks offered at places such as summer school, a community center, day camp, or park.
${ }^{\mathrm{b}}$ Asked for one randomly selected child age 2 years or older per household.
EBT = electronic benefits transfer; EDECH = Evaluation of Demonstration Projects to End Childhood Hunger; FDPIR = Food Distribution Program on Indian Reservations; NSLP = National School Lunch Program; SBP = School Breakfast Program; SFSP = Summer Food Service Program; SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

## D. Survey data collection

Before baseline data collection, the grantee submitted files containing eligible households and contact information. The evaluation sample was then selected, as described in greater detail in Appendix A.1. Sample members' contact information was then submitted to two commercial locating databases before data collection began. The purpose of these submissions was twofold: (1) to obtain additional telephone numbers for households, and (2) to triangulate the telephone numbers already available on the sampling frames. Telephone numbers found in more than one source (for example, the sampling frame and one or both of the databases) were prioritized for dialing. Before the follow-up data collection, the grantee provided updated contact information for households, and contact information was again submitted to a commercial locating database.

The baseline and follow-up CATI surveys were administered in both English and Spanish. Approximately $5 \%$ of respondents in Chickasaw Nation completed the follow-up surveys in Spanish. The target respondents were parents/guardians in eligible households. Exhibit B. 2 presents the field periods for each round of data collection.

## Exhibit B.2. Survey data collection periods

| Round | Survey start | Survey end |
| :--- | :--- | :--- |
| Baseline | November 2015 | February 2016 |
| First follow-up | January 2017 | June 2017 |
| Second follow-up | August 2017 | November 2017 |

A total of 4,750 households were contacted for the baseline survey. Households received an advance letter describing the evaluation and the purpose of the interview, and inviting sample members to call a toll-free number to complete the survey. The respondent was an adult living in the household (usually the parent or guardian) who was the most knowledgeable about household food resources and children's food consumption. Shortly after the letters were mailed, outbound calls were placed to households. Household interviews were attempted multiple times at different times of the day, from the morning to the evening, and across all days of the week to maximize the chances of speaking with a sample member. Participating households were mailed a $\$ 30$ gift card as a thank-you payment for their participation.

Response rates were monitored daily and follow-up strategies were adapted to address local considerations to maximize participation. Households received mail, email (if an email address was available), and postcard reminders throughout the field period. Reminder flyers were
distributed to non-responding households through schools as a means to augment the other communications. Sample members who refused to participate received an additional refusal conversion letter. Updated contact information was requested from grantees during data collection so that new telephone numbers and addresses could be attempted. Additional in-house locating, including Internet searches and more in-depth searches in commercial locating databases, were also performed.

The follow-up samples excluded households that were found during baseline data collection to be ineligible (including duplicates of other households in the sample), households that opted out of participation in the evaluation, and households that "aged out" of the demonstration (see Appendix A.1). Procedures used at baseline were repeated for the follow-up data collection. In addition, non-responding households received text messages requesting their participation, and field locators attempted to locate and persuade non-respondents to complete the interview. Participating households received a $\$ 30$ gift card.

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## B.2. BASELINE SURVEY INSTRUMENT

The final baseline questionnaire for households is shown in Appendix B.2.

# Evaluation of Demonstration Projects to End Childhood Hunger 

## Baseline Questionnaire for Households

[^43]
## A. Introduction

## ALL <br> IF DEMONSTRATION NE CHICKASAW NATION FILL1=two parts - an interview that will take about 30 minutes today, and a second interview about 12 months later. AND FILL2=interview <br> IF DEMONSTRATION=CHICKASAW NATION FILL1=three parts - an interview that will take about 30 minutes today, a second interview about 12 months from now, and a third interview about 18 months from now. The second and third interviews will also each take about 30 minutes. AND FILL2=interviews

BA1. For quality assurance purposes, this call may be monitored or recorded.
The study has [two parts - an interview that will take about 30 minutes today, and a second interview about 12 months later/three parts - an interview that will take about 30 minutes today, a second interview about 12 months from now, and a third interview about 18 months from now. The second and third interviews will also each take about 30 minutes.] As a way of saying thank you, you will get $\$ 30$ for completing the interview today and a similar amount for the future [interview/interviews]. We will send you a prepaid gift card after you complete each interview.
The interviews have questions about your children's food choices as well as general questions about you and your household. Your answers will help the government make its child nutrition programs better.

Your participation in this interview is voluntary and you may stop at any time. You may also refuse to answer any question. Your benefits will not be affected by any answers to questions or if you choose not to participate.
All the information you give us will be kept private to the extent allowed by law. There is a small risk of the loss of confidentiality of your data, but procedures are in place to minimize this risk. Your name will not be attached to any of your answers. Your information will be used only in combination with information from other households for research purposes.
Do you have any questions about the interview before I begin?
YES 1

NO .0 GO TO BB1
DON'T KNOW d

REFUSED .......................................................................................................r

## B. Household Size and Composition

## ALL

The first few questions are about the people you live with.
BB1. Including yourself, how many people live in your household? Don't forget to include nonrelatives who live in your household and, of course, babies, small children and foster children. Also include people who usually live in your household but may have been away within the last 30 days for reasons such as: vacation, traveling for work, or in the hospital. Do not include children living away at school or anyone who is now incarcerated
PROBE IF NEEDED: By temporarily away we mean away within the last 30 days
|___|__| NUMBER OF PEOPLE (1-20)
$\qquad$
d
REFUSED $\qquad$

Status refusal, Exit
Status refusal, Exit

## IF BB1=1

BB1a. Just to confirm, you are the only person living in the household. There are no children, non-relatives, or people who usually live there but are currently away?
$\qquad$
NO, CORRECT NUMBER
DON'T KNOW
REFUSED $\qquad$

```
[IF BB1 >1] AND [DEMONSTRATION = KENTUCKY
```

BB1b. In which county do you currently live?
[List of eligible counties]
$\qquad$
DON'T KNOW ................................................................................................d
d
REFUSED .....................................................................................................r Status refusal, Exit
[IF BB1 > 1] AND [DEMONSTRATION = NEVADA]
BB1c. What is your current ZIP Code?
[List of eligible ZIP Codes]
OTHER........................................................................................................... 13
DON'T KNOW ...............................................................................................d
REFUSED ...................................................................................................... r

Status ineligible, Exit
Status refusal, Exit
Status refusal, Exit

## IF [DEMONSTRATION] = KENTUCKY OR NEVADA

BB1d. Are you or others in your household currently receiving Supplemental Nutrition Assistance Program (SNAP)?
PROBE IF NEEDED: SNAP is the program formerly known as 'Food Stamps.'
$\qquad$
NO
0 GO TO BB1e
DON'T KNOW ..................................................................................................d GO TO BB1e
REFUSED .......................................................................................................r Status refusal, Exit

## IF [DEMONSTRATION = KENTUCKY OR NEVADA] AND [BB1D = 0 OR DK]

BB1e. PROBE: In the past three months, have you or others in your household received SNAP benefits?

YES
1 Status ineligible, Exit

NO 0

DON'T KNOW .................................................................................................. d
REFUSED .......................................................................................................r

Status refusal, Exit
IF BB1 > 1

BB2. Do all the people who live with you share the food that is bought for the household?

DON'T KNOW d GO TO BB2a
REFUSED ......................................................................................................r GO TO BB2a

## BB2 $=0, D, O R R$

BB2a. Including yourself, how many people in your household share the food that is bought for the household?
$\mid$ (1-20)
DON'T KNOW
d GO TO BB3

REFUSED
.r
GO TO BB3
HARD CHECK: [IF BB2a > BB1]; The number of people in your household who share food is greater than the total number of people in your household. Did I make a mistake?

```
[IF BB1 > 1] OR [IF BB2A > 1]
[IF BB2 = 1 FILL= NUMBER FROM BB1], OTHERWISE FILL=NUMBER FROM BB2a
```

BB3. How many of those [NUMBER FROM BB1 OR BB2a] people in your household are children age 18 or younger or over 18 but still in high school?
|__|__| NUMBER OF PEOPLE
(0-20)
DON'T KNOW d
Go to BB3a

REFUSED
.r
Go to BB3a
HARD CHECK: [IF BB3 > BB1]; The number of children living in your household is greater than or equal to the total number of people in your household. Did I make a mistake?
HARD CHECK: [IF BB3 > BB2a]; The number of children living in your household is greater than the total number of people sharing food in your household. Did I make a mistake?
PROGRAMMER BOX BB3
IF BB3 GTE 1 AND DEMONSTRATION=KENTUCKY OR
NEVADA, GO TO BB3B. ELSE IF BB3=D OR R GO TO
BB3A. ELSE GO TO BB4.

## BB3 $=0, D, O R R$

BB3a. Is there at least one child living in your household?

YES.
$\qquad$
DON'T KNOW $\qquad$d
$\qquad$

## REPEAT BB3

Status ineligible, Go to BB6
Status refusal, Exit
Status refusal, Exit

## IF DEMONSTRATION = KENTUCKY OR NEVADA

IF DEMONSTRATION = KENTUCKY FILL1= "was born after" AND FILL2 = "March 31, 2000"
IF DEMONSTRATION = NEVADA FILL1 = "will be under age 5 as of" AND FILL2 = "April 1, 2016"
BB3b. Is there at least one child living in your household who [was born after/will be under age 5
as of] [March 31, 2000/April 1, 2016]?*
YES ....................................................................................................................... 1
*Represents the wording used to field the question; revised from the OMB version to coincide with eligibility age cut-offs and the intervention dates for the projects.

BB4. [I'd like to make a list of the first names or initials of the children in your household. This will help me with asking some questions later.] What is the name of the [first/next] child? IF NEEDED: You can give me the child's initials or some other way to refer to the child.

## NAME

DON'T KNOW d
REFUSED ..... r

```
BB3 > 0
```

FILL [ANSWER FROM BB4]
IF BB4 = D OR R FILL "this child"

## BB4a. What is [ANSWER FROM BB4/this child]'s date of birth?

PROGRAMMER: COLLECT DATE WITH SEPARATE FIELDS
$\qquad$
$\qquad$

```
BB4A = D OR R
```

    FILL [ANSWER FROM BB4]
    IF BB4 = D OR R FILL "this child"

BB4b. How old is [ANSWER FROM BB4/this child]? This information will help me with asking some questions later.
|_____|AGE OF CHILD (0-52)

```
BB4B = 0-52
```

BB4c. Is that weeks, months, or years?
WEEKS ..... 1
MONTHS ..... 2
YEARS ..... 3
DON'T KNOW ..... d
REFUSED ..... r

| BB3 $>0$ |
| :--- |
| FILL [ANSWER FROM BB4] |
| IF BB4 = D OR R FILL "this child" |
| BB3 GTE 1 AND AGE GTE 3 YEARS AND DEMONSTRATION = CHICKASAW NATION OR |
| VIRGINIA |
| FILL NAME1 FROM BB4 |

BB4d. Is [ANSWER FROM BB4/this child] a boy or girl? INTERVIEWER: ASK IF RESPONDENT HAS NOT ALREADY MENTIONED CHILD'S SEX.

CODE ONE ONLY
BOY 1

GIRL 2

DON'T KNOW ....................................................................................................d
$\qquad$
[IF BB3 > 0] AND
[IF DEMONSTRATION = CHICKASAW NATION OR VIRGINIA] AND
[[IF BB4A [YEAR] < 2013] OR [IF BB4B > 3 AND BB4C = 3] OR [IF BB4B > 36 AND BB4C = 2]]
FILL [ANSWER FROM BB4]
IF BB4 = D OR R FILL "this child"

> BB4e. Is [ANSWER FROM BB4/this child] in grades pre-K through 12 in your local school system?
> YES .1
> NO ....................................................................................................................... 0
> DON'T KNOW
> d

```
[IF BB4E = 1] AND [IF DEMONSTRATION = CHICKASAW NATION OR VIRGINIA]
```

BB4f. What school does [ANSWER FROM BB4/this child] attend?
[List of schools + "other" option; "other" option routes respondent to BB9]
DON'T KNOW
d
$\qquad$

```
[IF BB4E = 1] AND [IF DEMONSTRATION = CHICKASAW NATION]
```

BB4g. On school days during the last 30 days, did [ANSWER FROM BB4/this child] get freelunches at school?
YES ..... 1
NO .....  0
DON'T KNOW ..... d
REFUSED ..... r
[IF BB4E = 1] AND [IF DEMONSTRATION = VIRGINIA]
BB4h. On school days during the last 30 days, did [ANSWER FROM BB4/this child] get free orreduced price lunches at school?YES1
NO ..... 0
DON'T KNOW ..... d
REFUSED ..... r

[IF BB1A = 1] OR

[IF BB3A = 0]

BB6. I apologize, this survey is for individuals with at least one child under the age of 18 in the house.
Go to END

```
[IF BB1 = R OR DK] or
[IF BB1a = R] or
[IF BB3a = R OR DK]
```

BB6a. I apologize, this survey is for individuals with at least one child under the age of 18 in the house.

Status refusal. Go to END

## IF BB1B = 99

BB7. I apologize, only certain counties are eligible for participation.
Status ineligible. Go to END

## IF BB1B = R OR DK

BB7a. I apologize, only certain counties are eligible for participation.
Status refusal. Go to END

## IF BB1C = 13

BB8. I apologize, only certain zip codes are eligible for participation.
Status ineligible. Go to END
IF BB1C = R OR DK

BB8a. I apologize, only certain zip codes are eligible for participation.
Status refusal. Go to END

```
[IF BB3B = 0] OR
IF [BB1E = 1 OR DK] OR
IF [[DEMONSTRATION = CHICKASAW NATION OR VIRGINIA]] AND NO
CHILDREN ATTEND AN ELIGIBLE SCHOOL IN BB4F]
```

BB9. I apologize, you do not meet the eligibility criteria for this study at this time. We may try to contact you again in the future.

Status ineligible. Go to END

```
[IF BB3B = R OR DK] OR
IF [BB1E = R] OR
```

BB9a. I apologize, you do not meet the eligibility criteria for this study at this time. We may try to contact you again in the future.

Status refusal. Go to END

## C. Children's Program Participation

For the next series of questions we'll be asking about meals and snacks the children in your household may have had during the last 30 days, that is, since [MONTH] [DAY].

## AT LEAST ONE CHILD GTE AGE 3 YEARS

BC1. On school days during the last 30 days, how many children in your household usually ate breakfast at school?
|____| NUMBER OF CHILDREN (0-20)
DON'T KNOW d
$\qquad$

IF BC1 = 1-20, D, R
BC1a. On school days during the last 30 days, how many children in your household got free or reduced-price breakfasts at school?
|____| NUMBER OF CHILDREN
(0-20)
DON'T KNOW d

REFUSED ..........................................................................................................r

## AT LEAST ONE CHILD GTE AGE 3 YEARS

BC1b. On school days during the last 30 days, how many children in your household usually ate a school lunch?
|___| NUMBER OF CHILDREN
(0-20)
DON'T KNOW d

REFUSED .r

## IF BC1B $=1-20, D, R$

BC1c. On school days during the last 30 days, how many children in your household got free or reduced-price lunches at school?
|_____| NUMBER OF CHILDREN
(0-20)
DON'T KNOW d
$\qquad$

## AT LEAST ONE CHILD GTE AGE 3 YEARS

BC1d. During the last 30 days, how many children in your household got free supper meals at an after school program held in their school building?
|____| NUMBER OF CHILDREN
(0-20)
DON'T KNOW d

REFUSED .r

## AT LEAST ONE CHILD GTE AGE 3 YEARS

BC1e. During the last 30 days, how many children in your household participated in any other after school program where meals or snacks are served?
|___|_| NUMBER OF CHILDREN
(0-20)
DON'T KNOW d

REFUSED .r

ALL [Asked only for period when the last 30 day period included summer.]
BC1f. During the last 30 days, how many children in your household received free meals or snacks at places such as summer school, a community center, day camp or park?
|____| NUMBER OF CHILDREN
(0-20)
DON'T KNOW d
$\qquad$

## AT LEAST ONE CHILD LTE AGE 5 YEARS

BC1g. During the last 30 days, how many children in your household received meals or snacks at a daycare center, family or group daycare home, or Head Start center?
IF NEEDED: Please include children who received meals or snacks whether the meals or snacks were free, reduced-price, or paid. Please also include meals and snacks that were included in any payment you made to the center or home.
|_____| NUMBER OF CHILDREN
(0-20)
DON'T KNOW d
$\qquad$

## AT LEAST ONE CHILD GTE AGE 3 YEARS

BC2. During the last 30 days, how many children in your household got food through a school backpack food program for children?

PROBE IF NEEDED: The Backpack Food Program provides food for children to take home from school over weekends and holidays.
|___| NUMBER OF CHILDREN
(0-20)
DON'T KNOW d
$\qquad$
[IF BC2 > 0] AND [IF DEMONSTRATION = VIRGINIA]
If $\mathrm{BC} 2=1$ : "child"
IF BC2 > 1: "children"

BC2a. During the most recently completed school year, that is, school year 2014-2015, how often did your [child/children] usually take home a food backpack from school? Would you say...
Less often than once per month, 1
Once per month,.................................................................................................. 2
Two or three times per month, or..................................................................... 3
Every week? ....................................................................................................... 4
DON'T KNOW .................................................................................................... d
REFUSED ............................................................................................................r

## IF DEMONSTRATION = CHICKASAW NATION

BC3. How many children in your household received Summer EBT for Children benefits this past summer, that is, summer 2015?
|___| NUMBER OF CHILDREN
(0-20)
DON'T KNOW d
$\qquad$

## D. Food Purchase Behavior

These next questions are about where you shop for food for your household.

## IF DEMONSTRATION = CHICKASAW NATION OR KENTUCKY

BD1. During the past 30 days, about how many times did you or someone in your household shop for food?
|____| NUMBER OF TIMES (0-30)
DON'T KNOW d
$\qquad$
IF DEMONSTRATION = CHICKASAW NATION OR KENTUCKY

BD2. During the past 30 days, at what kind of store did you buy most of your groceries? INTERVIEWER: READ ONLY IF NECESSARY INTERVIEWER: CODE "ALDI" AS A SUPERMARKET/GROCERY STORE

CODE ONE ONLY
SUPERMARKETS/GROCERY STORES 1
DISCOUNT STORES SUCH AS WAL-MART, TARGET, OR KMART ..... 2
WAREHOUSE CLUBS, SUCH AS PRICE CLUB, COSTCO, PACE, SAM'S CLUB, OR BJ'S ..... 3
CONVENIENCE STORES SUCH AS 7-11, QUICK CHECK, QUICK STOP ..... 4
GAS STATIONS, SUCH AS SHELL, FLYING J, EXXON, MARATHON OR AMACO ..... 5
ETHNIC FOOD STORES SUCH AS BODEGAS, ASIAN FOOD MARKETS, OR CARIBBEAN MARKETS ..... 6
FARMERS' MARKETS ..... 7
DOLLAR STORES ..... 8
SURPLUS/CLOSE-OUT RETAILERS SUCH AS BIG LOTS ..... 9
OTHER (SPECIFY) ..... 99
DON'T KNOW ..... d
REFUSED ..... r

## IF DEMONSTRATION = KENTUCKY

BD3. What is the main reason you shop at that store?
CODE ONE ONLY
LOW PRICES................................................................................................... 1
SALES.............................................................................................................. 2
QUALITY OF FOOD ......................................................................................... 3
VARIETY OF FOODS (GENERAL) ................................................................... 4
VARIETY OF SPECIAL FOODS (SUCH AS GLUTEN FREE)............................ 5
CLOSE TO HOME/CONVENIENT .................................................................... 6
EASY TO GET TO ........................................................................................... 7
PRODUCE SELECTION................................................................................... 8
MEAT DEPARTMENT ........................................................................................ 9
LOYALTY/FREQUENT SHOPPER PROGRAM................................................. 10
OTHER (SPECIFY)........................................................................................... 99

DON'T KNOW ...................................................................................................d
REFUSED .........................................................................................................r

## IF DEMONSTRATION = KENTUCKY

BD4. How do you usually get to the store where you bought most of your groceries in the past 30 days?

CODE ALL THAT APPLY
DRIVE OWN CAR............................................................................................. 1
DRIVE SOMEONE ELSE'S CAR....................................................................... 2
SOMEONE ELSE DRIVES ME.......................................................................... 3
WALK............................................................................................................... 4
BUS, SUBWAY, OR OTHER PUBLIC TRANSIT ............................................... 5
TAXI OR OTHER PAID DRIVER ....................................................................... 6
RIDE BICYCLE ................................................................................................ 7
OTHER (SPECIFY)........................................................................................... 99

DON'T KNOW ..................................................................................................d
REFUSED .......................................................................................................r

IF DEMONSTRATION = KENTUCKY
BD4a. About how many minutes does it take to go one way from home to that store?
INTERVIEWER: ENTER MIDPOINT IF RANGE IS GIVEN
|__|__|_| NUMBER OF MINUTES ONE WAY
(0-120)
DON'T KNOW d

REFUSED .......................................................................................................r

SOFT CHECK: IF BD4a > 60; I just want to make sure I recorded your answer correctly. Did you say [ANSWER FROM BD4a]?

## DEMONSTRATION=CHICKASAW NATION OR KENTUCKY

BD4b. And approximately how many miles away is that store from your home - one way? INTERVIEWER: ENTER MIDPOINT IF RANGE IS GIVEN; IF LESS THAN ONE MILE ENTER "0" |___| NUMBER OF MILES ONE WAY (0-99)
DON'T KNOW d

REFUSED .......................................................................................................r

SOFT CHECK: IF BD4b > 30; I just want to make sure I recorded your answer correctly. Did you say [ANSWER FROM BD4b]?

## ALL

BD5. How many nights a week does your family typically sit down together to have dinner as a family?
CODE ONE ONLY
EVERY NIGHT ..... 1
5 OR 6 NIGHTS ..... 2
3 OR 4 NIGHTS ..... 3
1 OR 2 NIGHTS ..... 4
NEVER ..... 5
DON'T KNOW ..... d
REFUSED ..... r
IF DEMONSTRATION = NEVADA OR VIRGINIA
BD6. During the past 7 days, how many times did you or someone else in your family prepare food for dinner or supper at home? Include times spent putting the ingredients together for dinner or supper, but do not include heating up leftovers.
I__| NUMBER (0-7)
DON'T KNOW ..... d
REFUSED ..... r
IF DEMONSTRATION = NEVADA OR VIRGINIA
BD7. How often do you shop with a grocery list? Would you say...CODE ONE ONLY
$\qquad$Never1
Rarely, ..... 2
Sometimes, ..... 3
Most of the time, or ..... 4
Always? ..... 5
DON'T KNOW ..... d
REFUSED ..... r

## IF DEMONSTRATION = NEVADA OR VIRGINIA

BD8. In the past 12 months, about how many classes, lectures, events, or demonstrations about how to shop for or prepare nutritious food and meals did you or another adult in your household attend?
|__|__| SESSIONS (0-24)
$\qquad$
REFUSED ..r

## E. Food Security

## PROGRAMMER:

SELECT APPROPRIATE FILLS DEPENDING ON NUMBER OF ADULTS AND CHILDREN IN THE HOUSEHOLD. DEFAULT TO MULTIPLE ADULTS AND MULTIPLE CHILDREN IN HOUSEHOLD.

## ALL <br> FILL [MONTH] [DAY]

BE1. Now l'm going to read you several statements that people have made about their food
situation. For these statements, please tell me whether the statement was often true,
sometimes true, or never true for your household in the last 30 days, that is, since
[MONTH] [DAY].

The first statement is "We worried whether our food would run out before we got money to
buy more." Was that often true, sometimes true, or never true for your household in the
last 30 days?

CODE ONE ONLY

OFTEN TRUE
.1

SOMETIMES TRUE
.2

NEVER TRUE
.3

DON'T KNOW ..................................................................................................d

$\qquad$

## ALL

BE2. "The food that we bought just didn't last, and we didn't have money to get more." Was that often, sometimes, or never true for your household in the last 30 days?

CODE ONE ONLY
OFTEN TRUE .1
SOMETIMES TRUE......................................................................................... 2
NEVER TRUE ................................................................................................... 3
DON'T KNOW ..................................................................................................d
REFUSED .......................................................................................................r

## ALL

BE3. "We couldn't afford to eat balanced meals." Was that often, sometimes, or never true for your household in the last 30 days?

CODE ONE ONLY
OFTEN TRUE .1

SOMETIMES TRUE.......................................................................................... 2
NEVER TRUE .................................................................................................... 3
DON'T KNOW ...................................................................................................d
REFUSED ........................................................................................................r

PROGRAMMER BOX BE3
IF BE1=1 OR 2 OR BE2=1 OR 2 OR BE3=1 OR 2, GO TO BE4; OTHERWISE, SKIP TO BE9.
[IF BE1 = 1 OR 2] OR [IF BE2 = 1 OR 2] OR [IF BE3 = 1 OR 2]
IF [BB1 - BB3] > 1: "or other adults in your household"
FILL [MONTH] [DAY]
BE4. In the last 30 days, that is, since [MONTH] [DAY], did you [or other adults in your household] ever cut the size of your meals or skip meals because there wasn't enough money for food?

YES
.1
$\qquad$ 0 GO TO BE5
DON'T KNOW
d GO TO BE5
$\qquad$ r GO TO BE5

## IF BE4 = 1

BE4a. In the last 30 days, how many days did this happen?

| $\qquad$ \| NUMBER OF DAYS | GO TO BE5 |
| :---: | :---: |
| DON'T KNOW ............... |  |
| REFUSED ... | GO TO BE5 |

## IF BE4A = D

## BE4b. Do you think it was one or two days, or more than two days?

CODE ONE ONLY
ONE OR TWO DAYS .1
MORE THAN TWO DAYS ................................................................................ 2
DON'T KNOW ...................................................................................................d
REFUSED .........................................................................................................r

## BE1=1 OR 2 OR BE2=1 OR 2 OR BE3=1 OR 2

BE5. In the last 30 days, did you ever eat less than you felt you should because there wasn't enough money for food?

YES .1

NO
0
DON'T KNOW .................................................................................................... d
REFUSED .......................................................................................................... r

## [IF BE1 = 1 OR 2] OR [IF BE2 = 1 OR 2] OR [IF BE3 = 1 OR 2]

BE6. In the last 30 days, were you ever hungry but didn't eat because there wasn't enough money for food?

YES .1
$\qquad$
DON'T KNOW d
$\qquad$
[IF BE1 = 1 OR 2] OR [IF BE2 = 1 OR 2] OR [IF BE3 = 1 OR 2]

BE7. In the last 30 days, did you lose weight because there wasn't enough money for food? YES

## NO

DON'T KNOW .................................................................................................. d
REFUSED ........................................................................................................r
PROGRAMMER BOX BE7
IF BE4=1 OR BE5=1 OR BE6=1 OR BE7=1, GO TO BE8; OTHERWISE, SKIP TO BE9.

$$
[\text { IF BE4 = 1] OR [IF BE5 = 1] OR [IF BE6 = 1] OR [IF BE7 = 1] }
$$

IF [BB1 - BB3] > 1: "or other adults in your household"
BE8. In the last 30 days, did you [or other adults in your household] ever not eat for a whole day because there wasn't enough money for food?

YES .1
$\qquad$
DON'T KNOW
d GO TO BE9
REFUSED
GO TO BE9

## IF BE8 = 1

BE8a. In the last 30 days, how many days did this happen?
|__|__| NUMBER OF DAYS
GO TO BE9 (1-30)
$\qquad$
REFUSED .r GO TO BE9

## IF BE8a = D

BE8b. Do you think it was one or two days, or more than two days?
CODE ONE ONLY
ONE OR TWO DAYS
.1
MORE THAN TWO DAYS ................................................................................. 2
DON'T KNOW ..................................................................................................d
REFUSED .......................................................................................................r

```
ALL
IF BB3 = 1; FILL 1 "your child"
IF BB3 > 1; FILL 1"children living in your household"
IF BB1= 2 AND BB3 = 1; FILL 2 "I relied on only a few kinds of low-cost food to feed my child because
I was running out of money to buy food."
[IF [BB1 - BB3] = 1] AND [BB3>1]; FILL 2 "I relied on only a few kinds of low-cost food to feed my
children because I was running out of money to buy food."
[IF [BB1 - BB3] > 1] AND [BB3 = 1]; FILL 2 "We relied on only a few kinds of low-cost food to feed our
child because we were running out of money to buy food."
[IF [BB1 - BB3] > 1] AND [BB3 > 1]; FILL 2 "We relied on only a few kinds of low-cost food to feed our
children because we were running out of money to buy food"
```

BE9. Now l'm going to read you several statements that people have made about the food situation of their children. For these statements, please tell me whether the statement was often true, sometimes true, or never true in the last 30 days for [your child/children living in your household].
["I relied on only a few kinds of low-cost food to feed my child because I was running out of money to buy food."/
"I relied on only a few kinds of low-cost food to feed my children because I was running out of money to buy food."/
"We relied on only a few kinds of low-cost food to feed our child because we were running out of money to buy food."/
"We relied on only a few kinds of low-cost food to feed our children because we were running out of money to buy food."]
Was that often, sometimes, or never true for your household in the last 30 days?
OFTEN TRUE ................................................................................................... 1
SOMETIMES TRUE......................................................................................... 2
NEVER TRUE .................................................................................................. 3
DON'T KNOW ....................................................................................................d
REFUSED ........................................................................................................r

```
ALL
IF BB1= 2 AND BB3 = 1; FILL 1 "I couldn't feed my child a balanced meal, because I couldn't afford
that."
[IF [BB1 - BB3] = 1] AND [BB3>1]; FILL 1 "I couldn't feed my children a balanced meal, because I
couldn't afford that."
[IF [BB1 - BB3] > 1] AND [BB3 = 1]; FILL 1 "We couldn't feed our child a balanced meal, because we
couldn't afford that."
[IF [BB1 - BB3] > 1] AND [BB3 > 1]; FILL 1 "We couldn't feed our children a balanced meal, because
we couldn't afford that."
```

BE10. ["I couldn't feed my child a balanced meal, because I couldn't afford that."/ "I couldn't feed my children a balanced meal, because I couldn't afford that."/
"We couldn't feed our child a balanced meal, because we couldn't afford that."/ "We couldn't feed our children a balanced meal, because we couldn't afford that."]
Was that often, sometimes, or never true for your household in the last 30 days?
OFTEN TRUE 1
SOMETIMES TRUE............................................................................................. 2
NEVER TRUE ...................................................................................................... 3
DON'T KNOW ....................................................................................................... d
REFUSED .........................................................................................................r


BE11. ["My child was not eating enough because I just couldn't afford enough food."/
"My children were not eating enough because I just couldn't afford enough food."/
"Our child was not eating enough because we just couldn't afford enough food."/
"Our children were not eating enough because we just couldn't afford enough food."]
Was that often, sometimes, or never true for your household in the last 30 days?
OFTEN TRUE 1
SOMETIMES TRUE............................................................................................. 2
NEVER TRUE ...................................................................................................... 3
DON'T KNOW .....................................................................................................d
REFUSED .........................................................................................................r

## PROGRAMMER BOX BE11

## IF BE9=1 OR 2 OR BE10=1 OR 2 OR BE11=1 OR 2, GO TO BE12;

 OTHERWISE, SKIP TO BF1
## [IF BE9 = 1 OR 2] OR [IF BE10 = 1 OR 2] OR [IF BE11 = 1 OR 2]

FILL 1 [MONTH] [DAY]
IF BB3 = 1; FILL 2 "your child's"
IF BB3>1; FILL 2 "any of your children's"

> BE12. In the last 30 days, that is, since [MONTH] [DAY], did you ever cut the size of [your child's/any of your children's] meals because there wasn't enough money for food? YES .1
> NO ................................................................................................................... 0
> DON'T KNOW ................................................................................................. d
> REFUSED ........................................................................................................r
[IF BE9 = 1 OR 2] OR [IF BE10 = 1 OR 2] OR [IF BE11 = 1 OR 2]
IF BB3 = 1; FILL "your child"
IF BB3>1; FILL "any of your children"
BE13. In the last 30 days, did [your child/any of your children] ever skip meals because there wasn't enough money for food?

YES
.1
NO ................................................................................................................... 0
0 GO TO BE14
DON'T KNOW ..................................................................................................d
d GO TO BE14
REFUSED ..........................................................................................................
r GO TO BE14

## BE13 = 1

BE13a. In the last 30 days, how many days did this happen?

| $\left.\right\|_{(1-30)} I_{\text {I }}$ INMBER OF DAYS | GO TO BE14 |
| :---: | :---: |
| DON'T KNOW | GO TO BE13b |
| REFUSED | GO TO BE14 |

## $\mathrm{BE} 13 \mathrm{a}=\mathrm{D}$

## BE13b. Do you think it was one or two days, or more than two days?

CODE ONE ONLY
ONE OR TWO DAYS .1
MORE THAN TWO DAYS ................................................................................ 2
DON'T KNOW d
REFUSED ..... r

| [IF BE9 $=1$ OR 2] OR [IF BE10 $=1$ OR 2] OR [IF BE11 $=1$ OR 2] |
| :--- |
| IF BB3 $=1$; FILL "was your child" |
| IF BB3>1; FILL "were your children" |

BE14. In the last 30 days, [was your child/were your children] ever hungry but you just couldn't afford more food?

YES .1

NO .................................................................................................................... 0
DON'T KNOW ..................................................................................................d
REFUSED ........................................................................................................r
[IF BE9 = 1 OR 2] OR [IF BE10 = 1 OR 2] OR [IF BE11 = 1 OR 2]
IF BB3 = 1; FILL "your child"
IF BB3>1; FILL "any of your children"
BE15. In the last 30 days, did [your child/any of your children] ever not eat for a whole day because there wasn't enough money for food?
YES 1
NO ..................................................................................................................... 0
DON'T KNOW ....................................................................................................d
REFUSED ........................................................................................................r

## F. Food Expenditures

## ALL

Now, l'd like to ask some questions about shopping for food and eating at restaurants. These questions are about out-of-pocket spending on food. Later on I will ask you about purchases made with government benefits like SNAP, WIC, or FDPIR.

## ALL <br> FILL DATE $=$ [DATE] [MONTH]

BF1. First l'll ask you about money spent on food at supermarkets and other stores. Then we will talk about money spent at fast food restaurants and other restaurants.

Excluding any government benefits like SNAP or WIC, since [DATE] [MONTH] how much money did your family spend out of pocket at supermarkets, grocery stores, and other stores? Please do not include fast food restaurants and other types of restaurants.

PROBE: This includes stores such as Wal-Mart, Target, and Kmart, convenience stores like 7-11 or Mini Mart, stores like Costco or Sam's Club, dollar stores, bakeries, meat markets, vegetable stands, or farmer's markets.
PROBE: Please include the total amount spent in the past 30 days, since [DATE] [MONTH].
$\left|\ldots \_|\ldots| \quad\right| \quad \mid \quad$ MONEY SPENT $(\$ 0-\$ 9,999)$
DON'T KNOW
REFUSED
r

```
IF BF1 = $1-$9,999
```

FILL AMOUNT FROM BF1

BF2. Was any of this \$[AMOUNT FROM BF1] spent on nonfood items such as cleaning or paper products, pet food, cigarettes or alcoholic beverages?

YES .................................................................................................................. 1 GO TO BF3
NO ................................................................................................................... 0 GO TO BF4
DON'T KNOW ..................................................................................................d GO TO BF4
REFUSED ........................................................................................................r GO TO BF4

IF BF2 = 1
FILL AMOUNT FROM BF1

## BF3. About how much of the \$[AMOUNT FROM BF1] was spent on nonfood items?

$\square$ | MONEY SPENT (\$0-\$9,999)
$\qquad$
$\qquad$

HARD CHECK: IF [BF1 = \$0-9,999] AND IF [BF3 > BF1]; The amount spent on nonfood items is greater than the total amount spent at supermarkets, grocery stores, and other stores. Did I make a mistake?

## ALL

BF4. During the last 30 days, how many times did your family eat food from a fast food restaurant or other kinds of restaurants? Include restaurant meals at home, at fast food or other restaurants, carryout, or drive thru.

PROBE IF NEEDED: Please include the total number of visits in the past 30 days, since [DATE] [MONTH].
PROBE IF NEEDED: Such as food you get at McDonald's, KFC, Panda Express, Taco Bell, Pizza Hut, food trucks, Applebee's, Chili's, TGI Fridays, etc.
|___|__| TIMES (0-99)
DON'T KNOW .................................................................................................... d
GO TO BG1
REFUSED
.r

BF4 $=1-99$
BF5. About how much money did your family spend on food at all types of restaurants including fast food restaurants during the last 30 days?

PROBE: $\quad$ Please include the total amount spent in the past 30 days, since [DATE] [MONTH].
$\left|\ldots \_\left|\_\_|\quad| \quad\right| \quad\right.$ MONEY SPENT $(\$ 0-\$ 9,999)$
DON'T KNOW ...................................................................................................d GO TO BG1
REFUSED ......................................................................................................r GO TO BG1

## G. Other Program Participation

## ALL

Next, l'm going to read the names of some programs that provide food or meals or other services to individuals or households.

## ALL <br> FILL DATE = [DATE] [MONTH]

BG1. In the last 30 days, that is, since [DATE] [MONTH], did you or anyone in your household receive food or benefits from the Women, Infants and Children program called WIC?
$\qquad$
NO
0 GO TO BG2
DON'T KNOW
d GO TO BG2
REFUSED
r GO TO BG2

## BG1 = 1

BG1a. How many women, infants, or children in the household got WIC foods or benefits?
$\left.\right|_{(1-20)} ^{\mid} \mid$NUMBER OF WOMEN, INFANTS, OR CHILDREN (1-20)
DON'T KNOW ..................................................................................................d d GO TO BG2
REFUSED .................................................................................................r GO TO BG2

## $B G 1 A=1-20$

BG1b. Of those, how many were infants or children up to age $\mathbf{5 ?}$
|____| NUMBER OF INFANTS OR CHILDREN
(0-20)
$\qquad$
REFUSED .............................................................................................................

## ALL

BG2. In the last 30 days did you or anyone in your household receive food or meals from food pantries, food banks, local soup kitchens or emergency kitchens, community program, senior center, shelter, Meals on Wheels (or other programs delivering meals to your home), or church?
YES 1

NO .......................................................................................................................... 0
DON'T KNOW ................................................................................................... d
REFUSED ..........................................................................................................r

## DEMONSTRATION = CHICKASAW NATION

BG3. Do you or others in your household currently receive monthly commodity foods as part of the Food Distribution Program on Indian Reservations, also called FDPIR, fi-dipper, or fidpurr?

YES
1
NO .................................................................................................................... 0
DON'T KNOW .................................................................................................. $d$
REFUSED
..r

## H. SNAP Enrollment

## ALL

BH1. In the last 12 months, has your household ever been enrolled in the Supplemental Nutrition Assistance Program (SNAP)?
$\qquad$
$\qquad$ 0 GO TO BH2a
DON'T KNOW ....................................................................................................... d
GO TO BH2a
REFUSED ......................................................................................................r GO TO BH2a
$\mathrm{BH} 1=1$
BH1a. In the last 12 months, how long did your household receive the Supplemental Nutrition Assistance Program (SNAP)? If your household received SNAP, stopped receiving it, and then started again, please include all of that time.


AMOUNT OF TIME
(0-365)
DON'T KNOW
d
GO TO BH2a
REFUSED
r GO TO BH2a

## $\mathrm{BH} 1 \mathrm{~A}=1-365$

BH1b. Is that days, weeks, or months?
DAYS .1

WEEKS

.2
$\qquad$
DON'T KNOW
3
REFUSED ..... r GO TO BH2a

## ALL

BH2a. In total, how long have you and your household ever received the Supplemental Nutrition Assistance Program (SNAP)?
IF NEEDED: Please include all of the time your household has received SNAP, even if your household has started and stopped receiving benefits more than once.
|___|__| AMOUNT OF TIME (0-365)
DON'T KNOW
d
GO TO BH3
REFUSED
r GO TO BH3

## IF BH2A $=1-365$

BH2b. Is that days, weeks, months, or years?
CODE ONE ONLY
DAYS............................................................................................................... 1
WEEKS ............................................................................................................ 2
MONTHS.......................................................................................................... 3
YEARS ............................................................................................................. 4
DON'T KNOW ..................................................................................................d
GO TO BH3
REFUSED .......................................................................................................r GO TO BH3
[BB1D=1 OR BH1=1] AND [DEMONSTRATION = CHICKASAW NATION OR KENTUCKY OR VIRGINIA]

BH3. Are you or others in your household currently receiving SNAP?
$\qquad$
$\qquad$
DON'T KNOW .................................................................................................d
GO TO BI1
REFUSED
.r GO TO BI1

BB1D=1 OR [BB1E=0 OR DK] OR BH3=1 AND [DEMONSTRATION = KENTUCKY]
BH4. What is the amount of the SNAP your household receives per month?
|__|__|__|__| DOLLAR AMOUNT
(\$1-\$9999)
DON'T KNOW
.d GO TO BI1
REFUSED ........................................................................................................r GO TO BI1
BB1D=1 OR [BB1E=0 OR DK] OR BH3=1 AND [DEMONSTRATION = KENTUCKY]
BH5. In the last 12 months, did the amount of the benefit increase, decrease, or stay the same? CODE ONE ONLY
INCREASED 1
DECREASED..................................................................................................... 2
BOTH INCREASED AND DECREASED ........................................................... 3
STAYED SAME................................................................................................ 4
DON'T KNOW ................................................................................................d GO TO BI1
REFUSED .......................................................................................................r GO TO BI1

## BB1D=1 OR [BB1E=0 OR DK] OR BH3=1 AND [DEMONSTRATION = KENTUCKY]

## BH6. How many weeks do your SNAP benefits usually last?

INTERVIEWER: CODE ANY ANSWER GREATER THAN 8 WEEKS AS 8
|__| NUMBER OF WEEKS
(0-8)
DON'T KNOW ............................................................................................................................................................................................................................. GO TO BI1
REFUSED ........

## I. Household Resources

## ALL

FILL [DATE] [MONTH]
BI1. The next questions are about working or jobs. Were you or any other adult in your household working for pay in the last 30 days that is, since [DATE] [MONTH]? YES .1
$\qquad$
N .0
DON'T KNOW ..... d
REFUSED ..... r
DEMONSTRATION=KENTUCKY AND BI1 = 1, D, R

BI2. And what was your household's total earnings before taxes last month? Please include earnings from wages and salaries from a job or self-employment, or income from a rental property. Do not include income from Social Security, pensions, child support, or cash welfare benefits, or the value of SNAP benefits or food stamps, WIC, Medicaid, or public housing.
\$ | _ _ I _ | _ |
DON'T KNOW d
GO TO BI2a

REFUSED .r

$$
\mathrm{BI} 2=\mathrm{D} O \mathrm{R} \mathrm{R}
$$

BI2a. Some people find it easier to select earnings from a range. Please stop me when I reach your household's total earnings for last month. Was it...

CODE ONE ONLY
Less than $\$ 500$, .1
$\$ 500$ to less than $\$ 1,000$, ..... 2
$\$ 1,000$ to less than \$1,500, ..... 3
\$1,500 to less than \$2,000, ..... 4
$\$ 2,000$ to less than $\$ 2,500$, ..... 5
$\$ 2,500$ to less than $\$ 3,000$, or ..... 6
\$3,000 or more? ..... 7
DON'T KNOW ..... d
REFUSED ..... r

## ALL <br> FILL [LAST MONTH]

| BI3. | What was your household's total income last month, during [LAST MONTH] before taxes? Please include all types of income received by all household members last month, including all earnings, Social Security, pensions, Veteran's Benefits, Unemployment Insurance, worker's compensation benefits, child support, payments from roomers or boarders, and cash welfare benefits such as TANF (TAH-nif) and SSI. Do not include the value of SNAP benefits or food stamps, WIC, Medicaid, or public housing. |  |
| :---: | :---: | :---: |
|  | \|__|__|__|___| DOLLAR AMOUNT (\$0 - 99,999) |  |
|  | NO INCOME | GO TO BI4 |
|  | GAVE ANSWER ..................................................................................... 1 | GO TO BI4 |
|  | DON'T KNOW | GO TO BI3B |
|  | REFUSED. | GO TO BI3B |

BI3 = D OR R

BI3b. Some people find it easier to select an income range. Please stop me when I reach your household's total income for last month. Was it...

CODE ONE ONLY
Less than $\$ 500$, .1
$\$ 500$ to less than $\$ 1,000$ ..... 2
$\$ 1,000$ to less than $\$ 1,500$, ..... 3
$\$ 1,500$ to less than $\mathbf{\$ 2 , 0 0 0}$, ..... 4
\$2,000 to less than \$2,500, ..... 5
$\$ 2,500$ to less than $\$ 3,000$, or ..... 6
$\$ 3,000$ or more? ..... 7
DON'T KNOW ..... d
REFUSED ..... r

## ALL

BI4. And, what was your household's total income last year before taxes?
PROBE IF NEEDED: Please include all types of income received by all household members last year, including all earnings, Social Security, pensions, Veteran's Benefits, Unemployment Insurance, worker's compensation benefits, child support, payments from roomers or boarders and cash welfare benefits such as TANF (TAH-nif) and SSI. Do not include the value of SNAP benefits or food stamps, WIC, Medicaid, or public housing.
INTERVIEWER: "LAST YEAR," MEANING 2015.
|__|__|____|__| DOLLAR AMOUNT (\$0 - 150,000)
DON'T KNOW .............................................................................................d d GO TO BI4A
REFUSED ......................................................................................................r GO TO BI4A
BI4 = D OR R

BI4a. Some people find it easier to select an income range. Please stop me when I reach your household's total income for last year. Was it...

