

The Family Food Decision-Making Study

Final Report

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Household food insecurity is associated with a range of negative health and wellbeing outcomes for individuals, including obesity¹, maternal depression and stress², and diminished physical activity and psychosocial functioning for children^{3,4}. While food insecurity impacts individual wellbeing, it also shapes interactions among individuals, for instance leading to compromised parent/child interactions⁵, stressful family processes, and changes in family eating patterns and socializing⁶. These inter-personal and intra-familial dynamics are important, both in their direct impact on the wellbeing of those involved, and through their potential influence on family decision-making about how to manage food insecurity⁶.

Family food decision-making involves the processes and negotiations through which choices are made about how to get food, what food to get, and what trade-offs to make in meeting different people's nutritional needs and food preferences. Food decisions depend in part on the resources available for meeting household needs, including economic resources (e.g., money for purchasing food), concrete resources (e.g., a car to get to the grocery store), social resources (e.g., friends and family who can lend food), and informational resources (e.g., knowledge about local food pantries, or how to apply for food stamps). Family structural and demographic factors are also important determinants of food decision-making, with, for instance, Supplemental Nutrition Assistance Program (SNAP) participation conditioned on race/ethnicity, the presence of children, marital status, and where a family lives⁷. Food decisions have also been found to be influenced by household processes. Devine et al⁸ found that food choices of

low-income working parents are influenced by several domains of intra-familial process: negotiations, or “setting priorities and trading off” (p 2597) food needs with other household needs, the quality of interactions among family members (time, stress, and anxiety), and norms about food (the importance of shared meal time, beliefs about whose role it is to cook).

The Devine et al. study suggests that mothers and fathers bring different role expectations and parenting concerns to the fore in their food management choices, resulting in different perspectives. This has significant implications for research on food insecurity, since existing studies rely heavily on data collected from mothers. The prioritization of mothers' experiences may be somewhat warranted in food insecurity research given the prevalence of mothers in the food-insecure population: over 30% of all single-mother households with children are food insecure ⁷, and people living in single-parent (mostly single-mother) households represent about 44% of all those receiving food stamps ⁹ and 17% of those using food pantries ¹⁰. In addition, when food assistance programs do not meet a family's needs, research suggests that mothers often absorb the suffering, skipping meals, or cutting back portions so that children will not experience hunger ⁷. But without asking children and other household members about their experiences, it is unclear the extent to which mothers' perspectives and reports accurately reflect household dynamics, versus reflecting only one important part of a more complex picture.

To further investigate family food decision-making and experiences of food insecurity among vulnerable families, this study tapped the perspectives of different household members through in-depth interviews with members of twenty-six diverse families in South Carolina. Before describing the present study, we provide additional background on family food decision-making, with particular attention to importance of context and perspective as filters for assessing family members' experiences related to food and food insecurity.

BACKGROUND

Family decision-making about food is part of a broader set of choices on how to meet basic needs given available resources. For low-income families, this process has been described as “making ends meet,” alluding to the struggles involved in meeting basic needs with inadequate resources¹¹. Food, as a particularly elastic necessity, is often a place of compromise within the household budget¹². While the rent, utility bills, and other expenditures are generally all-or-nothing costs, food spending can be adjusted more subtly. In addition, an extensive private and public food safety net means that families can often get free food¹³ – depending on where they live, and on having information about where and how to receive services^{14, 15}.

Using food assistance programs (governmental and private) can help a family to make ends meet, but these strategies may also have hidden costs. Rural families or those without reliable transportation may struggle to get to services¹⁶. Families with young children may have to pay for childcare while they wait to receive services¹⁶. For people looking for work, time spent waiting for emergency food service is time away from job search activities. Costs may also be socio-emotional, if family members experience stigma, embarrassment, or anxiety^{17, 18}, or if the kinds of food they can access are not healthy, or do not meet their cultural norms or their families' preferences and tastes¹⁹.

Children, mothers, and other adults may experience costs differently. Children may have strong negative priorities for participating in school lunch program because of their first-hand experiences of stigma¹⁷, while adults may have strong negative priorities on SNAP participation if they feel they have been treated poorly by government programs the past²⁰. So, while in general food demand is relatively elastic, the costs of getting food are complex, and food

decision-making priorities may vary by family type, rural versus urban location, and the particulars of family and individual social context.

