

## **Community Health Senior Honors Thesis**

The Perceived Benefits and Barriers to Summer Meal Participation in New York City

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### **Abstract**

Only 15 percent of U.S. children who receive free and reduced-price lunches during the year access USDA-sponsored free summer meal programs when school is out of session. Previous research has explored parent perceptions of summer meals to understand the underutilization of the program. The present study examined the role that summer meals have in shaping parents' experiences providing food and children's experiences eating in the summer with regard to the perceived benefits and barriers to participation. Twenty qualitative semi-structured phone interviews were conducted with parents from Queens, Bronx, and Brooklyn, New York, including both participants and non-participants in summer meals. All interview respondents were recruited through their participation in a separate summer meals survey at their child's elementary school, where they offered their contact information for follow-up. The interview asked questions about the challenges that parents face providing food in the summer and the perceived benefits or barriers to participating in a free meals program. Interviews were transcribed, coded, and analyzed thematically. Results demonstrated that summer meals reduce financial and psychological stress for parents, foster social support and connections within the community, and improve consumption habits for children. However, awareness of meal programs remains low and some programs may lack cultural inclusivity, preventing families with religious dietary restrictions from participating. On the whole, while the main purpose of summer meals is to reduce food insecurity, the programs provide many additional social and psychological benefits that demonstrate their value to low-income families. Summer meal administrators should incorporate messaging about these advantages into their marketing to leverage support for and participation in the programs, while meal sites should continue innovating ways to improve access to meals for all families.

## **Background**

### **Food Insecurity in Children**

Although the United States is a highly-resourced nation, limited food access remains a public health issue. Food insecurity is a term that encompasses the concept of limited food access by describing “whenever the availability of nutritionally adequate and safe foods or the ability to acquire acceptable foods in socially acceptable ways is limited or uncertain” (Anderson, 1990). In contrast, food security in a household refers to “access by all members at all times to enough food for an active, healthy life” (Anderson, 1990). As the definition suggests, food insecurity is multi-faceted, encompassing more than simply the presence or absence of sufficient food in a household; it may also refer to a lack of nutritional foods or the worry or anxiety caused by uncertainty around accessing food (Wunderlich & Norwood, 2006).

The prevalence of food insecurity in children ages 0 to 17 is concerning. In 2016, 16.5 percent of households with children in the United States were food-insecure, which was above the national average of 12.3 percent. About half of these households, or 8.0 percent, had food-insecure children in them, while the remainder had just food-insecure adults (Coleman-Jensen, Rabbitt, Gregory, & Singh, 2017). Unsurprisingly, food insecurity rates increased during the Great Recession in 2008 and have stayed at elevated levels since (Coleman-Jensen et al., 2017).

### **Risk Factors of Food Insecurity**

The most obvious risk factors of food insecurity are poverty level and income. Although poverty and food insecurity are inextricably linked, Gundersen & Ziliak (2014) caution that these factors play a large role but do not explain everything. Notably, food insecurity levels are still high for families at two or three times the federal poverty level, and nearly 60 percent of children

in households around the federal poverty level are food-secure (Gundersen & Ziliak, 2014). In addition to poverty, other demographic factors are also associated with high food insecurity levels. For example, 22.5 percent of households headed by Black non-Hispanics and 18.5 percent of households headed by Hispanics are food-insecure. In addition, marital status plays a role; single female-headed households with children had a rate of food insecurity at 31.6 percent in 2016 (Coleman-Jensen et al., 2017). Furthermore, households with a disabled person experience higher rates of food insecurity (Coleman-Jensen & Nord, 2013). Therefore, as expected, traditionally underprivileged groups in the United States experience food insecurity at higher rates.

Gundersen and Ziliak (2014) dig deeper to demonstrate less obvious themes associated with food insecurity such as adult caregivers' mental and physical health. Furthermore, they explore what circumstances can trigger a family to lose food security, highlighting that changes in socioeconomic situation including job loss, housing instability, and income instability contribute to changes in food security status (Gundersen & Ziliak, 2014).

### **Consequences of Food Insecurity for Children**

Food insecurity has a significant effect on children, as it can lead to physical and mental health problems and developmental delays that may begin at a young age. In a study of health outcomes of children less than or equal to 36 months old, food-insecure children had twice the odds of fair or poor health status and 1/3 higher odds of hospitalization than food-secure children (Cook et al., 2004). In addition, in a longitudinal study of children from kindergarten to third grade, food insecurity in kindergarten predicted greater weight gain, BMI, and poorer math performance, for girls. Over time, persistent food insecurity among girls was associated with a

smaller increase in reading score. Regardless of gender, transitioning from household food security to food insecurity was also associated with a smaller increase in reading score as compared to children whose households remained food secure (Jyoti, Frongillo, & Jones, 2005). The effects continue into adolescence, as increased food insecurity has been associated with increased odds of past-year mood, anxiety, behavior, and substance disorders among adolescents (McLaughlin et al., 2012). Most studies about food insecurity control for confounding variables such as income level, indicating that limited food access itself is associated with negative outcomes during childhood and adolescence. For this reason, it is imperative to understand ways to reduce food insecurity.

### **Definitions of Limited Food Access**

Food insecurity is the most commonly used term to describe limited food access and is often measured quantitatively at the household level by an 18-item questionnaire developed by the United States Department of Agriculture (USDA). The questionnaire is implemented annually in the Census Bureau's Current Population Survey. It asks families to reflect on their food-related behaviors in the previous 12 months caused by a lack of money or resources and categorizes households as having high food security, marginal food security, low food security, or very low food security ("Food Insecurity in the U.S.: Measurement," 2017). Both low and very low food secure households are considered to experience food insecurity. Low food security encompasses a reduced quality, variety, or desirability of diet with little indication of reduced food intake, whereas very low food insecurity indicates disruption of eating patterns and reduced food intake ("Food Insecurity in the U.S.: Measurement," 2017). The questionnaire includes items regarding the household in general and items specifically targeted at children. Since its

inception in 1995, food insecurity has been a widely-used indicator in the peer-reviewed literature of a household's difficulty to meet food needs.

Contrarily, while hunger is often used colloquially to describe a similar concept as food insecurity, its definition is distinct. A review of current research about hunger and food insecurity in America conducted by RTI International clearly synthesizes the distinction:

Currently, the USDA does not measure hunger—the physiological sensation arising from lack of enough food—because hunger is defined as an individual experience (which can come from food insecurity). Hunger also is a subjective experience that varies considerably by individual, and validated measures for hunger arising explicitly from food insecurity do not exist. In contrast, food security and insecurity capture household characteristics derived from social and economic conditions and are measured by observable behaviors relative to the availability of, and accessibility to, safe and nutritious food. (RTI International, 2014, p. 1-2)

Therefore, while hunger describes a physical sensation, food insecurity aims to describe the circumstances that may lead to hunger in some households. An additional term used in the peer-reviewed literature is food insufficiency, which specifically concerns whether or not a household has enough food for its members (Huang, Barnidge, & Kim, 2015). It is important to note that this more specific term is encompassed in the definition of food insecurity, as it measures the quantity of food available in a household. While some studies do use food insufficiency measures, quantitative food insecurity measures are much more common.

### **National School Meal Programs Addressing Food Insecurity**

To address issues of food insecurity in the population, the United States Department of

Agriculture has several governmental food assistance programs, including the Supplemental Nutritional Assistance Program (SNAP); Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); National School Lunch Program (NSLP); School Breakfast Program (SBP); and Summer Food Service Program (SFSP) (“Programs and Services,” 2018). The NSLP and SBP are particularly important to reduce food insecurity in children; they offer free meals for children in families at 130% of the Federal Poverty Level and reduced-price meals for children in families between 130% and 185% of the Federal Poverty Level (Income Eligibility Guidelines, 2017). While measuring the effectiveness of these programs in reducing food insecurity is critical, the fact that participants are a self-selecting group presents a major barrier; in other words, those with higher levels of food insecurity are more likely to participate (Huang et al., 2015). Researchers have found creative ways to avoid this issue and study the effectiveness of food assistance programs by taking advantage of surveys that are administered at varying times during the year.

For example, Huang and Barnidge (2016) used longitudinal data from households with school-aged children who receive free or reduced-price lunch from the Survey of Income and Program Participation, which was administered in both summer and non-summer months, since the NSLP does not operate fully in the summer. Though they recognized the potential confounding factors of summer meal participation and seasonal differences in financial status in their model, they found that NSLP participation was associated with a 14 percent reduction in food insufficiency risk (Huang & Barnidge, 2016). Arteaga and Heflin (2014) took advantage of a different transition—the transition into kindergarten—to study the NSLP and found that the program reduces food insecurity (Arteaga & Heflin, 2014). In addition, they found that paying full-price for school lunch is associated with increases in food insecurity for low-income

children. Furthermore, children above 185% of the federal poverty level did not experience a reduction in food insecurity after entering school. Therefore, they not only found evidence that the NSLP reduces food insecurity, but also demonstrated that the main impact of National School Lunch Program is on the low-income children that it intends to serve (Arteaga & Heflin, 2014). Despite the difficulties in measuring the impact of the NSLP and food insecurity and insufficiency, there is evidence that the program does positively impact families.

### **Food Insecurity in the Summer**

Given the impact of the NSLP, it is especially difficult for many low-income families to feed children during the summer when school is not in session. In a study of low-income families across the United States, 63 percent of families said that they spend more money on food during the summer at an average of \$316 more per month. Families who participate in free or reduced-price lunch program are particularly at risk: 54 percent of these families reported that it is harder to make ends meet in the summer, as compared to 43 percent of all survey respondents. In addition, 43 percent of families who participate in school meals said that they sometimes must go without sufficient food in the summer months (APCO Insight, 2013a). A USDA study conducted in 2006 about summer meal programs also found that some parents have difficulty providing food in the summer, but reported a smaller proportion. During in-person interviews, 10 of 73 non-participants in meal programs reported that they had a problem providing their children breakfast or lunch in the summer (Felton & Harley Associates, Inc. & Westat, 2006).

A small number of studies have also measured changes in food insecurity and insufficiency in the summer. To avoid issues of studying food insecurity that arise due to the self-selecting nature of meal program participation, researchers have used longitudinal data to

compare households to themselves rather than one another. One study measured changes in food insufficiency levels for families between the school year and the summer, including both families that are eligible for the National School Lunch Program and participate in it and those that are eligible but do not participate (Huang et al., 2015). The study found that the food insufficiency rate for eligible non-participating families was stable at 2 percent throughout the year, while eligible participating families had a significant increase from 4 percent during the year to >5 percent in the summer (Huang et al., 2015). They concluded that the NSLP may protect against food insufficiency during the year since NSLP participants experience an increase in food insufficiency during the summer while non-participants do not (Huang et al., 2015).

Nord & Romig (2006), on the other hand, took advantage of the fact that the Census Bureau's Current Population Survey Food Security Supplement alternated between being administered during April and during the summer from 1995 to 2001. Their findings showed that among households eligible for NSLP and SFSP, households with school-aged children had a larger summer-to-April odds ratio of food insecurity (1.342) than households without children (1.157) (Nord & Romig, 2006). Therefore, households with children have greater increases in food insecurity during the summer, though the prevalence of food insecurity for each group remained between 5 and 8 percent.

Overall, even though the proportion of low-income families who have difficulty accessing or providing food in the summer appears to be relatively small, parents do have a harder time making ends meet financially and food access issues increase when the school year ends.