CODE ONE ONLY
Less than \$10,000 $\qquad$ 1 GO TO BI5
$\$ 10,000$ to less than $\$ 20,000$ 2 GO TO BI5
$\$ 20,000$ to less than $\$ 35,000$ 3 GO TO BI5
$\$ 35,000$ to less than $\$ 50,000$, 4 GO TO BI5
$\$ 50,000$ to less than $\$ 75,000$,
5 GO TO BI5
$\$ 75,000$ to less than $\$ 100,000$, 6 GO TO BI5
$\$ 100,000$ to less than $\$ 150,000$, or 7 GO TO BI5
\$150,000 or more? ......................................................................................... 8 GO TO BI5
DON'T KNOW .................................................................................................d d GO TO BI5
REFUSED .........................................................................................................r GO TO BI5

## ALL <br> FILL [MONTH] [DAY]

BI5. The next questions are about sources of income. The answers to these and all other questions on this survey will be kept private and will never be associated with your name. During the last 30 days, that is, since [MONTH] [DAY], did you or anyone in your household receive...

CODE ONE PER ROW

| YES | NO | DON'T <br> KNOW | REFUSED |
| :--- | :--- | :--- | :--- |

a. TANF, Temporary Assistance to Needy Families or other welfare such as General Assistance?

10 d r
b. Social Security from the government for retirement, disability, or survivors' benefits, or other retirement benefits such as a government or private pension or annuity?
c. SSI or Supplemental Security Income from the federal, state, or local government?
d. Veteran's Benefits?
e. Unemployment Insurance or worker's compensation benefits?
f. Child support payments or payments from roomers or boarders?
g. Financial support from friends or family?
h. Any other income besides earnings?
10 d r 10 d
d r
10
d
r
10
d
$r$

10
d
r
$1 \quad 0 \quad d$
$r$
10 d r
$\mathrm{BI} 5 \mathrm{H}=1$
BI5H_Specify. What is that other income?
DESCRIPTION
DON'T KNOW . d

REFUSED ........................................................................................................r
[BI6 on household limitations deleted per OMB on August 10, 2015.]

## ALL

BI7. Now l'd like to ask you about how much help you would expect to get from different sources if your household had a problem with which you needed help, for example, sickness or moving. After I read each source, please tell me if you would expect to get all of the help needed, most of the help needed, very little of the help needed, or no help?
INTERVIEWER: REPEAT ANSWER CHOICES AS NEEDED.
CODE ONE PER ROW
a. Family living nearby?
b. Friends?

|  |
| :---: |
| ALL OF |
| THE HELP |
| NEEDED |


| MOST |  |
| :---: | :---: |
| OF THE | L |
| HELP | T |
| NEEDED |  |


| VERY <br> LITTLE OF <br> THE HELP NEEDED | $\begin{gathered} \text { NO } \\ \text { HELP } \end{gathered}$ | DON'T KNOW | REFUSED |
| :---: | :---: | :---: | :---: |
| 3 | 4 | d | r |
| 3 | 4 | d | $r$ |

c. Other people in the community besides family and friends, such as a social service agency or a church?

## J. Trigger Events

The next few questions are about changes that may have occurred in your household in the past 6 months.

## ALL

| BJ1. | Has there been a change in the number of people living in your household over the past 6 months? |  |
| :---: | :---: | :---: |
|  | YES ................................................................................................... 1 |  |
|  | NO ....................................................................................................... 0 | GO TO BJ2 |
|  | DON'T KNOW .......................................................................................... d | GO TO BJ2 |
|  | REFUSED ..............................................................................................r | GO TO BJ2 |
| $B J 1=1$ |  |  |

BJ1a. What caused that change?
CODE ALL THAT APPLY
BIRTH OF CHILD................................................................................................. 1
NEW STEP, FOSTER OR ADOPTED CHILD ........................................................ 2
MARRIAGE/ROMANTIC PARTNER .................................................................... 3
SEPARATION OR DIVORCE ................................................................................. 4
DEATH OF HOUSEHOLD MEMBER .................................................................... 5
FAMILY/BOARDER/OTHER ADULT MOVED IN .................................................. 6
FAMILY/BOARDER/OTHER ADULT MOVED OUT ............................................... 7
HOUSEHOLD MEMBER INCARCERATED .......................................................... 8
OTHER (SPECIFY)................................................................................................. 99

DON'T KNOW ..................................................................................................... d
REFUSED ............................................................................................................ $r$

## ALL

BJ2. At any time in the past 6 months was your household evicted from your house or apartment?
YES 1
NO ........................................................................................................................... 0
DON'T KNOW ....................................................................................................... $d$
REFUSED ............................................................................................................. $r$

## ALL

BJ3. Have you or anyone in your household had a change in employment or a change in pay or hours worked from a job in the past 6 months?
YES $\qquad$
$\qquad$ 0 GO TO BK1
DON'T KNOW .................................................................................................d GO TO BK1
REFUSED ......................................................................................................r GO TO BK1

BJ3 $=1$
BJ3a. What was that change in employment or a change in pay or hours worked from a job that you or someone in your household experienced in the past 6 months?

CODE ALL THAT APPLY
OBTAINED A JOB
1
LOST JOB........................................................................................................ 2
INCREASE IN PAY OR HOURS ....................................................................... 3
DECREASE IN PAY OR HOURS ...................................................................... 4
OTHER (SPECIFY)........................................................................................... 99

DON'T KNOW .................................................................................................d
REFUSED .......................................................................................................r

## K. Respondent Demographics and Health Status

## ALL

BK1. Now, I have a few questions about you.
[RECORD GENDER FROM OBSERVATION.]
[PROBE ONLY IF NECESSARY: Because it is sometimes difficult to determine over the phone, I am asked to confirm with everyone...Are you male or female?]
INTERVIEWER: CODE DON'T KNOW IF RESPONDENT DOES NOT WANT TO IDENTIFY AS MALE OR FEMALE

MALE 1

FEMALE ............................................................................................................... 2
DON'T KNOW ....................................................................................................... d
REFUSED .............................................................................................................r

## ALL

BK2. What is your relationship to the children living in the household?
INTERVIEWER: READ ONLY IF NECESSARY
CODE ALL THAT APPLY
BIOLOGICAL/ADOPTIVE PARENT 1

STEP-PARENT .................................................................................................... 2
GRANDPARENT..................................................................................................... 3
GREAT GRANDPARENT ...................................................................................... 4
SIBLING/STEPSIBLING ........................................................................................ 5
OTHER RELATIVE OR IN LAW ............................................................................ 6
FOSTER PARENT ................................................................................................ 7
OTHER NON-RELATIVE...................................................................................... 8
PARENT'S PARTNER .......................................................................................... 9
DON'T KNOW ...................................................................................................... d
REFUSED ............................................................................................................r

## ALL

BK3. Are you of Hispanic or Latino origin?
HISPANIC OR LATINO 1

NOT HISPANIC OR LATINO ................................................................................. 0
DON'T KNOW ...................................................................................................... $d$
REFUSED .............................................................................................................. $r$

## ALL

BK4. I am going to read a list of five race categories. Please choose one or more races that you consider yourself to be. American Indian or Alaska Native; Asian; Black or African American; Native Hawaiian or other Pacific Islander; White?
CODE ALL THAT APPLY
AMERICAN INDIAN OR ALASKA NATIVE .1
ASIAN ..... 2
BLACK OR AFRICAN AMERICAN ..... 3
NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER ..... 4
WHITE ..... 5
DON'T KNOW ..... d
REFUSED ..... r

## ALL

BK5. What is your current marital status? Are you now married, divorced, separated, widowed, never married, or living with a partner?

CODE ONE ONLY
MARRIED .1
SEPARATED OR DIVORCED ..... 2
WIDOWED ..... 3
NEVER MARRIED ..... 4
LIVING WITH PARTNER ..... 5
DON'T KNOW ..... d
REFUSED ..... r

## ALL

BK6. What is your date of birth?
PROGRAMMER: COLLECT DATE WITH SEPARATE FIELDS

(1-12) (1-31) (1916-2001)
DON'T KNOW ..................................................................................................d
$\qquad$

## BK6 = D OR R

BK6a. I can record your age instead if you would like. How many years old are you?
|_____| YEARS
(18-99)
DON'T KNOW ..................................................................................................d
REFUSED ........................................................................................................r

## ALL

BK7. What is the highest grade or level of school you have completed or the highest degree you have received?
[ENTER HIGHEST LEVEL OF SCHOOL.]
NEVER ATTENDED/KINDERGARTEN ONLY 0
1ST GRADE..................................................................................................... 1
2ND GRADE ..................................................................................................... 2
3RD GRADE ..................................................................................................... 3
4TH GRADE...................................................................................................... 4
5TH GRADE..................................................................................................... 5
6TH GRADE..................................................................................................... 6
7TH GRADE....................................................................................................... 7
8TH GRADE..................................................................................................... 8
9TH GRADE..................................................................................................... 9
10TH GRADE.................................................................................................. 10
11TH GRADE................................................................................................... 11
12TH GRADE, NO DIPLOMA ........................................................................... 12
HIGH SCHOOL GRADUATE............................................................................. 13
GED OR EQUIVALENT ..................................................................................... 14
SOME COLLEGE, NO DEGREE...................................................................... 15
ASSOCIATE DEGREE: OCCUPATIONAL, TECHNICAL, OR VOCATIONAL
ASSOCIATE DEGREE: ACADEMIC PROGRAM ............................................... 17
BACHELOR'S DEGREE (EXAMPLE: BA, AB, BS, BBA).................................... 18
MASTER'S DEGREE (EXAMPLE: MA, MS, MEng, MEd, MBA)......................... 19
PROFESSIONAL SCHOOL DEGREE (EXAMPLE: MD, DDS, DVM, JD) ........... 20
DOCTORAL DEGREE (EXAMPLE: PhD, EdD) ................................................. 21
DON'T KNOW ..................................................................................................d
REFUSED .......................................................................................................r

## ALL

BK8. In general, would you say your health is excellent, very good, good, fair or poor? CODE ONE ONLY EXCELLENT 1

VERY GOOD ................................................................................................... 2
GOOD .............................................................................................................. 3
FAIR ................................................................................................................. 4
POOR............................................................................................................... 5
DON'T KNOW ..................................................................................................d
REFUSED .......................................................................................................r

## L. Closing Information

## ALL

BL1. Thank you very much for your time. You have really helped us with this study. l'd like to confirm your address so we can send you a $\$ 30$ gift card within the next few weeks.

According to our records we have...
[FILL NAME FROM SAMPLE FRAME OR SCREENER]
[FILL STREET ADDRESS FROM SAMPLE FRAME]
[FILL CITY, STATE, ZIP CODE FROM SAMPLE FRAME]
[IF SECOND FOLLOW-UP FILL EMAIL ADDRESS]
[IF SECOND FOLLOW-UP FILL PHONE NUMBER]
CONTACT INFORMATION IS CORRECT 1

CONTACT INFORMATION NEEDS UPDATING .0

UPDATE: NAME
UPDATE: STREET ADDRESS:

## STREET 1

STREET 2

STREET 3

CITY

STATE

ZIP
$\qquad$ | - $\qquad$ I - $\qquad$ I | - $\qquad$ _ I_ EMAIL
$\qquad$
$\qquad$

## ALL

BL2. [We would also like to do a second telephone interview 12 months from now to see how
you are doing. You will get another prepaid card for participating in that interview.]
In case we can't reach you at this number, is there another number we should try?
CODE ONE ONLY
YES ............................................................................................................ 1

## BL2 $=1$

BL2a. What is the telephone number we should try?

DON'T KNOW d
GO TO BL2C
REFUSED
.r GO TO BL2C

## IF BL2A = ANSWERED

BL2b. What type of phone number is this?
CODE ONE ONLYHOME PHONE1
OFFICE PHONE ..... 2
HOME AND OFFICE PHONE ..... 3
CELL PHONE ..... 4
PAGER ..... 5
COMPUTER/FAX LINE ..... 6
OTHER ..... 7
DON'T KNOW ..... d
REFUSED ..... r

## [IF BL2B = 2] AND [DEMONSTRATION = KENTUCKY, NEVADA, OR VIRGINIA]

## BL2c. May we send text messages to your cell phone regarding the second interview?

YES ..... 1
NO ..... 0
DON'T KNOW ..... d
REFUSED ..... r
[BL2 =1, 2, 3, D OR R] OR [BL2A = D OR R]
BL2d. Do you have an email address where we can try to reach you?
YES ..... 1
NO ..... 0
GO TO BL3
DON'T KNOW ..... d GO TO BL3
REFUSED ..... r

## BL2D $=1$

## BL2e. What is the email address where we can reach you?

## EMAIL ADDRESS

DON'T KNOW d
REFUSED ..... r
BL2E = ANSWERED

BL2f. What type of email address is this? Is this a home email, office email, or something else?

> CODE ONE ONLY

HOME EMAIL1
OFFICE EMAIL ..... 2
HOME AND OFFICE EMAIL ..... 3
OTHER ..... 4

## ALL

BL3. In case we have trouble reaching you in 12 months, please give me the names and telephone numbers of two relatives or friends who would know where you could be reached. These should be relatives or friends not currently living in your household. Let's start with one friend or relative. What is his or her name?
[BE SURE TO VERIFY SPELLING]

## FIRST NAME

LAST NAME
$\qquad$
REFUSED

```
IF BL3 FIRST NAME = ANSWERED OR
IF BL3 LAST NAME = ANSWERED
```


## BL3a. What is the telephone number we should try?


$\qquad$
$\qquad$
IF BL3 FIRST NAME = ANSWERED OR
IF BL3 LAST NAME = ANSWERED

FILL = FIRST NAME FROM BL3
IF BL3 = D, FILL "this person"
BL3b. And what is [FIRST NAME FROM BL3/this person]'s relationship to you?

RELATIONSHIP
DON'T KNOW .....................................................................................................d
REFUSED ..........................................................................................................r

## BL2 $=1,2,3$, OR BL3A PHONE NUMBER ANSWERED

BL4. How about a second friend or relative? What is his or her name?
[BE SURE TO VERIFY SPELLING]

FIRST NAME

## LAST NAME

$\qquad$
$\qquad$
BL4 FIRST NAME = ANSWERED
BL4 LAST NAME = ANSWERED

BL4a. What is this person's telephone number, beginning with the area code?
$\qquad$
$\qquad$
$\qquad$
BL4 FIRST NAME = ANSWERED
BL4 LAST NAME = ANSWERED
FILL= FIRST NAME FROM BL4
IF BL4 = D, FILL "this person"

BL4b. And what is [FIRST NAME FROM BL4/this person]'s relationship to you?

RELATIONSHIP
DON'T KNOW d

REFUSED .......................................................................................................

## ALL

IF BL2 NE 9: We look forward to speaking with you again in 12 months.
END. Thank you again for your help and have a good day/evening. [We look forward to speaking with you again in 12 months.]

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## B.3. FIRST FOLLOW-UP SURVEY INSTRUMENT

The Follow-Up \#1 Questionnaire for Households is shown in Appendix B.3.

# Evaluation of Demonstration Projects to End Childhood Hunger 

Follow-Up \#1 Questionnaire for Households

[^44]
## A. Introduction

## DEMONSTRATION = CHICKASAW NATION AND BASELINE NON-RESPONDENT

IF FIELD LOCATOR PRESENT, FILL= "give"
ELSE FILL= "send"

## SampMembA.

For quality assurance purposes, this call may be monitored or recorded.
The interview will take approximately 30 minutes. It has questions about your children's food choices as well as general questions about you and your household. Your answers will help the government make its child nutrition programs better. As a way of saying thank you, we will [send/give] you $\$ 30$ for helping us. We will also follow up 6 months from now for a final interview that will also take approximately 30 minutes to complete. Will give you another prepaid card at that time for helping us.

Your participation in this interview is voluntary and you may stop at any time. You may also refuse to answer any question. Your benefits will not be affected by any answers to questions or if you choose not to participate.
All the information you give us will be kept private to the extent allowed by law. There is a small risk of the loss of confidentiality of your data, but procedures are in place to minimize this risk. Your name will not be attached to any of your answers. Your information will be used only in combination with information from other households for research purposes.
Do you have any questions about the interview before I begin?

CODE ONE ONLY
YES ..... 1
NO ..... 0
GO TO TB2
DON'T KNOW ..... d
REFUSED ..... r

## CASES NOT ROUTED TO SAMPMEMBA

IF FIELD LOCATOR PRESENT, FILL1 = "give"
ELSE, FILL1 = "send"
IF DEMONSTRATION=CHICKASAW NATION FILL2= "We will also follow up 6 months from now for a final interview that will also take approximately 30 minutes to complete. Will give you another prepaid card at that time for helping us."

## SampMembB.

For quality assurance purposes, this call may be monitored or recorded.
The interview will take approximately 30 minutes. It has questions about your children's food choices as well as general questions about you and your household. As a way of saying thank you, we will [give/send] you $\$ 30$ for helping us. [We will also follow up 6 months from now for a final interview that will also take approximately 30 minutes to complete. We will give you another prepaid card at that time for helping us.]
Do you have any questions before I begin?

CODE ONE ONLY
YES
1 GO TO FAQ
NO
0 GO TO TB1
DON'T KNOW ..................................................................................................d
REFUSED .......................................................................................................r

## B. Household Size and Composition

## BASELINE RESPONDENT

## FILL HHNUMB FROM BASELINE SURVEY

TB1. Let's start by updating our information from last year. According to my records from our last interview, there were [HHNUMB] people in your household that share their food together. Is that still correct?

YES
1 GO TO TB4
NO
0 GO TO TB2
DON'T KNOW ..................................................................................................d GO TO TB2
REFUSED .......................................................................................................r GO TO TB2

## BASELINE NON-RESPONDENT OR [TB1=0, D, OR R]

TB2. Including yourself, how many people live in your household? Don't forget to include nonrelatives who live in your household and, of course, babies, small children and foster children. Also include people who usually live in your household but may have been away within the last 30 days for reasons such as: vacation, traveling for work, or in the hospital. Do not include children living away at school or anyone who is now incarcerated.

PROBE: By temporarily away we mean away within the last $\mathbf{3 0}$ days.
|__| NUMBER OF PEOPLE
(1-20)
$\qquad$
REFUSED

## TB2=1

TB2a. Just to confirm, you are the only person living in the household. There are no children, non-relatives, or people who usually live there but are currently away?
YES .................................................................................................................... 1 GO TO TB9
$\qquad$ 0 REPEAT TB2
DON'T KNOW ................................................................................................... 1
REPEAT TB2
REFUSED .......................................................................................................r GO TO TB9A

## TB2 GT 1

TB3. Do all the people who live with you share the food that is bought for the household?

YES $\qquad$
NO
DON'T KNOW $\qquad$
REFUSED $\qquad$ . GO TO TB3A

```
PROGRAMMER BOX TB3
IF TB3=1 AND BASELINE RESPONDENT, GO TO TB4. IF TB3=1 AND BASELINE NONRESPONDENT, GO TO TB5.
```


## TB3 NE 1

TB3a. Including yourself, how many people in your household share the food that is bought for the household?
|____| NUMBER OF PEOPLE (1-20)
DON'T KNOW .................................................................................................... d
REFUSED ..........................................................................................................r

HARD CHECK: IF TB3A GT TB2; The number of people in your household who share food is greater than the total number of people in your household. Did I make a mistake?

PROGRAMMER BOX TB3A
IF BASELINE NON-RESPONDENT, GO TO TB5. OTHERWISE, GO TO TB4.

## (TB1=1 OR TB2>1) AND BASELINE RESPONDENT

IF TB4a_DOB1 = ANSWERED, FILL1 = "date of birth"
ELSE, FILL1 = "age"
IF TB4_1 = ANSWERED AND NE D OR R, FILL2 = [NAME1]
ELSE, FILL2 = "a child"
IF TB4a_DOB1 = ANSWERED, FILL3 = "a date of birth [DOB1]"
ELSE, FILL3 = "an age of [AGE1]
IF TB4_1 = ANSWERED AND NE D OR R, FILL4 = [NAME1]
ELSE, FILL4 = "this child"
For first child in HH, fill: We would now like to confirm... still live in your household?
For additional children in HH, fill: Now l'd like to ask about the next child...still live in your household?
TB4. FIRST CHILD: We would now like to confirm the information we collected 12 months ago regarding the children living in your household. I am going to read you the name or initials for each child that we have from last year's interview. I will also read each child's [date of birth/age] and gender. I would like for you to confirm whether the child still lives in your household and if his or her information is correct. I have [[NAME1]/a child] with [a date of birth of [DOB1]/an age of [AGE1] and [GENDER1]. Does ([NAME1]/this child) still live in your household?

ADDITIONAL CHILD: Now l'd like to ask about the next child we learned about in last year's interview. I have [[NAME2]/this child] with [a date of birth of [DOB2]/an age of [AGE2]] and [GENDER2]. Does [[NAME2]/this child] still live in your household?

INTERVIEWER: IF CHILD IS DECEASED: I'm very sorry for your loss. CODE "3."
CODE ONE ONLY
CHILD STILL LIVES IN HOUSEHOLD $\qquad$ GO TO BOX TB4
CHILD INFORMATION IS INCORRECT .2 GO TO BOX TB4

CHILD NO LONGER LIVES IN HOUSEHOLD OR IS DECEASED ..................... 3 GO TO BOX TB4
$\qquad$ GO TO BOX TB4

REFUSED $\qquad$ r GO TO BOX TB4

## PROGRAMMER BOX TB4

IF TB4=1 AND DOB1=.M AND AGE1=.M, GO TO TB4B. ELSE IF TB4=1 AND GENDER1=.M, GO TO TB4C.
ELSE IF TB4=1 AND DEMONSTRATION = CHICKASAW NATION OR VIRGINIA, GO TO TB4_1.

ELSE IF TB4=2, GO TO TB4A.
ELSE, GO TO TB4D.

```
TB4=2
IF TB4_1 = ANSWERED AND NE D OR R, FILL = [NAME1]
ELSE, FILL = "this child"
```

TB4a. What is ([NAME1]/this child)'s date of birth?

PROGRAMMER: COLLECT DATE WITH SEPARATE FIELDS

$\qquad$
d
.r

## (TB4=1 AND DOB1=.M AND AGE1=.M) OR TB4A=D OR R

IF TB4A=D OR R FILL1=Some people find it easier to select an age group.
IF TB4_1 = ANSWERED AND NE D OR R, FILL2 = [NAME1]
ELSE, FILL2 = "this child"
TB4b. [Some people find it easier to select an age group.] Please stop me when I reach ([NAME1]/this child)'s age group. Is it...

|  | CODE ONE ONLY |  |
| :---: | :---: | :---: |
| Under 2 years old, | ........ 1 | GO TO TB4C |
| Age 2 to 5 years, | ....... 2 | GO TO TB4C |
| Age 6 to 11 years, | ........... 3 | GO TO TB4C |
| Age 12 to 17 years, or | ........... 4 | GO TO TB4C |
| Age 18 or older and still in school? | ........... 5 | GO TO TB4C |
| DON'T KNOW | ...........d | GO TO TB4C |
| REFUSED | ..............r | GO TO TB4C |

```
(TB4=1 AND GENDER1=.M) OR TB4A=ANSWERED OR TB4B = ANSWERED
IF TB4_1 = ANSWERED AND NE D OR R, FILL = [NAME1]
ELSE, FILL = "this child"
```

TB4c. Is ([NAME1]/this child) a boy or girl?

INTERVIEWER: ASK IF RESPONDENT HAS NOT ALREADY MENTIONED CHILD'S SEX. CODE ONE ONLY

BOY
1
GIRL................................................................................................................. 2
DON'T KNOW ....................................................................................................d
REFUSED ........................................................................................................r
(DEMONSTRATION=CHICKASAW NATION OR VIRGINIA) AND ((BASELINE DOB YEAR <2015) OR (TB4A YEAR <2015) OR (TB4B=2, 3, 4, OR 5))

IF TB4_1 = ANSWERED AND NE D OR R, FILL = [NAME1]
ELSE, FILL = "THIS CHILD"
TB4_1. Is ([NAME1]/this child) in grades pre-K through 12 in your local school system?

YES
1 GO TO TB4_2
NO ................................................................................................................... 0
DON'T KNOW ................................................................................................. d
REFUSED ........................................................................................................r
TB4_1=1
IF TB4_1 = ANSWERED AND NE D OR R, FILL = [NAME1]
ELSE, FILL = "THIS CHILD"
TB4_2. What school does ([NAME1]/this child) attend?
[List of schools + "other" option]
DON'T KNOW d

REFUSED .......................................................................................................r

## PROGRAMMER BOX TB4_4

IF [(TB1=1 OR TB2>1)] AND [NUMCHILDBL > 1], LOOP OVER TB4 THROUGH TB4_2 FOR ALL CHILDREN ON BASELINE HOUSEHOLD ROSTER THEN GO TO TB4H.

## BASELINE RESPONDENT

TB4h. Are there any other children, age 18 or younger, or over 18 but still in high school, in your household that I have not asked about yet?
$\qquad$
NO
0 GO TO SECTION TC
DON'T KNOW
d GO TO SECTION TC
REFUSED $\qquad$ r GO TO SECTION TC

## TB4H=1

TB4i. How many additional children age 18 or younger, or over 18 but still in high school, are in your household that I have not asked about yet?
|__|__| NUMBER OF CHILDREN (1-20)
$\qquad$
REFUSED ........................................................................................................r

> PROGRAMMER BOX TB4I
> IF TB4I $=1-20$, GO TO TB7. IF D OR R, GO TO SECTION
> TC.

## BASELINE NON-RESPONDENT

TB5. How many children are currently living in your household that were age 18 or younger or over 18 but were still in high school during the most recently completed school year?
|__|__| NUMBER OF CHILDREN (0-20)

GO TO SECTION B PROGRAMMER BOX
DON'T KNOW ..................................................................................................d
REFUSED .......................................................................................................r

HARD CHECK: IF TB5 GT TB2; The number of children living in your household is greater than the total number of people living in your household. Did I make a mistake? HARD CHECK: IF TB5 GT TB3a; The number of children living in your household is greater than the total number of people sharing food in your household. Did I make a mistake?

## TB5=0 OR D OR R

TB6. Is there at least one child living in your household?

| YES ................................................................................................................... 1 | REPEAT TB5 |
| :--- | :--- | :--- |
| NO ............................................................................................................................. 0 | GO TO SECTION B |
| PROGRAMMER BOX |  |

## (TB4I GTE 1) OR (TB5 GTE 1)

IF TB4I=1 TO 20: For the children we haven't discussed already,
IF TB4I GT 1 OR TB5 GT 1: first
For additional children, fill: What is the name of the next child?
TB7. [For the children we haven't discussed already,] l'd like to make a list of the first names or initials of the children in your household. This will help me with asking some questions later. What is the name of the [first] child?
ADDITIONAL CHILD: What is the name of the next child?
IF NEEDED: You can give me the child's initials or some other way to refer to the child.

## NAME

$\qquad$
REFUSED $\qquad$
(TB4I GTE 1) OR (TB5 GTE 1)
IF TB7 = ANSWERED AND NE D OR R, FILL = ANSWER FROM TB7
ELSE, FILL = "THIS CHILD"
TB7a. What is ([ANSWER FROM TB7]/this child)'s date of birth?

PROGRAMMER: COLLECT DATE WITH SEPARATE FIELDS

(1-12) (1-31) (1996-2016)
GO TO TB7C
DON'T KNOW .................................................................................................d GO TO TB7B
REFUSED .......................................................................................................r GO TO TB7B

```
TB7A=D OR R
IF TB7 = ANSWERED AND NE D OR R, FILL = ANSWER FROM TB7
ELSE, FILL = "THIS CHILD"
```

TB7b. Some people find it easier to select an age group. This information will help me with asking some questions later. Please stop me when I reach ([ANSWER FROM TB7]/this child)'s age group. Is it..

## CODE ONE ONLY

Under 2 years old
1
GO TO TB7C
Age 2 to 5 years,
2 GO TO TB7C
Age 6 to 11 years, ......................................................................................... 3 GO TO TB7C
Age 12 to 17 years, or.......................................................................................... 4
4 GO TO TB7C
Age 18 or older and still in school? ................................................................ 5 GO TO TB7C
DON'T KNOW ...................................................................................................d GO TO TB7C
REFUSED .........................................................................................................r GO TO TB7C
(TB4I GTE 1) OR (TB5 GTE 1) OR (TB7B = RESPONSE OR D OR R)
IF TB7 = ANSWERED AND NE D OR R, FILL = ANSWER FROM TB7
ELSE, FILL = "THIS CHILD"
TB7c. Is ([ANSWER FROM TB7]/this child) a boy or girl?

INTERVIEWER: ASK IF RESPONDENT HAS NOT ALREADY MENTIONED CHILD'S SEX. CODE ONE ONLY

BOY
1
GIRL
2
DON'T KNOW .................................................................................................... d
REFUSED .............................................................................................................. $r$
(TB4I GTE 1) OR (TB5 GTE 1) AND [TB7A GTE 3 YEARS OR TB7B = 2,3,4, OR 5] AND DEMONSTRATION=CHICKASAW NATION OR VIRGINIA

IF TB7 = ANSWERED AND NE D OR R, FILL = ANSWER FROM TB7
ELSE, FILL = "THIS CHILD"
TB7d. Is ([ANSWER FROM TB7]/this child) in grades pre-K through 12 in your local school system?

YES 1

NO 0

DON'T KNOW ....................................................................................................d
REFUSED .r

```
TB7D=1 AND [DEMONSTRATION=CHICKASAW NATION OR VIRGINIA]
```

IF TB7 = ANSWERED AND NE D OR R, FILL = ANSWER FROM TB7
ELSE, FILL = "THIS CHILD"

TB7e. What school does ([ANSWER FROM TB7]/this child) attend?
[List of schools + "other" option]
DON'T KNOW d
$\qquad$

## PROGRAMMER BOX TB8G

IF TB4I GT1 OR TB5 GT 1, LOOP OVER TB8 THROUGH TB8G FOR ALL CHILDREN IN TB4I OR TB5.

PROGRAMMER BOX SECTION B:
CREATE PROGRAMMED VARIABLES FOR NUMBER OF CHILDREN IN HOUSEHOLD (NUMCHILDFU1), TOTAL HOUSEHOLD SIZE (HHNUMBFU1), A FLAG FOR CHICKASAW NATION CHILDREN AGE 2 YEARS OR OLDER (CNAGEFLAGFU1), AND NUMBER OF CHILDREN IN CHICKASAW NATION HOUSEHOLDS AGE 2 YEARS OR OLDER (TOTCNAgeFU1).

IF (TB5=0) OR (TB6=0, D, OR R) THEN
NUMCHILDFU1=0. IF (TB5=D OR R) AND (TB6=0, D, OR
R) THEN NUMCHILDFU1=0.

IF NUMCHILDFU1=0 GO TO SECTION D. ELSE GO TO TC1.

```
IF [TB2 = DK OR R] OR [TB2A = R]
```

TB9a. I apologize, this survey is for individuals with at least one child under the age of 18 in the house.
Status refusal. Go to END.

## C. Children's Program Participation

For the next series of questions we'll be asking about meals and snacks the children in your household may have had during the last 30 days, that is, since [DATE OF INTERVIEW-30].

## [KIDSGTE3FU1] GTE 1

TC1. On school days during the last 30 days, how many children in your household usually ate breakfast at school?
|_____| NUMBER OF CHILDREN
(0-20)
DON'T KNOW $\qquad$ .d

GO TO TC1A
REFUSED $\qquad$ r GO TO TC1A

## TC1 NE 0

TC1a. On school days during the last 30 days, how many children in your household got free or reduced-price breakfasts at school?
|__|__| NUMBER OF CHILDREN
(0-20)
DON'T KNOW d
REFUSED .r

## [KIDSGTE3FU1] GTE 1

TC1b. On school days during the last 30 days, how many children in your household usually ate a school lunch?
|____| NUMBER OF CHILDREN
(0-20)
DON'T KNOW .................................................................................................d GO TO TC1C
REFUSED ......................................................................................................r GO TO TC1C

## TC1B NE 0

TC1c. On school days during the last 30 days, how many children in your household got free or reduced-price lunches at school?
|_____| NUMBER OF CHILDREN
(0-20)
DON'T KNOW
REFUSED ......................................................................................................... $r$

## [KIDSGTE3FU1] GTE 1

IF DEMONSTRATION=VIRGINIA FILL "in school or"
TC1d. During the last 30 days, how many children in your household got free supper meals [in school or] at an after school program held in their school building?
|____| NUMBER OF CHILDREN
(0-20)
DON'T KNOW ..................................................................................................d
REFUSED .......................................................................................................r

## [KIDSGTE3FU1] GTE 1

TC1e. During the last 30 days, how many children in your household participated in any other after school program where meals or snacks are served?
|_____| NUMBER OF CHILDREN
(0-20)
DON'T KNOW d

REFUSED .......................................................................................................r
[Asked only for period when the last 30-day period included summer.]
TC1f. During the last 30 days, how many children in your household received free meals or snacks at places such as summer school, a community center, day camp or park?
|__|__| NUMBER OF CHILDREN
(0-20)
DON'T KNOW d
REFUSED
.r

## [KIDSLTE5FU1] GTE1

TC1g. During the last 30 days, how many children in your household received meals or snacks at a daycare center, family or group daycare home, or Head Start center?

IF NEEDED: Please include children who received meals or snacks whether the meals or snacks were free, reduced-price, or paid. Please also include meals and snacks that were included in any payment you made to the center or home.
|_____| NUMBER OF CHILDREN
(0-20)
DON'T KNOW d
REFUSED ........................................................................................................ $r$

## [KIDSGTE3FU1] GTE1

TC2. During the last 30 days, how many children in your household got food through a school backpack food program for children?

PROBE IF NEEDED: The Backpack Food Program provides food for children to take home from school over weekends and holidays.

## |__I__| NUMBER OF CHILDREN (0-20)

DON'T KNOW d

REFUSED ...............................................................................................................

## TC2 GTE 1 AND DEMONSTRATION=VIRGINIA

TC2=1: child
TC2 GT 1: children
TC2a. During the most recently completed school year, that is, school year 2015-2016, how often did your [child/children] usually take home a food backpack from school? Would you say...

Less often than once per month, ................................................................... 1
Once per month,............................................................................................. 2
Two or three times per month, or................................................................... 3
Every week? ................................................................................................... 4
DON'T KNOW ..................................................................................................d
REFUSED ........................................................................................................r

## DEMONSTRATION=CHICKASAW NATION AND KIDSGTE3FU1 GTE1

TC3. How many children in your household received Summer EBT for Children benefits this past summer, that is, summer 2016?
|__|__| NUMBER OF CHILDREN
(0-20)
DON'T KNOW d
$\qquad$

## D. Food Purchase Behavior and Other Food Behavior

These next questions are about where you shop for food for your household.

## DEMONSTRATION = CHICKASAW NATION OR KENTUCKY

## TD1. During the past 30 days, about how many times did you or someone in your household shop for food?

|___|_| NUMBER OF TIMES (0-30)
$\qquad$
REFUSED ............................................................................................................ $r$

## DEMONSTRATION = CHICKASAW NATION OR KENTUCKY

TD2. During the past 30 days, at what kind of store did you buy most of your groceries?

INTERVIEWER: READ ONLY IF NECESSARY
INTERVIEWER: CODE "ALDI" AS A SUPERMARKET/GROCERY STORE CODE ONE ONLY

SUPERMARKETS/GROCERY STORES SUCH AS ALDI OR SAVE-A-LOT ...... 1
DISCOUNT STORES SUCH AS WAL-MART, TARGET, OR KMART ................ 2
WAREHOUSE CLUBS, SUCH AS PRICE CLUB, COSTCO, PACE, SAM'S CLUB, OR BJ'S
.3
CONVENIENCE STORES SUCH AS 7-11, QUICK CHECK, QUICK STOP ....... 4
GAS STATIONS, SUCH AS SHELL, FLYING J, EXXON, MARATHON, OR
AMACO .............................................................................................. 5
ETHNIC FOOD STORES SUCH AS BODEGAS, ASIAN FOOD MARKETS, OR CARIBBEAN MARKETS6
FARMERS' MARKETS ..... 7
DOLLAR STORES ..... 8
SURPLUS/CLOSE-OUT RETAILERS SUCH AS BIG LOTS ..... 9
OTHER (SPECIFY) ..... 99
DON'T KNOW ..... d
REFUSED ..... r

TD2 = 99
TD2_Specify. INTERVIEWER: SPECIFY OTHER KIND OF STORE.
(STRING 100)
DESCRIPTION
DON'T KNOW
d
REFUSED ......................................................................................................... r

DEMONSTRATION = KENTUCKY
TD3. What is the main reason you shop at that store?

CODE ONE ONLY
LOW PRICES 1

SALES 2

QUALITY OF FOOD ......................................................................................... 3
VARIETY OF FOODS (GENERAL) ................................................................... 4
VARIETY OF SPECIAL FOODS (SUCH AS GLUTEN FREE)............................ 5
CLOSE TO HOME/CONVENIENT ..................................................................... 6
EASY TO GET TO ............................................................................................ 7
PRODUCE SELECTION................................................................................... 8
MEAT DEPARTMENT ...................................................................................... 9
LOYALTY/FREQUENT SHOPPER PROGRAM................................................. 10
ONLY STORE IN AREA...................................................................................... 11
AVAILABILITY OF FOOD AND NON-FOOD ITEMS IN SAME STORE .............. 12
GAS OR OTHER DISCOUNTS ......................................................................... 13
OTHER (SPECIFY)........................................................................................... 99
DON'T KNOW ..................................................................................................d
REFUSED ........................................................................................................r

TD3 = 99
TD3_Specify. INTERVIEWER: SPECIFY OTHER REASON.
DESCRIPTION
DON'T KNOW ..... d
REFUSED ..... r

## DEMONSTRATION = KENTUCKY

TD4. How do you usually get to the store where you bought most of your groceries in the past 30 days?

CODE ALL THAT APPLY
DRIVE OWN CAR................................................................................................ 1
DRIVE SOMEONE ELSE'S CAR.......................................................................... 2
SOMEONE ELSE DRIVES ME.............................................................................. 3
WALK.................................................................................................................. 4
BUS, SUBWAY, OR OTHER PUBLIC TRANSIT ................................................. 5
TAXI OR OTHER PAID DRIVER ........................................................................... 6
RIDE BICYCLE ..................................................................................................... 7
OTHER (SPECIFY)............................................................................................... 8
DON'T KNOW .................................................................................................... d
REFUSED ..........................................................................................................r

TD4 = 8
TD4_Other. INTERVIEWER: SPECIFY OTHER WAY.

DESCRIPTION
DON'T KNOW
d
REFUSED ........................................................................................................... $r$

## DEMONSTRATION = KENTUCKY

TD4a. About how many minutes does it take to go one way from home to that store?
INTERVIEWER: ENTER MIDPOINT IF RANGE IS GIVEN
|__|__| NUMBER OF MINUTES ONE WAY (0-120)
DON'T KNOW d

REFUSED ..........................................................................................................r

SOFT CHECK: IF GT 60; I just want to make sure I recorded your answer correctly. Did you say [ANSWER FROM TD4A]?

## DEMONSTRATION=CHICKASAW NATION OR KENTUCKY

TD4b. And approximately how many miles away is that store from your home - one way?

INTERVIEWER: ENTER MIDPOINT IF RANGE IS GIVEN; IF LESS THAN ONE MILE ENTER "0"
|_|_|_ NUMBER OF MILES ONE WAY
(0-99)
DON'T KNOW ..................................................................................................... d
REFUSED .............................................................................................................r

SOFT CHECK: IF GT 30; I just want to make sure I recorded your answer correctly. Did you say [ANSWER FROM TD4B]?

## ALL

TD5. How many nights a week does your family typically sit down together to have dinner as a family?

CODE ONE ONLY
$\qquad$
$\qquad$
3 OR 4 NIGHTS ..................................................................................................... 3
1 OR 2 NIGHTS .................................................................................................. 4
NEVER ..................................................................................................................... 5
DON'T KNOW ......................................................................................................... d
REFUSED ............................................................................................................ $r$

## DEMONSTRATION = NEVADA OR VIRGINIA

TD6. During the past 7 days, how many times did you or someone else in your family prepare food for dinner or supper at home? Include times spent putting the ingredients together for dinner or supper, but do not include heating up leftovers.
$\qquad$ NUMBER (0-7)
NEVER 0
DON'T KNOW ..... d
REFUSED ..... r
DEMONSTRATION = NEVADA OR VIRGINIA
TD7. How often do you shop with a grocery list? Would you say..
CODE ONE ONLY
Never ..... 1
Rarely, ..... 2
Sometimes, ..... 3
Most of the time, or ..... 4
Always? ..... 5
DON'T KNOW ..... d
REFUSED ..... r

## DEMONSTRATION=NEVADA OR VIRGINIA

TD8. In the past 12 months, about how many classes, lectures, or demonstrations about how to shop for or prepare nutritious food and meals did you or another adult in your household attend?
|__|_| SESSIONS (0-24)
$\qquad$
DONTKNOW d
REFUSED ..... r

## E. Food Security

PROGRAMMER BOX SECTION E
SELECT APPROPRIATE FILLS DEPENDING ON NUMBER OF ADULTS [ADULTSFU1] AND CHILDREN IN THE HOUSEHOLD [NUMCHILDFU1]. DEFAULT TO MULTIPLE ADULTS AND MULTIPLE CHILDREN IN HOUSEHOLD.

## ALL <br> FILL DATE = [DATE OF INTERVIEW-30]

TE1. Now l'm going to read you several statements that people have made about their food situation. For these statements, please tell me whether the statement was often true, sometimes true, or never true for your household in the last 30 days, that is, since [DATE OF INTERVIEW-30].
The first statement is "We worried whether our food would run out before we got money to buy more." Was that often true, sometimes true, or never true for your household in the last 30 days?

CODE ONE ONLY
OFTEN TRUE .1

SOMETIMES TRUE .2

NEVER TRUE ................................................................................................... 3
DON'T KNOW ...................................................................................................d
REFUSED ........................................................................................................r

## ALL

TE2. "The food that we bought just didn't last, and we didn't have money to get more." Was that often, sometimes, or never true for your household in the last 30 days?

CODE ONE ONLY
OFTEN TRUE .1

SOMETIMES TRUE.......................................................................................... 2
NEVER TRUE .................................................................................................. 3
DON'T KNOW ..................................................................................................d
REFUSED .........................................................................................................r

## ALL

TE3. "We couldn't afford to eat balanced meals." Was that often, sometimes, or never true for your household in the last 30 days?

## CODE ONE ONLY

OFTEN TRUE ................................................................................................... 1
SOMETIMES TRUE.......................................................................................... 2
NEVER TRUE .................................................................................................... 3
DON'T KNOW ...................................................................................................d
REFUSED ........................................................................................................r

PROGRAMMER BOX TE3
IF TE1=1 OR 2 OR TE2=1 OR 2 OR TE3=1 OR 2, GO TO TE4; OTHERWISE, SKIP TO TE9.

TE1=1 OR 2 OR TE2=1 OR 2 OR TE3=1 OR 2
IF [ADULTSFU1] > 1: "or other adults in your household"
FILL DATE $=$ [DATE OF INTERVIEW -30]
TE4. In the last 30 days, that is, since [DATE OF INTERVIEW-30], did you [or other adults in your household] ever cut the size of your meals or skip meals because there wasn't enough money for food?

| YES | GO TO TE4A |
| :---: | :---: |
| NO | GO TO TE5 |
| DON'T KNOW . | GO TO TE5 |
| REFUSED | GO TO TE5 |

## TE4=1

TE4a. In the last 30 days, how many days did this happen?
$\mid$ __|_| NUMBER OF DAYS GO TO TE5 (1-30)
DON'T KNOW ...................................................................................................d GO то те4B
REFUSED .......................................................................................................r GO TO TE5

## TE4A=D

TE4b. Do you think it was one or two days, or more than two days?

## CODE ONE ONLY

ONE OR TWO DAYS............................................................................................. 1
MORE THAN TWO DAYS ...................................................................................... 2
DON'T KNOW ...................................................................................................... d
REFUSED .............................................................................................................. $r$

## TE1=1 OR 2 OR TE2=1 OR 2 OR TE3=1 OR 2

TE5. In the last 30 days, did you ever eat less than you felt you should because there wasn't enough money for food?