Given these contextual factors, a family's food decision-making priorities, negotiations, and interactions culminate in: food management strategies, or the ways through which members of the family get and/or pay for food. Some strategies may dominate within a household; for instance, the bulk of food may be purchased using SNAP benefits or cash, while supplemental food is obtained from a food pantry⁷. Other, understated strategies may be less obvious or acknowledged, such as cutting back on portions, borrowing food, or sending children to eat with neighbors^{11, 19, 21}.

Different family members participate in different ways in these strategies. As dominant strategies are enacted, household members may participate in ways that are facilitative (e.g., one parent watching children while the other parent goes to the food pantry; a child waiting nicely in line with a parent), or in ways that are inhibitive (e.g., arranging to be unavailable to help with a strategy; children behaving so badly that they cannot remain in a waiting room). Household members may participate in more or less helpful ways with understated strategies as well; these behaviors may be less visible. Research suggests that mothers often cut back on the amount of food they eat in hopes of buffering their children from food shortages^{7, 22}. Children may, or may not, be aware of these adult behaviors; and, children may themselves eat less, or ask for different foods in response to their observations of their parents' strategies^{17, 23}. Children participate in the school lunch program independent of their parents – even though parents enroll children, they are not there to share in the experience itself. Children may manage their participation in a variety of ways, including not participating, saving food and bringing it home, or accessing additional resources (e.g., food from teachers, food left over at the end of school lunch) for

themselves or to share with family members. Parents may, or may not, be aware of their children's behaviors.

As discussed previously, current knowledge on household food insecurity is primarily derived from parental reporting of what is experienced by family members. National statistics on the prevalence of food insecurity, for instance, rely on a parent's responses to the USDA Household Food Security module. These parental responses are used to indicate both the household's overall level of food security, and children's exposure to food insecurity. Consistently, data from these parent reports suggests that most children in food-insecure households are buffered from the worst food hardships – this buffering is evidenced in the gap between the prevalence of very low food security among adults (the parent reports skipping meals, cutting back portions) and the prevalence of very low food security among children (the parent reports that the children are skipping meals or cutting back portions). For instance, national parent report data collected in 2007 found that in 5.7% of households adults did not always have enough to eat, while in only 0.7% of those same households children did not always have enough to eat²⁴.

Parents know about their own experiences, including what they do to try to provide adequate food and nutrition for their children, but parents do not necessarily know what children actually experience. Additional research is needed to assess children's experiences of household food insecurity and the decision-making and food management processes that characterize daily life within a household where food resources are scarce. Toward that end, the current study collected and analyzed data from interviews with multiple members (mothers, children, other adults) of a diverse sample of food-insecure households.

METHODS

Sample selection. Recruitment efforts targeted families at-risk for food insecurity in rural and non-rural areas of South Carolina. Some recruitment took place in-person, with research team members setting up information tables at food pantries, soup kitchens and after-school programs and providing fliers, information letters, and the opportunity to ask questions. Other recruitment took place through posting study fliers in Laundromats, libraries, grocery stores, and in social service agency offices. Fliers were also distributed through mailings to churches and family service providers. Finally, through collaboration with a local non-profit, information was mailed to families who participated in a school-based health services program for low-income families.

Screening questions were used to ensure that the sample was diverse and included families with children who could share their own experiences related to food decision-making. During screening, parents were asked to describe their race/ethnicity and whether they lived in a rural or non-rural area. Parent responses to these questions allowed us to focus ongoing recruitment efforts in geographic areas that would augment under-represented groups as the sample was developed. Families were asked the ages of children living in their household, and told they were eligible to participate in the study if a child between the ages of nine and sixteen lived in the household and was interested in being interviewed. Eligible families were invited to schedule interviews if they were still interested in participating.

The final sample included twenty-six families who, based on mother's report, were rural (n=14) and non-rural (n=12), and in which mothers were white (n=8) and African-American (n=18). Thirteen boys and thirteen girls were interviewed. Fourteen children were in elementary school, ten were in middle school, and two were in high school. In addition to children and mothers, seven fathers, one grandmother, two aunts, and one family friend agreed to participate in the study.