## **Coping Strategies**

When families face difficulties accessing food, like some low-income families do in the summer, they use a variety of coping strategies. A qualitative study of SNAP participants, though not specific to the summer, illustrated that the coping strategies to deal with food hardship include both proactive and reactive approaches (Edin et al., 2013). Proactive approaches include carefully planning food shopping around sales or visiting food pantries. In addition, researchers found evidence that families reduce electricity use to lower utility bills, delay bill payments, work odd jobs for additional cash, try to use less fuel, move in with relatives, and change or reduce their food intake. They also found that strategies differed depending on food security status: SNAP recipients that were less food secure were less likely to have a familial and social network that could provide assistance with meals, groceries, and money when their resources were low (Edin et al., 2013). Social networks seem especially important for food pantry clients. In a survey of food pantry clients about the different food sources they use, 41 percent indicated that they get food from relatives outside the household, and 20 percent that they get food from friends. These percentages were highest among the low and very low food secure in comparison to the food secure (Kaiser & Hermsen, 2015). Clearly, families make changes within the home and rely on their broader family and community networks to cope.

Furthermore, families rely on governmental food assistance programs in the summer. Barnidge et al. (2017) used a concept mapping strategy to compare how urban and rural African-American families in Missouri answered the following question: “What are all the things, good and bad, that affect whether kids have enough food to eat in the summer?” Their results indicated that government food assistance resources are highly important to both urban and rural

participants. In comparison to one another, urban participants considered food-related financial concerns and other household characteristics as more important factors, and rural participants considered community food assistance resources and the use of coping mechanisms, like eating with relatives, more important. Overall, food assistance redistribution programs, whether they are governmental or through community groups, seem to be an important factor determining children's food situation in the summer (Barnidge, Chapnick, Sawicki, Baker, & Huang, 2017).

### **Summer Meal Programs**

Fortunately, in addition to school meal programs, the USDA also has a program to support summer meals in order to address increased food insecurity in the summer. Through the Summer Food Service Program (SFSP), the USDA provides full reimbursement to meal sites to serve meals to low-income children up to age 18 ("Frequently Asked Questions | Food and Nutrition Service," 2016). Meal sites include local government agencies, private non-profits, schools, and camps. To make it easier for schools to provide meals, the Seamless Summer Option also allows schools that participate in the National School Lunch and School Breakfast Programs to continue their programs into the summer ("Seamless Summer and Other Options for Schools | Food and Nutrition Service," 2014).

States have a variety of ways of administering the Summer Food Service Program. In a 2003 study, the Economic Research Service aimed to characterize how the SFSP operates on the state, sponsor, and site levels through interviews with a nationally representative sample of programs (Gordon et al., 2003). In 41 states, the Summer Food Service Program is administered by the state's education agency. Within the state, sponsors organize the provision of meals at one or more meal sites. The study characterized five major types of sponsors: school food authorities,

government agencies, residential camps, National Youth Sports Camps, and other nonprofits. In their sample, school food authorities represented about half of all sponsors, half of all meal sites, and served half of all meals (Gordon et al., 2003).

### **Effectiveness of Summer Meals Programs**

Compared to the amount of research on federal nutrition programs such as SNAP and NSLP, there are very few studies on the effectiveness of summer meals programs. In a comparison of school year and summer food insecurity levels, Nord and Romig (2006) found that states with low rates of summer meal participation had a 25 percent larger food insecurity gap between the school year and summer for low-income families with school-aged children than states with high rates. Using a simulation, they predicted that to eliminate the school year-to-summer difference in food insecurity levels, 53 percent of children receiving school-year NSLP would have to access summer meals. Currently, there are no states that have that participation ratio (Nord & Romig, 2006). For reference, only three states have summer participation ratios above 30 percent of NSLP levels, and the ten worst-performing states have ratios below 10 percent (Hayes, Rosso, Anderson, & FitzSimons, 2017b).

Bartfeld and Dunifon (2006) also found support that summer meal programs are associated with decreased food insecurity in their study of state-level predictors of the outcome, but their results must be interpreted with caution (Bartfeld & Dunifon, 2006). They did find a significantly lower level of food insecurity with greater state participation in the Summer Food Service Program among households with children. However, they also found a significant relationship for childless households when testing for state participation in the Summer School Lunch program even though childless families do not make use of this program, suggesting that

there are other state-level attributes at work that are not accounted for. In addition, they did not find any differential impact of summer meal program participation on food security for poor, near-poor, or low-income households, even though this is the population that the summer meal programs are targeting (Bartfeld & Dunifon, 2006). While their results do not provide strong support for summer meal effectiveness, they do suggest that state-level predictors like SFSP participation do make a difference in some regards.

Overall, research on the effectiveness of summer meal programs is very limited. Authors in the field echoed this sentiment; when introducing his study about the impact of geographical access to summer meal sites on food insecurity, Miller (2016) states that there is almost no previous research on summer meal effectiveness. Given that most of the peer-reviewed studies about summer meals regard their effectiveness, this gap demonstrates a lack of summer meals research in general.

### **Participation in Summer Meals**

While research on effectiveness is important, anti-hunger organizations and the USDA have focused their efforts on a more pressing issue facing the program: low participation rates. Although the Summer Food Service Program has existed for over forty years, the number of children accessing the programs is still very low. In 2016, only 15.0 percent of U.S. children who received meals through the NSLP during the school year accessed the USDA's summer nutrition programs (Hayes et al., 2017b). Unfortunately, there are even fewer children receiving breakfast in the summer, as only 52.9 percent of children nationally that accessed summer lunches also accessed summer breakfast in July 2016 (Hayes, Rosso, Anderson, & FitzSimons, 2017a).

Considering the large national participation gap between school-year and summer meals,

it is necessary to recognize several basic differences between school meal programs and summer meal programs. First, the NSLP and SBP are available in schools nationwide to all eligible children. However, open SFSP sites can only exist where there is community eligibility, or 50 percent or more of the children are at or below 185% of the Federal Poverty Level. Second, school is mandatory, so children are already at a location where free meals are provided during the school year, whereas participation in summer meals programs is voluntary and hours may be inconvenient. Third, transportation to school is provided during the year, while many summer meals programs do not offer transportation (Felton & Harley Associates, Inc. & Westat, 2006).

There are several other reasons why families do not participate in summer meals programs. For example, in the USDA's 2006 study, over half of families that are eligible for summer meals programs are not aware of them - only 89 of 200 families knew about meal sites in their area (Felton & Harley Associates, Inc. & Westat, 2006). However, while awareness is clearly a major concern, other researchers warn that increasing awareness will not necessarily greatly increase participation, as only one-fourth of families who are aware of the programs participate (APCO Insight, 2013b).

For families that are familiar with the programs, reasons why they do not participate vary. The geographical convenience of meal sites and the incorporation of activities into the programs are important elements for participation (Felton & Harley Associates, Inc. & Westat, 2006). In rural areas, transportation to meals sites is an even larger barrier than in urban areas (Wauchope & Stracuzzi, 2010). A report from Hunger Free NYC had similar findings and stated that issues with program regulations (such as the fact that parents cannot eat the free meals) and food quality are additional, though less common, barriers (Binder, 2016). Children may also be occupied with other summer activities. In the 2006 USDA study, 44 percent of parents responded

that their children are in other programs, such as camps, during the summer (Felton & Harley Associates, Inc. & Westat, 2006). That being said, in a survey conducted by the national anti-hunger organization Share Our Strength, 80 percent of parents reported that their children are home in the summer and 86 percent reported that their children eat lunch at home, so participation in other summer programs may not represent as large a barrier to accessing summer meals as it seems (APCO Insight, 2013b). Moreover, the survey found that 93 percent of families who participated in a summer meals program would recommend it to others (APCO Insight, 2013b). Therefore, despite the barriers to accessing the programs, for the most part families who participate are satisfied with their experience.

### **Statement of Significance**

While the limited existing research provides some indication of the effectiveness of summer meal programs and barriers to accessing them, it fails to provide a broader picture of the role that summer meal programs play in low-income families' lives. The impact of summer meal programs is primarily framed in the existing body of research through quantitative reductions in food insecurity. This perspective, while valuable, is both large in scale and narrow in focus, as it analyzes impact on the state level and solely concerns changes in food insecurity. Qualitative research has the potential to explore more deeply how parents perceive the impact of the programs on themselves and their children by expanding upon the benefits and barriers that previous research has begun to uncover.

Studies that present parents perspectives indicate that the perceived benefits of the programs are the provision of free healthy food, free activities and a safe environment for children to socialize with others (Binder, 2016; Share Our Strength - No Kid Hungry, 2012).

While these studies begin to explain the appeal of the programs, it mostly frames the benefits that children, rather than their parents, experience from participation.

Another survey study concerns the benefits that summer meals have for parents in terms of their ability to provide food. In the USDA's 2006 study, 79 percent of participating families said that they rely on the program to provide breakfast and 91 percent said they rely on the program for lunch. On the other hand, 18 of 19 participants stated that they do not have a problem providing food for their children when the programs are not in session (Felton & Harley Associates, Inc. & Westat, 2006). Therefore, while the programs help parents provide food in the summer, it remains unclear how essential this benefit is for parents. Though some potential benefits to parents and children have been identified in previous surveys, further qualitative research is needed to deepen our understanding of them.

Finally, given the underutilization of the programs, it is important to continue researching the barriers to accessing them. A "summer meals barrier analysis" done in New York City, where the present study was conducted, found that convenience and unawareness were common barriers to participation (Binder, 2016). In-depth interviewing will provide further understanding of why barriers like these exist.

To this end, the present qualitative study examines the role that summer meals have in shaping parents' experiences providing food and children's experiences eating in the summer with regard to the perceived benefits and barriers to participation.

## **Project Development and Methodology**

### **Formation of Partnerships**

While formulating my original research question, a staff member at Tufts University connected me to a professor at the Tufts University Friedman School of Nutrition conducting summer meals research. When I met with Dr. Norbert Wilson of the Friedman School, we discussed his partnership with the national non-profit organization Hunger Free America in New York City. Dr. Wilson and Hunger Free America were collaborating to disseminate an anonymous survey to New York parents about the effect of participation in a summer camp with free meals on access to food and childcare (Wilson, 2018). As an organization, Hunger Free America promotes policies and programs that will help end hunger domestically and improve access to nutritious food (“Our Work,” 2018).

### **Summer Meals Survey**

#### **Survey population.**

Based on recommendations from partners at local organizations, Hunger Free America selected six elementary schools in Queens, Brooklyn, and Bronx, New York from which to draw a convenience sample of parents (Wilson, 2018). According to the New York City Department of Education’s “Demographic Snapshot,” all six schools had a 100.0 percent poverty rate in 2016-2017, measured by students’ free and reduced-price lunch eligibility status. The schools had high percentages of minority students and were racially diverse from one another; four schools had over 50 percent Hispanic students, one school had over 90 percent Asian students, and the last school had sizable portions of Hispanic, Asian, black, and white students (NYC Department of Education, 2017).

**Survey tool.**

The survey tool was developed by staff members at Hunger Free America and Dr. Norbert Wilson (Wilson, 2018). The 22-item instrument was predominantly multiple choice, with a small number of write-in responses. The first question asked parents if their children participated in a free or reduced-price summer camp during the previous summer so that researchers could later compare survey respondents based on their participation status. The following survey questions asked about participants' childcare arrangements and access to food in the summer as well as their expenses associated with childcare and food. For example, one survey question asked, "During this summer, was there any month that you spent more on food than you would normally during the school year?" If the participant answered "Yes," they were asked an additional question about how much more money they spent per month. The survey was conducted in both English and Spanish (Wilson, 2018).