YES 1

NO ....................................................................................................................... 0
DON'T KNOW .................................................................................................... d
REFUSED ............................................................................................................r

TE1=1 OR 2 OR TE2=1 OR 2 OR TE3=1 OR 2
TE6. In the last 30 days, were you ever hungry but didn't eat because there wasn't enough money for food?
$\qquad$
$\qquad$
DON'T KNOW ........................................................................................................ d
REFUSED .............................................................................................................. $r$

## TE1=1 OR 2 OR TE2=1 OR 2 OR TE3=1 OR 2

TE7. In the last $\mathbf{3 0}$ days, did you lose weight because there wasn't enough money for food?
YES .1
NO 0
DON'T KNOW .d
$\qquad$
PROGRAMMER BOX TE7
IF TE4=1 OR TE5=1 OR TE6=1 OR TE7=1, GO TO TE8; OTHERWISE, SKIP TO TE9.

```
TE4=1 OR TE5=1 OR TE6=1 OR TE7=1
IF [ADULTSFU1] > 1: "OR OTHER ADULTS IN YOUR HOUSEHOLD"
```

TE8. In the last 30 days, did you [or other adults in your household] ever not eat for a whole day because there wasn't enough money for food?

| YES | GO TO TE8A |
| :---: | :---: |
| NO | $\begin{aligned} & \text { GO TO } \\ & \text { BOX TE8B } \end{aligned}$ |
| DON'T KNOW | GO TO PROG BOX TE8B |
| REFUSED | GO TO PROG BOX TE8B |

## TE8=1

TE8a. In the last 30 days, how many days did this happen?

| NUMBER OF DAYS | GO TO PROG BOX TE8B |  |
| :---: | :---: | :---: |
| (1-30) |  |  |
| DON'T KNOW | ...d | GO TO TE8B |
| REFUSED |  | GO TO PROG |

## TE8A=D

TE8b. Do you think it was one or two days, or more than two days?

CODE ONE ONLY
ONE OR TWO DAYS........................................................................................... 1
MORE THAN TWO DAYS ..................................................................................... 2
DON'T KNOW ...................................................................................................... d
REFUSED .............................................................................................................. $r$

PROGRAMMER BOX TE8B
IF NUMCHILDFU1= 0 SKIP TO TF1. OTHERWISE, GO TO TE9.

## [NUMCHILDFU1] GT 0

IF [ADULTSFU1] = 1 AND [NUMCHILDFU1] = 1, FILL = "I RELIED ON ONLY A FEW KINDS OF LOWCOST FOOD TO FEED MY CHILD BECAUSE I WAS RUNNING OUT OF MONEY TO BUY FOOD."
IF [ADULTSFU1] = 1 AND [NUMCHILDFU1] >1, FILL = "I RELIED ON ONLY A FEW KINDS OF LOWCOST FOOD TO FEED MY CHILDREN BECAUSE I WAS RUNNING OUT OF MONEY TO BUY FOOD."
IF [ADULTSFU1]>1 AND [NUMCHILDFU1] =1, FILL = "WE RELIED ON ONLY A FEW KINDS OF LOW-COST FOOD TO FEED OUR CHILD BECAUSE WE WERE RUNNING OUT OF MONEY TO BUY FOOD"
IF [ADULTSFU1]>1 AND [NUMCHILDFU1]>1, FILL = "WE RELIED ON ONLY A FEW KINDS OF LOW-COST FOOD TO FEED OUR CHILDREN BECAUSE WE WERE RUNNING OUT OF MONEY TO BUY FOOD."

TE9. Now I'm going to read you several statements that people have made about the food situation of their children. For these statements, please tell me whether the statement was often true, sometimes true, or never true in the last 30 days for [your child/children living in the household who are under 18 years old or 18 or older but still in high school].
[IF SINGLE ADULT AND SINGLE CHILD:
"I relied on only a few kinds of low-cost food to feed my child because I was running out of money to buy food."

## IF SINGLE ADULT AND MULTIPLE CHILDREN:

"I relied on only a few kinds of low-cost food to feed my children because I was running out of money to buy food."
IF MULTIPLE ADULTS AND SINGLE CHILD:
"We relied on only a few kinds of low-cost food to feed our child because we were running out of money to buy food."
IF MULTIPLE ADULTS AND MULTIPLE CHILDREN:
"We relied on only a few kinds of low-cost food to feed our children because we were running out of money to buy food."]
SHOW FOR ALL:
Was that often, sometimes, or never true for your household in the last 30 days?
OFTEN TRUE ..................................................................................................... 1
SOMETIMES TRUE......................................................................................... 2
NEVER TRUE .................................................................................................... 3
DON'T KNOW ...................................................................................................d
REFUSED ........................................................................................................r

```
[NUMCHILDFU1] GT 0
IF [ADULTSFU1] = 1 AND [NUMCHILDFU1] = 1, FILL = "I COULDN'T FEED MY CHILD A BALANCED
MEAL, BECAUSE I COULDN'T AFFORD THAT."
IF [ADULTSFU1] = 1 AND [NUMCHILDFU1] >1, FILL = "I COULDN'T FEED MY CHILDREN A
BALANCED MEAL, BECAUSE I COULDN'T AFFORD THAT."
IF [ADULTSFU1]>1 AND [NUMCHILDFU1] =1, FILL = "WE COULDN'T FEED OUR CHILD A
BALANCED MEAL, BECAUSE WE COULDN'T AFFORD THAT."
IF [ADULTSFU1]>1 AND [NUMCHILDFU1]>1, FILL = "WE COULDN'T FEED OUR CHILDREN A
BALANCED MEAL, BECAUSE WE COULDN'T AFFORD THAT."
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TE10. IF SINGLE ADULT AND SINGLE CHILD:
"I couldn't feed my child a balanced meal, because I couldn't afford that."
IF SINGLE ADULT AND MULTIPLE CHILDREN:
"I couldn't feed my children a balanced meal, because I couldn't afford that."
IF MULTIPLE ADULTS AND SINGLE CHILD:
"We couldn't feed our child a balanced meal, because we couldn't afford that."
IF MULTIPLE ADULTS AND MULTIPLE CHILDREN:
"We couldn't feed our children a balanced meal, because we couldn't afford that."
SHOW FOR ALL:
Was that often, sometimes, or never true for your household in the last 30 days?
OFTEN TRUE 1

SOMETIMES TRUE.............................................................................................. 2
NEVER TRUE ........................................................................................................ 3
DON'T KNOW ....................................................................................................... d
REFUSED ..........................................................................................................r

## [NUMCHILDFU1] GT 0

IF [ADULTSFU1] = 1 AND [NUMCHILDFU1] = 1, FILL = "MY CHILD WAS NOT EATING ENOUGH BECAUSE I JUST COULDN'T AFFORD ENOUGH FOOD."

IF [ADULTSFU1] = 1 AND [NUMCHILDFU1] >1, FILL = "MY CHILDREN WERE NOT EATING ENOUGH BECAUSE I JUST COULDN'T AFFORD ENOUGH FOOD."
IF [ADULTSFU1]>1 AND [NUMCHILDFU1] =1, FILL = "OUR CHILD WAS NOT EATING ENOUGH BECAUSE WE JUST COULDN'T AFFORD ENOUGH FOOD."
IF [ADULTSFU1]>1 AND [NUMCHILDFU1]>1, FILL = "OUR CHILDREN WERE NOT EATING ENOUGH BECAUSE WE JUST COULDN'T AFFORD ENOUGH FOOD"

## TE11. IF SINGLE ADULT AND SINGLE CHILD:

"My child was not eating enough because I just couldn't afford enough food." IF SINGLE ADULT AND MULTIPLE CHILDREN:
"My children were not eating enough because I just couldn't afford enough food." IF MULTIPLE ADULTS AND SINGLE CHILD:
"Our child was not eating enough because we just couldn't afford enough food." IF MULTIPLE ADULTS AND MULTIPLE CHILDREN:
"Our children were not eating enough because we just couldn't afford enough food." SHOW FOR ALL:

Was that often, sometimes, or never true for your household in the last 30 days?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## [NUMCHILDFU1] GT 0 AND (TE9=1 OR 2 OR TE10=1 OR 2 OR TE11=1 OR 2)

IF [NUMCHILDFU1] = 1, FILL = "your child's"
IF [NUMCHILDFU1] > 1, FILL = "any of your children's"
FILL DATE = [DATE OF INTERVIEW-30]
TE12. In the last 30 days, that is, since [DATE OF INTERVIEW-30], did you ever cut the size of [your child's/any of your children's] meals because there wasn't enough money for food?
$\qquad$
NO
0
DON'T KNOW ..................................................................................................d
REFUSED .......................................................................................................r

## [NUMCHILDFU1] GT 0 AND (TE9=1 OR 2 OR TE10=1 OR 2 OR TE11=1 OR 2)

IF [NUMCHILDFU1] = 1, FILL = "your child"
IF [NUMCHILDFU1] > 1, FILL = "any of your children"
TE13. In the last 30 days, did [your child/any of your children] ever skip meals because there wasn't enough money for food?

| YES | GO TO TE13A |
| :---: | :---: |
| NO | GO TO TE14 |
| DON'T KNOW . | GO TO TE14 |
| REFUSED | GO TO TE14 |

## [NUMCHILDFU1] GT 0 AND TE13=1

TE13a. In the last 30 days, how many days did this happen?

[NUMCHILDFU1] GT 0 AND TE13A=D
TE13b. Do you think it was one or two days, or more than two days?
CODE ONE ONLY
ONE OR TWO DAYS
1
MORE THAN TWO DAYS ................................................................................ 2
DON'T KNOW ................................................................................................... $d$
REFUSED .......................................................................................................r

```
[NUMCHILDFU1] GT 0 AND (TE9=1 OR 2 OR TE10=1 OR 2 OR TE11=1 OR 2)
IF [NUMCHILDFU1] = 1, FILL = "was your child"
IF [NUMCHILDFU1] > 1, FILL = "were your children"
```

TE14. In the last 30 days, [was your child/were your children] ever hungry but you just couldn't afford more food?
$\qquad$
NO 0
DON'T KNOW ..... d
REFUSED ..... r
[NUMCHILDFU1] GT 0 AND (TE9=1 OR 2 OR TE10=1 OR 2 OR TE11=1 OR 2)
IF [NUMCHILDFU1] = 1, FILL = "your child"

IF [NUMCHILDFU1] > 1, FILL = "any of your children"

TE15. In the last 30 days, did [your child/any of your children] ever not eat for a whole day because there wasn't enough money for food?
YES ..... 1
NO ..... 0
DON'T KNOW ..... d
REFUSED ..... r

## F. Food Expenditures

Now, l'd like to ask some questions about shopping for food and eating at restaurants. These questions are about out-of-pocket spending on food. Later on I will ask you about purchases made with government benefits like SNAP, WIC, or FDPIR.

```
ALL
FILL DATE = [DATE OF INTERVIEW-30]
```

TF1. First l'll ask you about money spent on food at supermarkets and other stores. Then we will talk about money spent at fast food restaurants and other restaurants.

Excluding any government benefits like SNAP or WIC, since [DATE OF INTERVIEW-30] how much money did your family spend out of pocket at supermarkets, grocery stores, and other stores? Please do not include fast food restaurants and other types of restaurants.

PROBE: This includes stores such as Wal-Mart, Target, and Kmart, convenience stores like 7-11 or Mini Mart, stores like Costco or Sam's Club, dollar stores, bakeries, meat markets, vegetable stands, or farmer's markets.
PROBE: Please include the total amount spent in the past 30 days, since [DATE OF INTERVIEW-30].

INTERVIEWER: RECORD "0" IF NO MONEY WAS SPENT
\$ |__|__|___|_| MONEY SPENT $(\$ 0-\$ 9,999)$
DON'T KNOW .......................................................................................d $\mathrm{d} \quad$ GO TO TF4
REFUSED .........................................................................................r GO TO TF4

TF1=1 TO 9,999
FILL1=AMOUNT FROM TF1
TF2. Was any of this \$[AMOUNT FROM TF1] spent on nonfood items such as cleaning or paper products, pet food, cigarettes, or alcoholic beverages?

YES .................................................................................................................. 1 GO TO TF3
NO ........................................................................................................................ 0
GO TO TF4
DON'T KNOW ...............................................................................................d d GO TO TF4
REFUSED ......................................................................................................r GO TO TF4

TF2=1
FILL=AMOUNT FROM TF1
TF3. About how much of the \$[AMOUNT FROM TF1] was spent on nonfood items?

INTERVIEWER: RECORD "0" IF NO MONEY WAS SPENT
\$ |__|__|__|__| MONEY SPENT (\$0-\$9,999)
DON'T KNOW d

REFUSED .r

HARD CHECK: IF [TF1 = \$0-9,999] AND [TF3>TF1]; The amount spent on nonfood items is greater than the total amount spent at supermarkets, grocery stores, or other stores. Did I make a mistake?

## ALL

TF4. During the last 30 days, how many times did your family eat food from a fast food restaurant or other kinds of restaurants? Include restaurant meals at home, at fast food or other restaurants, carryout, or drive thru.
PROBE IF NEEDED: Please include the total number of visits in the past 30 days, since [DATE OF INTERVIEW-30].
PROBE IF NEEDED: Such as food you get at McDonald's, KFC, Panda Express, Taco Bell, Pizza Hut, food trucks, Applebee's, Chili's, TGI Fridays, etc.

I____ | TIMES (0-99)
$\qquad$
REFUSED .r GO TO SECTION TG

```
TF4 = 1-99
```

TF5. About how much money did your family spend on food at all types of restaurants including fast food restaurants during the last 30 days?
PROBE: Please include the total amount spent in the past 30 days, since [DATE OF INTERVIEW-30].

INTERVIEWER: RECORD "0" IF NO MONEY WAS SPENT
\$ |__|__|__|__| MONEY SPENT (\$0-\$9,999)
DON'T KNOW ................................................................................................... d
REFUSED ........................................................................................................r

## G. Other Program Participation

Next, l'm going to read the names of some programs that provide food or meals or other services to individuals or households.

| ALL |
| :--- |
| FILL DATE $=[$ [DATE OF INTERVIEW-30] |

TG1. In the last 30 days, that is, since [DATE OF INTERVIEW-30], did you or anyone in your household receive food or benefits from the Women, Infants and Children program called WIC?
YES ................................................................................................................. 1 GO TO TG1A

NO .................................................................................................................. 0 GO TO TG2
DON'T KNOW ..................................................................................................d GO TO TG2
REFUSED .....................................................................................................r GO TO TG2

TG1=1
TG1a. How many women, infants, or children in the household got WIC foods or benefits?
|__|__| NUMBER OF WOMEN, INFANTS, OR CHILDREN (1-20)
DON'T KNOW
d
GO TO TG2
REFUSED .r GO TO TG2

## [NUMCHILDFU1] GT 0 AND TG1A=1-20 AND [KIDSLTE5FU1]>0

TG1b. Of those, how many were infants or children up to age $\mathbf{5 ?}$

## |___|__| NUMBER OF INFANTS OR CHILDREN <br> (0-20)

DON'T KNOW d
$\qquad$

## ALL

TG2. In the last 30 days did you or anyone in your household receive food or meals from food pantries, food banks, local soup kitchens or emergency kitchens, community program, senior center, shelter, Meals on Wheels (or other programs delivering meals to your home), or church?
YES
1
NO ......................................................................................................................... 0
DON'T KNOW ...................................................................................................... d
REFUSED .........................................................................................................r

## DEMONSTRATION=CHICKASAW NATION

TG3. Do you or others in your household currently receive monthly commodity foods as part of the Food Distribution Program on Indian Reservations, also called FDPIR, fi-dipper, or fidpurr?

YES 1

NO .0
$\qquad$
REFUSED .r

## DEMONSTRATION=CHICKASAW NATION AND TREATMENT GROUP=T

TG4. How often did you try the recipes included with each Packed Promise food delivery?
Every time or nearly every time, ..... 1
Sometimes, or ..... 2 GO TO TG4A
None of the time or nearly none of the time? ..... 3 GO TO TG4A
DID NOT ORDER/RECEIVE A FOOD DELIVERY (VOLUNTEERED) ..... 4 GO TO TH1
DON'T KNOW ..... d GO TO TG4A
REFUSED ..... r GO TO TG4A

TG4=1, 2, 3, D, OR R
TG4a. About how much of the Packed Promise food delivery does your household eat each time you receive it? Would you say...

CODE ONE ONLY
All or most of the items, 1

GO TO TH1
Some of the items, or
.2
None or nearly none of the items?
3
DON'T KNOW ...................................................................................................... d
REFUSED ....................................................................................................r GO TO TH1

TG4A=2 OR 3
TG4b. What does your household do with the items that aren't used in the month they are delivered? Does your household...

CODE ALL THAT APPLY
Save the items for another time, ..................................................................... 1
Give the items to family or friends, or 2

Throw the items away?...................................................................................... 3
DON'T KNOW
d
REFUSED .............................................................................................................. $r$

## H. SNAP Enrollment

## ALL

TH1. In the last 12 months, has your household ever been enrolled in the Supplemental Nutrition Assistance Program (SNAP)?
PROBE IF NEEDED: SNAP is the program formerly known as 'Food Stamps.'
$\qquad$
TH1A
NO
0
GO TO TH2
DON'T KNOW ...................................................................................................d GO TO TH2
REFUSED .......................................................................................................r GO TO TH2

## TH1=1

TH1a. In the last 12 months, how long did your household receive the Supplemental Nutrition Assistance Program (SNAP)? If your household received SNAP, stopped receiving it, and then started again, please include all of that time.
|__|__|__| AMOUNT OF TIME
(1-365)
DON'T KNOW ..................................................................................................d GO TO TH2
REFUSED .......................................................................................................r GO TO TH2

IF TH1A = 1-365
TH1b. Is that days, weeks, or months?
DAYS. 1

WEEKS ........................................................................................................... 2
MONTHS.......................................................................................................... 3
DON'T KNOW ..................................................................................................d
REFUSED .......................................................................................................r

## ALL

TH2. In total, how long have you and your household ever received the Supplemental Nutrition
Assistance Program (SNAP)?
IF NEEDED: Please include all of the time your household has received SNAP, even if your household has started and stopped receiving benefits more than once.

INTERVIEWER: RECORD "0" IF NEVER ON SNAP
|________| AMOUNT OF TIME (0-365)

DON'T KNOW .................................................................................................... d
REFUSED ...........................................................................................................r

IF TH2 = 1-365
TH2a. Is that days, weeks, months, or years?
DAYS...................................................................................................................... 1
WEEKS ................................................................................................................ 2
MONTHS............................................................................................................. 3
YEARS .................................................................................................................... 4
DON'T KNOW ...................................................................................................... d
REFUSED .............................................................................................................r

TH1=1
TH3. Are you or others in your household currently receiving SNAP?


## TH3=1

TH4. What is the amount of the SNAP your household receives per month?
\$ |__|__|__|__| DOLLAR AMOUNT
(\$1-\$9999)
DON'T KNOW ...............................................................................................d d GO TO TI1
REFUSED .......................................................................................................r GO TO TI1

## TH3=1

TH5. In the last 12 months, did the amount of the benefit increase, decrease, or stay the same?

## CODE ONE ONLY

INCREASED .......................................................................................................... 1
DECREASED ......................................................................................................... 2
BOTH INCREASED AND DECREASED .............................................................. 3
STAYED SAME...................................................................................................... 4
DON'T KNOW ..................................................................................................d GO TO TI1
REFUSED ........................................................................................................r GO TO TI1

TH3=1
TH6. How many weeks do your SNAP benefits usually last?

INTERVIEWER: CODE ANY ANSWER GREATER THAN 8 WEEKS AS 8
|__| NUMBER OF WEEKS
(0-8)
DON'T KNOW ...................................................................................................d GO TO TI1
REFUSED ........................................................................................................r GO TO TI1

## I. Children's Food Consumption (Chickasaw Nation only)

## PROGRAMMER BOX SECTION I

IF DEMONSTRATION=KENTUCKY, NEVADA, OR VIRGINIA, GO TO TJ1. IF TOTCNAGEFU1 = 0 GO TO TJ1.

ELSE IF DEMONSTRATION = CHICKASAW NATION AND TOTCNAGEFU1 GTE 1, USE RANDOM SELECTION TO CHOOSE FOCAL CHILD FROM AMONG ROSTERED CHILDREN WITH CNAGEFLAGFU1=1.

```
ALL
PROGRAMMER: DISPLAY CNCHILDNAMEFU, DOB, AGE, AND GENDER ON SCREEN
FILL1 = [CNCHILDNAMEFU]
FILL2 = [CNCHILDNAMEFU]; IF MISSING: this child
FILL3 = [DATE OF INTERVIEW-30]
```

TI1. For the next set of questions, we are going to focus on [CNCHILDNAMEFU]. This child has been randomly selected and we cannot change to ask about a different child.

INTERVIEWER, DESCRIBE CHILD USING IDENTIFYING INFORMATION IF NAME IS MISSING.

We'll be asking about meals and snacks [[CNCHILDNAMEFU]/this child] may have had during the last 30 days, that is, since [DATE OF INTERVIEW-30].
First, during the past 30 days, how many days did [[CNCHILDNAMEFU]/this child] live in your household?

INTERVIEWER: IF RESPONDENT SAYS EVERYDAY, ENTER 30.
$\qquad$ | NUMBER OF DAYS (0-30)
DON'T KNOW d

REFUSED .......................................................................................................r

## ALL <br> FILL DATE = DATE OF INTERVIEW-30 <br> IF [CNCHILDNAMEFU] IS MISSING, FILL this child.

TI2. The next questions are about the different kinds of foods [[CNCHILDNAMEFU]/this child] ate or drank during the last 30 days since [DATE OF INTERVIEW-30]. When answering, please include meals and snacks eaten at home, at school or summer school, in restaurants, and anyplace else.

During the last 30 days, how often did [[CNCHILDNAMEFU]/this child] eat hot or cold cereal? (You can tell me per day, per week or per month.)
|__|_____| NUMBER OF TIMES
(0-270)
DON'T KNOW d
$\qquad$

IF TI2 = 1-270
TI2a. [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]
DAY .1

WEEK.............................................................................................................. 2
MONTH ............................................................................................................ 3
DON'T KNOW .................................................................................................. $d$
REFUSED .......................................................................................................r

IF [TI2>1 AND TI2A = 1] OR [TI2>14 AND TI2A = 2] OR [TI2>60 AND TI2A = 3]
FILL1 = ANSWER FROM TI2
FILL 2 = ANSWER FROM TI2A
TI2.1 You said [ANSWER FROM TI2] per [ANSWER FROM TI2A]. Is that correct?YES1
NO ..... 2
Repeat TI2
DON'T KNOW ..... d
REFUSED ..... r

```
TI2 NE 0
IF [CNCHILDNAMEFU] IS MISSING, FILL this child.
```

TI2.2. During the last 30 days, what kind of cereal did [[CNCHILDNAMEFU]/this child] usually eat?

PROBE IF NEEDED: Name and variety and brand
PROBE: What brand of cereal is that?

# INTERVIEWER: RECORD INFORMATION FOR ONLY ONE CEREAL. IF MORE THAN ONE CEREAL NAMED, TAKE FIRST CEREAL MENTIONED 

NAME/VARIETY
$\qquad$
GENERAL MILLS.................................................................................................. 2
MALT-O-MEAL........................................................................................................ 3
POST................................................................................................................... 4
QUAKER ................................................................................................................ 5
OTHER/STORE BRAND/GENERIC ..................................................................... 6
DON'T KNOW ..................................................................................................... d
REFUSED ............................................................................................................r

TI2.2_CEREAL = "OTHER"
TI2.2_Specify. INTERVIEWER: SPECIFY OTHER NAME AND VARIETY OF CEREAL.
DESCRIPTION
(STRING 100)

DON'T KNOW d

REFUSED ..........................................................................................................r

PROGRAMMER BOX TI2.2
IF TI2.1 AND TI2.2 =D OR R, GO TO TI3

TI2 NE 0
IF [CNCHILDNAMEFU] IS MISSING, FILL this child.
TI2.3. Was there another cereal that [[CNCHILDNAMEFU]/this child] ate?

| YES | . 1 | GO TO TI2.4 |
| :---: | :---: | :---: |
| NO | 0 | GO TO TI3 |
| DON'T KNOW | d | GO TO TI3 |
| REFUSED |  | GO TO TI3 |

TI2.3=1
FILL DATE = [DATE OF INTERVIEW-30] IF [CNCHILDNAMEFU] IS MISSING, FILL this child.

TI2.4. During the last 30 days since [DATE OF INTERVIEW-30], what second kind of cereal did [[CNCHILDNAMEFU]/this child] usually eat?
PROBE IF NEEDED: Name and variety and brand
PROBE: What brand of cereal is that?
INTERVIEWER: RECORD INFORMATION FOR ONLY ONE CEREAL. IF MORE THAN ONE CEREAL NAMED, TAKE FIRST CEREAL MENTIONED

NAME/VARIETY
KELLOGG'S ......................................................................................................... 1
GENERAL MILLS.................................................................................................. 2
MALT-O-MEAL..................................................................................................... 3
POST..................................................................................................................... 4
QUAKER ................................................................................................................ 5
OTHER/STORE BRAND/GENERIC ..................................................................... 6
DON'T KNOW ......................................................................................................... d
REFUSED ............................................................................................................ $r$

## ALL

FILL DATE $=$ [DATE OF INTERVIEW-30] IF [CNCHILDNAMEFU] IS MISSING, FILL this child.

TI3. During the last 30 days since [DATE OF INTERVIEW-30], how often did [[CNCHILDNAMEFU]/this child] have regular soda or pop that contains sugar? Do not include diet soda. (You can tell me per day, per week or per month.)

Include Manzanita (man-zuh-nee-tuh) and Peñafiel (pen-yah-fee-el) sodas. Do not include diet or sugar-free drinks, or juices or tea in cans.
$\qquad$ | NUMBER OF TIMES
(0-300)
DON'T KNOW d

REFUSED ..........................................................................................................r

## IF TI3 = 1-300

TI3a. [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]DAY1
WEEK ..... 2
MONTH ..... 3
DON'T KNOW ..... d
REFUSED ..... r
IF [TI3>2 AND TI3A = 1] OR [TI3>14 AND TI3A = 2] OR [TI3>60 AND TI3A = 3]
FILL1 = ANSWER FROM TI3
FILL2 = ANSWER FROM TI3A
TI3.1 You said [ANSWER FROM TI3] per [ANSWER FROM TI3A]. Is that correct?YES, CONTINUE1
NO, CORRECT NUMBER ..... 0
DON'T KNOW ..... d
REFUSED ..... r

## ALL <br> FILL DATE = [DATE OF INTERVIEW-30] IF [CNCHILDNAMEFU] IS MISSING, FILL this child.

T14. During the last 30 days since [DATE OF INTERVIEW-30], how often did [[CNCHILDNAMEFU]/this child] have $100 \%$ pure fruit juice, such as orange, mango, apple, grape, and pineapple juice? Do not include fruit-flavored drinks with added sugar or fruit juice you made at home with added sugar. (You can tell me per day, per week or per month.)

Include only 100\% pure juices. Do not include fruit-flavored drinks with added sugar, like cranberry drink, Hi-C, lemonade, Kool-Aid, Gatorade, Tampico (tam-pee-koh), or Sunny Delight.
|__|__|__| NUMBER OF TIMES
(0-300)
DON'T KNOW
d
REFUSED
.r

## IF TI4 = 1-300

TI4a. [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]
DAY. .1

WEEK.............................................................................................................. 2
MONTH ............................................................................................................ 3
DON'T KNOW ...................................................................................................d
REFUSED .......................................................................................................r

## IF [T|4>1 AND TI4A = 1] OR [TI4>14 AND TI4A = 2] OR [T|4>60 AND TI4A = 3]

FILL1=ANSWER FROM TI4
FILL 2 = ANSWER FROM TI4A
TI4.1 You said [ANSWER FROM TI4] per [ANSWER FROM TI4A]. Is that correct?
YES, CONTINUE .............................................................................................. 1
NO, CORRECT NUMBER ................................................................................. 0
REPEAT TI4
DON'T KNOW .................................................................................................. d
REFUSED .......................................................................................................r

```
ALL
FILL DATE = [DATE OF INTERVIEW-30]
IF [CNCHILDNAMEFU] IS MISSING, FILL this child.
```

TI5. During the last 30 days since [DATE OF INTERVIEW-30], how often did [[CNCHILDNAMEFU]/this child] drink coffee or tea that had sugar or honey added to it? Include coffee and tea you sweetened yourself and presweetened tea and coffee drinks such as Arizona Iced Tea and Frappuccino. Do not include artificially sweetened coffee or diet tea. (You can tell me per day, per week or per month.)
|__|_____| NUMBER OF TIMES
(0-300)
$\qquad$
$\qquad$
IF TI5 $=1-300$

TI5a. [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]
DAY .1

WEEK................................................................................................................ 2
MONTH ............................................................................................................ 3
DON'T KNOW ................................................................................................. d
REFUSED .......................................................................................................r

```
IF [TI5>1 AND TI5A = 1] OR [TI5>14 AND TI5A = 2] OR [TI5>60 AND TI5A = 3]
```

FILL1 = ANSWER FROM TI5
FILL 2 = ANSWER FROM TI5A
TI5.1 You said [ANSWER FROM TI5] per [ANSWER FROM TI5A]. Is that correct?YES, CONTINUE1
NO, CORRECT NUMBER ..... 0
REPEAT TI5
DON'T KNOW ..... d
REFUSED ..... r

## ALL <br> FILL DATE = [DATE OF INTERVIEW-30] IF [CNCHILDNAMEFU] IS MISSING, FILL this child.

TI6. During the last 30 days since [DATE OF INTERVIEW-30], how often did [[CNCHILDNAMEFU]/this child] drink sweetened fruit drinks, sports or energy drinks, such as Kool-Aid, Iemonade, Hi-C, cranberry drink, Gatorade, Red Bull, or Vitamin Water? Include fruit juices you made at home with added sugar. Do not include diet drinks or artificially sweetened drinks. (You can tell me per day, per week or per month.)
|__|__|__|__| NUMBER OF TIMES
(0-300)
$\qquad$
DONTKNOW
d
$\qquad$
IF TI6 = 1-300

TI6a. [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]
DAY .1

WEEK............................................................................................................... 2
MONTH ............................................................................................................ 3
DON'T KNOW .................................................................................................. d
REFUSED .......................................................................................................r

IF [TI6>1 AND TIGA = 1] OR [TI6>14 AND TIGA = 2] OR [TI6>60 AND TI6A = 3]
FILL1 = ANSWER FROM TI6
FILL 2 = ANSWER FROM TI6A
TI6.1 You said [ANSWER FROM TI6] per [ANSWER FROM TI6A]. Is that correct?
YES, CONTINUE .1

NO, CORRECT NUMBER ................................................................................. 0
DON'T KNOW .................................................................................................d
REFUSED .......................................................................................................r

```
ALL
FILL DATE = [DATE OF INTERVIEW-30]
IF [CNCHILDNAMEFU] IS MISSING, FILL this child.
```

T17. During the last 30 days since [DATE OF INTERVIEW-30], how often did [[CNCHILDNAMEFU]/this child] eat fruit? Include fresh, frozen or canned fruit. Do not include juices or dried fruits. (You can tell me per day, per week or per month.)
$\qquad$ | NUMBER OF TIMES
(0-270)
DON'T KNOW ................................................................................................. d
REFUSED ........................................................................................................r

IF TI7 = 1-270
TI7a. [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]
DAY. .1

WEEK.............................................................................................................. 2
MONTH ............................................................................................................ 3
DON'T KNOW ................................................................................................... $d$
REFUSED .......................................................................................................r

```
IF [TI7>1 AND TI7A = 1] OR [TI7>14 AND TI7A = 2] OR [TI7>60 AND TI7A = 3]
```

FILL1 = ANSWER FROM TI7
FILL 2 = ANSWER FROM TI7ATI7.1 You said [ANSWER FROM TI7] per [ANSWER FROM TI7A]. Is that correct?YES, CONTINUE1
NO, CORRECT NUMBER ..... 0
REPEAT TI7
DON'T KNOW ..... d
REFUSED ..... r

## ALL

IF [CNCHILDNAMEFU] IS MISSING, FILL this child.
TI8. During the last 30 days, how often did [[CNCHILDNAMEFU]/this child] eat a green leafy or lettuce salad, with or without other vegetables? Include spinach salads. (You can tell me per day, per week or per month.)
|________| NUMBER OF TIMES
(0-270)
DON'T KNOW d
REFUSED .......................................................................................................r

## IF TI8 = 1-270

TI8a. [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]
$\qquad$
WEEK.............................................................................................................. 2
MONTH ............................................................................................................ 3
DON'T KNOW ...................................................................................................... d
REFUSED ............................................................................................................. $r$

```
IF [TI8>1 AND TI8A = 1] OR [TI8>14 AND TI8A = 2] OR [TI8>60 AND TI8A = 3]
FILL1=ANSWER FROM TI8
FILL 2 = ANSWER FROM TI8A
```

TI8.1 You said [ANSWER FROM TI8] per [ANSWER FROM TI8A]. Is that correct?
YES, CONTINUE 1

NO, CORRECT NUMBER ................................................................................. 0
REPEAT TI8
DON'T KNOW ....................................................................................................... d
REFUSED .......................................................................................................r

ALL
IF [CNCHILDNAMEFU] IS MISSING, FILL this child.
TI9. During the last 30 days, how often did [[CNCHILDNAMEFU]/this child] eat any kind of fried potatoes, including French fries, home fries, or hash brown potatoes? Do not include potato chips. (You can tell me per day, per week or per month.)
|__|__|__| NUMBER OF TIMES
(0-270)
DON'T KNOW d

REFUSED ........................................................................................................

IF TI9 = 1-270
TI9a. [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]
DAY .1

WEEK................................................................................................................ 2
MONTH ............................................................................................................ 3
DON'T KNOW ................................................................................................. d
REFUSED ........................................................................................................r

```
IF [TI9>1 AND TI9A = 1] OR [TI9>14 AND TI9A = 2] OR [TI9>60 AND TI9A = 3]
FILL1=[ANSWER FROM TI9]
FILL 2 = [ANSWER FROM TI9A]
```

TI9.1 You said [ANSWER FROM TI9] per [ANSWER FROM TI9A]. Is that correct?
$\qquad$
NO, CORRECT NUMBER .....  0 REPEAT TI9
DON'T KNOW ..... d
REFUSED ..... r

## ALL

IF [CNCHILDNAMEFU] IS MISSING, FILL this child.

## TI9.2 During the last 30 days, how often did [[CNCHILDNAMEFU]/this child] eat other kinds of potatoes such as mashed potatoes, sweet potatoes, or potato salad? Include potatoes au gratin, scalloped potatoes, and all types of potatoes except fried. (You can tell me per day, per week or per month.)

|__|__|__| NUMBER OF TIMES
(0-270)
DON'T KNOW d

REFUSED .......................................................................................................r

IF TI9.2 = 1-270
TI9.2a [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]
DAY. 1

WEEK.............................................................................................................. 2
MONTH ........................................................................................................... 3
DON'T KNOW .................................................................................................d
REFUSED .......................................................................................................r
IF [TI9.2>1 AND TI9.2A = 1] OR [TI9.2>14 AND TI9.2A = 2] OR [T9.2>60 AND TI9.2A = 3]
FILL1=ANSWER FROM TI9.2
FILL 2 = ANSWER FROM TI9.2A
TI9.3 You said [ANSWER FROM TI9.2] per [ANSWER FROM TI9.2A]. Is that correct?YES, CONTINUE1
NO, CORRECT NUMBER ..... 0
REPEAT TI9.2
DON'T KNOW ..... d
REFUSED ..... r

## ALL <br> IF [CNCHILDNAMEFU] IS MISSING, FILL this child.


#### Abstract

TI10. During the last 30 days, how often did [[CNCHILDNAMEFU]/this child] eat refried beans, baked beans, beans in soup, pork and beans or any other type of cooked dried beans? Do not include green beans. Include soybeans, kidney, pinto, garbanzo, black beans, lentils, black eyed peas, cow peas, and lima beans. Include canned beans and hummus. (You can tell me per day, per week or per month.) |__|____| NUMBER OF TIMES (0-270) DON'T KNOW ...................................................................................................... d REFUSED ..........................................................................................................r


IF TI10 = 1-270
TI10.a [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]
DAY .1

WEEK.............................................................................................................. 2
MONTH ............................................................................................................ 3
DON'T KNOW ......................................................................................................d
REFUSED ............................................................................................................. $r$

## IF [TI10>1 AND TI10A = 1] OR [TI10>14 AND TI10A = 2] OR [T10>60 AND TI10A = 3]

FILL1=ANSWER FROM TI10
FILL 2 = ANSWER FROM TI10A
TI10.1 You said [ANSWER FROM TI10] per [ANSWER FROM TI10A]. Is that correct?
YES, CONTINUE
1
NO, CORRECT NUMBER ................................................................................................. 0
REPEAT TI10
DON'T KNOW ...................................................................................................... d
REFUSED .............................................................................................................r

## ALL <br> IF [CNCHILDNAMEFU] IS MISSING, FILL this child.

TI11. During the last 30 days, how often did [[CNCHILDNAMEFU]/this child] eat brown rice or other cooked whole grains, such as bulgur, cracked wheat, or millet? Do not include white rice.
PROBE IF NEEDED: Brown rice is a type of whole grain. It is brown in color and takes longer to cook than white rice. It contains almost all of the rice grain and is not as processed as white rice. Compared to white rice it also contains more fiber and more of some vitamins and minerals that are lost during the processing of rice.

## |__|__|__| NUMBER OF TIMES

(0-270)
$\qquad$
$\qquad$

```
IF TI11 = 1-270
```

TI11.a [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]
DAY 1
$\qquad$
WEEK 2
MONTH ..... 3
DON'T KNOW ..... d
REFUSED ..... r
IF [TI11>1 AND TI11A = 1] OR [TI11>14 AND TI11A = 2] OR [T11>60 AND TI11A = 3]
FILL1=ANSWER FROM TI11
FILL2 = ANSWER FROM TI11A
TI11.1 You said [ANSWER FROM TI11] per [ANSWER FROM TI11A]. Is that correct?
YES, CONTINUE ..... 1
NO, CORRECT NUMBER ..... 0
DON'T KNOW ..... d
REFUSED ..... r

## ALL <br> FILL DATE = [DATE OF INTERVIEW-30] IF [CNCHILDNAMEFU] IS MISSING, FILL this child.

TI12. During the last 30 days since [DATE OF INTERVIEW-30], not including what you just told me about lettuce salads, potatoes, cooked dried beans, how often did [[CNCHILDNAMEFU]/this child] eat other vegetables?

Do not include rice. Examples of other vegetables include tomatoes, green beans, carrots, pumpkin, corn, cabbage, bean sprouts, collard greens, and broccoli. Include any form of the vegetable (raw, cooked, canned, or frozen). (You can tell me per day, per week or per month.)
|__|__|__| NUMBER OF TIMES
(0-270)
DON'T KNOW ..................................................................................................d
REFUSED .......................................................................................................r

IF TI12 $=1-270$
TI12.a [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]
DAY .1
WEEK.............................................................................................................. 2
MONTH ............................................................................................................ 3
DON'T KNOW ................................................................................................... $d$
REFUSED ........................................................................................................r
IF [TI12>2 AND TI12A = 1] OR [TI12>14 AND TI12A = 2] OR [T12>60 AND TI12A = 3]

FILL1=ANSWER FROM TI12
FILL2= ANSWER FROM T12A
TI12.1 You said [ANSWER FROM TI12] per [ANSWER FROM TI12A]. Is that correct?
YES, CONTINUE 1
NO, CORRECT NUMBER .................................................................................. 0 REPEAT TI12
DON'T KNOW ..................................................................................................d
REFUSED ........................................................................................................r

```
ALL
FILL DATE = [DATE OF INTERVIEW-30]
IF [CNCHILDNAMEFU] IS MISSING, FILL this child.
```

TI13. During the last 30 days since [DATE OF INTERVIEW-30], how often did [[CNCHILDNAMEFU]/this child] have Mexican-type salsa made with tomato? Include all tomato-based salsas and Ro-Tel canned tomatoes. (You can tell me per day, per week or per month.)
|__|__|__| NUMBER OF TIMES (0-270)
$\qquad$
$\qquad$
IF TI13 = 1-270

TI13.a [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]
DAY 1
$\qquad$
MONTH 3

DON'T KNOW ..................................................................................................d
REFUSED .......................................................................................................r

## IF [TI13>1 AND TI13A = 1] OR [TI13>14 AND TI13A = 2] OR [T13>60 AND TI13A = 3]

FILL1=ANSWER FROM TI13
FILL2 = ANSWER FROM TI13A
TI13.1 You said [ANSWER FROM TI13] per [ANSWER FROM TI13A]. Is that correct?
YES, CONTINUE .1
NO, CORRECT NUMBER ..... 0 REPEAT TI13
DON'T KNOW ..... d
REFUSED ..... r
ALL
FILL DATE = [DATE OF INTERVIEW-30] IF [CNCHILDNAMEFU] IS MISSING, FILL this child.
TI14. During the last 30 days since [DATE OF INTERVIEW-30], how often did [[CNCHILDNAMEFU]/this child] eat pizza? Include frozen pizza, fast food pizza, and homemade pizza. (You can tell me per day, per week or per month.)
|__|_____| NUMBER OF TIMES
(0-270)
DON'T KNOW d
REFUSED .......................................................................................................r

## IF TI14 = 1-270

TI14.a [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]
DAY .1
WEEK.............................................................................................................. 2
MONTH ............................................................................................................. 3
DON'T KNOW .................................................................................................. d
REFUSED .......................................................................................................r

IF [TI14>1 AND TI14A = 1] OR [TI14>14 AND TI14A = 2] OR [T14>60 AND TI14A = 3]
FILL1=ANSWER FROM TI14
FILL2 = ANSWER FROM TI14A

## TI14.1 You said [ANSWER FROM TI14] per [ANSWER FROM TI14A]. Is that correct?

$\qquad$
NO, CORRECT NUMBER ................................................................................. 0 REPEAT TI14
DON'T KNOW ..................................................................................................d
REFUSED .......................................................................................................r

```
ALL
FILL DATE = [DATE OF INTERVIEW-30]
IF [CNCHILDNAMEFU] IS MISSING, FILL this child.
```

TI15. During the last 30 days since [DATE OF INTERVIEW-30], how often did [[CNCHILDNAMEFU]/this child] have tomato sauces such as with spaghetti or noodles or mixed into foods such as lasagna? Please do not count tomato sauce on pizza. (You can tell me per day, per week or per month.)
|_____|__| NUMBER OF TIMES
(0-270)
$\qquad$
$\qquad$
IF TI15 = 1-270

TI15.a [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]
DAY 1
$\qquad$
MONTH 3

DON'T KNOW ..................................................................................................d
REFUSED .......................................................................................................r

IF [TI15>1 AND TI15A = 1] OR [TI15>14 AND TI15A = 2] OR [T15>60 AND TI15A = 3]
FILL1=ANSWER FROM TI15
FILL 2 = ANSWER FROM TI15A
TI15.1 You said [ANSWER FROM TI15] per [ANSWER FROM TI15A]. Is that correct?
YES, CONTINUE 1

NO, CORRECT NUMBER ................................................................................ 0
REPEAT TI15
DON'T KNOW
d
REFUSED .......................................................................................................r

```
ALL
FILL DATE = [DATE OF INTERVIEW-30]
IF [CNCHILDNAMEFU] IS MISSING, FILL this child.
```

TI16. During the last 30 days since [DATE OF INTERVIEW-30], how often did [[CNCHILDNAMEFU]/this child] eat whole grain bread (and tortillas) including toast, rolls and in sandwiches? Whole grain breads include whole wheat, rye, oatmeal and pumpernickel. Do not include white bread or potato bread. (You can tell me per day, per week or per month.)
|_______| NUMBER OF TIMES
(0-270)
DON'T KNOW ....................................................................................................... d
REFUSED ............................................................................................................ $r$

## IF TI16 = 1-270

TI16.a [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]
DAY. 1
WEEK................................................................................................................... 2
MONTH ............................................................................................................... 3
DON'T KNOW ....................................................................................................... d
REFUSED .............................................................................................................r

IF [TI16>1 AND TI16A = 1] OR [TI16>14 AND TI16A = 2] OR [T16>60 AND TI16A = 3]
FILL1=ANSWER FROM TI16
FILL2 = ANSWER FROM TI16A
TI16.1 You said [ANSWER FROM TI16] per [ANSWER FROM TI16A]. Is that correct?
YES, CONTINUE 1

NO, CORRECT NUMBER .................................................................................... 0
REPEAT TI16
DON'T KNOW ....................................................................................................d
REFUSED ...........................................................................................................r

```
ALL
FILL DATE = [DATE OF INTERVIEW-30] IF [CNCHILDNAMEFU] IS MISSING, FILL this child.
```

TI17. During the last 30 days since [DATE OF INTERVIEW-30], how often did
[[CNCHILDNAMEFU]/this child] eat doughnuts, sweet rolls, Danish, muffins, (pan dulce) or
Pop-Tarts? Do not include sugar-free items. Include low-fat kinds, Twinkies, and Hostess cupcakes. Do not include pancakes, waffles, French toast, cake, ice cream and other frozen desserts, or candy. (You can tell me per day, per week or per month.)
|__|__|__| NUMBER OF TIMES
(0-270)
DON'T KNOW ..................................................................................................d
REFUSED ........................................................................................................r

IF TI17 = 1-270
TI17.a [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]
DAY
1
WEEK............................................................................................................... 2
MONTH ............................................................................................................ 3
DON'T KNOW ................................................................................................. d
REFUSED .......................................................................................................r

```
IF [TI17>1 AND TI17A = 1] OR [TI17>14 AND TI17A = 2] OR [T17>60 AND TI17A = 3]
```

FILL1=ANSWER FROM TI17
FILL2 $=$ ANSWER FROM TI17A
TI17.1 You said [ANSWER FROM TI17] per [ANSWER FROM TI17A]. Is that correct?
YES, CONTINUE .1
NO, CORRECT NUMBER ................................................................................ 0
DON'T KNOW d

REFUSED ........................................................................................................r