Data collection. Family members were interviewed separately, and interviews took place primarily in families' homes. Adult interviews lasted 45 to 90 minutes; child interviews lasted 15 to 60 minutes. All interviews were audio-taped, and de-identified transcripts and field notes became the data

for analysis. In appreciation for their time and effort, each participant was given a department-store gift card at the end of the interview: adults received \$20 and children received \$10.

The interview guides. Semi-structured interview guides (see Appendix A) were developed to tap the following main constructs: household resources and economic situation; food priorities, negotiations, interactions, and norms; food management strategies and roles; and food insecurity. Some child interview questions were adapted from Connell et al.'s work²⁵. Most questions were asked of both children and adults, but adults only were asked about household finances and completed the USDA 6-question Household Food Security Module²⁶. Interview guides were piloted and refined in-house in conjunction with interviewer training. Because these guides were meant to shape and structure a conversational-style interview, trained interviewers had latitude to probe, adjust wording, and otherwise respond to the interviewee to best explore that person's experiences and perspective in relation to the main study constructs.

Data analysis. Data analysis involved a constant comparative process²⁷, combining a priori coding based on main constructs from the interview guide with an inductive process of identifying new codes and refining existing codes based on the data. Codes were clustered into themes, and themes were confirmed through team discussion and in light of existing research. Relationships among codes were then assessed, and patterns were explored based on family-member demographic and other characteristics. NVivo software²⁸ was used for all coding.

RESULTS

Describing the sample

Household economic context. Sample families were, in general, coping with strained household economic circumstances. Only seven of the mothers were in the formal labor market at the time of their interview. While some had little connection to the workplace, many reported recent job losses, e.g., being laid off, fired, and working for a company that went bankrupt within the last couple of years. Some mothers had husbands or partners who were working even if they were not, though often with reduced

hours. Two mothers reported monthly income from providing in-home child care to relatives' children; this informal income was in small amounts (e.g., \$70/week) and irregular, depending on the fluctuating work schedules of the children's parents. Three mothers had returned to school or graduate school in hopes of improving job prospects; two were living in part on student loans. Despite the high levels of unemployment, none of the mothers was participating in the welfare program.

In addition to income problems, some families faced other challenges, including physical health problems (diabetes), mental health problems (schizophrenia), and a history of domestic violence. Along with these individual challenges, families were struggling with a range of issues with the stability of day-to-day life. For instance, transportation problems were common, with broken cars and the inability to pay for repairs being a significant barrier to both employment and the management of everyday needs. Parents made trade-offs in terms of bill-paying – prioritizing rent, the power bill, and food, and paying for other things only when able. All the families in this study reported cutting back on household expenses, but the nature of cut-backs varied quite a bit, from not eating out as often, forgoing trips to the beauty parlor, and buying fewer name brand items to careful planning to reduce monthly gas costs, using the emergency room rather than paying for regular medical care, and a diabetic parent not testing her blood levels to save money on the testing supplies.

Food management strategies. The parent interview data related to how families managed food resources were categorized into two broad codes: food acquisition and food use. Food acquisition refers to the resources a family uses to produce food and includes places to buy food, places to get free food, people who supply food, and formal and informal ways of obtaining money or benefits used specifically for purchasing food. Food use refers to the ways that a family manages the food they have acquired, and includes different approaches to budgeting food resources, ranging from an overt lack of attention to budgeting (coded as “indulging”), to careful planning of meals, to cutting back in the quality and quantity of food.

Food acquisition. All families reporting going to the grocery store regularly, and grocery store choice was often explained in terms of food budgeting. As one mother said,

“Wal-Mart, Dollar General, those stores where I can really, really afford to get the food I need. I couldn't go to like a Publix because it's just ridiculous [inaudible] the food is a better brand, fresher meat, but Wal-Mart is one of the stores where I can get canned goods, even the dollar store they have freezer food in there now, and it's, it is really so helpful.