**Recruitment and data collection.**

Representatives from Hunger Free America administered most surveys either before or after parent-teacher conferences at each of the six schools in November 2017. The sole inclusion criterion for participation was being a parent, grandparent, or legal guardian of a child at the elementary school. Flyers advertising the survey were sent home in children's backpacks in advance of parent-teacher conferences, and parents were notified that they could step into a room at the school to complete the survey on an iPad, laptop, or smartphone through Qualtrics. An informed consent form was presented on the screen prior to the initiation of the survey, and respondents were notified that the surveys were anonymous. Upon completion of the survey,

respondents received a round-trip MetroCard as compensation. Hunger Free America representatives revisited three schools during school events in December 2017 to gain more participants. All surveyors were trained in human subjects research through the Collaborative Institutional Training Initiative (CITI) program (Wilson, 2018).

### **Development of Initial Research Aims and Study Design**

In addition to being able to access Hunger Free America's survey data, I was permitted to collect names and contact information at the end of their electronic survey from any participants interested in partaking in a follow-up telephone interview. For this reason, I had the opportunity to shape my research question around what data the survey could provide and how interviews could build upon them. Most of the existing data about the impact of summer meals program are quantitative and analyze changes in food security status as measured by the USDA's 18-item questionnaire ("Food Insecurity in the U.S.: Measurement," 2017). It seemed as though a mixed methods approach would allow me to gain an even broader view of differences in food insecurity between participants and non-participants in meal programs. The survey would first allow me to quantify the financial burden that summer presents for families and compare between participants and non-participants in summer meals. Follow-up interviews with a subsample of survey participants would allow me to explore qualitatively the impact that summer meal programs have in mitigating the difficulties that parents face providing food in the summer and the coping strategies associated with them. In addition, I would be able to explore another element of food insecurity, how consumption changes for children, by again comparing between participants and non-participants in summer meals. To that end, the following were the project's *initial* research aims:

**Research Aim:** To explore the impact of free summer meal program participation on food insecurity among families with children in six New York City elementary schools.

- **Research question 1:** What difficulties do these families face feeding children in the summer and how does summer meal program participation mitigate these difficulties?
- **Research question 2:** What coping strategies do these families use to deal with increased difficulty providing food for children in the summer?
- **Research question 3:** How does the quantity and quality of food that children in these households consume change from the school year to the summer and with participation in a summer meals program?

### **Development of Interview Guide**

A 2006 study conducted by the USDA titled “Analysis of Summer Food Service Program and Food Needs of Nonparticipating Children” offered a strong model for qualitative interviewing surrounding these research aims, as interview guides were included in the study’s final report (Felton & Harley Associates, Inc. & Westat, 2006). The guide hones in on problems that families face in providing food and changes in the quantity and quality of food that children access during the summer. It also touches upon coping strategies by asking what families do differently in the summer when children cannot access a meals program.

More specifically, each telephone questionnaire, administered in the summer, asked parents: “Did the school breakfast and lunch program make a difference in your household food situation compared to the last 30 days?” and “What was the reason for the differences during the school year?” (Felton & Harley Associates, Inc. & Westat, 2006). These questions informed the parts of the present study’s interview guide that ask parents to reflect on if their child’s food situation differs from the school year to the summer and how so. Their in-person follow-up

questionnaires also asked parents to reflect on if they did “anything special this past summer when [CHILD NAME] was not in regular school to make sure he/she ate enough food and the right kinds of food for breakfast and lunch?” (Felton & Harley Associates, Inc. & Westat, 2006). Similarly, the present study’s interview guide asks parents about what they must do differently in the summer to provide food for their children. As this question demonstrates, many of the questions in the Felton & Harley Associates, Inc. interview ask about two main aspects of a child’s food consumption in the summer: if the child gets “enough food” and “the right kinds of food.” The inclusion of these domains informed the two main probes in the present study’s interview guide: the quantity and quality of the food that children consume. Lastly, the Felton & Harley Associates, Inc. in-person questionnaires ask parents about their satisfaction with their child’s eating arrangements in the summer. This is also included in the present study’s interview guide to stimulate further conversation.

In order to clarify the types of answers that might be of interest in the interview, the present interview guide includes several examples and probes specifically regarding ways that parents may act differently in the summer to cope with difficulties in feeding children. Many of these probes were developed from consulting other studies. Specifically, the “SNAP Food Security In-Depth Interview Study” and “Household Food Insecurity Access Scale (HFIAS) for Measurement of Food Access: Indicator Guide” informed the inclusion of probes about skipping meals, limiting variety of foods, eating with relatives, or going to food pantries or soup kitchens (Coates, Swindale, & Bilinsky, 2007; Edin et al., 2013).

The majority of the demographic questions in the interview guide were included to align with the demographic questions in the survey and make it possible to compare the survey sample and interview subsample. Two additional demographic questions that asked about annual

household income and parent education level were included in the interview guide as well. Income level is a highly pertinent indicator on the topic of summer meal programs as the programs are intended to serve low-income families who face a nutritional gap in the summer (“Summer Food Service Program,” 2017). In addition, education level is a demographic indicator in widely used in studies of food insecurity that address topics similar to this investigation (Bruce, De La Cruz, Moreno, & Chamberlain, 2017; Huang et al., 2015; Nord & Romig, 2006).

During the formation of the interview guide, three faculty advisors at Tufts University provided suggestions and feedback. In addition, the interview guide was piloted with three individuals who each provided suggestions for improvement. After beginning the data collection process, two interview recordings were reviewed in order to brainstorm more follow-up questions to use in future interviews. After this process was complete, the final interview guide was solidified, and is included in Appendix A.

### **Interview Study Procedures**

Adults who participated in the summer meals survey conducted by Dr. Norbert Wilson and Hunger Free America were offered the opportunity to provide their phone number and email address and indicate their participation status in summer camps that provided free meals if they were interested in a follow-up interview (Wilson, 2018).

From the list of interested survey respondents, individuals were purposively sampled based on participation status in a free or reduced-price summer camp program with the intention of having an equal number of participants and non-participants in summer meals. Note that the survey divided its sample based on participation in summer *camps*, while the interview study

concerned participation in summer *meals*. As it was expected that non-participants in camps may participate in other summer meal programs, this category of individuals was over-recruited.

The initial follow-up interview selection criteria were being English-speaking and having at least one child that participates in the free school lunch program, as the study sought to explore specifically the experiences of families whose children lose access to in-school meals when the summer begins. Accordingly, one individual was considered ineligible during recruitment because his children did not eat school meals. However, four participants revealed after their interviews began that their children did not regularly consume school meals. Their data were ultimately retained as their reasons for non-participation in school meals aligned with their reasons for non-participation in summer meals, which was of interest for this study.

Individuals were initially contacted by email and phone and were offered a 15-dollar gift card as compensation. The recruitment script is included in Appendix B. In January 2018, the number of participants was below the target of 16-20, so two improvements were made to the recruitment process. First, the compensation amount was increased from 15 to 20 dollars. Second, potential participants were contacted by text message rather than email, in addition to phone.

Data collection occurred from December 2017 to February 2018 by telephone following oral informed consent. The informed consent script is included in Appendix C. Nineteen of 20 interviews were audiotaped, and mean interview time was 30 minutes (9 standard deviation). Audiotaped interviews were transcribed verbatim. The study was approved by the Social, Behavioral, and Educational Research Institutional Review Board at Tufts University (Appendix D).

### **Refining Research Question**

While collecting data, it became clear not only that the majority of interview participants were food-secure, but also that the interview guide was not well-suited to compare food insecurity levels between meal participants and non-participants. The first research question about the difficulties that summer presents and the function of summer meals to mitigate these difficulties remained relevant, as did the third question about children's consumption habits. However, the second research question about coping mechanisms for families had limited results.

That being said, there was compelling data about how parents thought summer meals impacted their families and the benefits and barriers to participating. However, the summer meals survey data became less relevant after considering the content of the interviews. To reflect the emerging themes, the final research question was altered as follows: What role do summer meals have in shaping parents' experiences providing food and children's experiences eating in the summer with regard to the perceived benefits and barriers to participation?

### **Data Analysis**

A preliminary codebook was developed deductively using the questioning structure of the interview guide (Appendix E). Two transcripts (20% subsample) were initially reviewed using the preliminary codebook. Topics that arose in the interviews that were not covered in the interview guide were noted. Following completion of data collection, all transcripts were reviewed. First, an open coding method was used to generate emergent codes, and attribute coding was used to capture demographic data for each participant. Emergent codes were added to the codebook. For example, codes that were added at this stage included "suggestions for

improvement and most ideal summer meals,” as well as “dissatisfaction/perceived weaknesses of summer meals.” The codebook was then applied to all transcripts using NVivo version 11 (QSR International, 2015).

In the first stage of analysis, the coded data was reviewed and divided among categories such as “perceived strengths of summer meals” and “difficulty providing food.” Several themes emerged from these categories which were then incorporated into the final codebook. These additional codes, “community,” “security,” and “cultural inclusivity” were applied to all transcripts. In the next stage of analysis, a pattern coding method was used to determine final themes and subthemes. The final codebook is included in Appendix F.

## Results

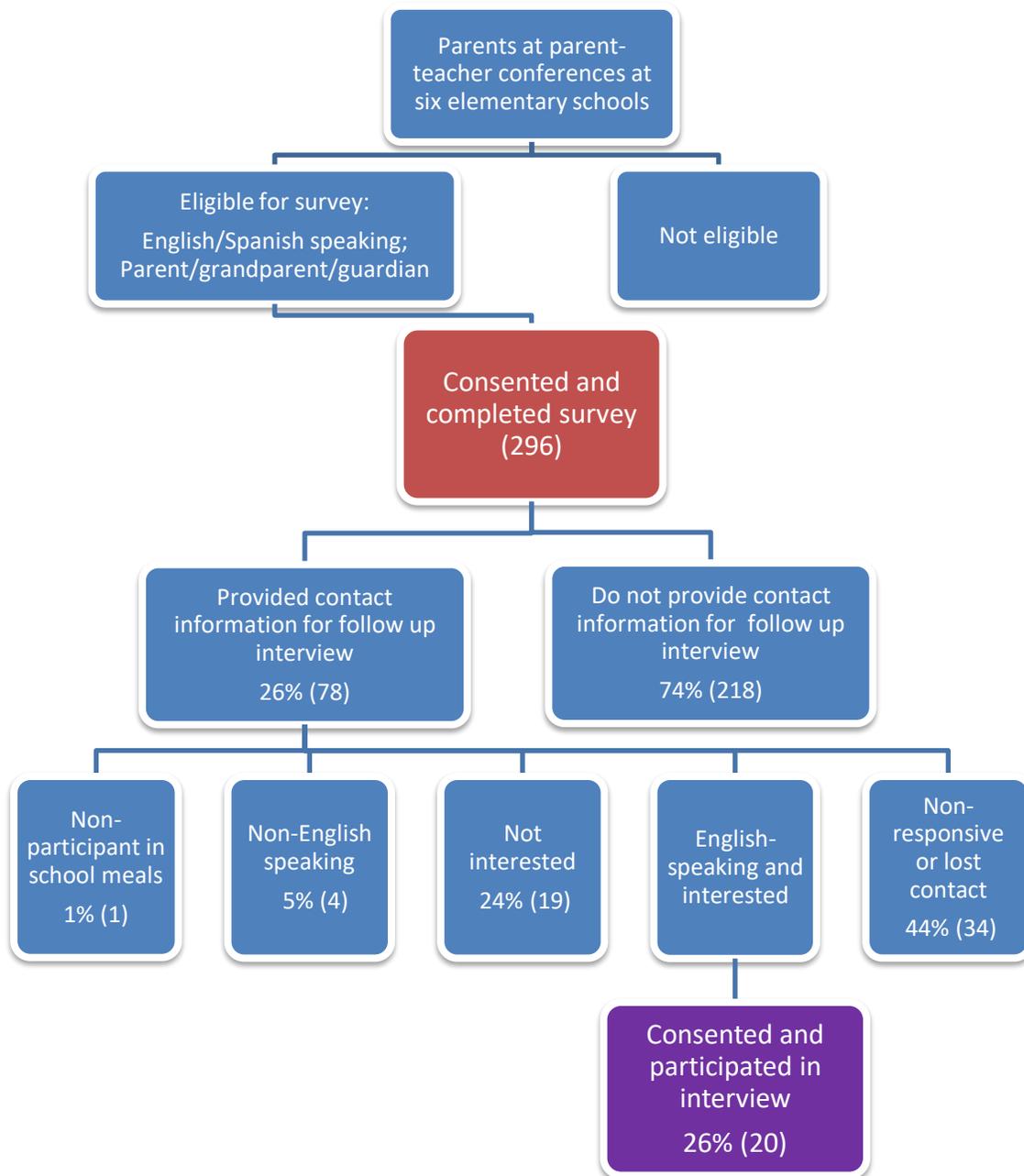
### Interview Participants

Of the 296 participants in the summer meals survey, 78 (26%) provided information for follow-up and were contacted for interview recruitment. In total, 20 individuals that were contacted and deemed eligible decided to participate in an interview (26%). Figure 1 outlines how interview participants were selected from the survey sample.