```
ALL
FILL DATE = [DATE OF INTERVIEW-30]
IF [CNCHILDNAMEFU] IS MISSING, FILL this child.
```

TI18. During the last 30 days since [DATE OF INTERVIEW-30], how often did [[CNCHILDNAMEFU]/this child] eat cookies, cake, pie, or brownies? Include low-fat kinds, Twinkies, granola bars, and Hostess cupcakes. Do not include ice cream and other frozen desserts or candy. Do not include sugar-free kinds. (You can tell me per day, per week or per month.)
|___|___| NUMBER OF TIMES (0-270)

DON'T KNOW ...................................................................................................... d
REFUSED .............................................................................................................r

## IF TI18 = 1-270

TI18.a [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]
DAY1
WEEK ..... 2
MONTH ..... 3
DON'T KNOW ..... d
REFUSED ..... r
IF [TI18>1 AND TI18A = 1] OR [TI18>14 AND TI18A = 2] OR [T18>60 AND TI18A = 3]
FILL1=ANSWER FROM TI18
FILL2 = ANSWER FROM TI18A
TI18.1 You said [ANSWER FROM TI18] per [ANSWER FROM TI18A]. Is that correct?
YES, CONTINUE ..... 1
NO, CORRECT NUMBER ..... 0 REPEAT TI18
DON'T KNOW ..... d
REFUSED ..... r

```
ALL
FILL DATE = [DATE OF INTERVIEW-30]
IF [CNCHILDNAMEFU] IS MISSING, FILL this child.
```

TI19. During the last 30 days since [DATE OF INTERVIEW-30], how often did [[CNCHILDNAMEFU]/this child] eat popcorn? Include low-fat popcorn. (You can tell me per day, per week or per month.)
|________| NUMBER OF TIMES
(0-270)
DON'T KNOW d
$\qquad$
IF TI19 = 1-270

TI19.a [PROBE ONLY IF NECESSARY: Is that per day, week, or month?]
DAY. .1
$\qquad$
MONTH 3
DON'T KNOW ..... d
REFUSED ..... r
IF [TI19>1 AND TI19A = 1] OR [TI19>14 AND TI19A = 2] OR [T19>60 AND TI19A = 3]
FILL1=ANSWER FROM TI19
FILL2 = ANSWER FROM TI19A
TI19.1 You said [ANSWER FROM TI19] per [ANSWER FROM TI19A]. Is that correct?
YES, CONTINUE ..... 1
NO, CORRECT NUMBER ..... 0 REPEAT TI19
DON'T KNOW ..... d
REFUSED ..... r

## J. Household Resources

## ALL

FILL DATE = [DATE OF INTERVIEW-30]
TJ1. The next questions are about working or jobs. Were you or any other adult in yourhousehold working for pay in the last 30 days, that is, since [DATE OF INTERVIEW-30]?YES1
NO .....  0
DON'T KNOW ..... d
REFUSED .....

## DEMONSTRATION=KENTUCKY AND TJ1 NE 0

TJ2. And what was your household's total earnings before taxes last month? Please include earnings from wages and salaries from a job or self-employment, or income from a rental property. Do not include income from Social Security, pensions, child support, or cash welfare benefits, or the value of SNAP benefits or food stamps, WIC, Medicaid, or public housing.
\$

$\qquad$
DOLLAR AMOUNT (\$0 - 99,999)
DON'T KNOW ..... d
GO TO TJ2B
REFUSED ..... r
TJ2=D OR R
TJ2b. Some people find it easier to select earnings from a range. Please stop me when I reach your household's total earnings for last month. Was it...
CODE ONE ONLY
Less than \$500, ..... 1
\$500 to less than \$1,000, ..... 2
$\$ 1,000$ to less than $\$ 1,500$ ..... 3
$\$ 1,500$ to less than $\$ 2,000$, ..... 4
$\$ 2,000$ to less than $\$ 2,500$, ..... 5
$\$ 2,500$ to less than $\$ 3,000$, or ..... 6
\$3,000 or more? ..... 7
DON'T KNOW ..... d
REFUSED ..... r

## ALL <br> FILL [LAST MONTH]

| J3. | What was your household's total income last month, during [LAST MONTH] Please include all types of income received by all household members last including all earnings, Social Security, pensions, Veteran's Benefits, Unemp Insurance, worker's compensation benefits, child support, payments from ro boarders, and cash welfare benefits such as TANF (TAH-nif) and SSI. Do not value of SNAP benefits or food stamps, WIC, Medicaid, or public housing. | before taxes? <br> onth, oyment omers or include the |
| :---: | :---: | :---: |
|  | \$ \| _ | _ | _ | _ | _ | DOLLAR AMOUNT ( $\$ 0-99,999$ ) |  |
|  | DON'T KNOW .......................................................................................d | GO TO TJ3B |
|  | REFUSED .............................................................................................r | GO TO TJ3B |

## TJ3=D OR R

TJ3b. Some people find it easier to select an income range. Please stop me when I reach your household's total income for last month. Was it...

## CODE ONE ONLY

Less than \$500,1
$\$ 500$ to less than $\$ 1,000$, ..... 2
$\$ 1,000$ to less than $\$ 1,500$ ..... 3
\$1,500 to less than \$2,000 ..... 4
$\$ 2,000$ to less than $\$ 2,500$ ..... 5
\$2,500 to less than \$3,000, or ..... 6
$\$ 3,000$ or more? ..... 7
DON'T KNOW ..... d
REFUSED ..... r

## ALL

TJ4. And, what was your household's total income last year before taxes?
PROBE IF NEEDED: Please include all types of income received by all household members last year, including all earnings, Social Security, pensions, Veteran's Benefits, Unemployment Insurance, worker's compensation benefits, child support, payments from roomers or boarders, and cash welfare benefits such as TANF (TAH-nif) and SSI. Do not include the value of SNAP benefits or food stamps, WIC, Medicaid, or public housing.
INTERVIEWER: "LAST YEAR," MEANING 2016.
\$ |___|__|__|, $\mid$ _______ DOLLAR AMOUNT $(\$ 0-150,000)$
$\qquad$
REFUSED .........................................................................................................r GO TO TJ4a

## TJ4=D OR R

TJ4A. Some people find it easier to select an income range. Please stop me when I reach your
household's total income for last year. Was it...
CODE ONE ONLY
Less than \$10,000, .1
$\$ 10,000$ to less than \$20,000, .2
$\$ 20,000$ to less than $\$ 35,000$ ..... 3
$\$ 35,000$ to less than $\$ 50,000$, ..... 4
$\$ 50,000$ to less than $\$ 75,000$ ..... 5
$\$ 75,000$ to less than $\$ 100,000$, ..... 6
$\$ 100,000$ to less than $\$ 150,000$, or ..... 7
$\$ 150,000$ or more? ..... 8
DON'T KNOW ..... d
REFUSED ..... r

## ALL

FILL DATE = [DATE OF INTERVIEW-30]
TJ5. The next questions are about sources of income. The answers to these and all other questions on this survey will be kept private and will never be associated with your name. During the last 30 days, that is, since [DATE OF INTERVIEW-30], did you or anyone in your household receive..

|  | CODE ONE PER ROW |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | YES | NO | DON'T <br> KNOW | REFUSED |
| a. TANF or Temporary Assistance to Needy Families, or other welfare such as General Assistance? | 1 | 0 | d | $r$ |
| b. Social Security from the government for retirement, disability, or survivors' benefits, or other retirement benefits such as a government or private pension or annuity? | 1 | 0 | d | $r$ |
| c. SSI or Supplemental Security Income from the federal, state, or local government? | 1 | 0 | d | $r$ |
| d. Veteran's Benefits? | 1 | 0 | d | $r$ |
| e. Unemployment Insurance or worker's compensation benefits? | 1 | 0 | d | $r$ |
| f. Child support payments or payments from roomers or boarders? | 1 | 0 | d | $r$ |
| g. Financial support from friends or family? | 1 | 0 | d | $r$ |
| h. Any other income besides earnings? | 1 | 0 | d | r |

## TJ5H=1

TJ5h_Specify. What is that other income?
DESCRIPTION
DON'T KNOW ...................................................................................................d
REFUSED ................................................................................................................
[TJ6 on household limitations deleted per OMB on August 10, 2015.]

## ALL

TJ7. Now l'd like to ask you about how much help you would expect to get from different sources if your household had a problem with which you needed help, for example, sickness or moving. After I read each source, please tell me if you would expect to get all of the help needed, most of the help needed, very little of the help needed, or no help?

INTERVIEWER: REPEAT ANSWER CHOICES AS NEEDED.
CODE ONE PER ROW
a. Family living nearby?
b. Friends?

1
2

| MOST OF <br> THE HELP <br> NEEDED | VERY LITTLE <br> OF THE HELP <br> NEEDED | NO <br> HELP | DON'T <br> KNOW | REFUSED |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 3 | 4 | d | r |
| 2 | 3 | 4 | d | r |


| ALL OF |
| :---: |
| THE HELP |
| NEEDED |

c. Other people in the community besides family and friends, such as a social service agency or a church?

## K. Trigger Events

The next few questions are about changes that may have occurred in your household in the past 6 months.

## ALL

TK1. Has there been a change in the number of people living in your household over the past 6 months?
$\qquad$
$\qquad$
DON'T KNOW ..................................................................................................d GO TO TK3
REFUSED ......................................................................................................r GO TO TK3

TK1=1
TK2. What caused that change?

|  | CODE ALL THAT APPLY |
| :---: | :---: |
| BIRTH OF CHILD. | .......... 1 |
| NEW STEP, FOSTER OR ADOPTED CHILD | .......... 2 |
| MARRIAGE/ROMANTIC PARTNER | ........... 3 |
| SEPARATION OR DIVORCE | ........... 4 |
| DEATH OF HOUSEHOLD MEMBER | ........... 5 |
| FAMILY, BOARDER, OR OTHER ADULT MOVED IN | ........... 6 |
| FAMILY, BOARDER, OR OTHER ADULT MOVED OUT . | ........... 7 |
| HOUSEHOLD MEMBER INCARCERATED. | ............ 8 |
| SAMPLE MEMBER MOVED | ............ 9 |
| OTHER (SPECIFY).. | ........... 10 |
| DON'T KNOW . | ............d |
| REFUSED ................................................................. | .............r |

TK2 $=10$
TK2_Specify. INTERVIEWER: SPECIFY OTHER CHANGE.

DESCRIPTION
DON'T KNOW d

REFUSED .r

## ALL

TK3. At any time in the past 6 months was your household evicted from your house or apartment?

YES 1

NO
0
DON'T KNOW ...................................................................................................... $d$
REFUSED .............................................................................................................r

## ALL

TK4. Have you or anyone in your household had a change in employment or a change in pay or hours worked from a job in the past 6 months?
YES
1 GO TO TK4A
NO
0 GO TO TL1
DON'T KNOW .................................................................................................d GO TO TL1
REFUSED ......................................................................................................r GO TO TL1

TK4=1
TK4a. What was that change in employment or a change in pay or hours worked from a job that you or someone in your household experienced in the past 6 months?

CODE ALL THAT APPLY
OBTAINED A JOB
.1
LOST JOB........................................................................................................ 2
INCREASE IN PAY OR HOURS ....................................................................... 3
DECREASE IN PAY OR HOURS ...................................................................... 4
QUIT A JOB ...................................................................................................... 5
CHANGED JOBS.............................................................................................. 6
TEMPORARY LEAVE (MATERNITY, DISABILITY, OR WORKMAN'S
SEASONAL WORK............................................................................................ 8
OTHER.............................................................................................................. 9
DON'T KNOW ..................................................................................................d
REFUSED ........................................................................................................r
TK4A $=9$
TK4a_Specify. INTERVIEWER: SPECIFY OTHER CHANGE.

SRIPTION
DON'T KNOW ...................................................................................................d
REFUSED .......................................................................................................r

## L. Respondent Demographics and Health Status

## ALL

TL1. Now, I have a few questions about you.
[RECORD GENDER FROM OBSERVATION.]
[PROBE ONLY IF NECESSARY: Because it is sometimes difficult to determine over the phone, I am asked to confirm with everyone...Are you male or female?]

INTERVIEWER: CODE DON'T KNOW IF RESPONDENT DOES NOT WANT TO IDENTIFY AS MALE OR FEMALE
$\qquad$
FEMALE ................................................................................................................ 2
DON'T KNOW ....................................................................................................... d
REFUSED ..........................................................................................................r

## IF [NUMCHILDFU1] GT 0

TL2. What is your relationship to the children living in the household?

> INTERVIEWER: READ ONLY IF NECESSARY

CODE ALL THAT APPLY
BIOLOGICAL/ADOPTIVE PARENT ..................................................................... 1
STEP-PARENT .................................................................................................... 2
GRANDPARENT................................................................................................... 3
GREAT GRANDPARENT ................................................................................... 4
SIBLING/STEPSIBLING ........................................................................................ 5
OTHER RELATIVE OR IN LAW ........................................................................... 6
FOSTER PARENT ................................................................................................ 7
OTHER NON-RELATIVE ....................................................................................... 8
PARENT'S PARTNER ............................................................................................ 9
DON'T KNOW ...................................................................................................... d
REFUSED ...........................................................................................................r

## ALL

## TL3. Are you of Hispanic or Latino origin?

HISPANIC OR LATINO........................................................................................... 1
NOT HISPANIC OR LATINO ............................................................................. 0
DON'T KNOW ...................................................................................................d
REFUSED ........................................................................................................r

## ALL

# TL4. I am going to read a list of five race categories. Please choose one or more races that you consider yourself to be. American Indian or Alaska Native; Asian; Black or African American; Native Hawaiian or other Pacific Islander; White? 

CODE ALL THAT APPLY
AMERICAN INDIAN OR ALASKA NATIVE
1
ASIAN............................................................................................................... 2
BLACK OR AFRICAN AMERICAN .................................................................... 3
NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER...................................... 4
WHITE.............................................................................................................. 5
DON'T KNOW ....................................................................................................d
REFUSED ........................................................................................................r

## ALL

TL5. What is your current marital status? Are you now married, divorced, separated, widowed, never married, or living with a partner?
CODE ONE ONLY
MARRIED......................................................................................................... 1
SEPARATED OR DIVORCED .......................................................................... 2
WIDOWED ........................................................................................................ 3
NEVER MARRIED ............................................................................................. 4
LIVING WITH PARTNER ................................................................................... 5
DON'T KNOW ...................................................................................................d
REFUSED .......................................................................................................r

## ALL

## TL6. What is your date of birth?

PROGRAMMER: COLLECT DATE WITH SEPARATE FIELDS

(1-12) (1-31) (1916-2001)
DON'T KNOW ...................................................................................................d GO TO TL6A
REFUSED r GO TO TL6A

TL6 = D OR R
TL6a. I can record your age instead if you would like. How many years old are you?
|__|__| YEARS
(18-99)
DON'T KNOW d

REFUSED .......................................................................................................r

## ALL

TL7. What is the highest grade or level of school you have completed or the highest degree youhave received?[ENTER HIGHEST LEVEL OF SCHOOL.]NEVER ATTENDED/KINDERGARTEN ONLY0
1ST GRADE ..... 1
2ND GRADE ..... 2
3RD GRADE ..... 3
4TH GRADE ..... 4
5TH GRADE ..... 5
6TH GRADE ..... 6
7TH GRADE ..... 7
8TH GRADE ..... 8
9TH GRADE ..... 9
10TH GRADE ..... 10
11TH GRADE ..... 11
12TH GRADE, NO DIPLOMA ..... 12
HIGH SCHOOL GRADUATE ..... 13
GED OR EQUIVALENT ..... 14
SOME COLLEGE, NO DEGREE ..... 15
ASSOCIATE DEGREE: OCCUPATIONAL, TECHNICAL, OR VOCATIONAL PROGRAM ..... 16
ASSOCIATE DEGREE: ACADEMIC PROGRAM ..... 17
BACHELOR'S DEGREE (EXAMPLE: BA, AB, BS, BBA) ..... 18
MASTER'S DEGREE (EXAMPLE: MA, MS, MEng, MEd, MBA) ..... 19
PROFESSIONAL SCHOOL DEGREE (EXAMPLE: MD, DDS, DVM, JD) ..... 20
DOCTORAL DEGREE (EXAMPLE: PhD, EdD) ..... 21
DON'T KNOW ..... d
REFUSED ..... r

## ALL

TL8. In general, would say your health is excellent, very good, good, fair or poor? CODE ONE ONLY

EXCELLENT ..................................................................................................... 1
VERY GOOD ................................................................................................... 2
GOOD .............................................................................................................. 3
FAIR ................................................................................................................. 4
POOR................................................................................................................ 5
DON'T KNOW ..................................................................................................d
REFUSED .......................................................................................................r

## M. Closing Information

## DEMONSTRATION=ALL AND TREATMENT GROUP=T, T1, OR T2

FILL1=DEMONSTRATION PROJECT NAME
TM1. Thank you very much for your time. You have really helped us with this study. We are also conducting in-person interviews to learn more about some families' experiences with [DEMONSTRATION PROJECT] and your household's access to healthy food. Those who are selected for the in-person interview will get $\$ 50$ in addition to the gift card for this telephone interview. If you agree to take part, one of my colleagues may contact you in the next few weeks with more information and to schedule an interview.

Are you willing to be contacted about taking part in an in-person interview? You can change your mind about participating at a later time.
$\qquad$
NO .
d
DON'T KNOW d

REFUSED .........................................................................................................r

## ALL

TM2. Thank you very much for your time. You have really helped us with this study. l'd like to confirm your address so we can send you a $\mathbf{\$ 3 0}$ gift card within the next few weeks.

Field: [To thank you for completing the survey, your field interviewer will give you a $\$ 30$ gift card. We would just like to confirm your contact information.]
[ASK ALL:] According to our records we have...
[FILL FIRSTNAME LASTNAME FROM SMS]
[FILL STREET ADDRESS FROM SMS]
[FILL CITY, STATE, ZIP CODE FROM SMS]
[IF DEMONSTRATION=CHICKASAW NATION FILL EMAIL ADDRESS FROM SMS] [IF DEMONSTRATION=CHICKASAW NATION FILL PHONE NUMBER FROM SMS]

CONTACT INFORMATION IS CORRECT ........................................................... 1 GO TO TM3
CONTACT INFORMATION NEEDS UPDATING .................................................. 0
UPDATE: NAME
UPDATE: STREET ADDRESS:

## STREET 1

STREET 2

STREET 3

## CITY

STATE

ZIP
 |-| $\qquad$ I _ $\qquad$ I_1. _
PHONE

EMAIL
DON'T KNOW d

REFUSED .r

# DEMONSTRATION=CHICKASAW NATION <br> IF FIRST TIME THROUGH LOOP: INCLUDE FILL 1: "WE WOULD ALSO LIKE TO DO A THIRD TELEPHONE SURVEY SIX MONTHS FROM NOW TO SEE HOW YOU ARE DOING. YOU WILL GET ANOTHER PREPAID CARD FOR PARTICIPATING IN THAT INTERVIEW." 

AFTER FIRST TIME THROUGH LOOP, DO NOT INCLUDE FILL1
TM3. [We would also like to do a third telephone survey six months from now to see how you are doing. You will get another prepaid card for participating in that interview.]

In case we can't reach you at this number, is there another number we should try?
$\qquad$ - - $\qquad$ - $\qquad$ __ ___| YES $\qquad$
NO ADDITIONAL PHONE AVAILABLE
REFUSED TO GIVE PHONE NUMBER............................................................. 3
REFUSED TO PARTICIPATE IN THIRD INTERVIEW ....................................... 9
9 GO TO END
DON'T KNOW
REFUSED
.r
GO TO END

TM3 $=1$
TM3.1 What is the telephone number we should try?
$\qquad$ | - $\qquad$ I - $\qquad$ - $\qquad$

DON'T KNOW d
$\qquad$

## TM3.1 PHONE NUMBER PROVIDED

TM3a. What type of phone number is this?

## SELECT CODING TYPE

$\qquad$
HOME PHONE 1

OFFICE PHONE .............................................................................................. 2
HOME AND OFFICE PHONE........................................................................... 3
CELL PHONE .................................................................................................... 4
PAGER............................................................................................................. 5
COMPUTER/FAX LINE...................................................................................... 6
OTHER............................................................................................................ 7
DON'T KNOW ...................................................................................................d
REFUSED ........................................................................................................... $r$

PROGRAMMER BOX
IF TM3 = ANSWERED LOOP OVER TM3 THROUGH TM3A UNTIL TM3 DOES NOT EQUAL 1. MAX 3 LOOPS.

TM3=1, 2, 3, OR PHONE NUMBER PROVIDED
TM3b. What is the email address where we can reach you?
EMAIL ADDRESS
NO EMAIL ADDRESS AVAILABLE ..... 0
DON'T KNOW ..... d
REFUSED ..... r

## TM3=1, 2, 3, OR PHONE NUMBER PROVIDED

TM4. In case we have trouble reaching you in 6 months, please give me the names and telephone numbers of two relatives or friends who would know where you could be reached. These should be friends or relatives not currently living in your household. Let's start with one friend or relative. What is his or her name?
[BE SURE TO VERIFY SPELLING]

|  | (STRING 25) | GO TO TM4A |
| :---: | :---: | :---: |
| FIRST NAME |  |  |
|  | (STRING 25) |  |
| LAST NAME |  |  |
| DON'T KNOW . | ...............d | GO TO TM4A |
| REFUSED.. | ............r | GO TO END |

TM4 NE R
TM4a. What is this person's telephone number, beginning with the area code?

(VOL) GAVE INTERNATIONAL PHONE NUMBER .......................................... 2
DON'T KNOW ..................................................................................................d
REFUSED .........................................................................................................r

TM4A NE 2, D, OR R
FILL= TM4 FIRST NAME
TM4b. And what is [FIRST NAME]'s relationship to you?
RELATIONSHIP
$\qquad$
REFUSED ........................................................................................................r

## TM3=1, 2, 3, OR PHONE NUMBER PROVIDED

TM5. How about a second friend or relative? What is his or her name?
[BE SURE TO VERIFY SPELLING]
(STRING 25) GO TO TM5A
FIRST NAME

LAST NAME
DON'T KNOW
$\qquad$ r GO TO END

TM5 NE R
TM5a. What is this person's telephone number, beginning with the area code?

|-|_| |__| I__| - I । | I_ I (VOL) GAVE INTERNATIONAL PHONE NUMBER .2
$\qquad$REFUSED
$\qquad$

TM5 NE 2, D, OR R
FILL= TM5 FIRST NAME

## TM5b. And what is [FIRST NAME]'s relationship to you?

RELATIONSHIP
DON'T KNOW d
$\qquad$

## ALL

IF DEMONSTRATION=CHICKASAW NATION AND TM3 NE 9: We look forward to speaking with you again in six months.

END. Thank you again for your help and have a good daylevening. [We look forward to speaking with you again in six months.]

## B.4. SECOND FOLLOW-UP SURVEY INSTRUMENT

The final Follow-Up \#2 Questionnaire for Households is shown in Appendix B.4.

# Evaluation of Demonstration Projects to End Childhood Hunger 

Follow-Up \#2 Questionnaire for Households

[^45]
## A. Introduction

## BASELINE AND FOLLOW-UP \#1 NON-RESPONDENT

IF FIELD LOCATOR PRESENT, FILL= "give"
ELSE FILL= "send"

## SampMembA.

For quality assurance purposes, this call may be monitored or recorded.
The interview will take approximately 30 minutes. It has questions about your children's food choices as well as general questions about you and your household. Your answers will help the government make its child nutrition programs better. As a way of saying thank you, we will [send/give] you $\$ 30$ for helping us.

Your participation in this interview is voluntary and you may stop at any time. You may also refuse to answer any question. Your benefits will not be affected by any answers to questions or if you choose not to participate.
All the information you give us will be kept private to the extent allowed by law. There is a small risk of the loss of confidentiality of your data, but procedures are in place to minimize this risk. Your name will not be attached to any of your answers. Your information will be used only in combination with information from other households for research purposes.

Do you have any questions about the interview before I begin?
CODE ONE ONLY
YES
1 GO TO FAQ
NO 0 GO TO EB1

DON'T KNOW d
$\qquad$

BASELINE OR FOLLOW-UP \#1 RESPONDENT
IF FIELD LOCATOR PRESENT, FILL1 = "give"
ELSE, FILL1 = "send"

## SampMembB.

For quality assurance purposes, this call may be monitored or recorded.
The interview will take approximately 30 minutes. It has questions about your children's food choices as well as general questions about you and your household. As a way of saying thank you, we will [give/send] you $\$ 30$ for helping us.
Do you have any questions before I begin?
CODE ONE ONLY
YES ..... 1 GO TO FAQ
NO ..... 0 GO TO EB1
DON'T KNOW ..... d
REFUSED ..... r

## B. Household Size and Composition

## BASELINE OR FOLLOW-UP \#1 RESPONDENT

FILL HHNUMB FROM BASELINE OR FOLLOW-UP \#1
EB1. Let's start by updating our information from our last interview. According to my records, there were [HHNUMB] people in your household that share their food together. Is that still correct?
YES ................................................................................................................. 1 GO TO EB4
NO ................................................................................................................... 0
GO TO EB2
DON'T KNOW .................................................................................................. d
d GO TO EB2
REFUSED ........................................................................................................r GO TO EB2

## BASELINE AND FOLLOW-UP \#1 NON-RESPONDENT OR [EB1=0, D, OR R]

EB2. Including yourself, how many people live in your household? Don't forget to include nonrelatives who live in your household and, of course, babies, small children and foster children. Also include people who usually live in your household but may have been away within the last 30 days for reasons such as: vacation, traveling for work, or in the hospital. Do not include children living away at school or anyone who is now incarcerated.

PROBE: By temporarily away we mean away within the last 30 days
|__|_| NUMBER OF PEOPLE (1-20)
DON'T KNOW .d

REFUSED .r

EB2=1
EB2a. Just to confirm, you are the only person living in the household. There are no children, non-relatives, or people who usually live there but are currently away?

YES
1
GO TO PROG BOXEB3
NO
0
REPEAT EB2
DON'T KNOW
d REPEAT EB2
REFUSED
.r

## EB2 GT 1

EB3. Do all the people who live with you share the food that is bought for the household?
YES $\qquad$ 1 GO TO PROGRAMMER BOX EB3

NO
0 GO TO EB3A
DON'T KNOW
d GO TO EB3A
REFUSED
r GO TO EB3A

PROGRAMMER BOX EB3
IF [EB2A=1 OR EB3=1] AND [BASELINE OR
FOLLOW-UP \#1 RESPONDENT], GO TO EB4. IF [EB2A=1 OR EB3=1] AND [BASELINE AND
FOLLOW-UP \#1 NON-RESPONDENT], GO TO EB5.

## EB3 NE 1

EB3a. Including yourself, how many people in your household share the food that is bought for the household?
|____| NUMBER OF PEOPLE (1-20)
DON'T KNOW d

REFUSED ..........................................................................................................r

PROGRAMMER BOX EB3A
IF BASELINE AND FOLLOW-UP \#1 NON-RESPONDENT, GO TO EB5. OTHERWISE, GO TO EB4.

## (EB1=1 OR EB2>1 OR EB2A=1) AND (BASELINE OR FOLLOW-UP \#1 RESPONDENT)

IF EB4a_DOB1 = ANSWERED, FILL1 = "date of birth"
ELSE, FILL1 = "age"
IF EB4_1 = ANSWERED AND NE D OR R, FILL2 = [NAME1]
ELSE, FILL2 = "a child"
IF EB4a_DOB1 = ANSWERED, FILL3 = "a date of birth [DOB1]"
ELSE, FILL3 = "an age of [AGE1]
IF EB4_1 = ANSWERED AND NE D OR R, FILL4 = [NAME1]
ELSE, FILL4 = "this child"
EB4. We would now like to confirm the information we collected in our last interview regarding the children living in your household. I am going to read you the name or initials for each child that we have from our last interview. I will also read each child's [date of birth/age] and gender. I would like for you to confirm whether the child still lives in your household and if his or her information is correct. I have [[NAME1]/a child] with [a date of birth of [DOB1]/an age of [AGE1] and [GENDER1]. Does ([NAME1]/this child) still live in your household?

INTERVIEWER: IF RESPONDENT SAID NONE OF THE CHILDREN ARE IN THE HOUSEHOLD, DO NOT ASK THE QUESTIONS ABOUT EACH CHILD. CODE "3" FOR EACH CHILD.

INTERVIEWER: IF CHILD IS DECEASED: I'm very sorry for your loss. CODE " 3 ."
CODE ONE ONLY
CHILD STILL LIVES IN HOUSEHOLD $\qquad$ 1 GO TO PROGRAMMER BOX EB4

CHILD INFORMATION IS INCORRECT $\qquad$ 2 GO TO PROGRAMMER BOX EB4

CHILD NO LONGER LIVES IN HOUSEHOLD OR IS DECEASED
3 GO TO PROGRAMMER BOX EB4

DON'T KNOW
d GO TO PROGRAMMER BOX EB4

REFUSED $\qquad$ r GO TO PROGRAMMER BOX EB4

> PROGRAMMER BOX EB4
> IF EB4=1 AND DOB1=.M AND AGE1=.M, GO TO EB4B. ELSE IF EB4=1 AND GENDER1=.M, GO TO EB4C. ELSE IF EB4=1, GO TO EB4_1. ELSE IF EB4=2, GO TO EB4A. ELSE, GO TO EB4D.

```
EB4=2
IF EB4_1 = ANSWERED AND NE D OR R, FILL = [NAME1]
ELSE, FILL = "this child"
```

EB4a. What is ([NAME1]/this child)'s date of birth? PROGRAMMER: COLLECT DATE WITH SEPARATE FIELDS


## (EB4=1 AND DOB1=.M AND AGE1=.M) OR EB4A=D OR R

IF EB4A=D OR R FILL1=Some people find it easier to select an age group.
IF EB4_1 = ANSWERED AND NE D OR R, FILL2 = [NAME1]
ELSE, FILL2 = "this child"
EB4b. [Some people find it easier to select an age group.] Please stop me when I reach ([NAME1]/this child)'s age group. Is it... CODE ONE ONLY

| Under 2 years old, | . 1 | GO TO EB4C |
| :---: | :---: | :---: |
| Age 2 to 5 years, | 2 | GO TO EB4C |
| Age 6 to 11 years, | 3 | GO TO EB4C |
| Age 12 to 17 years, or | 4 | GO TO EB4C |
| Age 18 or older and still in school? | 5 | GO TO EB4C |
| DON'T KNOW |  | GO TO EB4C |
| REFUSED | .r | GO TO EB4C |

EB4c. Is ([NAME1]/this child) a boy or girl?
INTERVIEWER: ASK IF RESPONDENT HAS NOT ALREADY MENTIONED CHILD'S SEX. CODE ONE ONLY

BOY
.1
GIRL
2
DON'T KNOW ......................................................................................................d
REFUSED .............................................................................................................r

```
(BASELINE DOB YEAR <2015) OR (EB4A YEAR <2015) OR (EB4B=2, 3, 4, OR 5)
IF EB4_1 = ANSWERED AND NE D OR R, FILL = [NAME1]
ELSE, FILL = "THIS CHILD"
```

EB4_1. Is ([NAME1]/this child) in grades pre-K through 12 in your local school system?
YES
1 GO TO EB4_2
NO 0
DON'T KNOW .................................................................................................d
REFUSED ........................................................................................................r

EB4_1=1
IF EB4_1 = ANSWERED AND NE D OR R, FILL = [NAME1]
ELSE, FILL = "THIS CHILD"
EB4_2. What school does ([NAME1]/this child) attend?

[List of schools + "other, specify" option]

DON'T KNOW
d
REFUSED
.r

| IF [(EB1=1 OR EB2>1)] AND [NUMCHILDBL > 1] |
| :--- |
| IF EB4_2 = ANSWERED AND NE D OR R, FILL1 = [NAME2] |
| ELSE, FILL1 = "this child" |
| IF EB4a_DOB2 = ANSWERED, FILL2 = "a date of birth of [DOB2]" |
| ELSE, FILL2 = "an age of [AGE2]" |
| IF EB4_2 = ANSWERED AND NE D OR R, FILL3 = [NAME2] |
| ELSE, FILL3 = "this child" |

EB4d. Now l'd like to ask about the next child we learned about in last year's interview. I have [[NAME2]/this child] with [a date of birth of [DOB2]/an age of [AGE2]] and [GENDER2]. Does [[NAME2]/this child] still live in your household?

|  | CODE ONE ONLY |  |
| :---: | :---: | :---: |
| YES | ......... 1 | GO TO PROG BOX EB4D |
| NO, INFORMATION IS INCORRECT.. | .......... 2 | GO TO PROG BOX EB4D |
| NO, CHILD NO LONGER LIVES IN HOUSEHOLD | ......... 3 | GO TO PROG BOX EB4D |
| DON'T KNOW ................... | ..............d | GO TO PROG BOX EB4D |
| REFUSED | ............r | GO TO PROG BOX EB4D |

## PROGRAMMER BOX EB4D

IF EB4D=1 AND DOB2=.M AND AGE2=.M, GO TO EB4F. ELSE IF EB4D=1 AND GENDER2=.M, GO TO EB4G. ELSE IF EB4D=1, GO TO EB4_3. ELSE IF EB4D=2, GO TO EB4E. ELSE GO TO EB4_4 PROGRAMMER BOX.

```
EB4D=2
IF EB4_2 = ANSWERED AND NE D OR R, FILL = [NAME2]
ELSE, FILL = "this child"
```

EB4e. What is ([NAME2]/this child)'s date of birth?
PROGRAMMER: COLLECT DATE WITH SEPARATE FIELDS


GO TO EB4G

DON'T KNOW d

GO TO EB4f
REFUSED .r GO TO EB4f

## (EB4D=1 AND DOB2=.M AND AGE2=.M) OR EB4E=D OR R

IF EB4E=D OR R FILL1="Some people find it easier to select an age group."
IF EB4_2 = ANSWERED AND NE D OR R, FILL2 = [NAME2]
ELSE, FILL2 = "this child"
EB4f. [Some people find it easier to select an age group.] Please stop me when I reach ([NAME2]/this child)'s age group. Is it...

CODE ONE ONLY

| Under 2 years old, | GO TO EB4G |
| :---: | :---: |
| Age 2 to 5 years, | GO TO EB4G |
| Age 6 to 11 years, | GO TO EB4G |
| Age 12 to 17 years, or | GO TO EB4G |
| Age 18 or older and still in school? | GO TO EB4G |
| DON'T KNOW | GO TO EB4G |
| REFUSED. | GO TO EB4G |

```
(EB4D=1 AND GENDER2=.M) OR EB4D=2
IF EB4_2 = ANSWERED AND NE D OR R, FILL = [NAME2]
ELSE, FILL = "this child"
EB4g. Is ([NAME2]/this child) a boy or girl? INTERVIEWER: ASK IF RESPONDENT HAS NOT ALREADY MENTIONED CHILD'S SEX. CODE ONE ONLY BOY .
```

GIRL ..... 2
DON'T KNOW ..... d
REFUSED ..... r
(BASELINE DOB YEAR <2015) OR (EB4E YEAR <2015) OR (EB4F=2, 3, 4, OR 5)
IF EB4_2 = ANSWERED AND NE D OR R, FILL = [NAME2]
ELSE, FILL = "THIS CHILD"

EB4_3. Is ([NAME2]/this child) in grades pre-K through 12 in your local school system? YES
$\qquad$DON'T KNOWd
REFUSED ..... r

EB4_3=1

IF EB4_2 = ANSWERED AND NE D OR R, FILL = [NAME2]

ELSE, FILL = "THIS CHILD"

EB4_4. What school does ([NAME2]/this child) attend?
[List of schools + "other, specify" option]
DON'T KNOW d

REFUSED ........................................................................................................r

> PROGRAMMER BOX EB4_4 4
> LOOP OVER EB4D THROUGH EB4_4 FOR ALL CHILDREN ON BASELINE HOUSEHOLD ROSTER THEN GO TO EB4H.

## BASELINE OR FOLLOW-UP \#1 RESPONDENT

EB4h. Are there any other children, age 18 or younger, or over 18 but still in high school, in your household that I have not asked about yet?

YES ............................................................................................................ 1 GO TO EB4I
NO
0 GO TO EC1
DON'T KNOW
d GO TO EC1
REFUSED r GO TO EC1

## EB4H=1

EB4i. How many additional children age 18 or younger, or over 18 but still in high school, are in your household that I have not asked about yet?
| | _ | NUMBER OF CHILDREN (1-20)
DON'T KNOW d

REFUSED .......................................................................................................r

PROGRAMMER BOX EB4I
IF EB4I = 1-20, GO TO EB7. IF D OR R, GO TO SECTION EC.

## BASELINE AND FOLLOW-UP \#1 NON-RESPONDENT

EB5. How many children are currently living in your household that were age 18 or younger or over 18 but were still in high school during the most recently completed school year?
$\qquad$ (1-20)
NO CHILDREN IN HOUSE
0
GO TO SECTION B PROGRAMMER BOX
DON'T KNOW ................................................................................................. d
REFUSED .......................................................................................................r

HARD CHECK: IF EB5 GT EB2; The number of children living in your household is greater than the total number of people living in your household. Did I make a mistake?
HARD CHECK: IF EB5 GT EB3a; The number of children living in your household is greater than the total number of people sharing food in your household. Did I make a mistake?

## EB5=0 OR D OR R

EB6. Is there at least one child living in your household?

YES $\qquad$
$\qquad$

DON'T KNOW $\qquad$ d

REFUSED $\qquad$

0 GO TO SECTION B PROGRAMMER BOX GO TO SECTION B PROGRAMMER BOX
REPEAT EB5

GO TO SECTION B PROGRAMMER BOX

## (EB4I GTE 1) OR (EB5 GTE 1)

IF EB4I=1 TO 20: For the children we haven't discussed already,
IF EB4I GT 1 OR EB5 GT 1: first

EB7. [For the children we haven't discussed already,] l'd like to make a list of the first names or initials of the children in your household. This will help me with asking some questions later. What is the name of the [first] child?

IF NEEDED: You can give me the child's initials or some other way to refer to the child.

## NAME

DON'T KNOW
$\qquad$

## (EB4I GTE 1) OR (EB5 GTE 1)

IF EB7 = ANSWERED AND NE D OR R, FILL = ANSWER FROM EB7
ELSE, FILL = "THIS CHILD"

## EB7a. What is ([ANSWER FROM EB7]/this child)'s date of birth?

PROGRAMMER: COLLECT DATE WITH SEPARATE FIELDSCOLLECT DATE WITH SEPARATE FIELDS
$\underset{\substack{\text { MONTH } \\(1-12)(1-31)(1996-2017)}}{\text { DAY }} \underset{\text { YEAR }}{ }$
(STRING 25)
(1-12) (1-31)(1996-2017) GO TO EB7C

DON'T KNOW .d

GO TO EB7B
REFUSED r GO TO EB7B

## EB7A=D OR R <br> IF EB7 = ANSWERED AND NE D OR R, FILL = ANSWER FROM EB7 <br> ELSE, FILL = "THIS CHILD"

EB7b. Some people find it easier to select an age group. This information will help me with asking some questions later. Please stop me when I reach ([ANSWER FROM EB7]/this child)'s age group. Is it. .

CODE ONLY ONE
Under 2 years old
1 GO TO EB7C
Age 2 to 5 years,
2 GO TO EB7C
Age 6 to 11 years
3 GO TO EB7C
Age 12 to 17 years, or..................................................................................... 4
.4 GO TO EB7C
Age 18 or older and still in school? ............................................................... 5 GO TO EB7C
DON'T KNOW ..................................................................................................
d GO TO EB7C
REFUSED ......................................................................................................r GO TO EB7C

```
(EB4I GTE 1) OR (EB5 GTE 1) OR (EB7B = RESPONSE OR D OR R)
IF EB7 = ANSWERED AND NE D OR R, FILL = ANSWER FROM EB7
ELSE, FILL = "THIS CHILD"
```


## EB7c. Is [NAME1]/this child) a boy or girl?

INTERVIEWER: ASK IF RESPONDENT HAS NOT ALREADY MENTIONED CHILD'S SEX.
CODE ONE ONLY
BOY
1
GIRL
2
DON'T KNOW .................................................................................................... d
REFUSED ........................................................................................................r

## (EB4I GTE 1) OR (EB5 GTE 1) AND [EB7A GTE 3 YEARS OR EB7B = 2,3,4, OR 5]

IF EB7 = ANSWERED AND NE D OR R, FILL = ANSWER FROM EB7
ELSE, FILL = "THIS CHILD"
EB7d. Is ([ANSWER FROM EB7]/this child) in grades pre-K through 12 in your local school system?
$\qquad$
NO ................................................................................................................... 0
DON'T KNOW .................................................................................................d
REFUSED .......................................................................................................r

```
EB7D=1
IF EB7 = ANSWERED AND NE D OR R, FILL = ANSWER FROM EB7
ELSE, FILL = "THIS CHILD"
```


## EB7e. What school does ([ANSWER FROM EB7]/this child) attend?

[List of schools + "other, specify" option]
DON'T KNOW ..... d
REFUSED ..... r
EB5E GT1 OR EB6 GT 1
EB8. What is the name of the next child?
NAME OR INITIAL
DON'T KNOW ..... d
REFUSED ..... r
EB8 = ANSWERED
IF EB8 = ANSWERED AND NE D OR R, FILL = ANSWER FROM EB8
ELSE, FILL = "this child"
EB8a. What is [NAME2]/this child)'s date of birth?
(1-12) (1-31) (1996-2017) GO TO EB8C
DON'T KNOW d GO TO EB8B
REFUSED ..... r GO TO EB8B

## EB8A=D OR R <br> IF EB8 = ANSWERED AND NE D OR R, FILL = ANSWER FROM EB8 ELSE, FILL = "THIS CHILD"

EB8b. Some people find it easier to select an age group. This information will help me with asking some questions later. Please stop me when I reach ([ANSWER FROM EB8]/this child)'s age group. Is it. .

## CODE ONE ONLY

Under 2 years old,
1
GO TO EB8C
Age 2 to 5 years,
2 GO TO EB8C
Age 6 to 11 years,
3 GO TO EB8C
Age 12 to 17 years, or
4 GO TO EB8C
Age 18 or older and still in school? ............................................................... 5 GO TO EB8C
DON'T KNOW ..................................................................................................d
d GO TO EB8C
REFUSED ......................................................................................................r GO TO EB8C

## EB8=ANSWERED

IF EB8 = ANSWERED AND NE D OR R, FILL = ANSWER FROM EB8
ELSE, FILL = "THIS CHILD"
EB8c. Is [NAME2]/this child) a boy or girl?
INTERVIEWER: ASK IF RESPONDENT HAS NOT ALREADY MENTIONED CHILD'S SEX.
CODE ONE ONLY
BOY
..
GIRL
2
DON'T KNOW .................................................................................................. $d$
REFUSED ........................................................................................................r
(EB4I GT1 OR EB5 GT 1) AND [EB8A GTE 3 YEARS OR EB8B $=2,3,4, \mathrm{OR} 5]$
IF EB8 = ANSWERED AND NE D OR R, FILL = ANSWER FROM EB8
ELSE, FILL = "THIS CHILD"
EB8d. Is ([ANSWER FROM EB8]/this child) in grades pre-K through 12 in your local school system?
YES .................................................................................................................... 1
$\qquad$
DON'T KNOW

REFUSED