Parents talked about having cut back their use of restaurants during tough economic times, though all but three said that they still did eat out sometimes. Most commonly, families ate at fast-food restaurants. Families also described special meals at “sit down” restaurants, and going to restaurants where children could eat for free as a way to stretch the food budget.

Because most of the study families could not afford to meet all their food needs with the money they earned at work, they relied on other programs and strategies to try to provide enough food for their families. Ten families were receiving SNAP benefits at the time of their interview, six were struggling with barriers in the application or recertification process, and one reported being eligible but too embarrassed to apply. Barriers to receiving SNAP included making a little too much money to qualify, being eligible for such a small amount of SNAP benefits that it is not worth filling out the paperwork, and having trouble taking time off work or arranging transportation to apply or recertify.

Twenty-one of the families' children received free or reduced school meals. Nine families used food pantries or soup kitchens to get them through rough times. Two mothers reported that people knew they were struggling economically and donated food to help them; one mother talked about standing with her children outside a grocery store and asking strangers for help until someone gave her a grocery store gift card. Friends and family also provided critical food resources for many families. Fourteen mothers reported relying on these social ties to help make ends meet, including borrowing food to tide them over tough times, eating at others' houses and/or sending children to eat at a relative's house, and “swapping”

food: "I may have spaghetti, my mom may have chicken, you know, and I'll bring her so much of what I have and she'll bring me some of what she has."

Food use. An important aspect of food use was "food budgeting", which refers to family efforts to shop, cook, and eat in ways that stretch existing resources. For instance, one mother said:

Well, what I do is I get the big bag and then I break it down in small bags. And a big bag of that kind of vegetables from Wal-Mart and then I'll go to like Dollar General and get like so many cans of vegetables for \$1, you know, and like a chicken, I buy the boneless, skinless chicken breasts, and each fillet, it's kind of thick so I'll just cut them in half, but they're three fillets in a pack and I split them all in half, there's six pieces. So I will save two pieces and grill on our grill and then four pieces I cook however they want it.

Another mother similarly reported:

I do my list, I stick to it . . . like if I say I'm gonna get a big thing of hamburger meat, I already know what I'm gonna cook with the hamburger meat so then I write down the things that gonna be cooked with the hamburger meat, so I pretty much have all the, everything that I need. When I get through and look at my list, everything on that list is pretty much marked and if the store just didn't have it that day or for some odd reason I switched up, but usually it's the store didn't have it that day.

Food budgeting also included saving food money as a "cushion" for times when resources are low, cooking in large quantities to have food left over for meals another day, cooking in small quantities so that no food is wasted, and substituting low-cost foods for more expensive ones.

Some families had to go beyond careful budgeting to get through the month, making compromises in food quality and food quantity to stretch food further. Ten mothers described relying on cheap foods as a way to get by, with Oodles of Noodles, peanut butter, and rice and beans becoming staples when nothing else was available. One mother reported having "breakfast for dinner" at times, saying "I would prefer to eat healthier but we can't afford it, bottom line we cannot afford it." Mothers also reported drinking lots of water or tea to feel full without eating food they needed for their children. Other less frequent food-quality compromises included using donated food that was stale or unhealthy, eating whatever food was left in the house, and for one mother, taking food out of a trash can for herself so that her daughter could eat better food.

Compromises in food quantity made by parents included cutting back portion sizes, having “light meals” with fewer different foods being served, generally eating less, not eating (skipping meals), and having only something to drink at meal time. One mother reported: “I really don’t eat, you know, I try not to eat because, you know, I want my kids to have more and my husband to have more.” While prioritizing children’s food was common, children did absorb some food-quantity cutbacks, generally by not having snacks between meals.

Food outcomes. Given study families’ economic situations and related food management strategies, it is not surprising that, based on mothers’ responses to the USDA Household Food Security Module, fourteen families experienced low or very low food security in the previous 12 months. This study did not include the longer USDA measure that would have tapped parental perceptions of children’s food hardships in a more structured way, but in the open-ended responses mothers in nine families described sacrificing their own food needs to make sure that their children had enough and never went hungry. As one mother said:

I always let him eat first. If I think I don’t have enough I will give him as much as he wants and I can always drink water and tea is cheap. I, yeah. But I don’t talk to him about it because it’s none of his business. I tell him not to waste. But, you know, as long as he eats – and I won’t force feed him. Eat as much as you want. If you want more, there’s more but don’t put in plate what you’re not gonna eat. Doesn’t make sense. As long as he eats it, I can always find something.