The twenty semi-structured telephone interviews were conducted with parents and guardians in Brooklyn, Queens, and the Bronx, New York, of which 11 participated in a summer meals program, while 9 did not. Eighty percent of interview participants were women and 85 percent were non-White. More specifically, 35 percent were Hispanic or Latino, 30 percent were Black or African-American, and 20 percent were Asian. Forty-five percent of individuals had an annual household income between 10,000 and 29,999 dollars. In addition, 80 percent had an education level of some college or higher (Table I).

Summer meal participants reported their children eating free meals at camps, schools, libraries, parks, and pools. Among both participants, and non-participants who were familiar with the programs, satisfaction with meals varied. While some parents were satisfied with meal quality and variety, especially the inclusion of healthy foods like fruit and milk, others thought that meal quality needed improvement and some suggested the meals were unappealing to their children. Parents were similarly divided regarding their opinions about the quantity of the meals. Some parents were satisfied with the amount of food served, while others stated that their children ate more when at home and wished that they could take multiple servings at meal programs. Though meal satisfaction varied, interview responses demonstrated several themes regarding the perceived benefits and barriers to summer meal participation.

**Figure 1. Selection of Interview Participants from Summer Meals Survey**



**Table I. Demographic characteristics of interview participants**

| <b>Characteristic</b>                                     | <b>Interview Participants (N = 20)<br/>% of N (n)</b> |
|---|---|
| <b>Participation Status</b>                               |   |
| Participant   | 55% (11)  |
| Non-participant   | 45% (9)   |
| <b>Gender</b>   |   |
| Female  | 80% (16)  |
| Male  | 20 % (4)  |
| <b>Number of Employed Adults in Household</b>             |   |
| 0   | 10% (2)   |
| 1   | 60% (12)  |
| 2   | 25% (5)   |
| Retired   | 5% (1)  |
| <b>Average Hours per Week of Work for Employed Adults</b> |   |
| Part-time (0-34 hours)                                    | 25% (5)   |
| Full-time (35-80 hours)                                   | 65% (13)  |
| Retired   | 5% (1)  |
| Other   | 5% (1)  |
| <b>Race</b>   |   |
| White/Caucasian   | 10% (2)   |
| Black or African-American                                 | 30% (6)   |
| Hispanic or Latino  | 35% (7)   |
| Asian   | 20% (4)   |
| Choose Not to Answer                                      | 5 % (1)   |
| <b>Annual Household Income (USD)</b>                      |   |
| 0 – 9,999   | 10% (2)   |
| 10,000 – 19,999   | 25% (5)   |
| 20,000 – 29,999   | 20% (4)   |
| 30,000 – 39,999   | 10% (2)   |
| 40,000 – 49,999   | 5% (1)  |
| 50,000 – 59,999   | 10% (2)   |
| 60,000+   | 10% (2)   |
| Choose not to answer                                      | 5% (1)  |
| <b>Education Level</b>                                    |   |
| Less than high school                                     | 5% (1)  |
| High School Graduate                                      | 15% (3)   |
| Some College  | 25% (5)   |
| College Graduate  | 30% (6)   |
| Graduate Degree   | 25% (5)   |

## **Perceived Benefits and Barriers: Themes and Subthemes**

Three themes emerged in the interview responses regarding the perceived benefits of summer meals: reducing stress for parents, fostering social support and connection, and improving consumption habits. In addition, two themes emerged regarding perceived barriers: lack of cultural inclusivity and unawareness of summer meals. In addition to illustrating how summer meals influence parent experience in the summer, both financially and psychologically, and influence children's socialization and consumption habits, the findings demonstrate that summer meals have benefits to the greater community and not just the individual. However, families with religious dietary restrictions and families who were unaware of the programs could not access the same benefits of the meal programs as their neighbors. Themes and exemplary quotations are presented in Table II.

### **Perceived Benefits**

#### **Reducing Stress for Parents**

##### *Decreasing Cognitive Load*

Several parents explained that summer meals relieve stress by assuring them that their children will always eat during mealtimes, whether or not they are with them. One participant explained that “knowing that they will get that meal in my absence is kind of soothing...[when I] pack a meal, maybe they'll share it, or maybe they'll take it, or maybe someone else will take it; everyone gets a meal, and it makes it a lot easier on my spirit, because they will be fed, regardless of if I'm there or not” (ID 15, Male, Participant). A non-participant who used to take advantage of summer meals before she moved to New York focused on the danger of having children prepare food on their own, saying that “I knew that they would eat at the summer

program, and I didn't have to worry about my child being burned at home trying to prepare food for them to eat in the summer, and it was just easier" (ID 111, Female, Non-Participant). Parents primarily spoke to the logistical stress associated with preparing food every day or ensuring that children were eating, rather than stress associated with an uncertainty of where their family's next meal would come from.

### *Addressing a Financial Burden*

Parents also spoke to the increased financial stress of feeding children in the summer when school is out of session. About half of parents described difficulty around affording food in the summer, and almost all of those parents had annual household incomes of less than 30,000 dollars. One non-participant stated that having children in the house all day, eating whatever they wanted, made providing food in the home more expensive: "it was very hard because...when you're not there to supervise, you [don't] know how much everyone takes; even if I leave a substantial amount for everybody to eat, you leave over the amount because you grocery shop, and the kids since they're home doing nothing, they eat the food all day long, so it's very expensive" (ID 111, Female, Non-Participant).

Given the financial burden that summer presents, parents viewed summer meals as a way to save a little bit of money. For example, one participant explained that having summer meals available "definitely makes it easier and less of a financial strain" (ID 104, Female, Participant). The savings associated with participation were helpful to cover other important costs. A parent whose child attends a school-based meals program explained that "if he's able to eat lunch at the school and I'm not having to buy the bread, and the cheese, and the fruit, and all this other kind of stuff every day, then that savings either goes into buying other groceries or even helping to

pay for MetroCard fares because travelling on the trains and the buses has gotten kind of expensive, or maybe it gives us that little bit of extra to take him somewhere he wants to go” (ID 126, Female, Participant).

### *Additional Support Instead of Survival*

When considering the financial benefit, summer meals were predominantly framed as helpful resources to save money rather than essential programs to ensure that one’s children would be able to eat each day. One parent predicted that if she were to use the program, “I wouldn’t say it’s a major influence or impact on my budget as a whole, but then again, of course it helps in whatever little way it does” (ID 17, Female, Non-Participant). Another parent agreed that the benefit of summer meals was supplemental rather than integral to his ability to support his family: “for us it’s added to being able to provide for them, but for other people in the community it’s [essential]” (ID 15, Male, Participant). Overall, no parents indicated that their children may not be able to eat without the free meal programs.

## **Fostering Social Support and Connection**

### *Safety Net for Greater Community*

Though parents implied that they are always able to provide food for their children, several said that they know that some families in their community cannot, and that summer meal programs are essential for them. When asked how important it was to her that her child’s summer camp provides free lunch, one parent responded with other families in mind: “I feel like it’s something that’s really important because there are some students that don’t have money at all, and they can’t afford to bring lunch, because they don’t even have food in the cabinet” (ID 12,

Female, Participant). Several other parents also explained the essentiality of the programs in terms of the security that it provides for other community members.

In addition, seeing needier community members take advantage of the programs catalyzed one family to participate: “We [used to live] in an impoverished community, so we would see a lot of other kids who didn’t have the means and watched them always take advantage of the summer programs, and because of that we learned to take advantage of the summer programs as well” (ID 15, Male, Participant). Though parents believed the purpose of the programs was to serve the neediest families, they appreciated their benefit for everyone, demonstrating their role as a community resource.

### *Socialization with Peers*

Several parents also highlighted that summer meal programs allow children to meet new people and find a sense of community around mealtimes. One mother noted that the programs let her children interact with other kids, and when asked why that was important to her, stated that eating together “shows them how to socialize with people; I’m big on respect, I want them to have friends, interact, not to be shy” (ID 24, Female, Participant). Another parent whose daughter and niece attend a camp-based and school-based meal program, respectively, explained that socialization at meals was something that the program provided that she could not provide at home. She said that when they’re at the programs with friends “they eat together, so in the house we don’t really [eat] together it’s like one person eats and then the other person eats, they don’t have that quality time that they have with their friends” and when asked why that was important, expressed that “they should have a sense of belonging” at mealtimes (ID 9, Female, Participant). Each type of summer meal site, whether it was at an open community space like a park or an

organized activity program like a camp, served as a place to bring children and families together, though summer camps provided a greater opportunity for socialization.

### **Improving Consumption Habits**

Many parents explained how eating around other children in a summer meals program would improve their child's eating habits in comparison to eating at home, in addition to providing an opportunity for socialization. For example, one non-participant explained that "She is much too choosy, she is just five, and she [doesn't] eat much. But I feel if she will eat with the other kids, she will eat a bit more. So it will... [be] good for her, I think so. A little bit more, so she will be more healthy" (ID 8, Female, Non-Participant). While Participant 8 referenced how her child might be less picky with food in general, another parent spoke specifically about her child's willingness to eat healthy foods: "They try to give a little bit of healthier stuff, and with him seeing other people eating it, like other kids eating, he'll eat it. Yeah, so it would impact because if he's only with me then you know, he wants to eat what he wants to eat" (ID 103, Female, Non-Participant). Although several parents spoke about improved habits due to the group environment, interview participants were split on the influence of the meals themselves on their child's consumption. Some parents were satisfied with the quantity and healthiness of the meals, while others felt that their child typically ate more at home and thought meal quality needed improvement.

### **Perceived Barriers**

#### **Lack of Cultural Inclusivity**

*Reduced Access due to Dietary Restrictions*

While most interested families were able to access the meals adequately, some families explained that due to dietary restrictions related to their cultural or religious beliefs, they were unable to make full use of school and summer meals and suggested that the meals should have greater variety. One Muslim parent who observes Halal explained that her children eat far too little at school and at camp: “Sometimes they say ‘oh mama, we didn’t eat anything because everything was not Halal, like veggie or fish or pizza, so that’s why we are hungry. We didn’t eat anything.’ So it should be a variety, but if you are not eating meat, there should be a veggie, so they can take [an] alternate” (ID 26, Female, Participant). More specifically, she said that “if there is a sandwich, they take off the meat or chicken from that and just eat the bread. And bread is too small. Not enough for them” (ID 26, Female, Participant). In addition, when one non-participant was asked if she would be interested in summer meals for her family, she answered: “yeah definitely. But my main problem is if I send [her] somewhere... [the] summer meal is non-[vegetarian], but my problem is we are vegetarian” (ID 8, Female, Non-Participant). Some parents said that greater variety and more meal options would address the issue for their family, while another parent observing Halal expressed that she has no interest in participating because she is dissatisfied with the meals in general.