```
EB8D=1
IF EB8 = ANSWERED AND NE D OR R, FILL = ANSWER FROM EB8
ELSE, FILL = "THIS CHILD"
```

EB8e. What school does ([ANSWER FROM EB8]/this child) attend?

| [List of schools + "other, specify" option] |  |
| :---: | :---: |
| DON'T KNOW | GO TO PROG BOX EB8G |
| REFUSED | GO TO PROG BOX EB8G |

PROGRAMMER BOX EB8G LOOP OVER EB8 THROUGH EB8G FOR ALL CHILDREN IN EB4I OR EB5.

## PROGRAMMER BOX SECTION B:

CREATE PROGRAMMED VARIABLES FOR NUMBER OF CHILDREN IN HOUSEHOLD (NUMCHILDFU2), AND TOTAL HOUSEHOLD SIZE (HHNUMBFU2).
IF (EB5=0) OR (EB6=0, D, OR R) THEN
NUMCHILDFU2=0. IF (EB5=D OR R) AND (EB6=0, D, OR R) THEN NUMCHILDFU2=0.

IF NUMCHILDFU2=0 GO TO SECTION D. ELSE GO TO EC1.

IF [EB2 $=$ DK OR R] OR [EB2A $=R]$
EB9a. I apologize, this survey is for individuals with at least one child under the age of 18 in the house.

Status refusal, Go to END.

## C. Children's Program Participation

For the next series of questions we'll be asking about meals and snacks the children in your household may have had during the last 30 days, that is, since [DATE (DATE OF INTERVIEW -30 DAYS)].

## [KIDSGTE3FU2] GTE 1

EC1. On school days during the last 30 days, how many children in your household usually ate breakfast at school?
|___| NUMBER OF CHILDREN
(0- MAX NUMBER GTE AGE 3 YEARS)
DON'T KNOW ................................................................................................d GO TO EC1A
$\qquad$ r GO TO EC1A

## EC1 NE 0

EC1a. On school days during the last 30 days, how many children in your household got free or reduced-price breakfasts at school?
____| NUMBER OF CHILDREN
(0- MAX NUMBER ENROLLED IN PRE-K TO 12)
DON'T KNOW d
$\qquad$

## [KIDSGTE3FU2] GTE 1

EC1b. On school days during the last 30 days, how many children in your household usually ate a lunch provided by the school?
_____| NUMBER OF CHILDREN
(0- MAX NUMBER GTE AGE 3 YEARS)
DON'T KNOW d

GO TO EC1C
REFUSED $\qquad$ r GO TO EC1C

## EC1B NE 0

EC1c. On school days during the last 30 days, how many children in your household got free or reduced-price lunches at school?
|____| NUMBER OF CHILDREN
(0- MAX NUMBER GTE AGE 3 YEARS)
DON'T KNOW d
$\qquad$

## [KIDSGTE3FU2] GTE 1

EC1d. During the last 30 days, how many children in your household got free supper meals at an after school program held in their school building?
|____| NUMBER OF CHILDREN
(0-20)
DON'T KNOW .................................................................................................... d
REFUSED ...........................................................................................................r

## [KIDSGTE3FU2] GTE 1

EC1e. During the last 30 days, how many children in your household participated in any other after school program where meals or snacks are served?
|____| NUMBER OF CHILDREN
(0- MAX NUMBER GTE AGE 3 YEARS)
DON'T KNOW d

REFUSED ...........................................................................................................r
[KIDSLTE18FU2] GTE 1 [Asked only for period when the last 30-day period included summer.]
EC1f. During the last 30 days, how many children in your household received free meals or snacks at places such as summer school, a community center, day camp or park?
|____| NUMBER OF CHILDREN
(0-20)
DON'T KNOW d
$\qquad$

## [KIDSLTE5FU2] GTE1

EC1g. During the last 30 days, how many children in your household received meals or snacks at a daycare center, family or group daycare home, or Head Start center?
IF NEEDED: Please include children who received meals or snacks whether the meals or snacks were free, reduced-price, or paid. Please also include meals and snacks that were included in any payment you made to the center or home.
|____| NUMBER OF CHILDREN
(0- MAX NUMBER LTE AGE 5 YEARS)
DON'T KNOW
d
REFUSED ............................................................................................................ $r$

## [KIDSGTE3FU2] GTE1

EC2. During the last 30 days, how many children in your household got food through a school
PROBE IF NEEDED: The Backpack Food Program provides food for children to take home from school over weekends and holidays.
I__I__| NUMBER OF CHILDREN
(0-MAX NUMBER GTE AGE 3 YEARS)
$\qquad$
DON'T KNOW d
$\qquad$ .r

## [KIDSGTE3FU2] GTE1

EC3. How many children in your household received Summer EBT for Children benefits this past summer, that is, summer 2017?
|_____| NUMBER OF CHILDREN (0-20)

DON'T KNOW ..................................................................................................
REFUSED .......................................................................................................r

## D. Food Purchase Behavior and Other Food Behavior

These next questions are about where you shop for food for your household.

## ALL

ED1. During the past 30 days, about how many times did you or someone in your household shop for food?
|___|_| NUMBER OF TIMES
(0-30)
DON'T KNOW .d
$\qquad$

ALL
ED2. During the past 30 days, at what kind of store did you buy most of your groceries? INTERVIEWER: READ ONLY IF NECESSARY

INTERVIEWER: CODE "ALDI" AS A SUPERMARKET/GROCERY STORE
CODE ONE ONLY
SUPERMARKETS/GROCERY STORES SUCH AS ALDI OR SAVE-A-LOT ...... 1
DISCOUNT STORES SUCH AS WAL-MART, TARGET, OR KMART ................ 2
WAREHOUSE CLUBS, SUCH AS PRICE CLUB, COSTCO, PACE, SAM'S CLUB, OR BJ'S

3
CONVENIENCE STORES SUCH AS 7-11, QUICK CHECK, QUICK STOP ....... 4
GAS STATIONS, SUCH AS SHELL, FLYING J, EXXON, MARATHON, OR AMACO .5
ETHNIC FOOD STORES SUCH AS BODEGAS, ASIAN FOOD MARKETS, OR CARIBBEAN MARKETS ..... 6
FARMERS' MARKETS ..... 7
DOLLAR STORES ..... 8
SURPLUS/CLOSE-OUT RETAILERS SUCH AS BIG LOTS ..... 9
OTHER (SPECIFY) ..... 99DON'T KNOWd
REFUSED ..... r
ED2 $=99$
ED2_Specify. INTERVIEWER: SPECIFY OTHER KIND OF STORE.
$\qquad$REFUSEDr

## ALL

ED4b. And approximately how many miles away is that store from your home - one way?
INTERVIEWER: ENTER MIDPOINT IF RANGE IS GIVEN; IF LESS THAN ONE MILE ENTER "0"
$\left.\right|_{(1-99)} \mid$ NUMBER OF MILES ONE WAY
DON'T KNOW d
REFUSED .r

SOFT CHECK: IF GT 30; I just want to make sure I recorded your answer correctly. Did you say [ANSWER FROM ED4B]?

## ALL

ED5. How many nights a week does your family typically sit down together to have dinner as a family?

CODE ONE ONLY
EVERY NIGHT ................................................................................................. 1
5 OR 6 NIGHTS ................................................................................................ 2
3 OR 4 NIGHTS ............................................................................................... 3
1 OR 2 NIGHTS ................................................................................................. 4
NEVER............................................................................................................. 5
DON'T KNOW ..................................................................................................d
REFUSED .......................................................................................................r

## E. Food Security

PROGRAMMER BOX SECTION E
SELECT APPROPRIATE FILLS DEPENDING ON NUMBER OF ADULTS [ADULTSFU2] AND CHILDREN IN THE HOUSEHOLD [NUMCHILDFU2]. DEFAULT TO MULTIPLE ADULTS AND MULTIPLE CHILDREN IN HOUSEHOLD.

## ALL <br> FILL DATE $=$ [DATE OF INTERVIEW-30]

EE1. Now l'm going to read you several statements that people have made about their food situation. For these statements, please tell me whether the statement was often true, sometimes true, or never true for your household in the last 30 days, that is, since [DATE (DATE OF INTERVIEW -30 DAYS)].
The first statement is "We worried whether our food would run out before we got money to buy more." Was that often true, sometimes true, or never true for your household in the last 30 days?

CODE ONE ONLY
OFTEN TRUE 1

SOMETIMES TRUE 2

NEVER TRUE 3

DON'T KNOW .................................................................................................. $d$
REFUSED .......................................................................................................r

## ALL

EE2. "The food that we bought just didn't last, and we didn't have money to get more." Was that often, sometimes, or never true for your household in the last 30 days?

CODE ONE ONLY
OFTEN TRUE .................................................................................................. 1
SOMETIMES TRUE.......................................................................................... 2
NEVER TRUE ................................................................................................... 3
DON'T KNOW ...................................................................................................d
REFUSED ........................................................................................................r

## ALL

EE3. "We couldn't afford to eat balanced meals." Was that often, sometimes, or never true for your household in the last 30 days?

## CODE ONE ONLY

OFTEN TRUE .................................................................................................. 1
SOMETIMES TRUE.......................................................................................... 2
NEVER TRUE .................................................................................................... 3
DON'T KNOW ...................................................................................................d
REFUSED .......................................................................................................r

PROGRAMMER BOX EE3
IF EE1=1 OR 2 OR EE2=1 OR 2 OR EE3=1 OR 2, GO TO EE4; OTHERWISE, SKIP TO EE9.

EE1=1 OR 2 OR TE2=1 OR 2 OR EE3=1 OR 2
IF [ADULTSFU2] > 1: "or other adults in your household"
FILL DATE = [DATE OF INTERVIEW -30]

| EE4. | In the last 30 days, that is, since [DATE (DATE OF INTERVIEW -30 DAYS)], did you [or other adults in your household] ever cut the size of your meals or skip meals because there wasn't enough money for food? |  |
| :---: | :---: | :---: |
|  | YES ...................................................................................................... 1 | GO TO EE4A |
|  | NO ....................................................................................................... 0 | GO TO EE5 |
|  | DON'T KNOW ........................................................................................d | GO TO EE5 |
|  | REFUSED .............................................................................................r | GO TO EE5 |

## EE4=1

EE4a. In the last 30 days, how many days did this happen?

| $\left.\frac{l_{(1-30)}}{} \right\rvert\,$ NUMBER OF DAYS | GO TO EE5 |
| :---: | :---: |
| DON'T KNOW ............ | GO TO EE4B |
| REFUSED | GO TO EE5 |

## EE4A=D

EE4b. Do you think it was one or two days, or more than two days?

## CODE ONE ONLY

ONE OR TWO DAYS....................................................................................... 1
MORE THAN TWO DAYS ................................................................................. 2
DON'T KNOW ..................................................................................................d
REFUSED ........................................................................................................r

## EE1=1 OR 2 OR EE2=1 OR 2 OR EE3=1 OR 2

EE5. In the last 30 days, did you ever eat less than you felt you should because there wasn't enough money for food?
YES ..... 1
NO ..... 0
DON'T KNOW ..... d
REFUSED ..... r
EE1=1 OR 2 OR EE2=1 OR 2 OR EE3=1 OR 2
EE6. In the last 30 days, were you ever hungry but didn't eat because there wasn't enoughmoney for food?
YES ..... 1
NO ..... 0
DON'T KNOW ..... d
REFUSED ..... r
EE1=1 OR 2 OR EE2=1 OR 2 OR EE3=1 OR 2
EE7. In the last 30 days, did you lose weight because there wasn't enough money for food?YES1
NO ..... 0
DON'T KNOW ..... d
REFUSED ..... r

```
                                    PROGRAMMER BOX EE7
IF EE4=1 OR EE5=1 OR EE6=1 OR EE7=1, GO TO EE8;
OTHERWISE, SKIP TO EE9.
```

```
EE4=1 OR EE5=1 OR EE6=1 OR EE7=1
IF [ADULTSFU2] > 1: "OR OTHER ADULTS IN YOUR HOUSEHOLD"
```

EE8. In the last 30 days, did you [or other adults in your household] ever not eat for a whole day because there wasn't enough money for food?

$\qquad$
NO ..... 0
GO TO EE9
DON'T KNOW ..... d GO TO EE9
REFUSED ..... r

## EE8=1

EE8a. In the last $\mathbf{3 0}$ days, how many days did this happen?
|__|__| NUMBER OF DAYS
GO TO EE9
(1-30)

DON'T KNOW d

REFUSED ........................................................................................................r GO TO EE9

## EE8A=D

EE8b. Do you think it was one or two days, or more than two days?
CODE ONE ONLY
ONE OR TWO DAYS....................................................................................... 1
MORE THAN TWO DAYS ................................................................................ 2
DON'T KNOW ...................................................................................................d
REFUSED .........................................................................................................r

PROGRAMMER BOX EE8B
IF NUMCHILDFU2= 0 SKIP TO EF1. OTHERWISE, GO TO EE9.

## [NUMCHILDFU2] GT 0

IF [ADULTSFU2] = 1 AND [NUMCHILDFU2] = 1, FILL = "I RELIED ON ONLY A FEW KINDS OF LOWCOST FOOD TO FEED MY CHILD BECAUSE I WAS RUNNING OUT OF MONEY TO BUY FOOD."
IF [ADULTSFU2] = 1 AND [NUMCHILDFU2] >1, FILL = "I RELIED ON ONLY A FEW KINDS OF LOWCOST FOOD TO FEED MY CHILDREN BECAUSE I WAS RUNNING OUT OF MONEY TO BUY FOOD."
IF [ADULTSFU2]>1 AND [NUMCHILDFU2] =1, FILL = "WE RELIED ON ONLY A FEW KINDS OF LOW-COST FOOD TO FEED OUR CHILD BECAUSE WE WERE RUNNING OUT OF MONEY TO BUY FOOD"
IF [ADULTSFU2]>1 AND [NUMCHILDFU2]>1, FILL = "WE RELIED ON ONLY A FEW KINDS OF LOW-COST FOOD TO FEED OUR CHILDREN BECAUSE WE WERE RUNNING OUT OF MONEY TO BUY FOOD."

EE9. Now l'm going to read you several statements that people have made about the food situation of their children. For these statements, please tell me whether the statement was often true, sometimes true, or never true in the last 30 days for [your child/children living in the household who are under 18 years old or 18 or older but still in high school].
IF SINGLE ADULT AND SINGLE CHILD:
"I relied on only a few kinds of low-cost food to feed my child because I was running out of money to buy food."

## IF SINGLE ADULT AND MULTIPLE CHILDREN:

"I relied on only a few kinds of low-cost food to feed my children because I was running out of money to buy food."
IF MULTIPLE ADULTS AND SINGLE CHILD:
"We relied on only a few kinds of low-cost food to feed our child because we were running out of money to buy food."
IF MULTIPLE ADULTS AND MULTIPLE CHILDREN:
"We relied on only a few kinds of low-cost food to feed our children because we were running out of money to buy food."

SHOW FOR ALL:
Was that often, sometimes, or never true for your household in the last 30 days?
OFTEN TRUE
SOMETIMES TRUE......................................................................................... 2
NEVER TRUE .................................................................................................... 3
DON'T KNOW ...................................................................................................d
REFUSED ........................................................................................................r

```
[NUMCHILDFU2] GT 0
IF [ADULTSFU2] = 1 AND [NUMCHILDFU2] = 1, FILL = "I COULDN'T FEED MY CHILD A BALANCED
MEAL, BECAUSE I COULDN'T AFFORD THAT."
IF [ADULTSFU2] = 1 AND [NUMCHILDFU2] >1, FILL = "I COULDN'T FEED MY CHILDREN A
BALANCED MEAL, BECAUSE I COULDN'T AFFORD THAT."
IF [ADULTSFU2]>1 AND [NUMCHILDFU2] =1, FILL = "WE COULDN'T FEED OUR CHILD A
BALANCED MEAL, BECAUSE WE COULDN'T AFFORD THAT."
IF [ADULTSFU2]>1 AND [NUMCHILDFU2]>1, FILL = "WE COULDN'T FEED OUR CHILDREN A
BALANCED MEAL, BECAUSE WE COULDN'T AFFORD THAT."
```


## EE10. IF SINGLE ADULT AND SINGLE CHILD

"I couldn't feed my child a balanced meal, because I couldn't afford that."
IF SINGLE ADULT AND MULTIPLE CHILDREN:
"I couldn't feed my children a balanced meal, because I couldn't afford that." IF MULTIPLE ADULTS AND SINGLE CHILD:
"We couldn't feed our child a balanced meal, because we couldn't afford that." IF MULTIPLE ADULTS AND MULTIPLE CHILDREN:
"We couldn't feed our children a balanced meal, because we couldn't afford that."
SHOW FOR ALL:
Was that often, sometimes, or never true for your household in the last 30 days?
$\qquad$
$\qquad$
$\qquad$
$\qquad$
REFUSED ............................................................................................................ $r$

```
[NUMCHILDFU2] GT 0
IF [ADULTSFU2] = 1 AND [NUMCHILDFU2] = 1, FILL = "MY CHILD WAS NOT EATING ENOUGH
BECAUSE I JUST COULDN'T AFFORD ENOUGH FOOD."
IF [ADULTSFU2] = 1 AND [NUMCHILDFU2] >1, FILL = "MY CHILDREN WERE NOT EATING
ENOUGH BECAUSE I JUST COULDN'T AFFORD ENOUGH FOOD."
IF [ADULTSFU2]>1 AND [NUMCHILDFU2] =1, FILL = "OUR CHILD WAS NOT EATING ENOUGH
BECAUSE WE JUST COULDN'T AFFORD ENOUGH FOOD."
IF [ADULTSFU2]>1 AND [NUMCHILDFU2]>1, FILL = "OUR CHILDREN WERE NOT EATING
ENOUGH BECAUSE WE JUST COULDN'T AFFORD ENOUGH FOOD"
```


## EE11. IF SINGLE ADULT AND SINGLE CHILD:

 "My child was not eating enough because I just couldn't afford enough food." IF SINGLE ADULT AND MULTIPLE CHILDREN:"My children were not eating enough because I just couldn't afford enough food." IF MULTIPLE ADULTS AND SINGLE CHILD:
"Our child was not eating enough because we just couldn't afford enough food." IF MULTIPLE ADULTS AND MULTIPLE CHILDREN:
"Our children were not eating enough because we just couldn't afford enough food." SHOW FOR ALL:

Was that often, sometimes, or never true for your household in the last 30 days?
OFTEN TRUE 1
$\qquad$
NEVER TRUE ......................................................................................................... 3
DON'T KNOW ........................................................................................................ d
$\qquad$

## PROGRAMMER BOX EE11

IF [EE9=1 OR 2 OR EE10=1 OR 2 OR EE11=1 OR 2] AND [NUMCHILDFU2] GT 0, GO TO EE12; OTHERWISE, SKIP TO EF1.

```
[NUMCHILDFU2] GT 0 AND (EE9=1 OR 2 OR EE10=1 OR 2 OR TE11=1 OR 2)
IF [NUMCHILDFU2] = 1, FILL = "your child's"
IF [NUMCHILDFU2] > 1, FILL = "any of your children's"
FILL DATE = [DATE OF INTERVIEW-30]
```

EE12. In the last 30 days, that is, since [DATE (DATE OF INTERVIEW -30 DAYS)], did you ever cut the size of [your child's/any of your children's] meals because there wasn't enough money for food?
$\qquad$
NO .................................................................................................................... 0
DON'T KNOW .................................................................................................d
REFUSED .......................................................................................................r

## [NUMCHILDFU2] GT 0 AND (EE9=1 OR 2 OR EE10=1 OR 2 OR EE11=1 OR 2)

IF [NUMCHILDFU2] = 1, FILL = "your child"
IF [NUMCHILDFU2] > 1, FILL = "any of your children"

| EE13. | In the last 30 days, did [your child/any of your children] ever skip meals because there wasn't enough money for food? |  |
| :---: | :---: | :---: |
|  | YES ...................................................................................................... 1 | GO TO EE13A |
|  | NO ....................................................................................................... 2 | GO TO EE14 |
|  | DON'T KNOW .......................................................................................d | GO TO EE14 |
|  | REFUSED ..............................................................................................r | GO TO EE14 |

## [NUMCHILDFU2] GT 0 AND EE13=1

## EE13a. In the last 30 days, how many days did this happen?

|__I__| NUMBER OF DAYS GO TO EE14 (1-30)
DON'T KNOW
d GO TO EE13B
REFUSED
r GO TO EE14

## [NUMCHILDFU2] GT 0 AND EE13A=D

EE13b. Do you think it was one or two days, or more than two days?
CODE ONE ONLY
ONE OR TWO DAYS 1

MORE THAN TWO DAYS ................................................................................. 2
DON'T KNOW ..................................................................................................d
REFUSED .......................................................................................................r

```
[NUMCHILDFU2] GT 0 AND (EE9=1 OR 2 OR EE10=1 OR 2 OR EE11=1 OR 2)
IF [NUMCHILDFU2] = 1, FILL = "was your child"
IF [NUMCHILDFU2] > 1, FILL = "were your children"
```

EE14. In the last 30 days, [was your child/were your children] ever hungry but you just couldn't afford more food?

YES $\qquad$
NO ..... 0
DON'T KNOW ..... d
REFUSED ..... r
[NUMCHILDFU2] GT 0 AND (EE9=1 OR 2 OR EE10=1 OR 2 OR EE11=1 OR 2)
IF [NUMCHILDFU2] = 1, FILL = "your child" IF [NUMCHILDFU2] > 1, FILL = "any of your children"
EE15. In the last 30 days, did [your child/any of your children] ever not eat for a whole day because there wasn't enough money for food? YES ..... 1
NO ..... 0
DON'T KNOW ..... d
REFUSED ..... r

## F. Food Expenditures

Now, l'd like to ask some questions about shopping for food and eating at restaurants. These questions are about out-of-pocket spending on food. Later on I will ask you about purchases made with government benefits like SNAP, WIC, or FDPIR.

## ALL <br> FILL DATE = [DATE OF INTERVIEW-30]

EF1. First l'll ask you about money spent on food at supermarkets and other stores. Then we will talk about money spent at fast food restaurants and other restaurants.
Excluding any government benefits like SNAP or WIC, since [DATE (DATE OF INTERVIEW -30 DAYS)] how much money did your family spend out of pocket at supermarkets, grocery stores, and other stores? Please do not include fast food restaurants and other types of restaurants.

PROBE: This includes stores such as Wal-Mart, Target, and Kmart, convenience stores like 7-11 or Mini Mart, stores like Costco or Sam's Club, dollar stores, bakeries, meat markets, vegetable stands, or farmer's markets.
PROBE: Please include the total amount spent in the past 30 days, since [DATE (DATE OF INTERVIEW -30 DAYS)].
INTERVIEWER: RECORD "0" IF NO MONEY WAS SPENT
\$ |__|__|__|__| MONEY SPENT ( $\mathbf{| c} 0-\$ 9,999$ )
DON'T KNOW ................................................................................................d d GO TO EF4
REFUSED ...................................................................................................... G GO TO EF4

## EF1=1 TO 9,999

FILL1=AMOUNT FROM EF1
EF2. Was any of this \$[AMOUNT FROM eF1] spent on nonfood items such as cleaning or paper products, pet food, cigarettes, or alcoholic beverages?

YES ................................................................................................................ 1 GO TO EF3
NO ............................................................................................................... 0 GO TO EF4
DON'T KNOW ................................................................................................d GO TO EF4
REFUSED .......................................................................................................r GO TO EF4

## EF2=1 <br> FILL=AMOUNT FROM EF1

EF3. About how much of the $\$[$ AMOUNT FROM EF1] was spent on nonfood items?INTERVIEWER: RECORD "0" IF NO MONEY WAS SPENT
\$ |___|_____| MONEY SPENT $(\$ 1-\$ 9,999)$
NO MONEY SPENT ..... 0
DON'T KNOW ..... d
REFUSED ..... r

HARD CHECK: IF [EF1 = \$0-9,999] AND [EF3>EF1]; The amount spent on nonfood items is greater than the total amount spent at supermarkets, grocery stores, or other stores. Did I make a mistake?

## ALL

EF4. During the last 30 days, how many times did your family eat food from a fast food restaurant or other kinds of restaurants? Include restaurant meals at home, at fast food or other restaurants, carryout, or drive thru.

Durante los últimos 30 días, ¿cuántas veces su familia comió comida de un restaurante de comida rápida u otros restaurantes? Incluya comida de restaurante consumida en la casa, en restaurantes de comida rápida u otros restaurantes, comidas para llevar, o de servicio al carro.

PROBE IF NEEDED: Please include the total number of visits in the past 30 days, since [DATE (DATE OF INTERVIEW -30 DAYS)].
PROBE IF NEEDED: Such as food you get at McDonald's, KFC, Panda Express, Taco Bell, Pizza Hut, food trucks, Applebee's, Chili's, TGI Fridays, etc.
|___|__| TIMES (1-99)
$\qquad$
SECTION EG
REFUSED $\qquad$ .r

GO TO
SECTION EG