Child perspectives. While mothers generally reported that they were able to protect their children from food hardships, child interview data suggested that children’s experiences were not always consistent with their parents’ reports. Children often are not fully buffered from food hardship; we identified two dimensions along which children reported experiencing household food insecurity: awareness of food scarcity, and taking responsibility for managing food resources. These dimensions, and the family contexts associated with them, are discussed below.

Awareness of food insecurity

“Awareness” means that the child had an experience of or an encounter with the household's food insecurity, and understood that experience as being related to not having enough money to meet food needs. Awareness was further differentiated into three subcategories: cognitive, emotional, and physical awareness.

Cognitive awareness refers to children's knowledge that food is scarce, and their knowledge of ways that their family manages food problems. This included awareness of the *resources and strategies* used to meet household food needs. As a teenage boy reported: “. . . we get [Food Stamps]. . . between the 1st and the 3rd, maybe the 4th. . . when we do get it then, I'm telling you the food is coming in the house . . . you come home after school and you got food.” Cognitive awareness also included awareness of *inadequate quality of food*. When asked if her family had ever almost run out of food before the end of the month, a middle-school girl replied: “Yeah, but like we always have hot dogs or French fries or something”. Children were aware of the use of cheap foods, and also of being limited to eating the same foods repeatedly. One boy described: “I guess chicken is like the easiest affordable thing to [my mother] . . . all she buys is chicken.” Awareness of *inadequate quantity* was also evidenced, and could extend to knowing that there is no food at all. A middle-schooler explained that there was no food in his house twice in the last month; the interviewer asked: “(I) What do your brothers say [to your mother]? (P) *If we're gonna eat and how we're gonna eat?* (I) And then what is your mom's response? (P) *Sometimes, 'No'.*”

Emotional awareness refers to feelings such as worry, sadness, or anger that are related to household food insecurity. For instance, an elementary-school-aged girl talked about times when food was running low: “I felt kind of sad too because I was really starving and then there was nothing else to eat. Except for maybe some chips or a soda . . . [How did that make you feel?] Kind of sad, kind of happy . . . because we had a little bit of food left, but we didn't have like as much as anyone else.” In addition to worries about getting enough food, some children expressed unhappiness about the strategies used to make it through a food shortage. One child said, “I just hated it eating like hot dogs or the French

fries or the Oodles of Noodles.” Another commented, “. . . we had to keep going over to my friend's house back and forth asking if she had butter and milk and eggs . . . I really didn't feel good about it because I'm not comfortable asking people that.”

There were also children who reported a lack of worry; despite food resources sometimes being low, they were confident that food problems would be handled. As one girl commented: “I know that I'm not gonna like starve 'cause my mom won't let that happen.” Another child offered a religious explanation: “. . . if we're at the last resort and we still don't have [food] and then, I don't know, somebody just comes and it's exactly what we needed . . . so I guess it's God.”

Physical awareness refers to physical feelings such as hunger, pain, tiredness, and weakness that are related to lack of sufficient food. Eight children reported physical awareness of hunger – some experienced hunger only occasionally, while others experienced it quite frequently. A high-school boy ate no more than one meal at home each day. He was often hungry, and described that he felt: “angry, mad, go to sleep basically, that's the only thing you can probably do and after you wake up, you feel like you've got a bunch of cramps in your stomach and you'll be light-headed.” An elementary-school girl explained, “Sometimes on Sundays before we figured out there was a soup kitchen, we would skip breakfast because there's no cereal and then we would have an early lunch and I would get really hungry because we get a late dinner.” Child hunger was also related to poor quality of available food. A boy said he was hungry during the interview because he had not eaten all the food served at school that day: “. . . cause the beef jerky looks like beef – the fruit jerky looks like beef jerky and it tastes nasty. And the orange chips normally don't taste like oranges to me.”