### *Lack of Ethnically Diverse Meals*

A few families without dietary restrictions indicated that they would also like to see summer meal programs offer a greater variety of foods, particularly different types of ethnic foods. For example, one parent stated that “it would be nice if they served a variety of Spanish food, let’s say one day in a month, one time a month, you know? She’ll dig [into] that plate and she’ll start going more. Cause she loves Spanish food” (ID 129, Male, Non-Participant). Offering

different types of ethnic foods, even if infrequently, was seen as a way to increase the appeal of the meals for children from diverse cultural backgrounds.

### **Unawareness of Summer Meals**

Several parents indicated that they were unaware that these programs existed or did not know of any in their area. While a few stated that they did not have a need for the programs and so would not seek them out, other parents indicated that if they were aware of free meal programs they would be very interested in participating. In addition, some parents knew about school-based summer meal programs but were not familiar with other types. For example, one father stated, “I’m aware that there’s a school that you can take her to,” but after the interviewer explained that there are also summer meals at community places like parks and pools, he said, “no, I haven’t seen that around” (ID 129, Male, Non-Participant). Schools were not only slightly better known as meal sites, but also regarded as good information sources for summer meals. One parent indicated that the best place to hear about summer meals would be the school because “I don’t trust a lot of stuff. So if it’s at the school that I’m learning about it, then it’ll be easier for me to trust it” (ID 111, Female, Non-Participant).

In summary, parents in New York City recognized a wide array of psychological, social, and nutritional benefits of summer meal programs for their families, and also valued the support that the programs provide others in the community. However, many families cannot access these benefits, both due to unawareness of the programs and dietary restrictions that prevent their children from being able to eat the meals. With the exception of the barrier related to dietary restrictions, the themes transcended distinctions based on race/ethnicity, education level, and employment status, though the sample was diverse in these regards.

**Table II. Perceived Benefits and Barriers with Selected Quotations**

|                           |   |   |
|---------------------------|---|---|
| <b>Perceived Benefits</b> | <i>Theme 1: Reducing Stress for Parents</i>             |   |
|                           | Decreasing Cognitive Load                               | "I know that when he goes there, I know that he's going to get a good lunch, maybe if I'm busy doing something, I don't have to worry...knowing that he's going to have a good lunch that's going to fill him up and everything definitely just eases my mind a lot." (ID 126)                        |
|                           | Addressing a Financial Burden                           | "It definitely helps financially because I'm not working right now, only my husband is, and my oldest son, he just recently started...having his own job and stuff, and I think it's really helpful for us to have that option." (ID 104)   |
|                           | Additional Support Instead of Survival                  | "In the summer vacation, it's me [providing food], and her mother. So it's got to come out of our pocket. It's either that or go to...those schools that they give out the lunches. Buts she eats, oh God knows she eats, she's ok." (ID 129)   |
| <b>Perceived Benefits</b> | <i>Theme 2: Fostering Social Support and Connection</i> |   |
|                           | Safety Net for Greater Community                        | "For my kid, [the] summer meal program is not that important, because we are [providing] her food...But I think so many kids, they [don't] have food in summer...Parents are not in [the] home, they are not taking care, so if you are providing food in [the] summer...it's very important." (ID 8) |
|                           | Socialization with Peers                                | "We did make quite a few friends at the library and...we would all get together, you know come around at the same time, and then we would meet new people as well." (ID 104)  |
| <b>Perceived Barriers</b> | <i>Theme 3: Improving Consumption Habits</i>            | "I would think that [if] she sees what her peers are eating, she may want to eat that." (ID 135)  |
|                           | <i>Theme 4: Lack of Cultural Inclusivity</i>            |   |
|                           | Reduced Access due to Dietary Restrictions              | "If you are a summer program, maybe there are lots of children who are [vegetarian], who don't eat non-[vegetarian]. So I think every program, you should provide vegetables for us." (ID 8)  |
|                           | Lack of Ethnically Diverse Meals                        | "I wish they could be more oriented to...our nationality or to our ethnic foods, it's mostly American food; we come from a Haitian background, we mostly eat Haitian-American meals and Spanish-American meals, and so I know that that's a flavor that they prefer." (ID 15)                         |
|                           | <i>Theme 5: Unawareness of Summer Meals</i>             | "I'm not aware of it...it's the first time I'm hearing it, that they have a summer meal option there, I never heard of it." (ID 17)   |

## Discussion

The present study aimed to explore the role that summer meals have in shaping parents' experiences providing food and children's experiences eating in the summer with regard to the perceived benefits and barriers to participation. We found that the role of free summer meal programs extends far past just saving families money in the summer. Summer meal programs reduce stress for families as they know they do not have to worry about their child eating each day if he or she attends a meals program. In general, meal programs seem to serve as an additional support rather than a necessary resource for most families, though parents value that the meals are a survival resource for others in the community. The programs offer children an opportunity to socialize with peers, demonstrating their role in building social networks in the community. Eating with peers may also improve some children's eating habits, as children may consume more, eat healthier foods, or be less picky with food when eating with peers. However, in some cases the lack of culturally diverse options or general unawareness about summer meals prevented families from accessing them.

The intention of the USDA's Summer Food Service Program is to fill a nutritional gap for low-income children that exists when school is not in session ("Summer Food Service Program," 2017). In addition to our finding that summer meals relieve a financial burden for families, previous research further suggests that the programs can reduce food insecurity (Nord & Romig, 2006). However, some low-income children lose more than just meals when school is out of session: they lose the opportunities for socialization with peers and cognitive stimulation. The present study suggests that summer meal programs encourage community-building and socialization for children and adds that eating in these environments may actually improve consumption. Many previous reports also highlight the importance of incorporating activity

programs into summer meals to provide enrichment in the summer (Binder, 2016). Low-income children often have fewer opportunities to take part in summer enrichment experiences than their middle-class peers (Chin & Phillips, 2004). This inequity contributes to summer learning loss, perpetuating the educational achievement gap (Donohue & Miller, 2008). Summer meal programs that incorporate activity programming, such as those at camps or libraries, may contribute to reducing summer learning loss.

In addition, while most previous work highlights the impact of the summer meals on the child's experience, we demonstrate potential impact on parent experience. For example, we contribute that parents feel as though the programs relieve stress as a result of the knowledge that children will eat every day even if parents are not there to prepare meals. The effects of low socioeconomic status on stress are well-studied, and more than half of interview participants had annual household incomes below \$30,000 a year (Baum, Garofalo, & Yali, 1999). Research on scarcity and decision-making has shown that low-income individuals may experience reduced cognitive capacity due to the fact that poverty-related concerns consume mental resources and reduce the attention and cognition that can be applied to other tasks (Mani, Mullainathan, Shafir, & Zhao, 2013). It is possible that summer meals may relieve some of the cognitive load associated with living with limited means and improve parents' ability to focus on other pressing needs in their lives.

In addition, our finding that many families are unaware of summer meal programs is well-supported by previous research. Two studies that sampled parents from several cities across the United States found that more than half of parents whose children are eligible for free or reduced-price lunch do not know about free summer meals (APCO Insight, 2013b; Felton & Harley Associates, Inc. & Westat, 2006). However, our finding is somewhat surprising given that

New York City is a highly-resourced area in terms of access to and participation in free meal programs. As of the 2017-2018 school year, New York City implemented universal free lunch, and in 2016 it had the 4<sup>th</sup> highest ratio in the nation of summer nutrition to National School Lunch program participation at 29.9 percent (“Free Lunch,” 2017; Hayes et al., 2017b). Previous research supports our finding that schools are ideal places to learn about summer meals (APCO Insight, 2013b). In addition, community outreach organizations have an important role in disseminating information about the programs (Binder, 2016). We contribute that schools also seem to be better known as meal sites, even though other types of meal programs exist.

### **Implications for Research and Practice**

Given that program awareness is low, meal sites should continue to expand their advertising of summer meals. In particular, community organizations that run meal sites might consider partnering with schools to disseminate information about non-school summer meal locations. Our understanding of how parents feel that summer meals benefit themselves, their children, and their community, may also contribute to advertising around the programs and extend past the simple messaging that they are free of charge. Meal sites could portray summer meal programs as resources that foster social connections and social support, both in terms of helping out one’s neighbors in need and providing an opportunity for children to come together during mealtimes. They could also highlight that summer meals help make busy parents’ lives easier. In addition increasing participation among low-income parents, advertising these benefits may help build a case among the greater community for supporting the Summer Food Service Program, as it does much more than just address food insecurity.

A “summer meals barrier analysis” conducted in New York City supports our finding that

dietary restrictions may impact participation for some families, though it was ranked as one of their less significant barriers (Binder, 2016). The present study deepens our understanding of how dietary restrictions affect families' use of school and summer meals. Families may be prevented from participating in meal programs at all or find that their children participate but consume a nutritionally inadequate meal. Meal sponsors and sites should consider the demographics of their community population and who may not be able to access their meals due to their religion or culture. Accordingly, sites could improve meal options by including a vegetarian, Kosher, or halal option if necessary. Further research is needed to understand the cost-effectiveness for meal sponsors to increase variety in the foods they serve. While consistently providing more than one option may prove unrealistic, meal sites could consider offering a vegetarian option once or twice a week, and publish a weekly menu so families know what meals to expect.

Finally, while we explore the perceived benefits and barriers of summer meal participation to better understand how families experience the programs, further research could go one step further to determine how these elements predict participation in summer meals. For example, researchers might consider if the benefits we found motivate parents to participate, or if they are supplementary benefits and parents have other main reasons for participation.

### **Policy Context**

The Child Nutrition Reauthorization Act, as the name suggests, is intended to reauthorize the USDA's ability to operate the Summer Food Service Program every five years ("Summer Food Service Program," 2017). Several bills have been introduced to the House of Representatives in the past few years as "marker bills" to promote that their content is included in the next

reauthorization legislation.

Most recently, the Summer Meals Act of 2017 was introduced to the House Committee for Education and Workforce by Representative Don Young of Alaska on January 3, 2017. The bill had three proposals relating to the summer months. First, it would lower the community eligibility threshold for a summer meals site from 50 percent of families at or below 185% of the Federal Poverty Level to 40 percent, allowing sites to open in more communities. Second, it would permit sites to offer a maximum of three meals to children instead of two. Third, it would allow the USDA to provide competitive grants to sites that address transportation barriers to summer meals in innovative ways (Young, 2017).

Transportation barriers to summer meal sites, while outside the scope of the present study, are central to the current conversation about increasing summer meal participation. They are particularly important in rural areas, where meal sites may be located geographically far away from families (Wauchope & Stracuzzi, 2010). The USDA has piloted two demonstration projects to address issues of access to meal sites: the summer electronic benefit transfer for children and mobile meal delivery. The summer electronic benefit transfer for children (SEBTC) provides families an additional stipend each month of the summer to their existing SNAP or WIC benefits. Providing 60 dollars per child per month reduced very low food security levels among children by 1/3 and increased whole grain, fruit, and vegetable consumption (Abt Associates, 2016). The meal delivery project brought breakfasts and lunches to children's homes or nearby drop-off sites in rural areas. Participation at local summer meal sites did not change, suggesting the meals were reaching new children (Baldi, Suchman, Thorn, & Tadler, C., 2014).