```
EF4 = 1-99
```

EF5. About how much money did your family spend on food at all types of restaurants including fast food restaurants during the last 30 days?
PROBE: Please include the total amount spent in the past 30 days, since [DATE (DATE OF INTERVIEW -30 DAYS)].
INTERVIEWER: RECORD "0" IF NO MONEY WAS SPENT
\$ |_________| MONEY SPENT (\$0-\$9,999)
$\qquad$
DON'T KNOW ..................................................................................................... d
REFUSED ...........................................................................................................r

## G. Other Program Participation

Next, l'm going to read the names of some programs that provide food or meals or other services to individuals or households.

| ALL |
| :--- |
| FILL DATE $=[$ [DATE OF INTERVIEW-30] |


| EG1. | In the last 30 days, that is, since [DATE OF INTERVIEW -30 DAYS], did you or anyone in your household receive food or benefits from the Women, Infants and Children program called WIC? |  |
| :---: | :---: | :---: |
|  | YES ....................................................................................................... 1 |  |
|  | NO ......................................................................................................... 0 | GO TO EG2 |
|  | DON'T KNOW ........................................................................................ d | GO TO EG2 |
|  | REFUSED | GO TO EG2 |

EG1=1
EG1a. How many women, infants, or children in the household got WIC foods or benefits?
$\left.\frac{l_{(1-20)}}{} \right\rvert\,$ NUMBER OF WOMEN, INFANTS OR CHILDREN
DON'T KNOW
.d GO TO EG2
REFUSED .............................................................................................................
r GO TO EG2

## [NUMCHILDFU2] GT 0 AND EG1A=1-20 AND [KIDSLTE5FU2]>0

EG1b. Of those, how many were infants or children up to age $\mathbf{5 ?}$
|____| NUMBER OF INFANTS OR CHILDREN (0-MAX NUMBER OF CHILDREN LTE AGE 5 YEARS)
DON'T KNOW d
REFUSED ...........................................................................................................r

## ALL

EG2. In the last 30 days did you or anyone in your household receive food or meals from food pantries, food banks, local soup kitchens or emergency kitchens, community program, senior center, shelter, Meals on Wheels (or other programs delivering meals to your home), or church?
YES 1

NO ...................................................................................................................... 0
DON'T KNOW ...................................................................................................... d
REFUSED .........................................................................................................r

## ALL

EG3. Do you or others in your household currently receive monthly commodity foods as part of the Food Distribution Program on Indian Reservations, also called FDPIR, fi-dipper, or fidpurr?
YES .1
NO ..... 0
DON'T KNOW ..... d
REFUSED ..... r
IN TREATMENT GROUP
EG4. How often did you try the recipes included with each Direct Mail food delivery?
Every time or nearly every time,1 GO TO EG4A
Sometimes, or ..... 2 GO TO EG4A
None of the time or nearly none of the time? ..... 3 GO TO EG4A
DID NOT ORDER/RECEIVE A FOOD DELIVERY (VOLUNTEERED) ..... 4 GO TO EH1
DON'T KNOW ..... d GO TO EG4A
REFUSED ..... $r$

EG4a. About how much of the Direct Mail food delivery does your household eat each time you receive it? Would you say... CODE ONE ONLY

All or most of the items, 1 GO TO EH1

Some of the items, or
2 GO TO EG4B
None or nearly none of the items?
.3 GO TO EG4B
DON'T KNOW ..................................................................................................d GO TO EH1
REFUSED .......................................................................................................r GO TO EH1

## EG4A=2 OR 3

EG4b. What does your household do with the items that aren't used in the month they are delivered? Does your household...

CODE ALL THAT APPLY
Save the items for another time, .1

Give the items to family or friends, or ........................................................... 2
Throw the items away? .3
DON'T KNOWd
REFUSED ..... r

## H. SNAP Enrollment

## ALL

EH1. In the last 6 months, has your household ever been enrolled in [FILL STATE SNAPPROGRAM NAME], or SNAP?PROBE IF NEEDED: SNAP is the program formerly known as 'FoodStamps.'
YES ..... 1
NO ..... 0 GO TO El1
DON'T KNOW ..... d GO TO El1
REFUSED ..... r
EH1=1

EH1a. In the last 6 months, how long did your household receive [FILL STATE SNAP PROGRAM NAME]? If your household received [FILL STATE SNAP PROGRAM NAME], stopped receiving it, and then started again, please include all of that time.
|__|____| AMOUNT OF TIME
DAYS (RANGE 1-183) ..... 1
WEEKS (RANGE 1-26) ..... 2
MONTHS (RANGE 1-6) ..... 3
DON'T KNOW ..... d
REFUSED ..... r
IF EH1A = 1-365
EH1b. Is that days, weeks, or months?
DAYS1
WEEKS ..... 2
MONTHS ..... 3
DON'T KNOW ..... d
REFUSED ..... r

## ALL

EH2. In total, how long have you and your household ever received [FILL STATE SNAP PROGRAM NAME]?
IF NEEDED: Please include all of the time your household has received [FILL STATE SNAP PROGRAM NAME], even if your household has started and stopped receiving benefits more than once.
INTERVIEWER: RECORD "0" IF NEVER ON SNAP
_______|AMOUNT OF TIME
NEVER .................................................................................................................... 0
DAYS (RANGE 1-365)......................................................................................... 1
WEEKS (RANGE 1-52)........................................................................................ 2
MONTHS (RANGE 1-12) ...................................................................................... 3
YEARS (RANGE 1-50)........................................................................................... 4
DON'T KNOW ....................................................................................................... d
REFUSED ..........................................................................................................r

IF EH2 = 1-365
EH2a. Is that days, weeks, months, or years?
DAYS.................................................................................................................... 1
WEEKS ............................................................................................................... 2
MONTHS............................................................................................................. 3
YEARS .................................................................................................................. 4
DON'T KNOW ....................................................................................................... d
REFUSED ..............................................................................................................r

## EH1=1

EH3. Are you or others in your household currently receiving [FILL STATE SNAP PROGRAM NAME]?
$\qquad$
NO .................................................................................................................... 0 GO TO EJ1
DON'T KNOW ..................................................................................................d GO TO EJ1
REFUSED .............................................................................................................r GO TO EJ1

## EH3=1

EH4. What is the amount of the [FILL STATE SNAP PROGRAM NAME] your household receives per month?
\$ |__|__|__|_ | DOLLAR AMOUNT
(\$1-\$9999)
DON'T KNOW $\qquad$
REFUSED
.r GO TO EJ1

## EH3=1

EH5. In the last 6 months, did the amount of the benefit increase, decrease, or stay the same?

## CODE ONE ONLY

INCREASED .

DECREASED 2

BOTH INCREASED AND DECREASED ........................................................... 3
STAYED SAME............................................................................................... 4
DON'T KNOW ...................................................................................................d
GO TO EJ1
REFUSED .....................................................................................................r GO TO EJ1

## EH3=1

EH6. How many weeks do your [FILL STATE SNAP PROGRAM NAME] benefits allotments usually last?
INTERVIEWER: CODE ANY ANSWER GREATER THAN 8 WEEKS AS 8
|__| NUMBER OF WEEKS (0-8)

DON'T KNOW .................................................................................................d GO TO EJ1
REFUSED .........................................................................................................r GO TO EJ1

## J. Household Resources

## ALL

FILL DATE = [DATE OF INTERVIEW-30]
EJ1. The next questions are about working or jobs. Were you or any other adult in your household working for pay in the last 30 days, that is, since [DATE (DATE OF INTERVIEW 30 DAYS)]?
$\qquad$
NO .................................................................................................................... 0
$\qquad$
REFUSED .......................................................................................................r

## ALL <br> FILL LAST MONTH = [CURRENT MONTH-1]

EJ3. What was your household's total income last month, during [LAST MONTH (CURRENT MONTH -1)] before taxes? Please include all types of income received by all household members last month, including all earnings, Social Security, pensions, Veteran's Benefits, Unemployment Insurance, worker's compensation benefits, child support, payments from roomers or boarders, and cash welfare benefits such as TANF (TAH-nif) and SSI. Do not include the value of SNAP benefits or food stamps, WIC, Medicaid, or public housing.
\$ $\qquad$ DOLLAR AMOUNT (\$1 - 99,999)
DON'T KNOW d
GO TO EJ3B
REFUSED .r

## EJ3=D OR R

EJ3b. Some people find it easier to select an income range. Please stop me when I reach your household's total income for last month. Was it...
CODE ONE ONLY
Less than $\$ 500$, ..... 1
$\$ 500$ to less than $\$ 1,000$, ..... 2
\$1,000 to less than \$1,500 ..... 3
\$1,500 to less than \$2,000, ..... 4
\$2,000 to less than \$2,500, ..... 5
$\$ 2,500$ to less than $\$ 3,000$, or ..... 6
$\$ 3,000$ or more? ..... 7
DON'T KNOW ..... d
REFUSED ..... r

## ALL

| EJ4. | And, what was your household's total income last year before taxes? |  |
| :---: | :---: | :---: |
|  | Probe if needed: Please include all types of income received by all household members last year, including all earnings, Social Security, pensions, Veteran's Benefits, Unemployment Insurance, worker's compensation benefits, child support, payments from roomers or boarders, and cash welfare benefits such as TANF (TAH-nif) and SSI. Do not include the value of SNAP benefits or food stamps, WIC, Medicaid, or public housing. |  |
|  | DOLLAR AMOUNT (\$1-150,000) |  |
|  | DON'T KNOW .........................................................................................d | GO TO EJ4A |
|  | REFUSED ..............................................................................................r | GO TO EJ4A |

## EJ4=D OR R

## EJ4a. Some people find it easier to select an income range. Please stop me when I reach your household's total income for last year. Was it...

CODE ONE ONLY
Less than \$10,000, ..... 1 GO TO El4
$\$ 10,000$ to less than $\mathbf{\$ 2 0 , 0 0 0}$, ..... 2
GO TO El4
$\$ 20,000$ to less than $\$ 35,000$ ..... 3
GO TO El4
$\$ 35,000$ to less than $\$ 50,000$, ..... 4
GO TO EI4
$\$ 50,000$ to less than $\$ 75,000$ ..... 5
GO TO El4
\$75,000 to less than \$100,000 ..... 6 GO TO El4
$\$ 100,000$ to less than $\$ 150,000$, or ..... 7
GO TO El4
\$150,000 or more? ..... 8
DON'T KNOW ..... d
GO TO El4
REFUSED ..... r
GO TO EI4

## ALL <br> FILL DATE = [DATE OF INTERVIEW-30]

EJ5. The next questions are about sources of income. The answers to these and all other questions on this survey will be kept private and will never be associated with your name. During the last 30 days, that is, since [DATE (DATE OF INTERVIEW -30 DAYS)], did you or anyone in your household receive...

|  | CODE ONE PER ROWCODE ONE PER ROW |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | YES | NO | DON'T KNOW | REFUSED |
| a. TANF or Temporary Assistance to Needy Families, or other welfare such as General Assistance? | 1 | 0 | d | $r$ |
| Social Security from the government for retirement, disability, or survivors' benefits, or other retirement benefits such as a government or private pension or annuity? | 1 | 0 | d | $r$ |
| SSI or Supplemental Security Income from the federal, state, or local government? | 1 | 0 | d | $r$ |
| Veteran's Benefits? | 1 | 0 | d | r |
| Unemployment Insurance or worker's compensation benefits? | 1 | 0 | d | r |
| Child support payments or payments from roomers or boarders? | 1 | 0 | d | $r$ |
| Financial support from friends or family? | 1 | 0 | d | $r$ |
| Any other income besides earnings? | 1 | 0 | d | r |

## $\mathrm{El} 4 \mathrm{H}=1$

## EJ5h_Specify. What is that other income?

## DESCRIPTION

DON'T KNOW d

REFUSED ........................................................................................................r

## ALL

EJ7. Now l'd like to ask you about how much help you would expect to get from different sources if your household had a problem with which you needed help, for example, sickness or moving. After I read each source, please tell me if you would you expect to get all of the help needed, most of the help needed, very little of the help needed, or no help?

INTERVIEWER: REPEAT ANSWER CHOICES AS NEEDED.
CODE ONE PER ROWCODE ONE PER ROW
a. Family living nearby?
b. Friends?
c. Other people in the community besides family and friends, such as a social 1

2
3
4
d
r

| ALL OF <br> THE HELP <br> NEEDED | MOST OF <br> THE HELP <br> NEEDED | VERY LITTLE <br> OF THE HELP <br> NEEDED | NO <br> HELP | DON'T <br> KNOW | REFUSED |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | d | r |
| 1 | 2 | 3 | 4 | d | r |

## K. Trigger Events

The next few questions are about changes that may have occurred in your household in the past 6 months.

## ALL

EK1. Has there been a change in the number of people living in your household over the past 6 months?
$\qquad$
$\qquad$ 0 GO TO EJ3
DON'T KNOW ......................................................................................................
d GO TO EJ3
REFUSED .......................................................................................................r GO TO EJ3

## EK1=1

EK2. What caused that change?
CODE ALL THAT APPLY
BIRTH OF CHILD................................................................................................. 1
NEW STEP, FOSTER OR ADOPTED CHILD ....................................................... 2
MARRIAGE/NEW PARTNER ............................................................................... 3
SEPARATION OR DIVORCE ............................................................................... 4
DEATH OF HOUSEHOLD MEMBER .................................................................... 5
FAMILY/BOARDER MOVING IN ........................................................................... 6
FAMILY/BOARDER MOVING OUT ...................................................................... 7
HOUSEHOLD MEMBER INCARCERATED ......................................................... 8
OTHER (SPECIFY)............................................................................................... 9
(STRING 50)
DON'T KNOW ........................................................................................................ d
$\qquad$
EJ $2=9$

EJ 2_Specify.
INTERVIEWER:
SPECIFY OTHER CHANGE.
(STRING 50)
DESCRIPTION
DON'T KNOW .d
$\qquad$

## ALL

EK3. At any time in the past 6 months was your household evicted from your house or apartment?
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## ALL

EK4. Have you or anyone in your household had a change in employment or a change in pay or hours worked from a job in the past 6 months?
$\qquad$
$\qquad$ 0 GO TO EJ 1
DON'T KNOW ........................................................................................................
d GOTO EJ 1
REFUSED .........................................................................................................r GO TO EJ 1

EK 4=1
EK4a. What was that change in employment or a change in pay or hours worked from a job that you or someone in your household experienced in the past 6 months?

## CODE ALL THAT APPLY

OBTAINED A JOB
1
LOST JOB............................................................................................................ 2
INCREASE IN PAY OR HOURS ........................................................................... 3
DECREASE IN PAY OR HOURS ........................................................................... 4
OTHER (SPECIFY)................................................................................................ 9
$\qquad$
DON'T KNOW d

REFUSED .............................................................................................................r

EK 4A = 9
EK 4a_Specify.INTERVIEWER: SPECIFY OTHER CHANGE.

## DESCRIPTION

DON'T KNOW
(STRING 50)

REFUSED .............................................................................................................. $r$

## L. Respondent Demographics and Health Status

## ALL

EL1. Now, I have a few questions about you.

## [RECORD GENDER FROM OBSERVATION.]

[ONLY IF NECESSARY - ASK: Because it is sometimes difficult to determine over the phone, I am asked to confirm with everyone...Are you male or female?]
INTERVIEWER: CODE DON'T KNOW IF RESPONDENT DOES NOT WANT TO IDENTIFY AS MALE OR FEMALE
MALE. .1
FEMALE ........................................................................................................... 2
DON'T KNOW ..................................................................................................d
REFUSED .......................................................................................................r

## IF [NUMCHILDFU2] GT 0

EL2. What is your relationship to the children living in the household?
INTERVIEWER: READ ONLY IF NECESSARY
CODE ALL THAT APPLY
BIOLOGICAL/ADOPTIVE PARENT
.1
STEP-PARENT ................................................................................................. 2
GRANDPARENT............................................................................................... 3
GREAT GRANDPARENT ................................................................................. 4
SIBLING/STEPSIBLING ................................................................................... 5
OTHER RELATIVE OR IN LAW ........................................................................ 6
FOSTER PARENT ............................................................................................ 7
OTHER NON-RELATIVE ................................................................................... 8
PARENT'S PARTNER ...................................................................................... 9
DON'T KNOW ..................................................................................................d
REFUSED ....................................................................................................... $r$

## ALL

EL3. Are you of Hispanic or Latino origin?
HISPANIC OR LATINO.................................................................................... 1
NOT HISPANIC OR LATINO ............................................................................ 0
DON'T KNOW ..................................................................................................d
REFUSED ........................................................................................................r

## ALL

## EL4. I am going to read a list of five race categories. Please choose one or more races that you consider yourself to be. American Indian or Alaska Native; Asian; Black or African American; Native Hawaiian or other Pacific Islander; White?

 CODE ALL THAT APPLYAMERICAN INDIAN OR ALASKA NATIVE .1
ASIAN ..... 2
BLACK OR AFRICAN AMERICAN ..... 3
NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER ..... 4
WHITE ..... 5
DON'T KNOW ..... d
REFUSED ..... r

## ALL

EL5. What is your current marital status? Are you now married, divorced, separated, widowed, never married, or living with a partner?

CODE ONE ONLY
MARRIED
.1
SEPARATED OR DIVORCED ........................................................................... 2
WIDOWED ......................................................................................................... 3
NEVER MARRIED ............................................................................................ 4
LIVING WITH PARTNER.................................................................................. 5
DON'T KNOW ..................................................................................................d
REFUSED .........................................................................................................r

## ALL

EL6. What is your date of birth?
PROGRAMMER: COLLECT DATE WITH SEPARATE FIELDS
$|\underline{M O N T H}|$
(1-12) (1-31) (1916-2001)
DON'T KNOW ....................................................................................................d
REFUSED ........................................................................................................r

## EL6 = D OR R

EL6a. I can record your age instead if you would like. How many years old are you?
$\qquad$ YEARS (18-99)DON'T KNOWd
REFUSED ..... r
ALL
EL7. What is the highest grade or level of school you have completed or the highest degree you have received?[ENTER HIGHEST LEVEL OF SCHOOL.]
NEVER ATTENDED/KINDERGARTEN ONLY ..... 0
1ST GRADE ..... 1
2ND GRADE ..... 2
3RD GRADE ..... 3
4TH GRADE ..... 4
5TH GRADE ..... 5
6TH GRADE ..... 6
7TH GRADE ..... 7
8TH GRADE ..... 8
9TH GRADE ..... 9
10TH GRADE ..... 10
11TH GRADE ..... 11
12TH GRADE, NO DIPLOMA ..... 12
HIGH SCHOOL GRADUATE ..... 13
GED OR EQUIVALENT ..... 14
SOME COLLEGE, NO DEGREE ..... 15
ASSOCIATE DEGREE: OCCUPATIONAL, TECHNICAL, OR VOCATIONAL PROGRAM ..... 16
ASSOCIATE DEGREE: ACADEMIC PROGRAM ..... 17
BACHELOR'S DEGREE (EXAMPLE: BA, AB, BS, BBA) ..... 18
MASTER'S DEGREE (EXAMPLE: MA, MS, MEng, MEd, MBA) ..... 19
PROFESSIONAL SCHOOL DEGREE (EXAMPLE: MD, DDS, DVM, JD) ..... 20
DOCTORAL DEGREE (EXAMPLE: PhD, EdD) ..... 21
DON'T KNOW ..... d
REFUSED ..... r

## ALL

EL8. In general, would say your health is excellent, very good, good, fair or poor? CODE ONE ONLY
EXCELLENT .................................................................................................... 1

VERY GOOD ................................................................................................... 2
GOOD ................................................................................................................ 3
FAIR ................................................................................................................. 4
POOR................................................................................................................ 5
DON'T KNOW ..................................................................................................d
REFUSED ........................................................................................................r

## M. Closing Information

> ALL
> IF NOT FIELD CALL IN, fill: Thank you very much for your time. You have really helped us with this study. I'd like to confirm your address so we can send you a $\$ 30$ gift card within the next few weeks.
> IF FIELD CALL IN, fill: To thank you for completing the survey, your field interviewer will give you a $\$ 30$ gift card. We would just like to confirm your contact information.

TM2. [Thank you very much for your time. You have really helped us with this study. l'd like to confirm your address so we can send you a $\$ 30$ gift card within the next few weeks.]

Field: [To thank you for completing the survey, your field interviewer will give you a $\$ 30$ gift card. We would just like to confirm your contact information.]
[ASK ALL:] According to our records we have...
[FILL FIRSTNAME LASTNAME FROM SMS]
[FILL STREET ADDRESS FROM SMS]
[FILL CITY, STATE, ZIP CODE FROM SMS]
[IF DEMONSTRATION=CHICKASAW NATION FILL EMAIL ADDRESS FROM SMS]
[IF DEMONSTRATION=CHICKASAW NATION FILL PHONE NUMBER FROM SMS]
CONTACT INFORMATION IS CORRECT
1 GO TO END
CONTACT INFORMATION NEEDS UPDATING ............................................... 0
UPDATE: NAME
UPDATE: STREET ADDRESS:

## STREET 1

STREET 2

STREET 3

| CITY |
| :--- |
| STATE |

## ZIP



EMAIL
$\qquad$
REFUSED ........................................................................................................r

## ALL

END. Thank you again for your help and have a good day/evening.

## B.5. QUALITATIVE DATA COLLECTION METHODS

Several qualitative data collection methods were used to describe the Packed Promise project and how it was implemented. The main sources of information to support the implementation analyses were: (1) site visits, including interviews with project staff and observations of project activities; (2) focus groups with parents and caregivers of treatment school children; (3) data on take-up of food boxes (including Fresh Checks), and outreach to households from the management information system (MIS) data); and (4) reviews of grantee documents including the grant application, quarterly progress reports to FNS, and operational materials (such as food box brochures, a list of items included in the food boxes, recipes and nutrition education handouts, a local food system assessment report, and letters to participants). Exhibit B. 3 identifies the objectives that each of the data sources helped to address. The remainder of this section describes the data collection methods for the site visit interviews and focus groups. Section B.6, on quantitative data, describes the MIS data collection methods.

Exhibit B.3. Implementation analysis objectives and data sources

|  | Data sources |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Site visits |  |  |  |  |
| Objectives | Staff interviews | Observations | Participant <br> focus groups | Project <br> documents | MIS data |

Project vision/description

| Intervention components | $x$ | X |  | X |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Logic model | X |  |  | X |  |
| Target population | X |  | X | X |  |
| Partners | X |  |  | X |  |
| Implementation processes |  |  |  |  |  |
| Outreach/enrollment/retention | X |  | X | X | $X$ |
| Service structure and provision | X | X | X | X | X |
| Staffing structure | X |  |  | X |  |
| Role of partners | X | X |  | X |  |
| Challenges | X |  | $x$ | X | X |
| Perceptions | X |  | X |  |  |
| Interpretation of project impacts |  |  |  |  |  |
| Participant characteristics | $x$ |  | $x$ |  |  |
| Influence of project design | X |  | X |  |  |
| Influence of implementation | X |  | X |  | X |

Source: Evaluation of Demonstration Projects to End Childhood Hunger.

## A. Interviews with project staff

Three site visits were conducted in Chickasaw Nation. The first visit occurred at the end of the planning period to coincide with the initial efforts to launch the intervention to (1) document planning processes, (2) describe the selected intervention model and vision, and (3) understand the project's cost components. The first site visit took place over two days, November 4-5, 2015, and included six semi-structured interviews with 10 key project staff, an observation of Feed the

Children's warehouse (where the Packed Promise foods and checks were stored and boxed), and a demonstration of the food ordering website. The site visitors met with CNNS staff in Ada, Oklahoma, and Feed the Children staff in Oklahoma City, Oklahoma. Interview topics included the vision or logic model for the project, planned project design and staffing structure, implementation plans and timelines, changes to information technology systems or data infrastructure, staff hiring and training, community context, and the planning process itself.

The second site visit occurred 9 months into full project operations, October 25-27, 2016; and the third site visit occurred 12 months later, in October 23-26, 2017. Combined, these operational period site visits included 12 semi-structured interviews with 11 key project staff from CNNS and Feed the Children. The goal of the second site visit was to describe operations at a steady-state level. The semi-structured interviews covered the same topics as the first site visit but with a focus on activities and experiences during the operational period. The interviews probed about leadership and partner roles, staffing structures, recruitment and engagement strategies, specific services offered and received, deviations from plans, interviewees' perceptions of challenges and successes, and changes made in year two.

Interviewees from CNNS included all project leaders and outreach specialists. Feed the Children interviewees included corporate leaders who oversee operations, supply chain management, and information technology, and staff responsible for the Packed Promise food ordering website. Two members of the research team conducted the visits. Site visitors completed a training before the first visit, with a refresher training before the second visit, to ensure they understood the data collection goals and tools, could capture the necessary data, and could lead interviews with appropriate cultural sensitivity.

Regular telephone calls with project staff were conducted during the planning and operational phases to supplement the staff interviews. The purpose of the calls was to obtain regular updates on both accomplishments and challenges encountered and how they were addressed. The calls were also an opportunity to provide Chickasaw Nation with ongoing evaluation technical assistance to support and monitor all data collection activities (including survey outreach and consent activities and MIS and administrative data collection). The same members of the evaluation team conducted both the telephone calls and the site visits.

## B. Focus groups with project participants

In addition to interviews with key project staff, the second and third site visits included a total of four focus groups with 46 Packed Promise participants. At each site visit, two 90 -minute focus groups were conducted with the parents or guardians of children in treatment schools. They were located in Byng, Wynnewood, Colbert, and Sulphur, Oklahoma. Participants were recruited from the pool of treatment households that completed a follow-up survey, indicated they would be willing to be contacted for an interview, and resided in zip codes near the focus group location. They provided a firsthand account of benefits offered and received and their experiences with and impressions of those benefits and the staff delivering them. Although the participants were not intended to be representative of the entire treatment group, their experiences complemented data collected from project staff to provide a holistic view of project implementation and help interpret project impacts. Guided by a semi-structured protocol, discussions covered how participants learned of the project, their motivation to participate, the
services they received, their experiences interacting with project staff and the project website, their perceptions on the usefulness of the project for feeding their children, thoughts on the project's successes and challenges, and their suggestions for project improvement.

Focus groups were held in the evenings at the local elementary or high school. Attendees provided active consent before participating in the discussion and received a $\$ 50$ gift card afterward. The telephone interviewers who administered the household surveys were trained to recruit focus group participants. The site visitors were trained to lead the focus group discussions with cultural sensitivity and take detailed notes.

## B.6. QUANTITATIVE DATA METHODS

The implementation and impact analyses drew from several quantitative data sources, grouped as follows: (1) administrative data on the Summer EBT for Children program and Summer Food Service Program (SFSP); (2) MIS data on food boxes, fresh checks, and staff outreach; and (3) records of costs incurred.

## A. Administrative data

Administrative records were collected to compare Packed Promise household and nondemonstration household participation in the Summer EBT for Children program and describe the availability of the SFSP sites in Packed Promise demonstration school districts. Summer EBT for Children program administrative data included any CNNS household that received program benefits (as opposed to only those households in the demonstration school districts or the evaluation sample for the Packed Promise project).

CNNS provided Summer EBT for Children issuance data for summers 2016 and 2017. The Summer EBT for Children administrative data file included a numeric household identifier, child name, a numeric district identifier, and a categorical food pack variable that identified $\$ 30$ versus $\$ 60$ monthly benefit-levels. These variables were used to construct household-level variables on the number of children issued monthly benefits and the total monthly EBT benefit amount issued per household; the district identifier was used to assign households to treatment, control, and non-demonstration groups. Summer EBT for Children data file processing was completed using SAS version 9.4. Data were checked and cleaned for duplicate households, duplicate children within household, consistency of within-household benefit level, and consistency of household identifiers between 2016 and 2017.

The Oklahoma State Department of Education provided data that were used to describe SFSP site availability from May to August of 2016 in the demonstration's treatment and control school districts. The SFSP data file included, for each SFSP site, an identifier, site name, site address, and school district. Data file processing involved verifying that SFSP sites operated in demonstration school districts and de-duplicating SFSP site identifiers. Due to staff turnover in 2017, the Oklahoma State Department of Education was unable to provide comparable data on SFSP availability at the school district level for summer 2017.

## B. MIS data

MIS data were used to describe (1) receipt of Packed Promise food boxes, (2) Fresh Check redemption, and (3) staff outreach to households. CNNS provided monthly records of food box orders extracted from the online ordering system, Magento, and monthly records of food boxes shipped to households from the UPS shipping system. These monthly files identified, for every food box ordered, the name of the food box, order date, shipping date, expected delivery date, the unique check number that matched the Fresh Check enclosed in the box, and a unique household identifier. These data, which spanned February 2016 through February 2018, were used to calculate the monthly and overall participation rates, and number and characteristics of food boxes ordered. Data on Fresh Check redemption, provided by the banking vendor, included the dollar amount redeemed from each check, the date of redemption, the unique check number, and type of vendor where the check was redeemed. These data, in conjunction with the Magento food box data, were used to calculate household- and check-level redemption rates and usage statistics. Fresh Check data were from February 2016 through March 2018 because store vendors had an extra month after the demonstration concluded to deposit the checks with the bank. Finally, staff outreach data were collected by CNNS staff on a continuous basis and submitted in monthly files. For the first 18 months of the project, staff provided a log with every telephone call or email to households, including the mode and date of the contact and unique household identifier. Starting August 2017, staff simplified their tracking approach and instead provided the total number of contacts to households by mode.

Test data were screened for completeness and quality during the first few months of the project. Final data cleaning involved checking for completeness, illogical values, combining files and data sources (that is, combining Magento, UPS, and Fresh Check redemption data), and aggregating data to household and monthly levels.

## C. Cost data

The resource cost method was used to collect and analyze the costs of the Packed Promise project. The resource cost method identifies a set of resources used for the project, collects data on the costs of each resource, and then calculates (or "builds up") an estimate of the total cost (Ohls and Rosenberg 1999; Ponza et al. 1996). For this study, data on labor costs and other direct costs were collected from each organization involved in Packed Promise, including (1) CNNS, (2) Feed the Children, and (3) participating school districts. Exhibit B. 4 describes each resource category.

Exhibit B.4. Description of resource categories and collected costs

| Resource | $\quad$ Description |
| :--- | :--- |
| Labor | Wages and value of fringe benefits for staff that contributed to the intervention. For volunteer <br> or donated labor, data on the wages (without fringe benefits) that would have been paid if the <br> work performed by the volunteer had been performed by paid staff was requested. |
| Other direct <br> costs, including <br> food boxes and <br> Fresh Checks |  | | Other direct costs (ODCs) include any costs that were not considered direct material costs or |
| :--- |
| direct labor costs. ODCs include items such as travel, printing, postage, shipping, and |
| computer equipment. This project reported a large amount of ODC expenditures primarily |
| because the main components of the intervention, i.e., food boxes and Fresh Checks, were |
| provided to households using ODC resources. |

${ }^{\text {a }}$ Data on indirect costs were not collected because they were not always tracked, and requesting information on the costs for space, utilities, et cetera would have been both overly burdensome and unlikely to be affected by the intervention.
ODC = other direct costs.
Data on labor costs, other direct costs, and vendor or partner costs were requested on a quarterly basis using Excel workbooks. ${ }^{4}$ The Packed Promise project designated a cost data liaison, who coordinated completion of the workbooks. As the workbooks were distributed, a webinar was held to train the grantee's cost data liaisons on how to complete the forms. The cost study team was available to respond to questions throughout the study period. In addition, all cost forms were reviewed by Mathematica project liaisons, who alerted the cost team to any missing information, issues, or questions on the forms. The cost team worked with the project liaisons to communicate questions back to the grantee cost data contact.

The report differentiates between start-up costs (those associated with preparations for providing project benefits incurred during the project start-up period of February 1, 2015 to January 31, 2016) and implementation costs (those that were ongoing and associated with providing services during the implementation period of February 1, 2016 to March 31, 2018). The grantee continued to provide services after the evaluation period ended on March 31, 2018, so the costs reported in this report do not include costs for closing out operations or costs associated with the extension of the benefits period.

Component costs (that is, labor costs and other direct costs) were estimated by summing the cost of resources used for each component. Once component costs were estimated, these costs were summed across components to estimate the total cost of the intervention. Finally, the cost per household was estimated by dividing the total and component costs by the total number of consenting households eligible for food boxes in September 2016 ( $\mathrm{n}=2,054$ ).

[^46]
## B.7. CONSTRUCTION OF THE DIETARY OUTCOMES

Information on intake of specific dietary factors included in recommendations for the 2010 Dietary Guidelines for Americans (USDA and HHS 2010) was used to assess children's diet outcomes. The first follow-up survey included food frequency questions drawn from the 20092010 National Health and Nutrition Examination Survey (NHANES) Multifactor Diet Screener (NCI 2018b). Respondents (parents or guardians) reported how often (per day, per week, or per month) a selected child in the household ate 19 food and beverage items ${ }^{5}$ over the last 30 days. For cereals, they also reported the name and brand for the cereal eaten most often and for a second cereal, if applicable. Of the 2,852 households surveyed, 2,829 had at least one child between the ages of 2 and 21 and were therefore eligible for the dietary outcome analysis; 2,777 households responded to the food frequency survey items. ${ }^{6}$

NCI data processing and scoring procedures use information about both the frequency and type of foods consumed to estimate daily amounts of fruits and vegetables, whole grains and teaspoons of added sugars for individual children (NCI 2018a). Reports of children's consumption of the specific items were converted into five dietary indicators for the dietary outcome impact analysis:

1. Daily cup equivalents of fruits and vegetables ${ }^{7}$
2. Daily cup equivalents of fruits and vegetables, excluding fried potatoes ${ }^{7}$
3. Daily cup equivalents of fruits ${ }^{8}$
4. Daily cup equivalents of vegetables ${ }^{9}$
5. Daily cup equivalents of vegetables, excluding fried potatoes ${ }^{9}$
6. Daily ounce equivalents ${ }^{10}$ of whole grains (from cereals, whole-grain breads and tortillas, whole grain rice, and popcorn)
${ }^{5}$ Survey questions asked about a single item (for example, any kind of fried potatoes) or a group of foods that are nutritionally similar (for example, brown rice or other cooked whole grains including bulgur, cracked wheat, or millet).
${ }^{6}$ Cases where the selected child was missing gender or age were excluded from the dietary analysis because both are required to run the NCI algorithms to calculate food consumption. The median age of the randomly selected child was 10 in both the treatment and the control groups.
${ }^{7}$ One cup equivalent is defined as 1 cup raw or cooked fruit or vegetables, vegetable juice, or fruit juice; or 2 cups leafy green vegetables.
${ }^{8}$ One cup equivalent is defined as 1 cup raw or cooked fruit or fruit juice.
${ }^{9}$ One cup equivalent is defined as 1 cup raw or cooked vegetable or vegetable juice, or 2 cups leafy green vegetables.
${ }^{10}$ One ounce equivalent of whole grains is 1 one-ounce slice of bread; 1 ounce uncooked pasta or rice; $1 / 2$ cup cooked rice; pasta; or cereal; 16-inch diameter tortilla; 15 -inch diameter pancake; 1 ounce ready-to-eat cereal; or 3 cups popped popcorn.
7. Teaspoons per day of added sugars ${ }^{11}$
8. Teaspoons per day of added sugars from sugar-sweetened beverages

Before applying the NCI scoring algorithms, the study team performed two main data preparation tasks. First, all reported cereal names/brands were mapped to the closest food codes in the USDA Food and Nutrition Database for Dietary Studies (FNDDS) searchable database. ${ }^{12}$ Then, the reported frequencies of consumption for each food item in the survey were reviewed for extreme values. The data preparation procedures are summarized below.

## A. Cereal Coding

Household respondents had the option of reporting one or two types of cereals that the child usually ate in the previous 30 days. Most households ( $\mathrm{n}=2,536$ ) reported the first kind of cereal that the child usually ate, and 1,790 households indicated there was another cereal the child usually ate. Cereal frequency data were collected once, regardless of whether a second type of cereal was reported. However, if two different cereal types were reported for the first cereal reported, the algorithm assumes the first cereal is the most frequently consumed and weights it at 0.75 ; the second cereal, assumed to be less frequently consumed, is weighted at 0.25 .

Study nutritionists worked with programming staff to assign the most appropriate food code from the FNDDS to each reported cereal using programmed matching ( 3,878 of 4,303 cereals) and manual matching ( 425 of 4,303 cereals). The programmed matching involved assigning reported cereals - that is, one of the 19 cereal survey categories - to an FNDDS food code based on exact matches on the brand and cereal names, or (most commonly) exact matches on the cereal name only. The manual matching process involved assigning reported cereals to an FNDDS food code using one of several approaches, including: (1) close matches between cereal names and/or brand names, (2) default matches for unfamiliar cereals with generic brands, cereals that were new-to-market, cereals with brand reported only, or cereals with flavor or form reported only, or (3) matches based on the second reported cereal instead of the first reported cereal, which was missing or otherwise unusable data. After cereal matching was completed, cereals were manually coded as "hot" or "cold" cereal types. A senior nutritionist reviewed all programmed and manual matches and hot/cold cereal codes.

Most cereals were matched to FNDDS food codes appearing on a "master list" developed by NCI for cereal names/brands that were reported in NHANES 2009-2010. This list included some default codes to use when detailed descriptions were not provided (e.g., "cereal, ready-to-eat, not further specified"). Other cereal food codes were located on the FNDDS searchable database.

[^47]Still others required the development of EDECH-specific default coding rules because the reported cereal name/brand was not found in the NCI master list or FNDDS searchable database.

## B. Identifying Extreme Values

All reported frequencies of consumption (per day, per week, and per month) were first converted to daily values for each of the 19 food and beverage items. The study team reviewed the distributions of the reported frequencies, including the minimum and maximum values as well as outliers that exceeded the NHANES maximum value for daily consumption. Since it was plausible for a child to consume a food item a small number of times or not at all over the 30-day period, the review focused on identifying outliers and likely reporting errors at the upper end of the distribution. Interviewers confirmed values with respondents for foods or beverages if the respondent reported quantities of greater than one time per day (or two times per day for soda), 14 times a week, or 60 times per month.

The study team reviewed the distributions of consumption frequencies reported on a weekly and monthly basis. Nine values were recoded that were confirmed with the respondent during the interview because it appeared that the respondent misreported the number of times or month unit. Specifically, values were recoded to the number of times per month in the following instances: 20 and 30 cereals per day; 20, 21, and 31 other vegetables per day, and 27 and 30 servings of fresh, frozen or canned fruit per day.

Daily frequencies of intake that exceeded the NCI maximums ${ }^{13}$ were top coded by programming staff based on daily maximum values (i.e., the highest daily frequency observed in the NHANES data set just prior to the discontinuous point of the distribution) following NCI scoring procedures; maximum values were not excluded from analysis. Exhibit B. 5 shows, for each food and beverage item in the food frequency survey section (see Appendix B.3), the NCIdefined maximum acceptable value and the number of EDECH values (for the Packed Promise evaluation) top-coded to the maximum. The NHANES maximums, based on the general US population ages 2 through 69 years, are recommended by NCI to be appropriate for most U.S. populations.

A variable was also constructed to report the mean daily frequency or number of times daily each item was reported. That is, daily, weekly, and monthly frequencies were converted to a daily measure and then averaged for each food or beverage item.

[^48]
## Exhibit B.5. Maximum Acceptable Daily Frequency Values for Foods from NHANES 2009-2010 and EDECH 2017

| Survey item | Food/beverage item | NHANES 2009-10 <br> maximum acceptable <br> daily frequency value | Number of EDECH values <br> top-coded to the maximum <br> acceptable daily frequency value |
| :--- | :--- | :---: | :---: |
| TI2 | Any cereal | 7 | 0 |
| TI3 | Soda | 8 | 0 |
| TI4 | Fruit juice (100\%) | 8 | 2 |
| TI5 | Sugar/honey in coffee/tea | 10 | 1 |
| TI6 | Fruitades/sports drinks | 7 | 1 |
| TI7 | Fruit | 8 | 2 |
| TI8 | Salad | 5 | 0 |
| TI9 | Fried potatoes | 5 | 1 |
| TI9.2 | Other potatoes | 3 | 1 |
| TI10 | Dried beans | 4 | 0 |
| T111 | Cooked whole grains | 4 | 0 |
| TI12 | Other vegetables | 5 | 0 |
| TI13 | Salsa | 3 | 0 |
| TI14 | Pizza | 2 | 0 |
| TI15 | Tomato sauce | 2 | 3 |
| TI16 | Whole grain bread | 6 | 0 |
| TI17 | Doughnuts | 5 | 0 |
| TI18 | Cookies, cake, pie | 7 | 0 |
| TI19 | Popcorn | 3 | 1 |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations prepared by Mathematica Policy Research.
${ }^{\text {a }}$ Question numbers in the first follow-up survey (see Appendix B.3).
EDECH = Evaluation of Demonstrations to End Childhood Hunger; NHANES = National Health and Nutrition
Examination Survey.

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## APPENDIX C

SUPPLEMENTAL EXHIBITS ON PROJECT IMPLEMENTATION AND COSTS

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Appendix C contains supplemental exhibits on implementation and cost information to complement Chapter II. Section C. 1 includes exhibits on shelf-stable foods in the food boxes, illustrations of the online ordering process (i.e., screenshots) and Fresh Checks, staff outreach to Packed Promise households, treatment households' food box ordering and utilization of items, the characteristics of households based on their food box order patterns, and food box order characteristics. Section C. 2 includes exhibits on project costs.

## C.1. SUPPLEMENTAL IMPLEMENTATION EXHIBITS

Exhibit C.1.a. List of shelf-stable foods in each Packed Promise box

| Food group | Food box |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Hope | Tomorrow | Believe | Courage | Dream |
| Protein (6) | Dried pinto beans | Dried pinto beans | Dried pinto beans | Dried pinto beans | Dried pinto beans |
|  | Chicken (2) | Chicken (2) | Chicken (2) | Turkey (2) | Chicken (2) |
|  | Tuna (2) | Tuna (2) | Salmon (2) | Salmon (2) | Tuna (2) |
|  | Pinto and black beans | Peanut butter | Peanut butter | Peanut butter | Peanut butter |
|  | Hummus | Hummus | Mixed nuts | Pumpkin seeds | Hummus |
|  | Black eyed and kidney | Pinto and black beans | Chili and navy | Ranch style and chick peas | Refried and black |
| Dairy (2) | Low fat UHT milk (64 oz) | Low fat chocolate UHT | Low fat chocolate UHT | Low fat UHT milk (64 oz) | Low fat UHT milk (64 oz) |
|  | Pudding with calcium | Low fat UHT milk | Low fat UHT milk | Pudding with calcium | Pudding with calcium |
| Grains (4) | WG elbow macaroni | WG spaghetti | WG penne pasta | WG shells pasta | WG rotini pasta |
|  | Oatmeal | Oatmeal | Cereal | Cereal | Brown rice |
|  | Graham crackers | Wheat thins | Triscuits | Graham crackers | Granola bars |
|  | Low fat popcorn | Granola bars | Brown rice | Low fat popcorn | Low fat popcorn |
| Fruits (2) | Mandarin orange | Peaches | Apricot halves | Mango | Mandarin orange |
|  | Unsweetened applesauce | Unsweetened applesauce | Tropical fruit | Tart cherries | Pineapples |
| Vegetables <br> (9) | Diced tomatoes(2) | Diced tomatoes(2) | Diced tomatoes(2) | Diced tomatoes(2) | Diced tomatoes(2) |
|  | Tomato/pasta sauce (2) | Tomato/pasta sauce (2) | Tomato/pasta sauce (2) | Tomato/pasta sauce (2) | Tomato/pasta sauce (2) |
|  | Rotel (2) | Rotel (2) | Rotel (2) | Rotel (2) | Rotel (2) |
|  | Cut green beans | Cut green beans | Mixed vegetables | Okra, corn, tomatoes | Cut green beans |
|  | Diced carrots | Diced carrots | Asparagus | Diced carrots | Mixed vegetables |
|  | Spinach | Spinach | Sweet peas | Sliced beets | Sweet peas |
|  | Pumpkin | Pumpkin | Sliced beets | Pumpkin | Pumpkin |
|  | Sweet potatoes | Sweet potatoes | Sweet potatoes | Spinach | Sweet potatoes |
|  | Marinara | Marinara | Corn | New potatoes | Marinara |

Source: Chickasaw Nation Nutrition Services.
Note: Numbers in parenthesis reflect the number of items offered in that food group and the number of cans of chicken, tuna, salmon, turkey, tomatoes, and Rotel offered in each food box. Rotel is diced tomatoes, green chilies, and spices in a can. The items included in two of the boxes (Believe and Courage) were updated in June 2017; the items shown here reflect the updated contents.
UHT = ultra-high temperature (a processing technique for pasteurizing milk and making it shelf-stable so that refrigeration is not needed); WG = whole grain.

Exhibit C.1.b. Illustration of Fresh Check included in each Packed Promise box


Source: Chickasaw Nation Nutrition Services.
Exhibit C.1.c. Screenshots of the online ordering system for Packed Promise






Source: Chickasaw Nation Nutrition Services. A video of the storage and packing process is available at: https://www.packedpromise.com/cmspages/getfile.aspx?guid=e90a286a-67d4-4cc4-a6b0-78cc4f12b644.

## Exhibit C.2. Staff outreach to Packed Promise households

| Outcome | Percentage | Number (SE) |
| :---: | :---: | :---: |
| Proportion of households staff attempted to contact per month (median across months) (\%) ${ }^{\text {a }}$ | 24.1 | 494 |
| Median number of contact attempts made to households (among households contacted) ${ }^{\text {a }}$ | NA | 5.0 (0.12) |
| Proportion of households that staff attempted to contact: ${ }^{\text {a }}$ |  |  |
| 1 time | 15.4 | 326 |
| 2 to 5 times | 37.1 | 788 |
| 6 to 10 times | 28.0 | 594 |
| 11 to 20 times | 18.4 | 391 |
| 21 or more times | 1.1 | 23 |
| Contact attempts by mode (\%) ${ }^{\text {b }}$ |  |  |
| Phone/voice messages | 74.4 | 14,838 |
| Emails | 25.6 | 5,101 |
| Text messages ${ }^{\text {c }}$ | 0.1 | 17 |
| Wrong phone number indicated (\%) ${ }^{\text {a, d }}$ | 15.2 | 1,806 |
| Sample size (number of households) |  | 2,054 |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, Chickasaw Nation MIS database, contact records, 2016-2018. Tabulations were prepared by Mathematica Policy Research.
Notes: The full sample size ( $n=2,054$ ) represents the number of households eligible for Packed Promise benefits as of September 2016 and that consented to participate in the evaluation (3 households withdrew consent). This slightly overestimates the participation rate before September 2016 and underestimates it during the last school year. Data on contacts mostly represent the staff's attempts to contact households. Not every contact resulted in a staff member speaking with a household or a successful email transmission. Further, some of the data represent a household contacting staff because such records could not be distinguished and excluded.
${ }^{\text {a }}$ Analyses are based on February 2016-July 2017. Starting in August 2017, project staff ceased logging each contact attempt into their outreach database and instead documented the total number of contact attempts per month (by mode). May, June, and July 2017 undercount the number of contacts and households that were contacted as staff tapered off of logging every contact.
${ }^{\text {b }}$ Percentages are based on 19,956 total contact attempts that staff made during the 25 -month project.
${ }^{\text {c }}$ Manual text message only.
${ }^{d}$ This percentage is based on 11,877 telephone contact attempts. For the remainder of the contacts, data were missing on whether a phone number was unavailable.
MIS $=$ management information system; NA = not applicable; SE $=$ standard error.

## Exhibit C.3. Percentage of households that ordered a food box, by month



Source: Evaluation of Demonstration Projects to End Childhood Hunger, Chickasaw Nation MIS database, Magento and UPS shipping records, 2016-2018. Tabulations were prepared by Mathematica Policy Research.
Notes: The full sample size ( $n=2,054$ ) represents the number of households eligible for Packed Promise as of September 2016 and that consented to participate in the evaluation ( 3 households withdrew consent). This number overestimates the participation rate before September 2016 and underestimates it afterwards, particularly during the last school year, because the calculation includes households that lost eligibility after September 2016. Dates of food box orders were based on the dates the orders were placed. Due to rolling monthly eligibility in the first 13 project months, households could have placed orders for two 30 -day benefit periods during one calendar month. The monthly participation rate calculations were based on whether a household placed any order during a calendar month, and therefore undercount two orders placed in the same calendar month. On the other hand, some households may have placed orders for replacement boxes during a month. These replacement orders were removed from the data analysis when possible. Starting in March 2017, households' benefit period aligned with calendar months.
MIS = management information system; UPS = United Parcel Service.

## Exhibit C.4. Households with gaps of two or more months between food box orders

Outcome Percentage of households