Responsibility for managing food resources

The children reported a range of behaviors that reflected taking responsibility for managing household food insecurity. Sometimes this involved compliance with adult strategies for stretching resources. One boy commented that: “We would try and save most of our food so we won't have to buy anymore, 'cause usually we wouldn't have as much food as anyone else.” An elementary-school girl

described that her parents “. . . say, ‘We’re running low on food. You guys can’t have an apple or something because we need those for snacks for later when we need them’.”

Some children went beyond compliance to initiate strategies without being asked. For instance, the girl quoted above not only complied with her parents’ request to not eat a snack when resources were low, she also initiated similar requests in her interactions with her younger sister: “[My sister] would sometimes ask me to ask for a fruit snack or a banana and I would say, no, we’re running low, we could use those for tomorrow for lunch.” Other types of initiation included not asking for foods at the grocery store, eating less at meals, and asking only for healthy foods rather than treats.

Occasionally, children reported that they took responsibility for managing food insecurity by generating more resources themselves. These strategies included asking neighbors and family members to borrow food, bringing food home from a relative’s house, and working part-time and giving the money to parents for food. In one particularly poignant example, a high-school boy hesitantly described how he and other youth in his community helped their families when food was running out:

. . . we’ll like get together and we’ll find a way to get money up, not, we ain’t got to sell no drugs though, not like that, but we’ll find a way to get money up. We might all get together and cut the grass or something. We’ll find some way . . . people will be putting money up on fights and stuff, too. And they might do dog fights every now and to get money like that.

Putting the data together – children’s experiences in family context

Children’s awareness and responsibility occurred in the context of family life more generally. While the study data are rich with respect to family interactions, family context, and food decision-making, we focus here on the three contextual factors that are particularly salient to understanding children’s experiences of food insecurity: parent/child communication, SNAP participation, and complex family problems.

Communication. Families differed in their communication about food insecurity. Some parents spoke with children openly. As one elementary-school boy said, “. . . my grandma tells me we can’t be

buying a lot of food with the EBT 'cause we ain't got much on it." In other situations of open communication, parents asked children to stretch snack foods, choose fewer foods or only healthy foods in the store, and to wait on food shopping needs. One girl explained: ". . .we didn't have as much money to buy enough food for everyone in the house to eat . . . [my parents] would say that we would just have to wait . . .cause usually the only way [my dad] go to the grocery store is if his check in the mail and then we can . . . buy some more food."

Other parents did not discuss food problems with children. Sometimes children were not aware of issues at all – buffered from awareness and thus from taking responsibility for resolving problems. This does not mean children were not impacted; children may have received inadequate food quality or quantity, or experienced strained and suboptimal parenting, without becoming cognizant that food resources were low. Other children became aware of food insecurity despite parental efforts to keep them from knowing. Thinking about whether her family had ever come close to running out of food, one girl explained: ". . . there's been times I guess when [my mom] couldn't find [money for food], but I just never probably knew about it because she's always trying to hide it." Another girl described how she knew when food was low without her family telling her:

They don't really say anything, but you can read it in their face . . . when they're out of money and then you ask why don't you go to the store and they don't answer or something or, and they just try to find other ways, like they just forget . . .I can tell by people's expressions . . . [they] wouldn't be frowning, but like it wouldn't be a happy face, it wouldn't be sad, it wouldn't be any face at all, it would be just like -- an empty face.

Children sometimes kept secrets from parents as well. In one family, the mother described skipping meals and filling up on beverages to save food for her son, emphasizing that she kept her son from knowing about food problems so that he could enjoy childhood. When her son was interviewed, he checked to make sure his mother could not hear him, and then whispered that to make food last he did not eat very much.

SNAP participation. Children in households that participated in SNAP were, for the most part, buffered from the worst food hardships – that is, they did not cut-back on how much they ate, and they did not experience hunger. This was most evident in two families in which the mothers volunteered that their SNAP benefit amount had been increased in recent months. These mothers reported having enough food for themselves and their children, and their children reported having no worries about food running out, and not limiting their food intake. In contrast, of the eight study children who reported cutting back on how much they ate due to household money problems, only one was in a family that was receiving SNAP. Four of these families reported being ineligible for SNAP, and three were in the midst of dealing with application or recertification issues. Similarly, of the three children in the sample who reported frequently going hungry (feeling hunger discomfort on at least a weekly basis because their family could not afford enough food for them to eat), two were in families not receiving SNAP – one had slightly too much income, the other was in the recertification process. The remaining family with a hungry child did receive SNAP; that family also experienced multiple and complex family problems that made it hard for resources to be used efficiently. We discuss the impact of complex family problems in more detail in the following section.