These strategies to reduce summer food insecurity are intended as supplements to existing meal sites for particularly hard-to-reach areas. Since we found that many of the

perceived benefits of summer meals programs were a result of the social environment that they foster, we reiterate that strategies like SEBTC benefits must not replace community summer meal sites. As proposed in the Summer Meals Act of 2017, the USDA should continue support innovative projects to reach the most vulnerable children in the summer, but traditional sites, even if they cost more to operate, are crucial to bring children together in the summer.

### **Limitations**

Due to the small sample size, convenience sampling, and high level of diversity among participants, our findings are not widely generalizable. For example, some districts may find that dietary restrictions due to religious preferences do not present a major barrier to participation. The study also had wider eligibility criteria than most summer meal studies which focus on individuals with traditional school meal eligibility (185% Federal Poverty Level). In September 2017, New York City implemented universal free lunch in its public schools, so not all of our participants were low-income, though most were. This may have resulted in a higher proportion of individuals that were not interested in summer meals due to a lack of financial need than in other studies. In addition, 35 percent of interview participants were stay-at-home mothers, and several completed their phone interview during the day, so the sample may have overrepresented more financially stable households in which parents felt as though they had time to participate in a research study. It is important to note that the USDA's Summer Food Service Program uses a community eligibility model and therefore is accessible to all children regardless of income, so participants in the present study actually better represent the pool of eligible participants than most studies. However, more restrictive eligibility criteria would focus research on the population that the programs aim to serve: low-income families.

Finally, the study excluded Spanish-speaking individuals. Even though about 20 percent of parents that participated in the initial summer meals survey completed it in Spanish, the interview was not able to capture their experiences and may have missed additional linguistic or cultural barriers to accessing meals (Wilson, 2018). Expanding the research team to include bilingual interviewers would address this issue. Furthermore, the study asked parents to discuss sensitive topics such as ability to provide food for their family, and social desirability bias may have caused parents to downplay the extent of their own food insecurity when engaging in conversation about the topic.

## **Conclusion**

Though summer meal programs remain underacknowledged and underutilized, they are valuable resources that do more than just help individual family's access food. They play an important role in building a sense of community around mealtimes that children lose when school is out of session, helping parents meet their children's needs during what can be a difficult time of the year for low-income families. Those who know about summer meals are supportive of them, both for themselves and for their neighbors. As participation barriers persist for many families, meal sites must address issues of access, while continuing to spread the word that summer meals exist and are important resources in the community.

## References

- Abt Associates. (2016). *Summer Electronic Benefits Transfer for Children (SEBTC) Demonstration Program: 2012 Results* (Abt Associates Policy Brief).
- Anderson, S. A. (Ed.). (1990). Core Indicators of Nutritional State for Difficult-to-Sample Populations. *The Journal of Nutrition*, *120*(11 Suppl), 1555–1600.
- APCO Insight. (2013a). *National Summer Meals Survey Major Findings*. Retrieved from <https://bestpractices.nokidhungry.org/sites/default/files/resources/National%20Summer%20Meals%20Survey%20Major%20Findings.pdf>
- APCO Insight. (2013b). *Share Our Strength Summer Meals Survey*. Retrieved from <https://bestpractices.nokidhungry.org/sites/default/files/resources/SOS%20-%20Summer%20Meals%20Survey%20Report%20FINAL2.pdf>
- Arteaga, I., & Heflin, C. (2014). Participation in the National School Lunch Program and food security: An analysis of transitions into kindergarten. *Children and Youth Services Review*, *47*(Part 3), 224–230. <https://doi.org/10.1016/j.childyouth.2014.09.014>
- Baldi, S., Suchman, A., Thorn, B., & Tadler, C. (2014). *Evaluation of the Impact of Enhancement Demonstrations on Participation in the Summer Food Service Program: 2012 (Summary)*. Food and Nutrition Service, Office of Policy Support. Retrieved from <https://fns-prod.azureedge.net/sites/default/files/ops/esfsp2012-participation-summary.pdf>
- Barnidge, E. K., Chapnick, M., Sawicki, M., Baker, E. A., & Huang, J. (2017). Food Insecurity in the Summer: A Rural–Urban Comparison of African American Households With Children. *Journal of Hunger & Environmental Nutrition*, *12*(2), 221–236. <https://doi.org/10.1080/19320248.2016.1255581>
- Bartfeld, J., & Dunifon, R. (2006). State-level predictors of food insecurity among households

- with children. *Journal of Policy Analysis and Management*, 25(4), 921–942.  
<https://doi.org/10.1002/pam.20214>
- Baum, A., Garofalo, J. P., & Yali, A. M. (1999). Socioeconomic Status and Chronic Stress: Does Stress Account for SES Effects on Health? *Annals of the New York Academy of Sciences*, 896(1), 131–144. <https://doi.org/10.1111/j.1749-6632.1999.tb08111.x>
- Binder, C. (2016). *Summer Meals Barrier Analysis*. New York, NY: Hunger Free NYC.  
Retrieved from  
[https://www.hungerfreeamerica.org/sites/default/files/atoms/files/Summer%20Meals%20Barrier%20Analysis%202016\\_online.pdf](https://www.hungerfreeamerica.org/sites/default/files/atoms/files/Summer%20Meals%20Barrier%20Analysis%202016_online.pdf)
- Bruce, J. S., De La Cruz, M. M., Moreno, G., & Chamberlain, L. J. (2017). Lunch at the library: examination of a community-based approach to addressing summer food insecurity. *Public Health Nutrition*, 20(9), 1640–1649. <https://doi.org/10.1017/S1368980017000258>
- Child Nutrition Programs: Income Eligibility Guidelines, 82 Fed. Reg. 07113 (April 10, 2017)  
(Billing Code: 3410–30–P).
- Chin, T., & Phillips, M. (2004). Social Reproduction and Child-rearing Practices: Social Class, Children’s Agency, and the Summer Activity Gap. *Sociology of Education*, 77(3), 185–210. <https://doi.org/10.1177/003804070407700301>
- Coates, J., Swindale, A., & Bilinsky, P. (2007). *Household Food Insecurity Access Scale (HFIAS) for Measurement of Household Food Access: Indicator Guide (v. 3)*. Washington, D.C.: FHI 360/FANTA. Retrieved from  
[https://www.fantaproject.org/sites/default/files/resources/HFIAS\\_ENG\\_v3\\_Aug07.pdf](https://www.fantaproject.org/sites/default/files/resources/HFIAS_ENG_v3_Aug07.pdf)
- Coleman-Jensen, A., & Nord, M. (2013). *Food Insecurity Among Households With Working-Age Adults with Disabilities* (Economic Research Report No. 144). U.S. Department of

- Agriculture, Economic Research Service. Retrieved from [https://www.ers.usda.gov/webdocs/publications/45038/34589\\_err\\_144.pdf](https://www.ers.usda.gov/webdocs/publications/45038/34589_err_144.pdf)
- Coleman-Jensen, A., Rabbitt, M. P., Gregory, C. A., & Singh, A. (2017). *Household Food Security in the United States in 2016* (No. 237). Economic Research Service. Retrieved from <https://www.ers.usda.gov/webdocs/publications/84973/err-237.pdf?v=42979>
- Cook, J. T., Frank, D. A., Berkowitz, C., Black, M. M., Casey, P. H., Cutts, D. B., ... Nord, M. (2004). Food insecurity is associated with adverse health outcomes among human infants and toddlers. *The Journal of Nutrition*, *134*(6), 1432–1438.
- Donohue, N. C., & Miller, B. M. (2008). Stemming Summer Learning Loss. *New England Journal of Higher Education*, *23*(1), 19–20.
- Edin, K., Boyd, M., Mabli, J., Ohls, J., Worthington, J., Greene, S., ... Sridharan, S. (2013). *SNAP Food Security In-Depth Interview Study* (Nutrition Assistance Program Report Series). Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis. Retrieved from <https://fns-prod.azureedge.net/sites/default/files/SNAPFoodSec.pdf>
- Felton & Harley Associates, Inc., & Westat. (2006). *Analysis of Summer Food Service Program and Food Needs of Nonparticipating Children* (Special Nutrition Program Report Series No. CN-06-SFSP). Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Analysis, Nutrition, and Evaluation. Retrieved from <https://fns-prod.azureedge.net/sites/default/files/SFSPFoodNeeds.pdf>
- Food Insecurity in the U.S.: Measurement. (2017, October 4). Retrieved December 4, 2017, from <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement.aspx>

- Free Lunch. (2017). Retrieved from <http://www.schoolfoodnyc.org/freelunch/freelunch.htm>
- Frequently Asked Questions | Food and Nutrition Service. (2016, June 16). Retrieved October 9, 2017, from <https://www.fns.usda.gov/sfsp/frequently-asked-questions>
- Gordon, A., Briefel, R., Needels, K., Wemmerus, N., Zavitsky, T., Russo, R., ... Creel, Darryl. (2003). *Feeding Low-Income Children When School Is Out—The Summer Food Service Program*. Mathematica Policy Research, Inc. Retrieved from [https://www.ers.usda.gov/webdocs/publications/43212/48148\\_efan03001.pdf?v=41808](https://www.ers.usda.gov/webdocs/publications/43212/48148_efan03001.pdf?v=41808)
- Gundersen, C., & Ziliak, J. P. (2014). Childhood Food Insecurity in the U.S.: Trends, Causes, and Policy Options. *The Future of Children*, 24(2), 1–19. <https://doi.org/10.1353/foc.2014.0007>
- Hayes, C., Rosso, R., Anderson, S., & FitzSimons, C. (2017a). *Hunger Doesn't Take a Vacation: Summer Breakfast Status Report*. Food Research & Action Center. Retrieved from <http://frac.org/wp-content/uploads/2017-summer-breakfast-report.pdf>
- Hayes, C., Rosso, R., Anderson, S., & FitzSimons, C. (2017b). *Hunger Doesn't Take a Vacation: Summer Nutrition Status Report*. Food Research & Action Center. Retrieved from <http://frac.org/wp-content/uploads/2017-summer-nutrition-report-1.pdf>
- Huang, J., & Barnidge, E. (2016). Low-income Children's participation in the National School Lunch Program and household food insufficiency. *Social Science & Medicine*, 150(Supplement C), 8–14. <https://doi.org/10.1016/j.socscimed.2015.12.020>
- Huang, J., Barnidge, E., & Kim, Y. (2015). Children Receiving Free or Reduced-Price School Lunch Have Higher Food Insufficiency Rates in Summer. *The Journal of Nutrition*, 145(9), 2161–2168. <https://doi.org/10.3945/jn.115.214486>
- Jyoti, D. F., Frongillo, E. A., & Jones, S. J. (2005). Food Insecurity Affects School Children's

- Academic Performance, Weight Gain, and Social Skills. *The Journal of Nutrition*, 135(12), 2831–2839.
- Kaiser, M., & Hermsen, J. (2015). Food Acquisition Strategies, Food Security, and Health Status Among Families With Children Using Food Pantries. *Families in Society: The Journal of Contemporary Social Services*, 96(2), 83–90. <https://doi.org/10.1606/1044-3894.2015.96.16>
- Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. (2013). Poverty Impedes Cognitive Function. *Science*, 341(6149), 976. <https://doi.org/10.1126/science.1238041>
- McLaughlin, K. A., Green, J. G., Alegría, M., Jane Costello, E., Gruber, M. J., Sampson, N. A., & Kessler, R. C. (2012). Food insecurity and mental disorders in a national sample of U.S. adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 51(12), 1293–1303. <https://doi.org/10.1016/j.jaac.2012.09.009>
- Miller, D. P. (2016). Accessibility of summer meals and the food insecurity of low-income households with children. *Public Health Nutrition*, 19(11), 2079–2089. <https://doi.org/10.1017/S1368980016000033>
- New York City Department of Education, NYC Data. (2017). *Demographic Snapshot – Citywide, Borough, District, and School*. [Data Set]. Retrieved from <http://schools.nyc.gov/Accountability/data/default.htm>.
- Nord, M., & Romig, K. (2006). Hunger in the Summer. *Journal of Children and Poverty*, 12(2), 141–158. <https://doi.org/10.1080/10796120600879582>
- NVivo qualitative data analysis Software; QSR International Pty Ltd. Version 11, 2015.
- Our Work. (2018). Retrieved April 5, 2018, from <https://www.hungerfreeamerica.org/about/our-work>.