Households with gaps of 2 or more months between orders
No gap of 2 or more months 60.6
1 gap 21.5
2 gaps 11.2
3 or more gaps 6.7
Maximum gap length (among households with gaps between orders)
2 months 35.3
3 months 25.5
4 months 13.6
5 or more months 25.5
Sample size 1,992
Source: Evaluation of Demonstration Projects to End Childhood Hunger, Chickasaw Nation MIS database, Magento and UPS shipping records, 2016-2018. Dates of food box orders were based on the order's shipping date in UPS shipping reports. Tabulations were prepared by Mathematica Policy Research.
Notes: The sample size ( $n=1,992$ ) represents the number of households that ordered at least one food box during the 25 -month implementation period; another 3\% of households did not order a box. The number of households with a gap of two or more calendar months between orders is 785. A gap is defined as a break of two or more calendar months between orders. A one-month break between orders is not counted as a gap because it could reflect the way in which orders from consecutive 30-day benefit periods were counted rather than when the orders were placed (for example, orders placed at the beginning and end of June for two consecutive 30-day benefit periods were counted in June and would appear as a one-month gap). The true number of gaps would thus be higher if counting one-month gaps.
MIS = management information system; UPS = United Parcel Service.
Exhibit C.5. Food Box ordering characteristics

| Characteristic | Percentage of food boxes ordered |
| :---: | :---: |
|  | $\begin{gathered} \text { Year } 2 \\ \text { (Feb. 2017-Feb. 2018) } \end{gathered}$ |
| Ordering method |  |
| Ordering website | 49.0 |
| Phone call to CNNS specialist | 51.0 |
| Food boxes ordered, by type ${ }^{\text {a }}$ |  |
| Promise for Tomorrow | 25.6 |
| Promise to Dream | 22.4 |
| Promise for Hope | 17.7 |
| Promise to Believe | 18.8 |
| Promise for Courage | 15.5 |
| Total number of food boxes ordered | 34,694 |
| Source: Evaluation of Demonstration Projects to End Childhood Hunger, Chickasaw Nation MIS database, Magento and UPS shipping records, 2016-2017. Tabulations were prepared by Mathematica Policy Research. Three of the households eligible to receive Packed Promise benefits were excluded from the analysis because they withdrew consent for the evaluation. |  |
| ${ }^{\text {a }}$ A description of each food box is shown in Appendix Exhibit C.1. |  |
| MIS = management information system; CNNS = Chickasaw Nation Nutrition Services; UPS = United Parcel Service. |  |

## Exhibit C.6. Characteristics of treatment households, among groups with distinct food box ordering patterns, at first follow-up

|  | Household pattern of ordering food boxes |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | No gaps of 2 months or more (SE) | At least one gap of 2 months or more (SE) | Dropped off (SE) | Never ordered (SE) |
| Household (HH) size |  |  |  |  |
| Mean number of HH members who share food | 4.4 (0.07) | 4.6 (0.11) | 4.2 (0.09) | 3.6 (0.15) |
| Mean number of children in household | 2.5 (0.06) | 2.7 (0.10) | 2.3 (0.06) | 2.0 (0.10) |
| Age of children (\%) |  |  |  |  |
| Less than 5 years | 25.8 | 40.2 | 37.4 | 45.2 |
| 5 to 11 years | 78.0 | 79.5 | 71.4 | 89.9 |
| 12 to 17 years | 57.6 | 54.2 | 47.4 | 28.5 |
| 18 years (or older if still in school) | 6.7 | 5.8 | 3.8 | 0.0 |
| Single adult household (\%) | 30.9 | 35.1 | 37.9 | 47.7 |
| Mean HH income last month (\$) ${ }^{\text {a }}$ | 2,141 (119) | 1,817 (119) | 1,761 (124) | 1,215 (120) |
| Any household adult employed in last 30 days (\%) | 74.8 | 77.0 | 70.4 | 79.5 |
| Nutrition benefit program participation (\%) ${ }^{\text {b }}$ |  |  |  |  |
| Reported currently receiving SNAP or FDPIR | 43.8 | 59.8 | 54.8 | 77.6 |
| Reported receiving WIC | 17.8 | 20.3 | 21.0 | 17.7 |
| Reported receiving food from food pantry, emergency kitchen, or other community program | 19.4 | 14.4 | 13.1 | 22.3 |
| Reported receiving FRPL | 95.2 | 96.8 | 94.9 | 91.9 |
| Reported receiving FRPB | 84.0 | 88.8 | 84.5 | 77.9 |
| Reported receiving any child nutrition benefits outside school hours | 37.6 | 39.6 | 42.4 | 38.5 |
| Received Summer EBT for Children | 63.2 | 52.8 | 50.2 | 48.1 |
| HH food security status (\%) |  |  |  |  |
| Insecure | 54.9 | 54.8 | 61.6 | 39.0 |
| VLFS-HH | 22.5 | 25.2 | 31.0 | 20.6 |
| Adult food security status (\%) |  |  |  |  |
| Insecure | 47.6 | 48.1 | 55.9 | 37.2 |
| VLFS-A | 22.5 | 25.2 | 31.0 | 20.6 |
| Child food security status (\%) |  |  |  |  |
| Insecure | 38.3 | 38.3 | 45.8 | 26.6 |
| VLFS-C | 2.5 | 1.6 | 2.9 | 0.0 |
| Respondent race/ethnicity (\%) |  |  |  |  |
| Hispanic, all races | 5.2 | 16.5 | 10.5 | 4.6 |
| Black or other, non-Hispanic | 17.7 | 18.2 | 15.4 | 23.9 |
| White, non-Hispanic | 65.6 | 47.8 | 55.9 | 53.9 |
| Native American, non-Hispanic | 11.5 | 17.5 | 18.2 | 17.7 |
| Respondent is age 40 or older (\%) | 45.2 | 27.9 | 30.0 | 14.7 |
| Respondent health status (\%) |  |  | 0 |  |
| Excellent, very good, or good | 68.4 | 69.4 | 64.1 | 72.2 |
| Fair or poor | 31.6 | 30.6 | 35.9 | 27.8 |
| Head of household language preference (\%) |  |  |  |  |
| English | 97.1 | 91.6 | 95.4 | 100.0 |
| Spanish | 2.9 | 8.4 | 4.6 | 0.0 |
| Sample size | 654 | 322 | 312 | 47 |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation Packed Promise project and were prepared by Mathematica Policy Research.
Note: All statistical tests account for weighting and the complex sampling design.
${ }^{\text {a }}$ Includes all earnings, Social Security, pensions, Veteran's benefits, unemployment insurance, worker' compensation benefits, child support, payments from roomers and borders, TANF, and SSI for all household members.
${ }^{\mathrm{b}}$ Calculated for all households as a descriptive variable and not constrained to only those households that are eligible for a specific program listed.
EBT = electronic benefits transfer; FDPIR = Food Distribution Program on Indian Reservations; FRPB = free or reducedprice breakfast; FRPL = free or reduced-price lunch; $\mathrm{HH}=$ household; SE = standard error; SNAP = Supplemental Nutrition Assistance Program; SSI= Supplemental Security Income; TANF = Temporary Assistance for Needy Families; VLFS-A = very low food security among adults; VLFS-C = very low food security among children; VLFS-HH = very low food security among households; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

## Exhibit C.7. Extent to which treatment households utilized the Packed Promise food box items

|  | Percentage of households |  |
| :--- | :---: | :---: |
| Outcome | First follow-up <br> survey | Second follow-up <br> survey |

How much of the shelf-stable food items households reported eating each time ${ }^{\text {a }}$

| All or most of the items | 80.1 | 76.5 |
| :--- | ---: | ---: |
| Some of the items | 18.6 | 21.4 |
| None or nearly none of the items | 1.3 |  |
| What households reported doing with the items that weren't used in <br> the month they were delivered |  |  |
| Saved the items for another time <br> Gave the items to family or friends <br> Threw the items away <br> How often households reported trying the recipes included with <br> each Packed Promise food delivery <br> Every time or nearly every time <br> Sometimes | 48.6 | 42.9 |
| None of the time or nearly none of the time | 1.1 | 66.2 |
| Did not order or receive a food delivery | 11.3 | 1.2 |
| Sample size | 50.0 | 11.5 |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first and second follow-up surveys. Tabulations are weighted to represent the target population in Chickasaw Nation and prepared by Mathematica Policy Research.
Note: $\quad$ The sample size is based on treatment households that responded to the survey.
${ }^{\text {a }}$ Calculated among those that ordered a food box. In the first follow-up survey sample, 77 households reported that they had not ordered a food box; in the second follow-up survey sample, 80 households reported that they had not ordered a food box. These households were not asked the questions about how much of the box contents they ate or what they did with uneaten portions, since the questions do not logically apply to them.

## C.2. SUPPLEMENTAL COST EXHIBITS

Exhibit C.8. Chickasaw Nation Packed Promise project costs

| Component | Start-up costs | Implementation costs ${ }^{\text {a }}$ |  |  | Total cost |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | First two quarters | Average per quarter | Total |  |
| Paid labor costs (wages plus fringe) |  |  |  |  |  |
| Chickasaw Nation | \$274,703 | \$124,061 | \$82,154 | \$739,387 | \$1,014,090 |
| Feed the Children | \$142,788 | \$101,201 | \$48,230 | \$434,066 | \$576,854 |
| School districts | \$18,211 | \$0 | \$0 | \$0 | \$18,211 |
| Total food boxes | \$0 | \$0 | \$0 | \$0 | \$0 |
| Fresh Checks | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total paid labor costs | \$435,702 | \$225,262 | \$130,384 | \$1,173,453 | \$1,609,155 |
| Paid nonlabor resources |  |  |  |  |  |
| Chickasaw Nation | \$3,782 | \$18,625 | \$4,766 | \$42,892 | \$46,674 |
| Feed the Children | \$370 | \$0 | \$0 | \$0 | \$370 |
| School districts | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total food boxes | \$560,484 | \$742,353 | \$409,258 | \$3,683,326 | \$4,243,810 |
| Fresh Checks | \$0 | \$437 | \$77,221 | \$694,989 | \$694,989 |
| Total paid nonlabor resources | \$564,636 | \$760,979 | \$414,024 | \$3,726,218 | \$4,290,854 |
| Total paid costs | \$1,000,338 | \$986,240 | \$544,408 | \$4,899,671 | \$5,900,009 |
| Volunteer labor costs (value of wages) |  |  |  |  |  |
| Chickasaw Nation | \$42,811 | \$3,051 | \$339 | \$3,051 | \$45,862 |
| Feed the Children | \$0 | \$0 | \$0 | \$0 | \$0 |
| School districts | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total food boxes | \$3,000 | \$19,080 | \$4,420 | \$39,780 | \$42,780 |
| Fresh Checks | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total volunteer labor costs | \$45,811 | \$22,131 | \$4,759 | \$42,831 | \$88,642 |
| Donated or in-kind nonlabor resources |  |  |  |  |  |
| Chickasaw Nation | \$145,527 | \$52,099 | \$25,619 | \$230,572 | \$376,099 |
| Feed the Children | \$0 | \$0 | \$0 | \$0 | \$0 |
| School districts | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total food boxes | \$8,624 | \$1,152 | \$128 | \$1,152 | \$9,776 |
| Fresh Checks | \$5,311 | \$1,152 | \$128 | \$1,152 | \$6,464 |
| Total donated or in-kind nonlabor resources | \$154,151 | \$53,252 | \$25,747 | \$231,725 | \$385,876 |
| Total value of donated or in-kind resources | \$199,962 | \$75,383 | \$30,506 | \$274,556 | \$474,518 |
| Total cost (paid plus donated/in-kind resources) | \$1,200,300 | \$1,061,623 | \$574,914 | \$5,174,227 | \$6,374,527 |

Source: The Packed Promise project cost data collection instruments. Start-up costs cover February 1, 2015 to January 31, 2016. Implementation costs cover February 1, 2016 to March 31, 2018. The grantee continued to provide services after the evaluation period ended on March 31, 2018, so the costs reported in this report do not include costs for closing out operations or costs associated with the extension of benefits. Costs per household can be calculated by dividing the amounts here by the total number of consenting households eligible for food boxes in September 2016 ( $n=2,054$ ).
Note: CNNS and Feed the Children labor costs and nonlabor resources reflect those for administering the project, excluding the costs associated with providing the food boxes. Total food box costs reflect CNNS's and Feed the Children's labor costs or nonlabor resources for packaging, stocking, and shipping the food boxes, including the costs of the shelf-stable items and the Fresh Checks. The costs for the Fresh Checks as a component of the food boxes represent redemption values and bank fees.
${ }^{\text {a }}$ Quarters represent calendar quarters. Because the implementation period was from February 1, 2016 to March 31, 2018, the first quarter of the implementation period includes less than three months of costs.

Exhibit C.9. Total costs by organization or activity, per household


Source: The Packed Promise project cost data collection instruments. Start-up costs cover February 1, 2015 to January 31, 2016. Implementation costs cover February 1, 2016 to March 31, 2018. The first quarter of the implementation period includes cost data for only two months-February and March of 2016. All others are calendar quarters and include three months of cost data. The grantee continued to provide services after the evaluation period ended on March 31, 2018, so the costs shown in this report do not include those for closing out operations or associated with the extension of benefits. Tabulations were prepared by Mathematica Policy Research.
Notes: Labor and ODC estimates include both paid costs and the estimated value of volunteer or in-kind resources. Both CNNS and Feed the Children incurred costs related directly to the provision of food boxes, as well as other costs for administering the project. CNNS and Feed the Children labor costs and ODCs presented in this figure reflect those for administering the project, excluding those associated with providing food boxes. Food box costs reflect CNNS's and Feed the Children's labor costs and ODCs for packaging, stocking, and shipping the food boxes. ODCs for the Fresh Checks, which include redemption values and bank fees, are shown as a component of the food box costs.
Feed the Children reported $\$ 0.18$ in ODCs per household, and school districts reported $\$ 9$ per household in labor costs for certifying students' eligibility and processing consent forms. These costs do not appear as bars in the chart because of their relatively small size.
CNNS = Chickasaw Nation Nutrition Services; FTC = Feed the Children; Food boxes = labor costs or ODCs associated with the provision of food boxes, including the shelf-stable foods and Fresh Checks; Fresh Checks = labor costs and ODCs associated with check redemption and bank fees; ODCs = other direct costs.

## Exhibit C.10. Total costs by organization or activity, by time period, per household



Source: The Packed Promise project cost data collection instruments. Start-up costs cover February 1, 2015 to January 31, 2016. Implementation costs cover February 1, 2016 to March 31, 2018. The first quarter of the implementation period includes cost data for only two months-February and March of 2016. All others are calendar quarters and include three months of cost data. The grantee continued to provide services after the evaluation period ended on March 31, 2018, so the costs shown in this report do not include those for closing out operations or associated with the extension of benefits. Tabulations were prepared by Mathematica Policy Research.
Notes: Labor and ODC estimates include both paid costs and the estimated value of volunteer or in-kind resources. Both CNNS and Feed the Children incurred costs related directly to the provision of food boxes, as well as other costs for administering the project. CNNS and Feed the Children labor costs and ODCs presented in this figure reflect those for administering the project, excluding those associated with providing food boxes. Food box costs reflect CNNS's and Feed the Children's labor costs and ODCs for packaging, stocking, and shipping the food boxes. ODCs for the Fresh Checks, which include redemption values and bank fees, are shown as a component of the food box costs.
Per household start-up costs included: Feed the Children reported \$0,18 in ODCs, school districts reported $\$ 9$ in labor costs for certifying students' eligibility and processing consent forms, and CNNS reported \$3 in ODCs for printing Fresh Checks. These costs do not appear as bars in the chart because of their relatively small size.

CNNS = Chickasaw Nation Nutrition Services; FTC = Feed the Children; Food boxes = labor costs or ODCs associated with the provision of food boxes, including the shelf-stable foods and Fresh Checks; Fresh Checks = labor costs and ODCs associated with check redemption and bank fees; ODCs = other direct costs.

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## APPENDIX D

## SUPPLEMENTAL ANALYSIS

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Appendix D contains supplemental exhibits on additional analysis conducted to better understand the results described in Chapter III. Section D. 1 presents analyses of data collected in the second follow-up survey; exhibits in this section correspond with Exhibits III. 3 through III. 9. Section D. 2 includes exhibits with $95 \%$ confidence intervals for subgroup impact estimates and a treatment-on-the-treated analysis of the impact on food insecurity. Section D. 3 shows differences between the treatment and control groups on individual items from the food security module for each follow-up survey. Section D. 4 presents supplemental analysis on dietary outcomes. Section D. 5 includes a case example for Chapter IV.

## D.1. IMPACT RESULTS FROM THE SECOND FOLLOW-UP SURVEY

Exhibit D.1. Impact of the Packed Promise project on food insecurity at second follow-up survey

|  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Treatment | Control | Difference ${ }^{\text {a }}$ | Confidence <br> interval | p-value |
| Children |  |  |  |  |  |
| Secure | 71.8 | 71.3 | 0.6 | $[-1.3,2.4]$ | 0.276 |
| Insecure | 28.2 | 28.7 | -0.6 | $[-2.4,1.3]$ | 0.276 |
| $\quad$ VLFS-C | 2.3 | 2.6 | -0.3 | $[-1.1,0.4]$ | 0.202 |
| Adults |  |  |  | $[-1.5,2.2]$ | 0.354 |
| Secure | 67.1 | 66.7 | 0.4 | $[-2.2,1.5]$ | 0.354 |
| Insecure | 32.9 | 33.3 | -0.4 | $[-3.8,1.9]$ | 0.255 |
| $\quad$ VLFS-A | 15.7 | 16.7 | -1.0 | $[-2.0,1.7]$ | 0.571 |
| Households |  |  | -0.2 | $[-3.6,1.6]$ | 0.571 |
| Secure | 60.9 | 61.1 | 0.2 |  | 0.230 |
| Insecure | 39.1 | 38.9 | -1.0 |  |  |
| $\quad$ VLFS-HH | 16.0 | 17.0 | 1,503 |  |  |
| Sample size | 1,287 |  |  |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 second follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Food security was measured using the standard USDA 18-item survey module and a 30-day reference period. VLFS is a subcategory within the food insecure category. Households missing values for FI-C were excluded from the calculations. The p-value associated with each impact estimate is from a one-tailed test of statistical significance. Of the one-tailed tests not statistically significant at the $5 \%$ level, none would have been statistically significant if they had been specified as a two-tailed test. Regressions controlled for baseline measures of child and adult food insecurity and VLFS; the presence of a single adult in the household versus more than one; ages of children in the household; household income and employment status; respondent age, health status, race/ethnicity, and language preference; baseline participation in SNAP, FDPIR, WIC, Summer EBT for Children, school-based meal programs, or food pantries; and indicator variables for the month of follow-up survey response.
a Values may not reflect exact differences between columns 2 and 3 due to rounding.
EBT = electronic benefits transfer; FDPIR = Food Distribution Program on Indian Reservations; SNAP = Supplemental Nutrition Assistance Program; USDA = U.S. Department of Agriculture; VLFS-A = very low food security among adults; VLFS-C = very low food security among children; VLFS-HH = very low food security among households; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Exhibit D.2. Impact of the Packed Promise project on food insecurity among children, by subgroup, at second follow-up survey

|  | Treatment |  | Control |  |  | $p$-value |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Characteristic | Sample size | FI-C | $\begin{aligned} & \text { Sample } \\ & \text { size } \end{aligned}$ | FI-C | Difference ${ }^{\text {a }}$ | Differences within categories | Differences between subgroups |
| Household composition |  |  |  |  |  |  | 0.172 |
| Two or more adults | 954 | 28.2 | 1,128 | 27.8 | 0.4 | 0.639 |  |
| Single adult | 320 | 28.1 | 355 | 31.6 | -3.5 | 0.075 |  |
| Number of children in household |  |  |  |  |  |  | 0.068 |
| 1 child | 251 | 29.3 | 292 | 31.7 | -2.3 | 0.192 |  |
| 2 children | 445 | 29.6 | 506 | 25.0 | 4.6 | 0.967 |  |
| 3 or more | 578 | 26.5 | 685 | 30.2 | -3.8 | 0.081 |  |
| Respondent race/ethnicity |  |  |  |  |  |  | 0.031 |
| Non-Hispanic white | 723 | 27.6 | 771 | 27.3 | 0.3 | 0.584 |  |
| Non-Hispanic American Indian/Alaska Native | 201 | 23.9 | 184 | 24.0 | -0.1 | 0.488 |  |
| Non-Hispanic black or other | 227 | 27.2 | 284 | 34.0 | -6.9 | 0.011 |  |
| Hispanic | 121 | 35.8 | 242 | 30.9 | 5.0 | 0.895 |  |

Respondent level of
education

| Less than high school | 198 | 35.8 | 294 | 31.0 | 4.8 | 0.906 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| High school, GED | 477 | 29.2 | 530 | 26.6 | 2.6 | 0.932 |
| Some college or higher | 595 | 24.2 | 657 | 29.2 | -5.0 | 0.010 |

Baseline food security
among children

| Secure (FS-C) | 606 | 15.7 | 744 | 15.1 | 0.6 | 0.663 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Insecure (FI-C) | 399 | 52.1 | 403 | 56.7 | -4.6 | 0.066 |


| Presence of a teenager in the household |  |  |  |  |  |  | 0.864 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Household has no teens | 560 | 22.9 | 688 | 23.1 | -0.2 | 0.474 |  |
| Household has 1 or more teens | 714 | 32.6 | 794 | 33.5 | -0.9 | 0.308 |  |
| Presence of a preschooler in the household |  |  |  |  |  |  | 0.024 |
| Household has no preschoolers | 931 | 30.7 | 1,079 | 29.4 | 1.3 | 0.870 |  |
| Household has 1 or more preschoolers | 343 | 21.4 | 403 | 27.0 | -5.7 | 0.013 |  |
| Household income |  |  |  |  |  |  | 0.558 |
| No income | 32 | 13.8 | 49 | 21.6 | -7.8 | 0.202 |  |
| Below poverty threshold | 769 | 33.2 | 834 | 32.5 | 0.7 | 0.645 |  |
| $101 \%$ to $185 \%$ of poverty threshold | 381 | 23.1 | 438 | 26.9 | -3.8 | 0.067 |  |
| Above 185\% of poverty threshold | 84 | 16.4 | 148 | 15.0 | 1.4 | 0.624 |  |


| Characteristic | Treatment |  | Control |  |  | p-value |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Sample } \\ & \text { size } \end{aligned}$ | FI-C | Sample size | FI-C | Difference ${ }^{\text {a }}$ | Differences within categories | Differences between subgroups |
| Reported SNAP or FDPIR <br> participation in last 30 <br> days |  |  |  |  |  |  |  |
| Participates in SNAP or FDPIR | 638 | 31.8 | 688 | 31.5 | 0.3 | 0.568 |  |
| Does not participate in SNAP or FDPIR | 635 | 24.9 | 793 | 26.3 | -1.5 | 0.185 |  |
| Number of children in household who attend a local school |  |  |  |  |  |  |  |
| Household has 1 child in a local school | 320 | 27.4 | 352 | 28.3 | -0.9 | 0.403 |  |
| Household has more than 1 child in a local school | 686 | 28.4 | 798 | 30.0 | -1.6 | 0.200 |  |
| Sample size | 1,274 |  | 1,483 |  |  |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 second follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Food security was measured using the standard USDA 18-item survey module and a 30-day reference period. Households missing values for FI-C were excluded from the calculations. Subgroups of households are defined using baseline information whenever available. For households missing baseline information (primarily those that responded to the follow-up survey, but not the baseline survey), subgroup membership is defined using the follow-up value. This approach prevents loss of the households that completed a follow-up survey but not a baseline survey (roughly $20 \%$ of the analysis sample). The p-value associated with each impact estimate is from a one-tailed test of statistical significance. Of the one-tailed tests not statistically significant at the $5 \%$ level, none would have been statistically significant if they had been specified as a two-tailed test. Regressions controlled for baseline measures of child and adult food insecurity and VLFS; the presence of a single adult in the household versus more than one; ages of children in the household; household income and employment status; respondent age, health status, race/ethnicity, and language preference; baseline participation in SNAP, FDPIR, WIC, Summer EBT for Children, school-based meal programs, or food pantries; and indicator variables for the month of follow-up survey response.
a Values may not reflect exact differences between columns 3 and 5 due to rounding.
EBT = electronic benefits transfer; FDPIR = Food Distribution Program on Indian Reservations; FI-C = food insecurity among children; FS-C = food security among children; GED = General Educational Development; SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children; USDA = U.S. Department of Agriculture; VLFS = very low food security.

## Exhibit D.3. Reported household changes in the six months before second follow-up survey

|  | Treatment | Control | Difference ${ }^{\text {a }}$ | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of households with a change in number of people living in household (HH size) | 16.1 | 16.7 | -0.6 | 0.600 |
| Reasons for change in HH size (\%) ${ }^{\text {b }}$ |  |  |  |  |
| Percentage of households with the following: |  |  |  |  |
| Birth, new step, foster, or adopted child | 15.0 | 13.1 | 1.8 | 0.388 |
| Marriage, romantic partner | 1.5 | 2.4 | -1.0 | 0.466 |
| Family, boarder, other child, or other adult moved in | 34.3 | 31.8 | 2.5 | 0.544 |
| Family, boarder, other child, or other adult moved out | 46.4 | 43.6 | 2.7 | 0.525 |
| Separation or divorce | 8.2 | 7.4 | 0.8 | 0.726 |
| Death of HH member | 2.3 | 3.5 | -1.3 | 0.289 |
| HH member incarcerated | 1.1 | 0.4 | 0.7 | 0.339 |
| Sample member moved | 3.2 | 1.0 | 2.2 | 0.054 |
| Other ${ }^{\text {c }}$ | 2.2 | 2.8 | -0.7 | 0.644 |
| Percentage of households reporting an eviction | 1.6 | 0.9 | 0.7 | 0.073 |
| Percentage of households with a change in employment or pay | 24.4 | 26.8 | -2.4 | 0.128 |
| Percentage of households that: ${ }^{\text {b }}$ |  |  |  |  |
| Obtained a job | 19.2 | 18.8 | 0.4 | 0.871 |
| Changed jobs | 21.8 | 21.1 | 0.7 | 0.832 |
| Had an increase in pay or hours | 26.3 | 20.9 | 5.4 | 0.056 |
| Lost a job | 18.7 | 19.8 | -1.2 | 0.553 |
| Quit a job | 5.3 | 6.6 | -1.3 | 0.454 |
| Had a decrease in pay or hours | 19.1 | 20.4 | -1.3 | 0.581 |
| Had seasonal work | 3.0 | 0.4 | 2.6 | 0.002 |
| Had temporary leave (maternity, workers' compensation, disability) | 5.8 | 6.5 | -0.7 | 0.704 |
| Other ${ }^{\text {d }}$ | 2.9 | 3.4 | -0.4 | 0.674 |
| Of three categories of changes, number reported in the past six months (\%) ${ }^{\text {e }}$ |  |  |  | 0.628 |
| None | 64.3 | 62.0 | 2.4 |  |
| One | 29.7 | 31.9 | -2.2 |  |
| Two | 5.6 | 5.8 | -0.3 |  |
| Three | 0.4 | 0.3 | 0.1 |  |
| Sample size | 1,282 | 1,505 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 second follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: F-tests of independence were conducted to test for significant differences in proportions between the treatment and control groups for each characteristic.
a Values may not reflect exact differences between columns 2 and 3 due to rounding.
${ }^{\mathrm{b}}$ Calculated among households that reported a change. Multiple reasons could be reported.
${ }^{\text {c }}$ Other reasons include the following: child went to college, different custody arrangements, evicted, personal issues.
${ }^{\mathrm{d}}$ Other reasons include the following: change in job location, change in job shift, retirement.
${ }^{e}$ Includes changes in HH size, changes in employment or pay, and eviction.
$\mathrm{HH}=$ household.

## Exhibit D.4. Reported access to help from family, friends, and the local community at second follow-up survey

| Percentage of households reporting they could get help, if needed for a problem, from the following: | Treatment | Control | Difference ${ }^{\text {a }}$ | p -value |
| :---: | :---: | :---: | :---: | :---: |
| Family living nearby |  |  |  | 0.747 |
| All of the help needed | 15.0 | 16.3 | -1.2 |  |
| Most of the help needed | 28.8 | 27.6 | 1.3 |  |
| Very little of the help needed | 31.0 | 32.0 | -1.0 |  |
| No help | 25.1 | 24.2 | 0.9 |  |
| Friends |  |  |  | 0.667 |
| All of the help needed | 6.1 | 7.1 | -1.0 |  |
| Most of the help needed | 17.9 | 17.2 | 0.7 |  |
| Very little of the help needed | 38.2 | 39.1 | -0.9 |  |
| No help | 37.8 | 36.6 | 1.2 |  |
| Other people in the community |  |  |  | 0.849 |
| All of the help needed | 3.9 | 4.0 | -0.1 |  |
| Most of the help needed | 13.9 | 14.5 | -0.6 |  |
| Very little of the help needed | 40.3 | 38.9 | 1.4 |  |
| No help | 42.0 | 42.7 | -0.7 |  |
| Sample size | 1,283 | 1,504 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 second follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: $\quad$ F-tests of independence were conducted to test for significant differences in proportions between the treatment and control groups for each overall characteristic.
a Values may not reflect exact differences between columns 2 and 3 due to rounding.

## Exhibit D.5. Reported participation in household and child nutrition assistance programs at second follow-up survey

|  | Treatment | Control | Difference ${ }^{\text {a }}$ | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Household nutrition assistance program ${ }^{\text {b }}$ |  |  |  |  |
| Reported currently receiving SNAP or FDPIR (\%) | 45.0 | 40.0 | 5.1 | <. 001 |
| Reported receiving WIC (\%) | 21.4 | 18.8 | 2.6 | 0.015 |
| Reported none of the above nutrition benefits (\%) | 47.1 | 50.6 | -3.6 | 0.040 |
| Children's nutrition program ${ }^{\text {b }}$ |  |  |  |  |
| Reported receiving FRP lunch (\%) | 65.4 | 68.0 | -2.6 | 0.233 |
| Reported receiving NSLP (including free, paid, and reducedprice) | 68.8 | 72.3 | -3.5 | 0.081 |
| Reported receiving FRP breakfast (\%) | 60.5 | 58.8 | 1.8 | 0.417 |
| Reported receiving SBP (including free, paid, and reduced-price) | 63.7 | 61.9 | 1.9 | 0.363 |
| Reported receiving supper (\%) | 7.9 | 7.5 | 0.4 | 0.848 |
| Reported receiving backpack program (\%) | 10.7 | 8.1 | 2.6 | 0.007 |
| Reported receiving food at afterschool program where snacks are served (\%) | 10.1 | 11.5 | -1.3 | 0.330 |
| Reported receiving food at another center, e.g., Head Start or daycare (\%) | 7.9 | 7.7 | 0.3 | 0.678 |
| Reported none of the child nutrition benefits listed above ${ }^{\text {c (\%) }}$ | 25.8 | 24.3 | 1.5 | 0.358 |
| Mean number of 9 listed programs in which household reported participation ${ }^{\text {d }}$ | 2.3 | 2.3 | 0.1 | 0.248 |
| Reported receiving free meals or snacks at places such as a summer school, community center, day camp, or park | 11.8 | 11.7 | 0.1 | 0.960 |
| Reported receiving Summer EBT for Children in summer 2017 (\%) | 67.2 | 56.2 | 11.0 | <. 001 |
| Reported receiving food from food pantry, emergency kitchen, or community program (\%) | 18.1 | 13.1 | 5.1 | <. 001 |
| Sample size | 1,288 | 1,506 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 second follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Program participation questions generally reflected current participation at the time of the interview, defined as "during the last 30 days." Reported p-values are drawn from two-tailed tests of statistical significance. Regressions controlled for baseline measures of household income and employment status; the survey respondent's age, race/ethnicity, health status, and preferred language; household size and presence of a teenager; and household participation in the program being analyzed at follow-up. Regressions also controlled for the month of survey response.
${ }^{\text {a }}$ Values may not reflect exact differences between columns 2 and 3 due to rounding.
${ }^{\mathrm{b}}$ Calculated for all households as a descriptive variable and not limited only to those eligible for a specific program listed.
${ }^{c}$ Calculation excludes free meals or snacks at summer food programs due to the timing of data collection.
${ }^{d}$ Calculation excludes food pantry, emergency or other community food programs.
EBT = electronic benefits transfer; FDPIR = Food Distribution Program on Indian Reservations; FRP = free or reduced-price; HH = household; NSLP = National School Lunch Program; SBP = School Breakfast Program; SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

|  | Treatment | Control | Difference ${ }^{\text {a }}$ (SE) | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Total out-of-pocket food expenditures ${ }^{\text {b }}$ (\$) |  |  |  |  |
| Household mean | 387 | 404 | -16 (7) | 0.035 |
| Household median | 334 | 350 | -16 (7) | 0.020 |
| Per-person mean | 93 | 98 | -4 (2) | 0.012 |
| Per-person median | 80 | 84 | -4 (2) | 0.070 |
| Food expenditures at supermarkets, grocery stores, and other types of stores ${ }^{\text {c }}$ (\$) |  |  |  |  |
| Household mean | 302 | 317 | -15 (5) | 0.006 |
| Household median | 291 | 300 | -9 (6) | 0.116 |
| Per-person mean | 73 | 76 | -4 (1) | 0.009 |
| Per-person median | 63 | 67 | -4 (2) | 0.016 |
| Expenditures at restaurants ${ }^{\text {d }}(\$)$ |  |  |  |  |
| Household mean | 85 | 87 | -2 (3) | 0.534 |
| Household median | 58 | 60 | -2 (2) | 0.402 |
| Per-person mean | 20 | 21 | -1 (1) | 0.312 |
| Per-person median | 14 | 15 | -1 (0)^ | 0.147 |
| Sample size | 1,280 | 1,493 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 second follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: $\quad$ Questions were asked about the last 30 days. Reported $p$-values are obtained from two-tailed $t$-tests of statistically significant differences. Regressions controlled for baseline measures of household income and employment status; the survey respondent's age, race/ethnicity, health status, and preferred language; household size and the presence of a teenager; and household participation in the program being analyzed at follow-up. Regressions also controlled for the month of survey response.
${ }^{\text {a }}$ Values may not reflect exact differences between columns 2 and 3 due to rounding.
${ }^{\mathrm{b}}$ Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days. Excludes purchases made with SNAP and WIC.
${ }^{\text {c }}$ Out-of-pocket expenditures on food at supermarkets, grocery stores, and other stores. Excludes purchases made with SNAP and WIC.
${ }^{d}$ Includes carryout, drive through, and all types of restaurants.
${ }^{\wedge}$ Greater than zero but less than 0.05.
SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

## Exhibit D.7. Reported food shopping and nutrition behaviors at second followup survey

|  | Treatment | Control | Difference ${ }^{\text {a }}$ (SE) | p-value |
| :---: | :---: | :---: | :---: | :---: |
| Mean number of times shopped for food in past 30 days | 7.3 | 7.1 | 0.2 (0.26) | 0.471 |
| Percentage that shopped at each frequency |  |  |  | 0.439 |
| Less than 5 times (or 0-4) | 45.1 | 45.2 | -0.1 |  |
| 5-9 times | 30.3 | 32.4 | -2.1 |  |
| 10-19 times | 17.3 | 15.5 | 1.8 |  |
| 20-30 times | 7.4 | 7.0 | 0.4 |  |
| Type of store where bought most of its groceries (\%) |  |  |  | 0.504 |
| Supermarkets/grocery stores | 39.8 | 42.6 | -2.9 |  |
| Discount stores | 58.3 | 55.1 | 3.1 |  |
| Dollar stores, warehouse clubs, farmer's markets, or other ${ }^{\text {b }}$ | 0.9 | 1.5 | -0.6 |  |
| Average distance to grocery shopping destination (one-way miles) ${ }^{\text {c }}$ | 9.8 | 10.5 | -0.7 (2.50) | 0.790 |
| Percentage traveling each distance to grocery shopping destination |  |  |  | 0.781 |
| 0-2 miles | 23.1 | 25.0 | -1.9 |  |
| 3-5 miles | 21.2 | 20.3 | 0.9 |  |
| 6-10 miles | 25.0 | 20.1 | 5.0 |  |
| 11-19 miles | 15.4 | 14.8 | 0.6 |  |
| 20-29 miles | 9.6 | 12.3 | -2.7 |  |
| 30 or more miles | 5.7 | 7.6 | -1.9 |  |
| Distribution of the number of nights a week family typically sits down together (\%) |  |  |  | 0.692 |
| Every night | 44.7 | 42.8 | 1.9 |  |
| 5 or 6 nights | 25.2 | 26.4 | -1.2 |  |
| 3 or 4 nights | 22.1 | 21.8 | 0.3 |  |
| 1 or 2 nights | 5.5 | 6.8 | -1.3 |  |
| Never | 2.5 | 2.3 | 0.2 |  |
| Sample size | 1,288 | 1,506 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 second follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: For continuous measures, reported p-values are obtained from two-tailed t-tests of statistically significant differences; for binary and categorical measures, p -values are drawn from F-tests of independence.
${ }^{\text {a }}$ Values may not reflect exact differences between columns 2 and 3 due to rounding.
${ }^{\mathrm{b}}$ Includes convenience store; ethnic food store; and other retailers, such as surplus store and local produce store.
${ }^{\text {c }}$ Reported miles ranged from 0 to 99 miles from home.
SE = standard error.

## D.2. SUBGROUP IMPACT RESULTS WITH 95\% CONFIDENCE INTERVALS

Exhibit D.8. Impact of the Packed Promise project on food insecurity among children, by subgroup, at first follow-up survey

| Characteristic | Treatment |  | Control |  |  | 95\% <br> Confidence interval | p-value |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Sample } \\ & \text { size } \end{aligned}$ | Fl-C | Sample size | Fl-C | Difference ${ }^{\text {a }}$ |  | Differences within categories | Differences between subgroups |
| Household composition |  |  |  |  |  |  |  | 0.828 |
| Two or more adults | 979 | 27.8 | 1,125 | 28.8 | -1.0 | [-3.3, 1.2] | 0.183 |  |
| Single adult | 355 | 33.9 | 371 | 34.1 | -0.3 | [-5.6, 5.1] | 0.462 |  |
| Number of children in household |  |  |  |  |  |  |  | 0.531 |
| 1 child | 273 | 29.5 | 288 | 27.9 | 1.6 | [-3.3, 6.5] | 0.742 |  |
| 2 children | 446 | 29.6 | 514 | 29.8 | -0.2 | [-4.8, 4.4] | 0.467 |  |
| 3 or more | 615 | 28.9 | 694 | 31.3 | -2.4 | [-5.8, 1.1] | 0.089 |  |
| Respondent race/ethnicity |  |  |  |  |  |  |  | 0.088 |
| Non-Hispanic white | 787 | 32.4 | 772 | 29.5 | 2.9 | [-0.7, 6.5] | 0.942 |  |
| Non-Hispanic American Indian/Alaska Native | 198 | 22.5 | 177 | 26.6 | -4.1 | [-9.9, 1.8] | 0.089 |  |
| Non-Hispanic black or other | 218 | 24.7 | 293 | 34.5 | -9.9 | [-18.0, -1.7] | 0.009 |  |
| Hispanic | 120 | 29.2 | 240 | 31.1 | -1.9 | [-10.0, 6.2] | 0.323 |  |
| Respondent level of education |  |  |  |  |  |  |  | 0.997 |
| Less than high school | 226 | 33.4 | 294 | 34.1 | -0.7 | [-8.6, 7.2] | 0.431 |  |
| High school, GED | 493 | 28.5 | 518 | 29.4 | -0.9 | [-4.4, 2.6] | 0.303 |  |
| Some college or higher | 604 | 28.6 | 671 | 29.4 | -0.8 | [-4.0, 2.4] | 0.310 |  |
| Baseline food security among children |  |  |  |  |  |  |  | 0.410 |
| Secure (FS-C) | 645 | 14.0 | 757 | 15.4 | -1.4 | [-4.2, 1.4] | 0.169 |  |
| Insecure (FI-C) | 431 | 54.2 | 434 | 60.3 | -6.0 | [-10.7, -1.3] | 0.007 |  |
| Presence of a teenager in the household |  |  |  |  |  |  |  | 0.082 |
| Household has no teens | 618 | 25.5 | 713 | 23.4 | 2.1 | [-1.5, 5.6] | 0.874 |  |
| Household has 1 or more teens | 714 | 32.9 | 781 | 36.2 | -3.4 | [-6.4, -0.3] | 0.015 |  |


| Characteristic | Treatment |  | Control |  | Difference ${ }^{\text {a }}$ | ```95% Confidence interval``` | p-value |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sample size | FI-C | Sample size | FI-C |  |  | Differences within categories | Differences between subgroups |
| Presence of a preschooler in the household |  |  |  |  |  |  |  | 0.533 |
| Household has no preschoolers | 977 | 32.0 | 1,086 | 32.0 | -0.1 | [-2.5, 2.4] | 0.479 |  |
| Household has 1 or more preschoolers | 355 | 22.3 | 408 | 24.8 | -2.5 | [-8.4, 3.4] | 0.210 |  |
| Household income |  |  |  |  |  |  |  | 0.471 |
| No income | 36 | 23.0 | 50 | 19.9 | 3.1 | [-12.0, 18.1] | 0.652 |  |
| At or below poverty threshold | 796 | 32.7 | 839 | 35.7 | -3.0 | [-6.6, 0.6] | 0.055 |  |
| $101 \%$ to $185 \%$ of poverty threshold | 395 | 28.0 | 429 | 25.6 | 2.3 | [-3.1, 7.8] | 0.798 |  |
| Above 185\% of poverty threshold | 87 | 13.5 | 155 | 17.2 | -3.7 | [-11.4, 3.9] | 0.168 |  |
| Reported SNAP or FDPIR participation in last 30 days |  |  |  |  |  |  |  | 0.349 |
| Participates in SNAP or FDPIR | 665 | 33.5 | 690 | 33.0 | 0.4 | [-2.8, 3.6] | 0.605 |  |
| Does not participate in SNAP or FDPIR | 667 | 25.2 | 804 | 27.6 | -2.4 | [-5.0, 0.2] | 0.035 |  |
| Number of children in household who attend a local school |  |  |  |  |  |  |  | 0.154 |
| Household has 1 child in a local school | 350 | 27.8 | 355 | 26.6 | 1.2 | [-5.4, 7.9] | 0.642 |  |
| Household has more than 1 child in a local school | 727 | 28.6 | 839 | 33.7 | -5.1 | [-7.7, -2.5] | <. 001 |  |
| Sample size | 1,334 |  | 1,496 |  |  |  |  |  |
| Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research. |  |  |  |  |  |  |  |  |
| Food security was measured using the standard USDA 18-item survey module and a 30-day reference period. VLFS is a subcategory within the food insecure category. Households missing values for FI-C were excluded from the calculations. The p-value associated with each impact estimate is from a one-tailed test of statistical significance. Of the one-tailed tests not statistically significant at the $5 \%$ level, none would have been statistically significant if they had been specified as a two-tailed test. The p-value associated with differences in impacts across subgroups is from a chi-squared test of statistically significant differences in impacts across groups. Regressions controlled for baseline measures of child and adult food insecurity and VLFS; the presence of a single adult in the household versus more than one; ages of children in the household; household income and employment status; respondent age, health status, race/ethnicity, and language preference; baseline participation in SNAP, FDPIR, WIC, Summer EBT for Children, schoolbased meal programs, or food pantries; and indicator variables for the month of follow-up survey response. |  |  |  |  |  |  |  |  |

a Values may not reflect exact differences between columns 3 and 5 due to rounding.
EBT = electronic benefits transfer; FDPIR = Food Distribution Program on Indian Reservations; FI-C = food insecurity among children; FS-C = food security among children; GED = General Educational Development; SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children; USDA = U.S. Department of Agriculture; VLFS = very low food security.

Exhibit D.9. Impact of the Packed Promise project on food insecurity among children, by subgroup, at second follow-up survey

| Characteristic | Treatment |  | Control |  |  | 95\% <br> Confidence Interval | p-value |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sample size | FI-C | Sample size | FI-C | Difference ${ }^{\text {a }}$ |  | Differences within categories | Differences between subgroups |
| Household composition |  |  |  |  |  |  |  | 0.172 |
| Two or more adults | 954 | 28.2 | 1,128 | 27.8 | 0.4 | [-1.8, 2.5] | 0.639 |  |
| Single adult | 320 | 28.1 | 355 | 31.6 | -3.5 | [-8.2, 1.3] | 0.075 |  |
| Number of children in household |  |  |  |  |  |  |  | 0.068 |
| 1 child | 251 | 29.3 | 292 | 31.7 | -2.3 | [-7.7, 3.0] | 0.192 |  |
| 2 children | 445 | 29.6 | 506 | 25.0 | 4.6 | [-0.4, 9.6] | 0.967 |  |
| 3 or more | 578 | 26.5 | 685 | 30.2 | -3.8 | [-9.1, 1.5] | 0.081 |  |
| Respondent race/ethnicity |  |  |  |  |  |  |  | 0.031 |
| Non-Hispanic white | 723 | 27.6 | 771 | 27.3 | 0.3 | [-2.8, 3.4] | 0.584 |  |
| Non-Hispanic American |  |  |  |  |  |  |  |  |
| Indian/Alaska Native | 201 | 23.9 | 184 | 24.0 | -0.1 | [-7.1, 6.9] | 0.488 |  |
| Non-Hispanic black or other | 227 | 27.2 | 284 | 34.0 | -6.9 | [-12.7, -1.0] | 0.011 |  |
| Hispanic | 121 | 35.8 | 242 | 30.9 | 5.0 | [-2.8, 12.7] | 0.895 |  |
| Respondent level of education |  |  |  |  |  |  |  | 0.045 |
| Less than high school | 198 | 35.8 | 294 | 31.0 | 4.8 | [-2.3, 11.9] | 0.906 |  |
| High school, GED | 477 | 29.2 | 530 | 26.6 | 2.6 | [-0.8, 6.0] | 0.932 |  |
| Some college or higher | 595 | 24.2 | 657 | 29.2 | -5.0 | [-9.3, -0.8] | 0.010 |  |
| Baseline food security among children |  |  |  |  |  |  |  | 0.228 |
| Secure (FS-C) | 606 | 15.7 | 744 | 15.1 | 0.6 | [-2.2, 3.4] | 0.663 |  |
| Insecure (FI-C) | 399 | 52.1 | 403 | 56.7 | -4.6 | [-10.4, 1.3] | 0.066 |  |
| Presence of a teenager in the household |  |  |  |  |  |  |  | 0.864 |
| Household has no teens | 560 | 22.9 | 688 | 23.1 | -0.2 | [-4.9, 4.6] | 0.474 |  |
| Household has 1 or more teens | 714 | 32.6 | 794 | 33.5 | -0.9 | [-4.5, 2.7] | 0.308 |  |


| Characteristic | Treatment |  | Control |  |  | $\begin{aligned} & 95 \% \\ & \text { Confidence } \\ & \text { Interval } \end{aligned}$ | p-value |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Sample } \\ & \text { size } \end{aligned}$ | FI-C | $\begin{aligned} & \text { Sample } \\ & \text { size } \end{aligned}$ | FI-C | Difference ${ }^{\text {a }}$ |  | Differences within categories | Differences between subgroups |
| Presence of a preschooler in the household |  |  |  |  |  |  |  | 0.024 |
| Household has no preschoolers | 931 | 30.7 | 1,079 | 29.4 | 1.3 | [-1.0, 3.5] | 0.870 |  |
| Household has 1 or more preschoolers | 343 | 21.4 | 403 | 27.0 | -5.7 | [-10.6, -0.7] | 0.013 |  |
| Household income |  |  |  |  |  |  |  | 0.558 |
| No income | 32 | 13.8 | 49 | 21.6 | -7.8 | [-27.0, 11.0] | 0.202 |  |
| At or below poverty threshold $101 \%$ to $185 \%$ of poverty | 769 | 33.2 | 834 | 32.5 | 0.7 | [-3.2, 4.7] | 0.645 |  |
| threshold | 381 | 23.1 | 438 | 26.9 | -3.8 | [-8.8, 1.2] | 0.067 |  |
| Above 185\% of poverty threshold | 84 | 16.4 | 148 | 15.0 | 1.4 | [-7.3, 10.1] | 0.624 |  |
| Reported SNAP or FDPIR participation in last 30 days |  |  |  |  |  |  |  | 0.276 |
| Participates in SNAP or FDPIR | 638 | 31.8 | 688 | 31.5 | 0.3 | [-3.6, 4.3] | 0.568 |  |
| Does not participate in SNAP or FDPIR | 635 | 24.9 | 793 | 26.3 | -1.5 | [-4.7, 1.7] | 0.185 |  |
| Number of children in household who attend a local school |  |  |  |  |  |  |  | 0.885 |
| Household has 1 child in a local school | 320 | 27.4 | 352 | 28.3 | -0.9 | [-7.7, 6.0] | 0.403 |  |
| Household has more than 1 child in a local school | 686 | 28.4 | 798 | 30.0 | -1.6 | [-5.3, 2.1] | 0.200 |  |
| Sample size | 1,274 |  | 1,483 |  |  |  |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 second follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Food security was measured using the standard USDA 18 -item survey module and a 30 -day reference period. VLFS is a subcategory within the food insecure category. Households missing values for FI-C were excluded from the calculations. The p-value associated with each impact estimate is from a one-tailed test of statistical significance. Of the one-tailed tests not statistically significant at the $5 \%$ level, none would have been statistically significant if they had been specified as a two-tailed test. The p-value associated with differences in impacts across subgroups is from a chi-squared test of statistically significant differences in impacts across groups. Regressions controlled for baseline measures of child and adult food insecurity and VLFS the presence of a single adult in the household versus more than one; ages of children in the household; household income and employment status; respondent age, health status, race/ethnicity, and language preference; baseline participation in SNAP, FDPIR, WIC, Summer EBT for Children, schoolbased meal programs, or food pantries; and indicator variables for the month of follow-up survey response.
a Values may not reflect exact differences between columns 3 and 5 due to rounding.
EBT = electronic benefits transfer; FDPIR = Food Distribution Program on Indian Reservations; FI-C = food insecurity among children; FS-C = food security among children; GED = General Educational Development; SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children; USDA = U.S. Department of Agriculture; VLFS = very low food security.

## D.3. ADDITIONAL MEASURES OF FOOD SECURITY

Exhibit D.10. Differences on individual survey items of the 30-day food
security module at first follow-up survey

|  | Percentage of households with an affirmative response |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Treatment | Control | Difference ${ }^{\text {a }}$ | p-value |
| Items measuring household and adult(s)' food security |  |  |  |  |
| 1 Worried food would run out before (I/we) got money to buy more (often true or sometimes true) | 47.8 | 49.1 | -1.3 | 0.335 |
| 2 Food bought didn't last and (I/we) didn't have money to get more (often true or sometimes true) | 38.6 | 40.2 | -1.6 | 0.074 |
| 3 Couldn't afford to eat balanced meals (often true or sometimes true) | 38.5 | 40.7 | -2.2 | 0.015 |
| 4 Adult(s) cut size of meals or skipped meals | 24.3 | 25.2 | -0.9 | 0.443 |
| 4a Adult(s) cut size of meals or skipped meals in more than 2 of the last 30 days | 20.3 | 21.2 | -1.0 | 0.332 |
| 5 Respondent ate less than felt he/she should | 26.2 | 28.4 | -2.2 | 0.065 |
| 6 Respondent hungry but didn't eat because couldn't afford | 15.8 | 17.2 | -1.4 | 0.087 |
| 7 Respondent lost weight | 9.2 | 9.9 | -0.7 | 0.525 |
| 8 Adult(s) did not eat for whole day | 6.5 | 5.5 | 1.0 | 0.183 |
| 8a Adult(s) did not eat for whole day in more than 2 of the last 30 days | 4.9 | 4.3 | 0.6 | 0.378 |
| Items measuring children's food security |  |  |  |  |
| 9 Relied on few kinds of low-cost food to feed child(ren) (often true or sometimes true) | 45.7 | 45.9 | -0.1 | 0.887 |
| 10 Couldn't feed child(ren) balanced meals (often true or sometimes true) | 31.6 | 32.4 | -0.9 | 0.404 |
| 11 Child(ren) were not eating enough (often true or sometimes true) | 8.8 | 11.1 | -2.3 | 0.007 |
| 12 Cut size of child(ren)'s meals | 5.9 | 5.5 | 0.5 | 0.496 |
| 13 Child(ren) skipped meals | 1.5 | 1.7 | -0.2 | 0.553 |
| 13a Child(ren) skipped meals in more than 2 of the last 30 days | 1.1 | 1.2 | -0.1 | 0.688 |
| 14 Child(ren) were hungry | 4.0 | 5.7 | -1.7 | 0.010 |
| 15 Child(ren) did not eat for whole day | 0.6 | 0.4 | 0.2 | 0.347 |
| Sample size | 1,342 | 1,510 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Food security items are from the standard USDA 18-item survey module and use a 30-day reference period. Food security is classified using items to measure household, adult, and children's food security using 3, 7, and 8 items, respectively. Items 4 through 8 are preceded by "You or other adults in your household," depending on whether there was one adult (the respondent) in the household or more than one. The wording for items 11 through 15 is based on the number of adults and children in the household. Item numbers align with the follow-up instrument in Appendix B.3.
Regressions controlled for baseline measures of child and adult food insecurity and VLFS; the presence of a single adult in the household versus more than one; ages of children in the household; household income and employment status; respondent age, health status, race/ethnicity, and language preference; baseline participation in SNAP, FDPIR, WIC, Summer EBT for Children, school-based meal programs, or food pantries; and indicator variables for the month of follow-up survey response.
${ }^{\text {a }}$ Values may not reflect exact differences between columns 2 and 3 due to rounding.
EBT = electronic benefits transfer; FDPIR = Food Distribution on Indian Reservations; SNAP = Supplemental
Nutrition Assistance Program; USDA = U.S. Department of Agriculture; VLFS = very low food security; WIC = Special
Supplemental Nutrition Program for Women, Infants, and Children.

## Exhibit D.11. Differences on individual survey items of the 30-day food security module at second follow-up survey

|  | Percentage of households with an affirmative response |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Treatment | Control | Difference ${ }^{\text {a }}$ | p-value |
| Items measuring household and adult(s)' food security |  |  |  |  |
| 1 Worried food would run out before (l/we) got money to buy more (often true or sometimes true) | 42.6 | 45.6 | -3.0 | 0.021 |
| 2 Food bought didn't last and (I/we) didn't have money to get more (often true or sometimes true) | 35.8 | 35.3 | 0.4 | 0.617 |
| 3 Couldn't afford to eat balanced meals (often true or sometimes true) | 37.1 | 38.2 | -1.1 | 0.326 |
| 4 Adult(s) cut size of meals or skipped meals | 22.5 | 23.8 | -1.4 | 0.315 |
| 4a Adult(s) cut size of meals or skipped meals in more than 2 of the last 30 days | 18.9 | 19.9 | -1.0 | 0.445 |
| 5 Respondent ate less than felt he/she should | 23.4 | 25.1 | -1.6 | 0.111 |
| 6 Respondent hungry but didn't eat because couldn't afford | 16.0 | 15.8 | 0.2 | 0.889 |
| 7 Respondent lost weight | 8.5 | 9.0 | -0.5 | 0.683 |
| 8 Adult(s) did not eat for whole day | 4.7 | 5.4 | -0.7 | 0.216 |
| 8a Adult(s) did not eat for whole day in more than 2 of the last 30 days | 3.2 | 4.1 | -0.8 | 0.171 |
| Items measuring children's food security |  |  |  |  |
| 9 Relied on few kinds of low-cost food to feed child(ren) (often true or sometimes true) | 43.2 | 42.1 | 1.2 | 0.239 |
| 10 Couldn't feed child(ren) balanced meals (often true or sometimes true) | 30.1 | 31.5 | -1.4 | 0.212 |
| 11 Child(ren) were not eating enough (often true or sometimes true) | 8.8 | 10.6 | -1.8 | 0.011 |
| 12 Cut size of child(ren)'s meals | 4.5 | 5.8 | -1.3 | 0.007 |
| 13 Child(ren) skipped meals | 1.8 | 1.9 | -0.1 | 0.863 |
| 13a Child(ren) skipped meals in more than 2 of the last 30 days | 1.0 | 1.2 | -0.1 | 0.624 |
| 14 Child(ren) were hungry | 3.7 | 5.2 | -1.6 | 0.043 |
| 15 Child(ren) did not eat for whole day | 0.1 | 0.3 | -0.2 | 0.263 |
| Sample size | 1,288 | 1,506 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 second follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Food security items are from the standard USDA 18-item survey module and use a 30-day reference period. Food security is classified using items to measure household, adult, and children's food security using 3, 7, and 8 items, respectively. Items 4 through 8 are preceded by "You or other adults in your household," depending on whether there was one adult (the respondent) in the household or more than one. The wording for items 11 through 15 is based on the number of adults and children in the household. Item numbers align with the follow-up instrument in Appendix B.4.
Regressions controlled for baseline measures of child and adult food insecurity and VLFS; the presence of a single adult in the household versus more than one; ages of children in the household; household income and employment status; respondent age, health status, race/ethnicity, and language preference; baseline participation in SNAP, FDPIR, WIC, Summer EBT for Children, school-based meal programs, or food pantries; and indicator variables for the month of follow-up survey response.
${ }^{\text {a }}$ Values may not reflect exact differences between columns 2 and 3 due to rounding.
EBT = electronic benefits transfer; FDPIR = Food Distribution on Indian Reservations; SNAP = Supplemental
Nutrition Assistance Program; USDA = U.S. Department of Agriculture; VLFS = very low food security; WIC = Special
Supplemental Nutrition Program for Women, Infants, and Children.

Exhibit D.12. Impact of the Packed Promise project on food insecurity at first follow-up, among households that ordered a food box within $\mathbf{6 0}$ days before the survey

|  | Impact on households that <br> ordered a box | Standard error | p-value |
| :--- | :---: | :---: | :---: |
| Children | 1.0 | 0.80 | 0.112 |
| Secure | -1.0 | 0.80 | 0.112 |
| Insecure | -0.5 | 0.63 | 0.202 |
| $\quad$ VLFS-C |  |  |  |
| Adults | -3.4 | 1.15 | 0.002 |
| Secure | -1.8 | 1.15 | 0.002 |
| Insecure |  | 1.25 | 0.077 |
| $\quad$ VLFS-A | 2.9 |  | 0.002 |
| Households | -2.9 | 1.00 | 0.002 |
| Secure | -1.6 | 1.24 | 0.104 |
| Insecure | 2,852 |  |  |
| $\quad$ VLFS-HH |  |  |  |
| Sample size |  |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Food security was measured using the standard USDA 18-item survey module and a 30-day reference period. VLFS is a subcategory within the food insecure category. Households missing values for FI-C were excluded from the calculations. The impact on households that ordered at least one food box within 60 days is the local average treatment effect, measured using an instrumental variables regression model in which the indicator for being randomly selected for the treatment group is used as a predictor for having ordered a box in the 60 days before first follow-up, and then predicted values of box ordering from this first-stage equation are used to estimate the impact of Packed Promise among households that ordered boxes. This estimate measures the effect of the treatment on the treated, that is, the impact of receiving a food box with shelf stable foods and a fresh check, among the households who received one. The p-value associated with each impact estimate is from a one-tailed test of statistical significance. Of the one-tailed tests not statistically significant at the $5 \%$ level, none would have been statistically significant if they had been specified as a two-tailed test. Regressions controlled for baseline measures of child and adult food insecurity and VLFS; the presence of a single adult in the household versus more than one; ages of children in the household; household income and employment status; respondent age, health status, race/ethnicity, and language preference; baseline participation in SNAP, FDPIR, WIC, Summer EBT for Children, school-based meal programs, or food pantries; and indicator variables for the month of follow-up survey response.
EBT = electronic benefits transfer; FDPIR = Food Distribution on Indian Reservations; FI-C = food insecurity among children; SNAP = Supplemental Nutrition Assistance Program; USDA = U.S. Department of Agriculture; VLFS = very low food security; VLFS-A = very low food security among adults; VLFS-C = very low food security among children; VLFS-HH = very low food security among households WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