Complex problems. Most of the children in this study were affected by household food insecurity to some degree. Sometimes children's experiences were difficult, but not dire. Food quality was less than desirable, and children were aware of and responsive to food needs in ways that children from more affluent homes generally are not, but they had enough to eat and trusted their parents to manage food problems. Other children experienced more severe aspects of food insecurity. Consistent with findings in other research²⁹, these children lived in families with additional, complex problems including: parent mental and physical health challenges, domestic violence, recent relocation, job loss, and geographic and social isolation. One mother's untreated schizophrenia and the ensuing fear-inducing hallucinations kept her from driving or cooking on the stove; her ability to access and maximize food resources was thus constrained. In another family, parents were coping with recent economic crisis. One parent had recently

lost a job; the other parent in the household had work hours cut back; and, the informal income production strategies on which they had relied (collecting and selling scrap metal and items from yard sales) were failing in the recession. Lack of knowledge about available services exacerbated food shortages. A mother in a rural area had neither a car nor a refrigerator, and spent hours each day walking to the nearest grocery and bringing home one day's worth of food to cook for dinner. An urban mother had left a violent marriage, and her stress, fear, and sudden poverty overwhelmed her; she did not notice her child's awareness of food problems or efforts to solve them.

DISCUSSION AND CONCLUSION

The purpose of this research was to understand different family members' experiences of and perspectives on household food insecurity. We learned that there is substantial overlap in parents' and children's experiences. For instance, there was consistency in reporting of what food resources were used, how food decisions were made, and by whom. We observed differences, however, in parents' and children's reporting of experiences of food insecurity. In particular, children reported being more aware of food insecurity and more impacted by it than would be gleaned from the parental interviews.

Most parents in this study tried to buffer their children from the worst aspects of food insecurity. Some were successful: children ate before adults did, were spared from severe nutritional deprivation, and sometimes were even spared from food worries. SNAP, and the efficient use of SNAP benefits, appeared to be important supports for parental efforts to ensure an adequate diet for children. When parents did not have enough support or were negotiating too many challenges with too few resources, however, children were not always buffered. Children knew when food was scarce, and they felt worry, anger, hunger, and tiredness. Children also acted to help manage food problems, supporting parental efforts, initiating their own strategies, and contributing to household food resources.

When children were not buffered, parents did not always know what children experienced. This suggests that estimates of child hunger based on parental reports may be too low -- a concern given the serious developmental consequences of childhood food insecurity. Epidemiologic data demonstrate

that children in food-insecure households are more likely to experience adverse health and developmental outcomes, including depressive symptoms and academic and social developmental delays^{1, 2, 4, 29-31}. Additional research based on children's reports of their own experiences is needed; this research should aim to understand children's experiences in different parts of the country, because these experiences and children's perspectives about them may differ by regional culture³²⁻³⁴.

Ending childhood hunger will require additional research, expanding our understanding of what children experience, in what context, and why. This study demonstrates that children can and will discuss food struggles when asked. Subsequent studies should replicate a direct child-interview approach with children of different race/ethnic status, in different geographic locations, and in differently structured families. From there, more generalizable approaches to measuring child food insecurity directly can lead to more accurate estimates of the prevalence, severity, and distribution of child hunger in the United States.

While such future research will be invaluable for understanding the extent of the child hunger problem, the development of interventions to allay that problem will depend on the development of richer adult food-insecurity data as well. This study suggests, for instance, that some parents may benefit from guidance to improve communication skills and assure children that parents can solve food problems. Other parents and children experience more complex problems, and child hunger may linger unless non-food issues are also addressed through housing, welfare, mental health, and other social safety net programs. At times, it may be critical to provide food services to children directly, through enhanced school and summer food programs, for instance. The use of data on food insecurity and food resource management from multiple household members can lead to a more complete understanding of what happens in vulnerable families, and of how best to respond to particular family and individual needs to improve nutrition, strengthen family processes, and enhance child and parent wellbeing more generally.