Programs and Services. (2018, March 26). Retrieved from <https://www.fns.usda.gov/programs-and-services>

RTI International. (2014). *Current and Prospective Scope of Hunger and Food Security in America: A Review of Current Research*. Retrieved from [https://www.rti.org/sites/default/files/resources/full\\_hunger\\_report\\_final\\_07-24-14.pdf](https://www.rti.org/sites/default/files/resources/full_hunger_report_final_07-24-14.pdf)

Seamless Summer and Other Options for Schools | Food and Nutrition Service. (2014, January 22). Retrieved October 9, 2017, from <https://www.fns.usda.gov/sfsp/seamless-summer-and-other-options-schools>

Share Our Strength - No Kid Hungry. (2012). *Findings from Summer Meal Focus Groups*.

Retrieved from

[https://bestpractices.nokidhungry.org/sites/default/files/resources/Share%20Our%20Strength%20Summer%20Meals%20Focus%20Groups\\_FINAL\\_042012%20%282%29.pdf#overlay-context=content/share-our-strength-summer-meals-focus-groups](https://bestpractices.nokidhungry.org/sites/default/files/resources/Share%20Our%20Strength%20Summer%20Meals%20Focus%20Groups_FINAL_042012%20%282%29.pdf#overlay-context=content/share-our-strength-summer-meals-focus-groups)

Summer Food Service Program. (2017, July 20). Retrieved from

<https://www.fns.usda.gov/sfsp/summer-food-service-program>

Wauchope, B., & Stracuzzi, N. F. (2010). Challenges in serving rural American children through the Summer Food Service Program. *The Carsey School of Public Policy at the Scholars' Repository*, (Issue Brief No. 103).

Wilson, Norbert L. W., 2018 " Summer Food Service Program (SFSP or Summer Meals)" Data source, Tufts University.

Wunderlich, G. S., & Norwood, J. L. (Eds.). (2006). *Food Insecurity and Hunger in the United States: An Assessment of the Measure*. Washington, D.C.: The National Academies Press. <https://doi.org/10.17226/11578>

Young, D. Summer Meals Act of 2017, Pub. L. No. H.R.203 (2017).

## Appendix A: Summer Meals Food Access Study Interview Guide

Thank you for your participation. Before we begin, I want to emphasize that there are no right or wrong answers to these questions; all answers are valid and are valuable for this research. Please answer however you feel best represents your family's situation.

### Background and Building Rapport:

1. **Question:** Tell me a little bit about yourself and your family.  
**Follow-ups:**
  - a. How many children do you have and what is your relationship to them (parent, grandparent, etc.)?
  - b. How many adults live in the household?
2. **Question:** How old are the children and what schools do they attend (elementary, middle, etc.)?
3. **Question:** How do you like the schools that your children attend? Why? Do your children like the school lunches there? What about them do they like or not like?

### Interview Questions for Non-Participants in Summer Meals

#### Summer Lunch Background

4. **Question:** First, I want to ask you about what lunch is typically like for your family in the summer. Thinking back to this past summer, please describe the what lunchtime is like for each of your children.  
**(Probes:** where did your children typically eat lunch? Who do they eat with and what do they typically eat?)
5. **Question:** How satisfied are you with your children's lunch arrangements during the summer? Why? Is there anything you would change? What would be the ideal?  
**Follow-ups:**
  - a. How are your answers different for each of your kids?
  - b. Do your kids like what they eat for lunch in the summer?
6. **Question:** Do know of places in your community that provide free summer meals for children in the summer, such as parks, pools, or libraries? Does your family get meals at any of these sites? Tell me a little bit more about your experience with them.
  - a. IF YES—SKIP DOWN TO #4 IN GUIDE BELOW.
  - b. IF NO:
    - i. What do you know about these programs? How interested are you in these programs for your children? What type of program would be most

appealing to you and why?

7. **Question:** Tell me more about how a summer meals program may change your children's food situation in the summer. How do you think participation might influence how much food your children can eat in the summer? How about how healthily they eat?
8. **Question:** If you are interested in a summer meals program, what factors prevent you from enrolling your children in the program? What would make it easier for you to enroll your children?

### School Year to Summer Transition

9. **Question:** Given that your children eat meals at school during the year, think about the transition from the school year to the summer. In terms of food and meals, how was that transition from the school year to the summer for your family this past June?

### Changes in the Summer and Difficulty Feeding in Summer

10. Providing lunch, especially in the summer when kids are out of school, can sometimes be challenging. **Question:** During the summer, how does not having your children in the school lunch program impact your children's food situation?

#### Follow-ups:

- a. For example, how does the variety of food they eat change when they are not able to eat school lunch? Does the healthiness of the food change from school year to summer?
  - b. Or, do you notice a difference in how much your children eats in the summer?
11. You mentioned a few ways that your child's eating may change in the summer. **Question:** How does your experience change providing food? Please compare how difficult it is to provide food for children during the school year versus during the summer.

#### Follow-ups:

- a. If it is more difficult in the summer, please describe what was most difficult for you and why.
- b. If it is not more difficult, why is it the same? In terms of providing food, what enables you to transition to the summer smoothly even though your children cannot access school meals?
- c. How is your answer different for each of your children?

**Probe:** (For example, is it more or less difficult to feed older or younger children in the summer?)

- a. How is your answer different during the weekdays versus the weekends?

### Coping Strategies

12. **Question:** How do you deal with these difficulties? What are the different ways that you cope? Why are those coping strategies helpful for you?

13. Some families feel as though they have to take additional steps in the summer to make sure their children can eat enough food and the right types of food. For example, some families may choose less expensive food options, eat with relatives more often, or limit the variety of foods that they eat. **Question:** This past summer what did you do differently in comparison to what you do during the school year, if anything, to make sure your children had enough food to eat? To make sure your children ate healthily?  
**Probes:** (For example: choosing less expensive food options or shopping in different places; limiting variety of food; cooking at home more or eating out of the house more; eating with other relatives; family skipping meals; parents or older siblings skipping meals to benefit younger children; going to food pantries or soup kitchens?)

**To finish, I have a few demographic questions. As I said, these are not associated with your name, they will just help me better understand the backgrounds of the interview respondents when I'm looking at all of the interviews together.**

14. Do you and the other adults in your household work outside your home? How many hours per week?
15. How do you identify racially or ethnically? (or what racial group or groups best describes you?)
16. Which of the following ranges best describes your total annual household income? 0-\$9,999, \$10,000-\$19,999, \$20,000 - \$29,999, \$30,000-39,999, 40,000-\$49,000, \$50,000 - \$59,999, \$60,000+?
17. For each adult in the household including yourself, what is their highest level of education? (Grades 0-12, some college, college, or graduate degree)?

Would you like to share anything else with me or do you have any questions for me?

Thank you for your time! As I mentioned previously, to compensate you for participating in this interview, you will receive a \$15 gift card. You have two options: an online \$15 Amazon gift card that would be emailed to you, or a \$15 Visa gift card that would be sent in the mail. Which would you prefer? What is your email address or address that I can send a physical gift card to?

## Interview Questions for Participants in Summer Meals

Begin with rapport-building questions above.

### **Experience with Camps**

1. You mentioned at the end of the survey that one or more of your children attend a free or reduced-price summer camp. **Question:** Can you tell me more about your experience with them? How did you learn about them? Do you make use of any other summer meals programs?

#### **Follow-ups:**

- a. How many of your children attend the camps? How many weeks during the summer do they attend? (If very few weeks), why do they not attend for more weeks?
2. **Question:** Do the camps that your children attend provide free breakfast or lunch and do they eat the lunches at camp? Did you know that the camps provide free lunch when you decided to enroll your children?  
IF THEY DON'T PROVIDE FREE LUNCH—skip up to #4 and finish as non-participant.
  3. **Question:** What do you think about the meals provided at the summer camp? How do your children feel about the meals served there?

#### **Follow-ups:**

- a. What do you think about the quality of the food they provide? What do you think about the amount of food they provide?

### **Meals when not at program and impact of summer meals**

4. **Question:** When not at camp [or summer meals], please describe your children's lunch situation this past summer (**Probes:** where, with who, what they ate, etc.?) How satisfied are you with the lunches your child was eating when not at camp? Why?

#### **Follow-ups:**

- a. How do you think the variety and healthiness of the foods they eat when not at camp compares to when they're at camp? How does the amount of food they eat change? Why do you think that?
5. Providing food in the summer, when children are out of school for several months, can sometimes be difficult. Some parents may feel that having their children eat at a summer meals program not only makes a difference for their children, but also makes a difference in their own experience providing food, while others don't really feel like there's a change. **Question:** How does having your children eat at camp [or summer meals] affect your experience providing food for your children during the summer?

**Follow-ups:**

- a. When your children attend a summer meals program, is it easier for you to provide food for them in general? How so? Is it easier to access healthy foods for them for the times they're at home when they can get some meals at a program? Is it easier to access enough food? Can you explain your answer?
- b. What else changes for you when your children attend a summer meals program? For example, are you able to avoid spending more money on food, or do you worry less about healthy eating? What else?
- c. How is your answer different for each of your children? For example, is it more or less difficult to feed older or younger children in the summer?

**Coping Strategies**

6. **Question:** If it's harder to feed your child when meals programs aren't available, how do you deal with these difficulties? What are the different ways that you cope? Why are these coping strategies helpful for you?
7. Some families feel as though they have to take additional steps in the summer to make sure their children can eat enough food and the right types of food. For example, some families may choose less expensive food options, eat with relatives more often, or limit the variety of foods that they eat. **Question:** When your children were not at a summer meals program, did you have to do anything different to make sure your children had enough food to eat? To make sure they had healthy food to eat? What did you do?

**Probes:** (choosing less expensive food options or shopping in different places; limiting variety of food; cooking at home more or eating out of the house more; eating with other relatives; family skipping meals; parents or older siblings skipping meals to benefit younger children; going to food pantries or soup kitchens?)

**If they go to camp or something else with an activity:**

8. **Question:** How important is it to you that the summer camps provide free lunches? Would you sign your child up to attend the program if lunch was not provided?

**To finish, I have a few demographic questions. As I said, these are not associated with your name, they will just help me better understand the backgrounds of the interview respondents when I'm looking at all of the interviews together.**

9. Do you and the other adults in the household work outside your home? How many hours per week?
10. How do you identify racially or ethnically? (what racial group or groups best describes you?)

- 11.** Which of the following ranges best describes your total annual household income? 0-\$9,999, \$10,000-\$19,999, \$20,000 - \$29,999, \$30,000-39,999, 40,000-\$49,000, \$50,000 - \$59,999, \$60,000+?
  
- 12.** For each adult in the household including yourself, what is their highest level of education? (Grades 0-12, some college, college, or graduate degree)?

Would you like to share anything else with me or do you have any questions for me?

Thank you for your time! As I mentioned previously, to compensate you for participating in this interview, you will receive a \$15 gift card. You have two options: an online \$15 Amazon gift card that would be emailed to you, or a \$15 Visa gift card that would be sent in the mail. Which would you prefer? What is your email address or address I can send a physical gift card?