## D.4. SUPPLEMENTAL RESULTS ON DIETARY OUTCOMES

Exhibit D.13. Age and gender of the child randomly selected as the focus of diet outcome questions at first follow-up

| Gender and age of child selected for dietary outcome questions | Percent of treatment group | Percent of control group |
| :---: | :---: | :---: |
| Male, 2-4 | 5.2 | 5.4 |
| Male, 5-11 | 24.6 | 27.4 |
| Male, 12-17 | 20.3 | 17.1 |
| Male, 18+ | 2.5 | 2.2 |
| Female, 2-4 | 3.3 | 3.5 |
| Female, 5-11 | 24.2 | 25.3 |
| Female, 12-17 | 18.3 | 17.5 |
| Female, 18+ | 1.6 | 1.6 |
| Total | 100.0 | 100.0 |
| Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations were prepared by Mathematica Policy Research. |  |  |
| Note: Respondents (i.e., parents or guardians) reported how foods and beverages in the past 30 days before the sur | randomly select | consumed spe |

## Exhibit D.14. Impact of the Packed Promise project on children's dietary outcomes, by child age

$\left.\begin{array}{llllll} \\ & & & & \text { p-value } \\ \hline & & & & \begin{array}{c}\text { Difference } \\ \text { within }\end{array} & \begin{array}{c}\text { Differences } \\ \text { between }\end{array} \\ \text { subgroups }\end{array}\right)$

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: $\quad$ Food frequency data were analyzed using NCI's Dietary Screener Questionnaire in the NHANES (2009-10) data processing and scoring procedures for children age 2 and older. The median age of the randomly selected child within the household for which dietary outcome data were collected was 10 years old in both study groups. Households were excluded from analysis if they were missing data on the children's age or gender (which are required for the scoring algorithms), no age-eligible children were reported in the household, or the respondent did not complete the food frequency survey section ( $\mathrm{n}=75$ ). An additional 104 respondents completed some items in this survey section, but not all. Regressions controlled for baseline measures of child and adult food insecurity and VLFS; the presence of a single adult in the household versus more than one; ages of children in the household; household income and employment status; respondent age, health status, race/ethnicity, and language preference; baseline participation in

SNAP, FDPIR, WIC, Summer EBT for Children, school-based meal programs, or food pantries; and indicator variables for the month of follow-up survey response.
${ }^{\text {a }}$ Daily amounts are measured in cup equivalents (cup eq.) for fruits and vegetables and ounce equivalent (oz eq.) for whole grains, as defined by the 2010 Dietary Guidelines for Americans.
${ }^{\mathrm{b}}$ Treatment group estimates are based on all households eligible to receive food boxes, regardless of receipt.
${ }^{\text {c }}$ Values may not reflect exact differences between columns 2 and 3 due to rounding.
${ }^{d}$ One cup equivalent is defined as 1 cup of raw or cooked fruit or vegetables, vegetable juice, or fruit juice, or 2 cups of leafy green vegetables.
${ }^{\mathrm{e}}$ One cup equivalent is defined as 1 cup of raw or cooked fruit or fruit juice.
${ }^{f}$ One cup equivalent is defined as 1 cup of raw or cooked vegetables or vegetable juice or 2 cups of leafy green vegetables.
${ }^{g}$ One oz. eq. of whole grains is 11 -ounce slice of bread; 1 ounce of uncooked pasta or rice; $1 / 2$ cup of cooked rice, pasta, or cereal; 16 -inch diameter tortilla; 15 -inch diameter pancake; 1 ounce of ready-to-eat cereal; or 3 cups of popped popcorn.
${ }^{\mathrm{h}}$ Teaspoons (tsp.) of added sugars are derived from reported frequencies of consuming sugar-sweetened beverages (soda, fruit-flavored drinks, and sugar or honey added to coffee or tea); cookies/cakes/pies/brownies; doughnuts/sweet rolls/Danish/muffins; and cereals. Questions on candy and ice cream consumption were not asked and therefore are excluded from the estimates.
EBT = electronic benefits transfer; FDPIR = Food Distribution Program on Indian Reservations; $\mathrm{NCI}=$ National Cancer Institute; NHANES = National Health and Nutrition Examination Survey; SE = standard error of the difference; SNAP =Supplemental Nutrition Assistance Program; VLFS = very low food security; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

## Exhibit D.15. Impact of the Packed Promise project on children's mean daily frequency of reported consumption of specific foods

| Mean daily frequency of food consumptiona ${ }^{\text {a }}$ | Treatment ${ }^{\text {b }}$ | Control | Difference ${ }^{\text {c }}$ (SE) | p-value | Percentage difference |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fruit juice (100\%) | 0.68 | 0.66 | 0.02 (0.021) | 0.402 | 2.62 |
| Fruit (fresh, frozen, canned) | 0.93 | 0.84 | 0.10 (0.020) | <. 001 | 11.61 |
| Green leafy or lettuce salad | 0.28 | 0.27 | 0.01 (0.014) | 0.541 | 3.23 |
| Fried potatoes | 0.27 | 0.25 | 0.01 (0.005) | 0.005 | 5.46 |
| Other potatoes | 0.27 | 0.27 | 0.00 (0.006) | 0.848 | 0.44 |
| Other vegetables | 0.74 | 0.71 | 0.03 (0.015) | 0.048 | 4.26 |
| Tomato salsa | 0.20 | 0.16 | 0.03 (0.007) | <. 001 | 18.87 |
| Tomato sauce | 0.19 | 0.16 | 0.02 (0.004) | <. 001 | 14.95 |
| Pizza | 0.14 | 0.16 | -0.02 (0.004) | <. 001 | -10.89 |
| Cooked dried beans | 0.24 | 0.23 | 0.01 (0.008) | 0.223 | 4.59 |
| Cereal (hot or cold) | 0.63 | 0.60 | 0.02 (0.009) | 0.014 | 3.92 |
| Brown rice or other cooked whole grains | 0.11 | 0.09 | 0.02 (0.003) | <. 001 | 19.06 |
| Whole grain bread and tortillas | 0.44 | 0.40 | 0.03 (0.016) | 0.049 | 8.26 |
| Popcorn | 0.20 | 0.16 | 0.05 (0.006) | <. 001 | 29.80 |
| Sample size | 1,324 | 1,477 |  |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Food frequency data were analyzed for children age 2 and older. The median age of the randomly selected child within the household for which dietary outcome data were collected was 10 years old in both study groups. "Percentage difference" is impact as a percentage of control group level. The p-value associated with each impact estimate is from a two-tailed test of statistical significance.
${ }^{\text {a }}$ Mean daily frequency is based on the reported number of times per day, week, or month that a food was reported to be consumed in the last 30 days. That is, daily, weekly, and monthly frequencies were converted to a daily number of times and then averaged for each food or beverage item.
${ }^{\mathrm{b}}$ Treatment group estimates are based on all households eligible to receive food boxes, regardless of receipt. See Appendix Exhibit C. 1 for a full list of the food items in each type of Packed Promise food box.
${ }^{c}$ Values may not reflect exact differences between columns 2 and 3 due to rounding.
SE = standard error of the difference.

## Exhibit D.16. Impact of the Packed Promise project on children's dietary outcomes among households that ordered a food box within $\mathbf{6 0}$ days before

 the survey| Dietary outcome (daily amounts) ${ }^{\text {a }}$ | Impact on households that ordered a food box | Standard error | p-value |
| :---: | :---: | :---: | :---: |
| Fruits and vegetables (cup eq. per day) ${ }^{\text {b }}$ | 0.11 | 0.023 | <. 001 |
| Fruits and vegetables, without fried potatoes (cup eq. per day) ${ }^{\text {b }}$ | 0.13 | 0.025 | <. 001 |
| Fruits (cup eq. per day) ${ }^{\text {c }}$ | 0.07 | 0.016 | <. 001 |
| Vegetables (cup eq. per day) ${ }^{\text {d }}$ | 0.04 | 0.010 | <. 001 |
| Vegetables, without fried potatoes (cup eq. per day) ${ }^{\text {d }}$ | 0.04 | 0.011 | <. 001 |
| Whole grains (oz eq. per day) ${ }^{\text {e }}$ | 0.07 | 0.013 | <. 001 |
| Added sugars (tsp. per day) ${ }^{\text {f }}$ |  |  |  |
| Total from foods and beverages | 0.01 | 0.113 | 0.902 |
| From sugar-sweetened beverages | 0.16 | 0.113 | 0.164 |
| Sample size | 2,750 |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations are weighted to be representative of all eligible households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Food frequency data were analyzed using NCl's Dietary Screener Questionnaire in the NHANES (2009-10) data processing and scoring procedures for children age 2 and older. The median age of the randomly selected child within the household for which dietary outcome data were collected was 10 years old in both study groups. The impact on households that ordered at least one food box within 60 days is the local average treatment effect, measured using an instrumental variables regression model in which the indicator for being randomly selected for the treatment group is used as a predictor for having ordered a box in the 60 days before first follow-up, and then predicted values of box ordering from this first-stage equation are used to estimate the impact of Packed Promise among households that ordered boxes. This estimate measures the effect of the treatment on the treated, that is, the impact of receiving a food box with shelf stable foods and a fresh check, among the households who received one. The p-value associated with each impact estimate is from a two-tailed test of statistical significance. Households were excluded from analysis if they were missing data on the children's age or gender (which are required for the scoring algorithms), no age-eligible children were reported in the household, or the respondent did not complete the food frequency survey section ( $n=75$ ). An additional 104 respondents completed some items in this survey section, but not all.
${ }^{\text {a }}$ Daily amounts are measured in cup equivalents (cup eq.) for fruits and vegetables and ounce equivalent (oz eq.) for whole grains, as defined by the 2010 Dietary Guidelines for Americans.
${ }^{\text {b }}$ One cup equivalent is defined as 1 cup of raw or cooked fruit or vegetables, vegetable juice, or fruit juice, or 2 cups of leafy green vegetables.
${ }^{\text {c }}$ One cup equivalent is defined as 1 cup of raw or cooked fruit or fruit juice.
${ }^{d}$ One cup equivalent is defined as 1 cup of raw or cooked vegetables or vegetable juice or 2 cups of leafy green vegetables.
${ }^{e}$ One oz. eq. of whole grains is 11 -ounce slice of bread; 1 ounce of uncooked pasta or rice; $1 / 2$ cup of cooked rice, pasta, or cereal; 16 -inch diameter tortilla; 15 -inch diameter pancake; 1 ounce of ready-to-eat cereal; or 3 cups of popped popcorn.
${ }^{\mathrm{f}}$ Teaspoons (tsp.) of added sugars are derived from reported frequencies of consuming sugar-sweetened beverages (soda, fruit-flavored drinks, and sugar or honey added to coffee or tea); cookies/cakes/pies/brownies; doughnuts/sweet rolls/Danish/muffins; and cereals. Questions on candy and ice cream consumption were not asked and therefore are excluded from the estimates.
$\mathrm{NCI}=$ National Cancer Institute; NHANES = National Health and Nutrition Examination Survey.

## Exhibit D.17. Dietary outcomes of children in treatment households, by number of boxes received prior to the first follow-up survey

|  | Mean daily amounts (SE) |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  | $0-10$ boxes | $11-15$ boxes | $16-25$ boxes | $26-35$ boxes | 36 boxes <br> or more |
| Dietary outcome ${ }^{\text {a }}$ |  |  |  |  |  |  |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey, and MIS data on number of food boxes received. Tabulations are weighted to be representative of all eligible treatment households in the Chickasaw Nation demonstration and were prepared by Mathematica Policy Research.
Note: Results in this table should be interpreted with caution, as they are not causal effects, and analyses did not adjust for household size or other factors that could affect the number of food boxes ordered by families. Food frequency data were analyzed using NCl's Dietary Screener Questionnaire in the NHANES (2009-10) data processing and scoring procedures for children age 2 and older. Households were excluded from analysis if they were missing data on the children's age or gender (which are required for the scoring algorithms), no age-eligible children were reported in the household, or the respondent did not complete the food frequency survey section $(\mathrm{n}=34)$. An additional 49 respondents completed some items in this survey section, but not all.
${ }^{\text {a }}$ Daily amounts are measured in cup equivalents (cup eq.) for fruits and vegetables and ounce equivalent (oz eq.) for whole grains, as defined by the 2010 Dietary Guidelines for Americans.
${ }^{\mathrm{b}}$ One cup equivalent is defined as 1 cup of raw or cooked fruit or vegetables, vegetable juice, or fruit juice, or 2 cups of leafy green vegetables.
${ }^{\text {c }}$ One cup equivalent is defined as 1 cup of raw or cooked fruit or fruit juice.
${ }^{d}$ One cup equivalent is defined as 1 cup of raw or cooked vegetables or vegetable juice or 2 cups of leafy green vegetables.
${ }^{e}$ One oz. eq. of whole grains is 11 -ounce slice of bread; 1 ounce of uncooked pasta or rice; $1 / 2$ cup of cooked rice, pasta, or cereal; 16 -inch diameter tortilla; 15-inch diameter pancake; 1 ounce of ready-to-eat cereal; or 3 cups of popped popcorn.
${ }^{\mathrm{f}}$ Teaspoons (tsp.) of added sugars are derived from reported frequencies of consuming sugar-sweetened beverages (soda, fruit-flavored drinks, and sugar or honey added to coffee or tea); cookies/cakes/pies/brownies; doughnuts/sweet rolls/Danish/muffins; and cereals. Questions on candy and ice cream consumption were not asked and therefore are excluded from the estimates.
MIS = management information system; $\mathrm{NCI}=$ National Cancer Institute; NHANES $=$ National Health and Nutrition Examination Survey; SE = standard error.

## D.5. ILLUSTRATION TO SUPPLEMENT CHAPTER IV DISCUSSION

## Exhibit D.18. Hypothetical calculation using Chickasaw Nation study data to estimate the dollar value of a food box for an average eligible child in an average treatment household

- Assume a food box with a value of $\$ 53$ per child was available to treatment households each month. As the average household had 2.2 eligible children, treatment households had $\$ 117$ in extra food available each month.
- However, treatment households did not always order their full benefits, and some lost their eligibility by moving away from treatment districts. Specifically, the average number of food boxes going to treatment households in the typical month was 1.4, amounting to a $\$ 74$ benefit.
- However, part of these benefits comprised the Fresh Checks, and among checks they received, households failed to redeem about $25 \%$, leading to a further reduction in the extra food resulting from the project of about $\$ 5\left(\$ 15 * 1.4^{*} 0.25=\$ 5.25\right)$, for a total of $\$ 69$.
- Among the checks used, households typically bought $\$ 14$ worth of fresh produce for each $\$ 15$ check, dropping the benefit of participation for the typical treatment household to $\$ 68$.
- The analysis found that the project led to a modest decline in households' out-of-pocket food expenditures. In other words, with more food coming into the household, they did not spend as much of their own money on food in stores. Specifically, there was a decline of $\$ 22$ for the typical household, meaning that the total value of additional food in the household was $\$ 68-22=\$ 46$.
- As noted previously, these extra food resources came to the household and may not have resulted specifically in extra food for eligible children in the household. Assuming that about half of these benefits went to adults (or ineligible children), this scenario implies that only $\$ 23$ went to eligible children.
- Also, the average for households was 2.2 children, suggesting that the typical eligible child got about $\$ 10$ in additional food each month.

Source: Evaluation of Demonstrations to End Childhood Hunger. Calculations prepared by Mathematica Policy Research based on analysis of implementation and survey data for Chickasaw Nation's Packed Promise project.

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## APPENDIX E

## ADMINISTRATIVE DATA ON SFSP AND SUMMER EBT FOR CHILDREN

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This appendix provides information on the Summer Food Service Program (SFSP) and the Summer EBT for Children as context for the range of food assistance programs available to lowincome households in the Chickasaw Nation demonstration area. The contextual findings show that access to these two summer programs was roughly similar in treatment and control school districts during the study period. Access to summer programs like these is of interest to the evaluation because participation in these other summer programs may have influenced the treatment group's participation in Packed Promise (or vice versa). Likewise, knowing that the control group did not have greater access to SFSP or Summer EBT for Children is also important in interpreting the impacts of Packed Promise on measures of children's food security. The findings suggest that access to the SFSP was limited in both treatment and control school districts. Overall, participation in the Summer EBT for Children was roughly similar between treatment and control districts, suggesting similar access to this summer benefit as well. These findings are discussed in detail below.

## A. Summer Food Service Program

Appendix Exhibit E. 1 shows SFSP site availability in demonstration school districts in summer 2016 based on administrative data. ${ }^{1}$ Specifically, the SFSP administrative data showed that less than a quarter of demonstration school districts (9 of 40) had operating SFSP sites; this number was fairly evenly divided between treatment and control school districts (four and five school districts, respectively). A total of 46 SFSP sites operated in the 9 demonstration school districts throughout the summer; June and July had the largest number of available sites-36 and 32 sites, respectively. More SFSP sites operated in treatment school districts ( 25 sites) than control districts ( 21 sites) across the summer months. However, the number of SFSP sites in control school districts was equal to the number in treatment school districts in June, and slightly greater than the number of sites in treatment school districts in July and August. On average, 7 SFSP sites operated per treatment school district and 4 per control school district. ${ }^{2}$

Exhibit E.1. Summer Food Service Program characteristics in demonstration school districts, 2016

|  | All school districts <br> $(\mathrm{n}=40)$ |  | Treatment school districts <br> $(\mathrm{n}=20)$ | Control school districts <br> $(\mathrm{n}=20)$ |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percentage | Number | Percentage | Number | Percentage |
| Outcome |  |  |  |  |  |  |
| School districts with | 9 | 22.5 | 4 | 20.0 | 5 | 25.0 |
| SFSP sites |  |  |  |  |  |  |
| By month | 8 | 20.0 | 3 | 15.0 | 5 | 25.0 |
| May | 9 | 22.5 | 4 | 20.0 | 5 | 25.0 |
| June | 8 | 20.0 | 3 | 15.0 | 5 | 25.0 |
| July | 5 | 12.5 | 3 | 15.0 | 2 | 10.0 |

[^49]| Outcome | All school districts$(\mathrm{n}=40)$ |  | Treatment school districts$(n=20)$ |  | Control school districts$(\mathrm{n}=20)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percentage | Number | Percentage | Number | Percentage |
| SFSP sites ${ }^{\text {a }}$ | 47 | -- | 26 | -- | 21 | -- |
| By month |  |  |  |  |  |  |
| May | 7 | -- | 5 | -- | 2 | -- |
| June | 36 | -- | 18 | -- | 18 | -- |
| July | 34 | -- | 15 | -- | 19 | -- |
| August | 22 | -- | 10 | -- | 12 | -- |
| Average number of SFSP sites per district | 5.2 | -- | 6.5 | -- | 4.2 | -- |

Source: Evaluation of Demonstration Projects to End Childhood Hunger, SFSP administrative data from the Oklahoma State Department of Education, 2016. Tabulations were prepared by Mathematica Policy Research.
Notes: Column percentage estimates do not sum to $100 \%$ because SFSP sites might have operated in multiple months. All demonstration households were eligible for their children to receive free SFSP meals and snacks if available in the community.
${ }^{\text {a }}$ The number of SFSP sites per district ranged from 1 to 17 sites.
-- District-level percentages are not reported because not all districts participated in the SFSP.
SFSP = Summer Food Service Program.
The limited availability of SFSP sites is consistent with the relatively low percentage of households ( $12 \%$ ) reporting at the second follow-up survey that their children received free meals or snacks in the past 30 days at places such as summer school, a community center, day camp, or park (see Appendix D.5). The survey question on summer meals was asked only in the August and September 2017 interviews, comprising about half of the full set of second follow-up survey respondents.

## B. Summer EBT for Children

Administrative data were provided on the Summer EBT for Children, in which CNNS provides food assistance to low-income households during the summer using WIC EBT technology. To qualify for Summer EBT for Children benefits, households must reside in a school district participating in the program, and children must be eligible to receive FRP meals at school (The Chickasaw Nation 2018). In summer 2016, participating households received monthly benefits of $\$ 30$ or $\$ 60$ per eligible child; in summer 2017, all households received $\$ 30$ per eligible child because federal demonstration funding for FY 2017 only included the $\$ 30$ benefit level. ${ }^{3}$

Administrative data on Summer EBT for Children household participation during summer 2016 showed that among treatment and control households receiving Summer EBT for Children benefits in Packed Promise school districts, about one-fifth received the $\$ 60$ monthly benefit per child $(429 / 2,363=18 \%$ in treatment households and $497 / 2,257=22 \%$ in control households;

[^50]Appendix Exhibit E.2). Among non-demonstration school districts, about 3\% of participating households received the $\$ 60$ monthly benefit in 2016 (216/6,206 = 3\%; Appendix Exhibit E.3).

Exhibit E.2. Household participation in the summer EBT for childrena among households in Packed Promise school districts

| Monthly benefit level per child | Summer 2016 |  |  |  |  |  | Summer 2017 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$30 |  |  | \$60 |  |  | \$30 |  |  |
|  | No. of HHs | Mean no. of eligible children ${ }^{\text {b }}$ per HH (SE) | Mean monthly benefit per HH (\$) (SE) | No. of HHs | Mean no. of eligible children ${ }^{\text {b }}$ per HH (SE) | Mean monthly benefit per HH (\$) (SE) | No. of HHs | Mean no. of eligible children ${ }^{\text {b }}$ per HH (SE) | Mean monthly benefit per HH (\$) (SE) |
| Treatment school districts ${ }^{\text {c }}$ | 1,933 | 2.0 (0.02) | 60 (0.7) | 429 | 2.4 (0.06) | 143 (3.3) | 2,573 | 2.0 (0.02) | 61 (0.6) |
| Control school districts ${ }^{\text {d }}$ | 1,760 | 2.0 (0.02) | 60 (0.7) | 497 | 2.5 (0.05) | 150 (3.1) | 2,318 | 2.1 (0.02) | 63 (0.7) |
| Treatmentcontrol difference | -- | 0.0 (0.03) | 0 (1.0) | -- | -. 1 (0.08) | -7 (4.5) | -- | -. 0 (0.03) | -1 (0.9) |
| P -value | -- | 0.86 | 0.86 | -- | 0.14 | 0.14 | -- | 0.12 | 0.12 |

Source: Chickasaw Nation administrative data on Summer EBT for Children benefits, summer 2016 and summer 2017. Tabulations were prepared by Mathematica Policy Research.

Notes: Calculations are based on households participating in the Packed Promise project demonstration and evaluation. Household participation is measured as Summer EBT for Children benefit issuance. Treatmentcontrol differences among Packed Promise school districts were calculated by a two-sample t-test.
${ }^{\text {a }}$ Chickasaw Nation participates in the USDA FNS Summer EBT for Children and uses WIC EBT technology to provide low-income families with more resources to use at food stores in the summer.
${ }^{\mathrm{b}}$ Children were eligible for Summer EBT for Children benefits if they were enrolled in a summer EBT for children school district and received FRP school meals.
${ }^{c}$ All 20 Packed Promise treatment school districts were included in the Summer EBT for Children at the $\$ 30$ benefit level in 2016 and 2017; 18 Packed Promise treatment school districts were included in the Summer EBT for Children at the $\$ 60$ benefit level.
${ }^{\text {d }}$ All 20 Packed Promise control school districts were included in the Summer EBT for Children at the $\$ 30$ benefit level in 2016 and 2017; 16 Packed Promise control school districts were included in the Summer EBT for Children at the $\$ 60$ benefit level.
EBT = electronic benefits transfer; FNS = Food and Nutrition Service; HH = household; No. = number; SE = standard error; FRP = free or reduced-price; USDA = U.S. Department of Agriculture; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Analysis of summer 2017 administrative data on Summer EBT for Children found that there was no significant difference between the mean number of eligible children per household receiving benefits or the amount of the benefit between treatment and control school districts, suggesting that households in Packed Promise treatment and control districts were similar regarding levels of benefit eligibility based on household composition. Analysis of data from the second follow-up survey found that Packed Promise treatment households were more likely to
receive Summer EBT for Children benefits than control households (67\% versus 56\%, respectively; Appendix Exhibit D.5). ${ }^{4} \backslash$

## Exhibit E.3. Household participation in the summer EBT for childrena among households not in Packed Promise school districts

|  | Summer 2016 |  |  |  |  |  | Summer 2017 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$30 |  |  | \$60 |  |  | \$30 |  |  |
| Monthly benefit level per child | No. of HHs | Mean no. of eligible children ${ }^{\text {b }}$ per HH (SE) | Mean monthly benefit per HH (\$) (SE) | No. of HHs | Mean no. of eligible children ${ }^{\text {b }}$ per HH (SE) | Mean monthly benefit per HH (\$) (SE) | No. of HHs | Mean no. of eligible children ${ }^{\text {b }}$ per HH (SE) | Mean monthly benefit per HH (\$) (SE) |

All other school
districts ( $\mathrm{n}=71$ )
not in the
Packed
$\begin{array}{lllllllll}\text { Promise project } 5,990 & 2.1(0.01) & 63(0.4) & 216 & 2.4(0.08) & 147(4.5) & 7,655 & 2.1(0.01) & 63(0.4)\end{array}$
Source: Chickasaw Nation administrative data on Summer EBT for Children demonstration benefits, summer 2016 and summer 2017. Tabulations were prepared by Mathematica Policy Research.
Notes: Calculations are based on households that did not participate in the Packed Promise project and evaluation. Household participation is measured as Summer EBT for Children benefit issuance.
${ }^{\text {a }}$ Chickasaw Nation participated in the USDA FNS Summer EBT for Children and used WIC EBT technology to provide low-income families with resources to be used at WIC-authorized food stores in the summer.
${ }^{\text {b }}$ Children were eligible for Summer EBT for Children benefits if they were enrolled in a Summer EBT for Children school district and received FRP school meals.
EBT = electronic benefits transfer; FNS = Food and Nutrition Service; FRP = free or reduced-price; HH = household; No. = number; SE = standard error; USDA = U.S. Department of Agriculture; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

[^51]
## APPENDIX F

## APPENDIX REFERENCES

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## APPENDIX REFERENCES

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[^0]:    ${ }^{1}$ FI-C in the household occurs when any of the children in it have their eating pattern disrupted (ERS 2017b). In 2016, the 12-month estimate for very low food security among children (VLFS-C), the most severe form of food insecurity, was $2.6 \%$ among households with incomes eligible for SNAP or free school meals (Coleman-Jensen et al. 2017)

[^1]:    ${ }^{2}$ The 175 households not selected for the evaluation sample remained eligible to receive project benefits. Households were randomly selected to receive project benefits in this non-evaluation sample, just as in the evaluation sample.

[^2]:    ${ }^{3}$ Households were eligible for the evaluation sample if the children in the household received free school meals or attended a Community Eligibility Provision (CEP) school, in which all school children receive free school meals (FNS 2017a). Households with relatively higher incomes may have had children attending a CEP school, or their income information reported in the survey may have differed from the meal certification status of the children provided in the school records used for sampling.
    ${ }^{4}$ A broader definition of Native American would include many of those in the multiracial group.

[^3]:    ${ }^{5}$ Note that each follow-up survey asked respondents about their Summer EBT for Children participation during the previous summer (that is, summer 2016 for respondents to the first follow-up survey). The 30-day reference period for the first follow-up survey did not include the summer of 2016 because the survey was fielded between January and June 2017. The second follow-up survey, fielded between August and November 2017, asked about summer 2017 participation.
    ${ }^{6}$ One cup equivalent is defined as 1 cup of raw or cooked fruit or vegetables, vegetable juice, or fruit juice, or 2 cups of leafy green vegetables.

[^4]:    ${ }^{7}$ The Chickasaw Nation is a federally recognized Native American nation located in Oklahoma.
    ${ }^{8}$ Fresh Checks could be redeemed for fresh produce or frozen fruits and vegetables at any WIC-authorized store, farmers market, or farm stand in the target counties; see Chapter II for details.
    ${ }^{9}$ Food security is defined as access by all people at all times to enough food for an active, healthy life (Economic Research Service [ERS]) 2017a). Household food insecurity occurs when the food intake of one or more household members is reduced and their eating patterns are disrupted because the household lacks money and other resources for food (ERS 2017a). Food insecurity can be measured at the household, adult, and child levels. Food insecurity among children (FI-C) occurs when any of the children in the household have their eating patterns disrupted; food insecurity among adults (FI-A) occurs when any of the adults in the household have their eating patterns disrupted because "there wasn't enough money for food."

[^5]:    ${ }^{10}$ Participation in NSLP has remained stable in the past decade; 30 million children participated in fiscal year (FY) 2017 (FNS 2018d). In FY 2017, 74\% of all school lunches were free or reduced-price (FNS 2018d). In FY 2017, 42.1 million people participated in SNAP (FNS 2018 g ) and 7.3 million women and children participated in WIC (FNS 2018h). In both programs, total participation decreased slightly compared to the 2011-2014 period. FDPIR provides USDA foods to low-income households living on Indian reservations and Native American families residing in designated areas near reservations and in the State of Oklahoma (FNS 2018c). WIC provides supplemental nutritious foods and other services to low-income infants, children under age 5, and pregnant and postpartum women (FNS 2018i).
    ${ }^{11}$ Native American children have approximately twice the levels of food insecurity, obesity, and Type II diabetes, relative to the averages for all U.S. children of similar ages (Gordon and Oddo 2012). Native Americans have the highest rates of diabetes among all race/ethnicity groups (Centers for Disease Control and Prevention 2017; Indian Health Service 2009).

[^6]:    ${ }^{12}$ Under the Community Eligibility Provision, schools and school districts in low-income areas serve meals at no cost to all enrolled students without collecting household applications (FNS 2017a).
    ${ }^{13}$ CNNS decided to include school districts with at least $14 \%$ Native American students to ensure that (1) the project included a significant portion of Chickasaw Nation families, and (2) the expected Packed Promise benefits and costs could be covered by the grant award if all potentially eligible households in the treatment group chose to enroll. CNNS estimated that its grant award would cover the costs of serving about 5,000 children. Based on school demographic information, CNNS determined that a $14 \%$ cutoff would enable it to serve 5,000 children while still targeting school districts with relatively large shares of Native American students.

[^7]:    ${ }^{14}$ For example, among households that completed the first follow-up survey and were included in the main impact model (used for the impact estimates presented in Chapter III), there was only one baseline measure for which there was a statistically significant (at the 0.05 level) difference between the mean among the treatment and control groups. Households in the treatment group were significantly more likely to experience food insecurity at the household level. Households in the two groups had mean values of all other baseline covariates that were not significantly different from one another. As described in Appendix A, the impact model controls for all of these baseline covariates.

[^8]:    ${ }^{15}$ In general, the report focuses on the first follow-up survey because it includes children's diet outcomes (see Chapter III); this decision also enables comparisons to the other EDECH demonstration projects. Findings from the second follow-up survey are also discussed in Chapter III and presented in Appendix D.
    ${ }^{16}$ In addition, these baseline characteristics may account for any differences between the treatment and control groups that arose by chance, despite random assignment.

[^9]:    ${ }^{17}$ Before the Packed Promise project began, there was an evaluation of the Summer EBT for Children demonstration that included a site in Chickasaw Nation (Collins et al. 2016). In the last year of that study, households were randomly assigned to receive either $\$ 30$ or $\$ 60$ in 2013. The households that participated in that study (some of whom also participated in this study) continued to receive that same benefit level through 2016. Following the release of the study results showing no significant difference between the $\$ 30$ and $\$ 60$ per eligible child in reducing VLFS-C, the benefit level was set by FNS at $\$ 30$ to reach more households with eligible children beginning in 2017 (FNS 2017b).

[^10]:    ${ }^{18}$ Packed Promise participation rate calculations are based on the number of consenting households still eligible to receive benefits as of September 2016, or the start of school year 2016-2017 ( $\mathrm{n}=2,054$ households, which excludes three households that did not consent to the evaluation).

[^11]:    ${ }^{19}$ Due to rolling order periods that did not correspond exactly to calendar months in the first 13 project months, households could have placed orders for two 30-day benefit periods during one calendar month. The calculation for the estimated participation rate was based on whether a household placed any order during a calendar month, and undercounts two orders placed in the same calendar month. In terms of project operations, $65 \%$ of households placed monthly orders out of a possible 25 monthly orders. See Exhibit II.A notes for additional details.
    ${ }^{20}$ Households that did not participate in Packed Promise because they were not eligible to do so were included in the participation rate calculations. Thus, a decline in the number of eligible households is one likely reason for the decline in the participation rate between Years 1 and 2. CNNS updated its eligibility records on an ongoing basis, with major updates at the start of each school year. If fewer households were eligible to participate at the start of the second school year, the participation rate would have been affected. Reasons for loss of eligibility included a child graduating from high school or a household moving away and the child no longer attending a treatment school.

[^12]:    ${ }^{21}$ One Packed Promise participant reported, "Right now I think I have 10 boxes of [whole wheat crackers] and nobody's going to eat them. I'm going to take them to church for a party or something." The finding that households may have deliberately skipped months to avoid stockpiling certain shelf-stable items is consistent with research on FDPIR. One study on FDPIR found that when the quantity of a food item (such as flour) was too much, some participants did not take the full quantity to avoid it piling up in their homes unused (Pindus et al. 2016).
    ${ }^{22}$ Based on the sample of treatment households that responded to the survey items.

[^13]:    ${ }^{23}$ Redemption dates reflect the date on which the store cashed the check at the bank, rather than the date the household redeemed the check at the store.

[^14]:    ${ }^{24}$ The remainder of this analysis reports total rather than paid costs. Total cost includes both paid costs and the estimated value of donated or in-kind resources.
    ${ }^{25}$ ODCs accounted for a high percentage of project costs because they include those related to food boxes $(\$ 3,552,134)$ and Fresh Checks $(\$ 701,452)$.
    ${ }^{26}$ Costs per household ( $\mathrm{n}=2,054$ ) were calculated based on the total number of consenting households eligible for food boxes in September 2016 (that is, at the start of the 2016-2017 school year).
    ${ }^{27}$ Based on an average of 2.2 school children per household (Exhibit III.1), the cost per eligible child was approximately $\$ 1,410$.

[^15]:    ${ }^{28}$ Costs associated with redeeming the Fresh Checks include the disbursements-that is, funds sent to the bank to cover the actual amount of Fresh Check benefits redeemed by Packed Promise participants, and bank fees-that is, fees related to check processing, returns, wire transfers, overdrafts, and a base monthly cost. There were no labor costs associated with the Fresh Checks that were distinct from the food box labor costs.

[^16]:    ${ }^{29}$ Among the full sample of baseline respondents, there were only two characteristics with statistically significant treatment-control differences at baseline, although both were measures of food security. The baseline rate of food insecurity among adults and in the household were significantly higher in the treatment group than in the control group, with no significant difference in food insecurity among children. The model for estimating the impacts of Packed Promise controlled for these measures of baseline food security, along with other baseline characteristics. Characteristics of households at the first and second follow-up surveys are also presented in Appendix A.
    ${ }^{30}$ Analytic sample sizes in exhibits vary according to the questions included in each exhibit. Specifically, the sample sizes in a given exhibit reflect the sample for the highest nonmissing survey data element in that exhibit. In most or all cases, it will be less than the full evaluation sample.

[^17]:    ${ }^{31}$ The poverty threshold for a family of four in 2016 was $\$ 24,563$ (U.S. Census Bureau 2018c), or $\$ 2,047$ per month.
    ${ }^{32}$ Households were eligible for the evaluation sample if at least one child attended school in a demonstration district and was eligible for free meals (or the school was a CEP school). Although children are eligible for free school meals if their income is less than $130 \%$ of the FPL, the sample includes a small proportion of higher-income households for two reasons. First, children attending CEP schools could have been from households with income above $130 \%$ of the FPL. Second, household income could have changed between the time they established their eligibility for free school meals and the time income was measured on the baseline survey.
    ${ }^{33}$ Income-eligible American Indian and non-Indian households that reside on a reservation and households living in approved areas near a reservation or in Oklahoma that contain at least one person who is a member of a Federallyrecognized tribe, are eligible to participate in FDPIR (FNS 2018c). Approximately 34\% of the evaluation sample was American Indian or Alaska Native (Appendix Exhibit A.1).
    ${ }^{34}$ In some low-income communities, backpack programs operated by nonprofit or other community organizations provide supplemental foods to students in backpacks for consumption at home. Backpack program are often intended to cover food needs for weekends and school breaks.

[^18]:    ${ }^{35}$ For the typical household, the first follow-up survey was conducted in the 13 th month of implementation; the second follow-up survey was conducted in the 19th month of implementation.

[^19]:    ${ }^{36}$ At the time of the second follow-up, only one of the numerous measures presented in this table-having engaged in seasonal work-exhibited a statistically significant difference between treatment and control groups. The prevalence of changes in household circumstances were otherwise similar.
    ${ }^{37}$ Because fewer than one-third of households in both groups experienced a change in employment or pay, the difference between the two groups in the percentage that experienced a decrease in pay or hours was much smaller when examined among the full evaluation sample. In particular, about $5 \%$ of the full treatment group experienced a decrease in pay or hours, compared with $8 \%$ of the full control group.

[^20]:    ${ }^{38}$ Note that each follow-up survey asked respondents about their Summer EBT for Children participation the previous summer (that is, summer 2016 for first follow-up survey respondents). The 30 -day reference period for the first follow-up survey did not include the summer of 2016 because the survey was fielded between January and June 2017. The second follow-up survey was fielded between August and November 2017.
    ${ }^{39}$ A significantly smaller share of treatment than control households received food at an afterschool program ( $12 \%$ versus $14 \%$ ) but the difference in participation rates was small; this difference was not significant at the time of the second follow-up.
    ${ }^{40}$ Administrative data on Summer EBT for Children show that (1) the program was equally available in treatment and control school districts (18 out of 20), and (2) more households in treatment school districts participated than in control school districts despite there being more households in the control school districts in the evaluation sample. Administrative data support the survey finding that participation in Summer EBT for Children was higher in treatment than control households (see Appendix E. 2 and E.3).
    ${ }^{41}$ For example, a question about use of community food resources such as food pantries, which also mentioned meal delivery services such as Meals on Wheels, may have caused some respondents to think of the deliveries in Packed Promise.

[^21]:    ${ }^{42}$ Although the retail value of the food box was not estimated directly, households received approximately $\$ 22$ in Fresh Checks alone in a typical month. Fresh Checks represented approximately one-fourth of the overall value of the delivery ( $\$ 15$ out of $\$ 53$ per box).

[^22]:    ${ }^{43}$ A more healthful diet is associated with greater intake of fruits, vegetables (non-fried), and whole grains, and limited intake of added sugars from sources such as cookies, cakes, pies, doughnuts, brownies, and sugar-sweetened beverages (USDA and HHS 2015).

[^23]:    ${ }^{44}$ The participation rate depends on the definition and method used for calculations and household eligibility, which was not known monthly for this project. The estimated monthly participation rate is $61 \%$ based on monthly orders among all households. For the first 13 project months, a 30 -day benefit period could span two calendar months, so the rate undercounts two orders a month. On the other hand, some orders may have been replacements orders not noted as such in the data, and overcounts in the rate. Using the number of monthly orders out of a total of 25 order months, $65 \%$ of households ordered food boxes monthly.

[^24]:    ${ }^{45}$ There was no evidence that the project led to significant increases in the percentage reporting other individual food security items.

[^25]:    ${ }^{46}$ The rate of FI-C in this sample is substantially higher than the 12 -month nationwide prevalence: among households with children and incomes at or below $130 \%$ of the FPL, 22\% experienced FI-C in 2016 (ColemanJensen et al. 2017). As additional context, nationally $2.6 \%$ of low-income households with children experienced VLFS-C and $22 \%$ experienced food insecurity at the household level.

[^26]:    ${ }^{47}$ Another possible reason for an increase in participation in other nutrition assistance programs is treatment households misreporting participation in these programs at higher rates than control households if they were attributing food boxes from Packed Promise to their participation in another program.

[^27]:    ${ }^{48}$ Although the Packed Promise project targeted children, it provided the food box to the household as a whole, thus not intending to limit the food to children, but rather to help feed the entire family.

[^28]:    ${ }^{49}$ For example, Summer EBT for Children was implemented among low-income households in Chickasaw Nation beginning in the summer of 2012 during a period when the economy was just recovering from the Great Recession. The evaluation of this demonstration included a site in Chickasaw Nation and found that Summer EBT for Children substantially and significantly reduced FI-C and VLFS-C in this site (Collins et al. 2013).

[^29]:    ${ }^{1}$ In accordance with the Chickasaw Nation IRB, the study team obtained verbal consent for the evaluation when the baseline survey was conducted. Participants could withdraw consent from the evaluation via an initial question asked by phone. The same process was implemented in the subsequent two rounds of follow up data collection ( 13 of 4,875 households opted out). However, households could receive project benefits even if they opted out of the evaluation.

[^30]:    ${ }^{2}$ In order to assess each school's similarity to other schools for purposes of matching, a four step procedure was followed. First, for each characteristic, the difference between the minimum and maximum value (or range) among schools in the pool was identified. Second, choosing a single school as the reference school, the difference between that reference school and each other school was calculated, as a proportion of the full range of values for that characteristic. Third, a weighted average of these differences was calculated, with larger weights applied to characteristics of particular importance to create a "quantitative similarity index" between each school and the reference school. Fourth, this process was repeated for each school as the reference school to identify, for each school, a ranking of similarity of the other schools. Matching pairs were identified by selecting the most similar school to each of the reference schools. The first school to be matched was the one with the highest proportion of free-lunch-eligible students, then the school with the lowest proportion was matched, then the school with the next highest proportion, and so on.

[^31]:    Source: Evaluation of Demonstration Projects to End Childhood Hunger, Chickasaw Nation Nutrition Services household sample files. Tabulations were prepared by Mathematica Policy Research.
    Notes: Randomization was at the school district level. Characteristics were based on head of household information from the school district files. It was not feasible to conduct significance testing between treatment and control groups for the full sample for the Packed Promise project. Making the statistical adjustments necessary to account for the clustered design would require knowing which households contained children in multiple clusters (or school districts). This information exists only for households in the analysis sample based on responses to the survey questions about schools attended by children in the household. Characteristics for the full sample are similar to those for the analysis sample (e.g., Exhibit A.2) and there were few significant differences within the analysis sample. All households originally in the sample and with an eligible child in a study district based on the original sample lists were included. Households later determined to be ineligible at baseline were included here, but excluded from the impact analysis, and the baseline characteristics of the treatment and control households included in the impact analysis are described below, in Exhibits A. 3 and A. 4 .

[^32]:    ${ }^{3}$ It is worth noting, however, that for the comparison of baseline characteristics among households that completed the first follow-up survey, since the baseline characteristics are drawn from the baseline survey, the households included in these comparisons completed both the baseline and first follow-up surveys. Similarly, for the comparison of baseline characteristics among households that completed the second follow-up survey, the households included in these comparisons completed both the baseline and second follow-up surveys.

[^33]:    ${ }^{4}$ Under the dummy variable adjustment approach recommended by Puma et al. (2009), the key is that missing values for a given variable are replaced (imputed) with a constant. The specific constant that is used (e.g., zero, the mean of valid values, or some other value) does not matter. This is because of the inclusion of the missing value dummy variable in the regression, since the coefficient on that dummy variable will capture the effect of the missing data. In other words, if the average outcome among cases with a missing value for a given covariate differs from the outcome among cases with a

[^34]:    valid value of that covariate (controlling for the other covariates in the model), the coefficient on the missing value dummy variable will capture this difference.

[^35]:    ${ }^{5}$ Partial interviews are those that the respondent completed through at least the Food Security questions (Section E in the follow-up surveys) before breaking off the interview.

[^36]:    ${ }^{6}$ In addition, follow-up surveys were not attempted among households that-during the administration of the baseline survey-refused to provide their consent to participate in any part of the study. However, these households were still considered part of the eligible population and defined as non-respondents to the follow-up surveys.

[^37]:    ${ }^{7}$ For ease of presentation, we use 0.5 in all of the formulas that follow.

[^38]:    ${ }^{8}$ These last two adjustments to the weights were different for the baseline and follow-up surveys, since the analysis sample of households with non-missing data presumably differs for each one. Separate weights were created for analysis of data from the baseline survey and each of the follow-up surveys.
    ${ }^{9}$ However, it was possible that at some time during the follow-up period new information was received about the household's baseline eligibility. The data collection did not set out to obtain updated information on baseline eligibility throughout the follow-up period. However, there were a handful of cases of households determined to have duplicate records in the data files. In these cases, one of the records was defined as baseline ineligible and dropped from the analysis, and the other record was retained, so that each household would be represented only once in the analysis file. In addition, there were a small number of households in which the child aged out of demonstration eligibility between the baseline and follow-up surveys. Since the administrative records provided complete information to identify any such households (meaning no information from survey responses was needed) these households were excluded from calculation of the eligibility rate that was applied to households with unknown eligibility. That is, any household falling into this category would have been identified using the administrative records, and would have known eligibility.

[^39]:    ${ }^{10}$ For more information about this procedure, see: http://www.statisticssolutions.com/non-parametric-analysis-chaid/. (StatisticsSolutions 2018).
    ${ }^{11}$ Because the modeling was conducted separate for the treatment and control groups and for the first and second followup surveys, the term $p_{i}^{e}$ should have subscripts for treatment/control status and for the first/second follow-up periods. These have been suppressed for simplicity.

[^40]:    ${ }^{12}$ As above, subscripts for treatment/control status and first/second follow-up survey in the term $\left(p_{i}^{r 2}\right)$ have been suppressed for simplicity.

[^41]:    ${ }^{1}$ The baseline survey's 30-day reference period did not include summer. The first follow-up survey ended on June 9, 2017 and included about a week of summer in the 30-day period. The second follow-up survey started on July 31, 2017 and included about two months of summer in the 30-day reference period. See Exhibit B.2.

[^42]:    ${ }^{2}$ Food security measures were missing for $0.3 \%$ or less of cases across categories and survey rounds, and reflect item nonresponse. At baseline, child food security constructs were missing for 5 cases, adult constructs for 4 cases, and household constructs for 5 cases ( 8 cases for VLFS-HH) among those who responded to the survey. At the first follow-up, child food security constructs were missing for 4 cases, adult constructs for 0 cases, and household constructs for 3 cases. At the second follow-up, child food security constructs were missing for 5 cases, adult constructs for 4 cases, and household constructs for 7 cases ( 9 cases for VLFS-HH).
    ${ }^{3}$ Food boxes were provided to treatment households for eligible children four years and older who were eligible for or receiving free school meals through attending a CEP school. Because the food security measures assessed food security for all children living in the household, and the food box contents could have been consumed by others in the household, the children's dietary measures are reported for the full age range possible with the scoring algorithms, two years and older (Appendix B.7).

[^43]:    According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection will be entered after clearance. The time required to complete this information collection is estimated to average 30 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection.

[^44]:    According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection will be entered after clearance. The time required to complete this information collection is estimated to average 30 to 35 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection.

[^45]:    According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection will be entered after clearance. The time required to complete this information collection is estimated to average 30 to 35 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection.

[^46]:    ${ }^{4}$ The first quarter of the implementation period includes cost data for two months, February and March of 2016, but all other quarters are calendar quarters and include three months of cost data.

[^47]:    ${ }^{11}$ Teaspoons of added sugars are derived from reported frequencies of consuming sugar-sweetened beverages (soda, fruit-flavored drinks, and sugar or honey added to coffee or tea); cookies/cakes/pies/brownies; doughnuts/sweet rolls/Danish/muffins; and cereals. Questions on candy and ice cream consumption were not asked and are therefore excluded from the estimates.
    12 The FNDDS searchable database is called, "What's In the Foods You Eat Search Tool", and can be found at: https://reedir.arsnet.usda.gov/codesearchwebapp/(S(3bir4ywqae42psk3fpnshozp))/CodeSearch.aspx (USDA n.d.).

[^48]:    ${ }^{13} \mathrm{NCI}$ definitions of extreme values can be found at: https://epi.grants.cancer.gov/nhanes/dietscreen/scoring/current/identify.html (NCI 2018c).

[^49]:    ${ }^{1}$ SFSP administrative data for 2017 were requested from the Oklahoma State Department of Education, but SFSP site data could not be provided at the school district level. Data for 2016 are reported under the assumption that the numbers of SFSP sites operating in 2017 are similar to those operating in 2016.
    ${ }^{2}$ The number of SFSP sites per school district ranged from 2-17 in treatment districts and 1-9 in control districts.

[^50]:    ${ }^{3}$ Households were initially assigned to receive $\$ 30$ or $\$ 60$ per eligible child during the demonstration period (20112015) and continued to receive that same benefit level in 2016. In addition, in 2017 new households received a $\$ 30$ benefit as did all households that were enrolled in previous summers (FNS 2017b).

[^51]:    ${ }^{4}$ Summer EBT for Children administrative data did not identify Packed Promise households. However, it is possible that fewer households were participating in the latter than the former in Packed Promise school districts because eligibility criteria for Packed Promise were more stringent (that is, children from eligible households needed to qualify for free school meals or attend a school where all meals were served for free, whereas children were eligible for Summer EBT for Children if they received FRP meals).