## Appendix B: Recruitment Script

### Phone Recruitment:

Hello, may I please speak with \_\_\_\_\_? My name is Allison Kannam, and I am calling from Tufts University in Boston because in December, you completed a survey at your child's elementary school about your child's participation in summer camps that provide lunch. You indicated that you may be interested in participating in a follow up phone interview. I am the researcher conducting the follow up interviews, so I wanted to explain more about the study. Is now a good time to talk?

The goal of the interview will be to learn more about families' access to food in the summer. You are eligible to participate if at least one of your children receives free school lunch. Does this apply to your family?

If not: Unfortunately, you are not eligible to participate in the follow up interview. We very much appreciate your participation in the survey in December. Thank you for your time.

If so:

In the interview, you would be asked several questions about your child's participation in summer camps that offer free meals, your family's food situation during the summer, and any difficulties that you may experience accessing food when school is not in session. The interviews are confidential, and the results would be used to better understand the impact of summer meals programs in New York City. If you choose to participate, you would be compensated for your time with a \$15 Visa gift card that will be sent to you by mail or a \$15 Amazon gift card sent over email. Your participation is completely voluntary and the interview would take about 30 minutes to complete.

Are you interested in participating? If so, when would be a good time to conduct the interview over the phone?

Thank you for your time. I look forward to being in touch on \_\_\_\_\_. Please feel free to call me at XXX-XXX-XXXX with any questions or concerns.

Text Message Recruitment:

Dear \_\_\_\_\_,

I am reaching out because you filled out a survey in \_\_\_\_\_ about summer meals at your child's elementary school and indicated you might be interested in a follow up phone interview about your experiences. The confidential interview would take about 30 minutes to complete and you would receive a \$20 gift card for participating. My name is Allison Kannam and I am a student researcher from Tufts University in Boston. Please let me know if you are still interested and I can explain more, and we can find a time that is convenient for you over the weekend or during the week to speak on the phone. Thank you for your consideration!

Email Recruitment:

Subject: Follow-Up from Summer Meal Survey at Elementary School

Dear \_\_\_\_\_,

I am writing to invite you to participate in a research study about families' access to food in the summer. On November 16<sup>th</sup>, you completed a survey about your child's participation in free or reduced-price summer camps with staff from Hunger Free America. The survey took place at the parent-teacher conference at your child's elementary school.

After the survey, you indicated that you may be interested in participating in a follow-up phone interview. I am a student at Tufts University in Medford, Massachusetts and will be conducting the interviews. You are eligible to participate if at least one of your children receives free school lunch. If you participate in the study, you will receive either a \$15 Visa gift card sent by mail or a \$15 Amazon gift card sent by email, based on your preference, after the interview.

In the phone interview, you would be asked questions about your family's food situation during the summer, difficulties that you may face accessing food when your children are not in school, and whether your children participate in a summer meals program. The interview takes about 30 minutes and can be scheduled at a time that works best for you. The interviews are confidential, and the results would be used to better understand the impact of free summer meal programs in New York City.

If you are interested in participating, please reply to this email or call me at XXX-XXX-XXXX. I will also reach out to you by phone in the next few days to follow up. If you do not want to receive any further information about this study, you may also let me know by phone or email.

Thank you for your consideration.

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## **Appendix C: Informed Consent Script**

### **VERBAL INFORMED CONSENT SCRIPT**

#### **TITLE OF STUDY**

Summer Meals Food Access Study

#### **PRINCIPAL INVESTIGATOR**

Allison Kannam

Student, Tufts University

XXX-XXX-XXXX

Allison.kannam@tufts.edu

#### **RECORDING**

Is it ok if I record this interview? The recording will not be shared with anyone, and will allow me to better review and analyze your responses. You may request not to be recorded, in which case I will take notes on your responses. Please indicate verbally now if you agree to be recorded: \_\_\_\_\_.

#### **PURPOSE OF STUDY**

You are being asked to take part in a research study about access to food in the summer and your children's participation in New York City summer camps that provide free lunch. The purpose of this study is to better understand what hardships families may face in feeding children in the summer, and how participation in summer camps may impact a family's ability to access food. The results will be presented in a senior thesis at Tufts University, and may also be used to write a research paper.

#### **STUDY PROCEDURES**

In this study, you will be asked several questions over the phone about your child's participation in summer camps that offer free meals, your family's food situation during the summer, and any difficulties that you may experience accessing food when school is not in session. The interview will take about 30 to 45 minutes to complete.

#### **RISKS AND BENEFITS**

There are no major risks associated with participation in this study. You may choose not to answer any question, and you may end the interview at any time.

There will be no direct benefit to you for your participation in this study. However, we hope that the information obtained from this study may help us better understand the impact of programs that provide summer meals for children.

**CONFIDENTIALITY**

Every effort will be made to preserve your confidentiality; however, this cannot be guaranteed. After your responses have been collected, you will be assigned a code number, and your name will not be associated with your responses.

**COMPENSATION**

To compensate you for your time, you will receive a \$15 gift card after completion of the interview. You may elect to share your email address and have an online Amazon gift card emailed to you, or you may elect to provide your mailing address and receive a Visa gift card.

**VOLUNTARY PARTICIPATION**

Your participation in this study is completely voluntary. If you decide to take part in this study, you will be asked to provide verbal consent over the phone. After you provide verbal consent, you are still free to withdraw at any time without giving a reason.

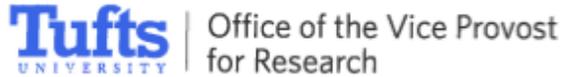
**CONTACT INFORMATION**

If you have questions at any time about this study, you may contact me at XXX-XXX-XXXX. If you have further concerns about your rights as a research participant, I will provide you with the contact information of Tufts University's Institutional Review Board.

**CONSENT**

If you consent to participation in this study, please indicate verbally now: \_\_\_\_\_.

## Appendix D: Notice of Institutional Review Board Exemption



Title: Summer Meals Food Access Study

November 7, 2017 | Notice of Action

IRB Study # 1711001 | Status: EXEMPT

PI: Allison Kannam  
Co-Investigator(s): Norbert Wilson  
Faculty Advisor: Keren Ladin  
Review Date: 11/7/2017

The above referenced study has been granted the status of Exempt Category 2 as defined in 45 CFR 46.101 (b). For details please visit the Office for Human Research Protections (OHRP) website at: [http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html#46.101\(b\)](http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html#46.101(b))

- The Exempt Status does not relieve the investigator of any responsibilities relating to the research participants. Research should be conducted in accordance with the ethical principles, (i) Respect for Persons, (ii) Beneficence, and (iii) Justice, as outlined in the Belmont Report.
- Any changes to the protocol or study materials that might affect the Exempt Status must be referred to the Office of the IRB for guidance. Depending on the changes, you may be required to apply for either expedited or full review.

IRB Administrative Representative Initials:

Handwritten initials in blue ink, appearing to be "AS" or "AW", written over a horizontal line.

## Appendix E: Summer Meals Food Access Study Preliminary Codebook

### Transcript-wide cases:

- Meal Participation Status
  - Attributes:**
    - Participant
    - Non-participant
  
- Demographics
  - Attributes:**
    - Number of children
    - Number of adults
    - Relationship to children
    - School-level kids
    - Income
    - Education level
    - Race
    - Employment

### Codes:

- Family/school background
- Description of non-program summer food arrangements
- Satisfaction with non-program summer eating
- Coping mechanisms
- Differences between siblings

### Non-participant specific codes:

- Knowledge/interest in summer meals
- Barriers to enrollment
- Potential impact of meals program
- Changes in food situation (school to summer)
  - Sub-codes:**
    - Quantity
    - Quality
- Changes in parent experience providing food (school to summer)

**Participant specific codes:**

- Experience with summer meals
- Satisfaction with summer meal food
  - Sub-codes:**
    - Quantity
    - Quality
- Impact of summer camp on feeding
- Changes in food situation: summer meal to non-meals
  - Sub-codes:**
    - Quantity
    - Quality
- Changes in parent experience providing food (summer meal to non-meal)
- Importance of free lunch for camp attendance

## Appendix F: Final Codebook

### Case Classifications

- Participation Status
  - Participant
  - Non-participant
- Number children
  - 1
  - 2
  - 3
  - 4+
- Number adults in household
  - 1
  - 2
  - 3 or more
- Relationship to children
  - Parent or step-parent
  - Other relative
- School level kids
  - Below elementary, elementary, middle, high school, older (select all that apply)
- Income
  - 0-10,000; 10-20,000; 20,000-30,000; 30,000-40,000; 40,000-50,000; 50,000-60,000; 60,000+
- Education level
  - Less than high school
  - High school graduate
  - Some college
  - College Graduate
  - Graduate School
- Race
  - White
  - Black or African-American
  - Hispanic or Latino
  - Asian
  - Choose Not to Answer
- Employment -- how many adults in household are employed
  - 0
  - 1
  - 2
- Average hours of employment of adults that are employed
  - More than 80 hours per week
  - 50-80 hours per week
  - 35-50 hours per week
  - 20-35 hours per week
  - Less than 20 hours per week

**In-text codes:**

- Family/school background
  - Description: A general portrait of the family, their family structure, and their interaction with the school. Indicators include structure of family, age of specific children, details about school
  
- Experience with school meals
  - Description of how parents and children feel about school meals. May include participation status in school meals reflections on the quantity or quality of food, what types of food their children eat there, etc.
  
- Experience with summer meals
  - Description: general description of use of summer meals (where they go, how often, etc.)
  
- Description of non-program summer food arrangements
  - Description: The who/what/when/where of children's food in the summer that they access outside of a meals program. Indicators: what children eat, where they eat, who they eat with
  
- Satisfaction with non-program summer eating
  - Description: How satisfied parents are with what their children eat when they're not at a meals program
  
- Satisfaction/perceived strengths of summer meals
  - Description: Indicated satisfaction with summer meals programs and why, perceived strengths of summer meals program
  
- Dissatisfaction/ perceived weaknesses of summer meals
  - Description: Aspects of summer meal programs that parents are unsatisfied with, may even prevent them from using them at all, things that they wish were different
  
- Most important elements of summer meals
  - Description: What parents most value in a summer meals program, may be hypothetical
  
- Perceived or potential impact/changes related to summer meals
  - Description: Refers to concrete changes for child consumption or child experience parent experience as a result of a summer meals program-- could be negative (ex: eats more at home)

**Subcodes:**

- Time
  - Stress
  - Financial
  - Childcare
  - Community themes
- Changes from school year to summer
    - Description: any indication that child consumption, child food experience, or parent experience changes from the school year to the summertime based on the loss of the school meals program
  - Suggestions for improvement or most ideal summer meals
    - Description: What parents would like to see changed about summer meals, what could be more ideal, specific suggestions they have for improvement
  - Difficulty feeding in summer
    - Description: Indication that it is more difficult to feed children during the summer or when a summer meals program is unavailable OR statements that there is not increased difficulty in the summer
  - Coping mechanisms
    - Description: ways that families deal with increased difficulty to feed children in summer, including strategies or additional behaviors in summer. May include coping strategies used throughout the year as well.
  - Interest in summer meals and barriers to enrollment
    - Description: Primarily aimed at non-participants, indications of interest or lack of interest in summer meals and why, as well as barriers to making use of summer meal programs

**Subcodes:**

- Awareness
- Lack of interest
- Does not like offerings

- Community:
  - Description: References to how summer meals build community or social networks, support the greater community, or are community resources.
  
- Security:
  - Description: References to summer meals reducing stress or instilling a feeling of security
  
- Cultural Inclusivity
  - Description: Any reference to how the food at summer meal programs is appropriate or appealing to children of various religions and cultures
  
- Salient Quotations
  - Description: Any quotation that was particularly compelling