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Appendix – Interview Guides

Adult Interview Guide

How and when people eat is different for different families. I'm going to ask you a few questions to help me understand what eating is like in your family.

1.) Can you tell me about what you ate yesterday?

PROBE for breakfast/in the morning, lunch, dinner/in the evening

Summarize what participant said (e.g. If I understand you correctly . . .)

2.) Is this how it typically goes in your family?

[IF "NO"] How was yesterday different than normal?

3.) Thinking about a/this typical day,

- a. Does your family eat together? (**PROBE**– who is there, where do people eat, etc.)
- b. What else goes on while people are eating? (probe – TV, talking)
- c. Who decides what foods are eaten?
- d. Are there any rules about what people can eat? or when? Where?
- e. Who prepares food?
- f. Who cleans up after a meal?

- 4.) In most families, there are times when different people want different things related to food. Maybe they want different things for dinner, or to buy different foods in the store, or to eat at different times, for instance. Can you tell me about a time when, in your family, different people have wanted different things?

[if unclear --- what to eat for dinner? What to get at the grocery store? Where kids will eat?]

[PROBE: *What was happening? Who was involved? How did it get resolved?]*

- 5.) Imagine a situation where there's a food or drink you'd really like to have but no one else in your family wants it. Please tell me about how you would get it.

- 6.) Can you tell me about a time when you've wanted [PARTICULAR FOOD or DRINK] but didn't end up getting it?

[PROBE *as necessary: Are there other reasons besides what you just mentioned?]*

- 7.) How do other people in your family try to get the foods or drinks that they really want to have?

We're going to shift our discussion now to the ways you and your family manage to get the food you need.

Household budget and food priorities

- 8.) In these times it can be hard for a family to make ends meet. Are you aware of any of your friends or family that are having a hard time covering their expenses?

9.) If a family was going through a hard time, and couldn't afford enough food, what could they do?

- a. In addition to [STRATEGY] what else could they do? [*keep going until no more ideas*]
- b. With all these things they could do, what do you think they should try first? Why?
- c. If you were making the decisions, what would be the last thing you would do? Why?

10.) Can you tell me about a time when you've found it hard to cover all your expenses? [IF "NO" GO TO 11]

[IF "YES"] *Probe: How did you manage that? What compromises did you have to make?*

- a. Were you able to keep eating the way you'd like?

How did you manage?

11.) [SKIP IF #10 IS "YES"] Can you imagine that something comes up – someone loses a job, or someone gets sick – and money gets tight. What do you think you might do to get by?

[Probe: How do you think you would manage that? What compromises do you think you might have to make?]

12.) Can you tell me about something you've done to try to help your family have enough food?

13.) Can you tell me about something you've done to try to make food last?

14.) Over the last few months, what are the ways that your family gets food?

[Probe into roles the person plays in each situation]

a. Does anyone in your family go to the store?

[IF "YES"] What store(s)?

Who usually goes to the store?

b. Does anyone in your family eat at a restaurant?

[IF "YES"] What restaurants do you usually go to?

About how often do you eat out?

c. Does anyone in your family eat at a friend's house or with relatives?

[IF "YES"] Can you please tell me more about that?

d. Does anyone in your family borrow food from friends or neighbors?

[IF "YES"] Can you please tell me more about that?

- e. Does anyone in your family use Food Stamps, or EBT, to help buy groceries at the store?
- f. Does anyone in your family go to a food pantry – like at a church or Harvest Hope?
[IF "YES"] About how often?

Who usually goes to the food pantry?

- g. Does anyone in your family get free or reduced lunch at school?
[IF "YES"] Who usually gets free or reduced lunch at school?
[IF "NO"] Why not?

- h. Does anyone in your family get free breakfast at school?
[IF "YES"] Who usually gets free or reduced lunch at school?
[IF "NO"] Why not?

- 15.) Sometimes families have to do things they don't like to get food. Can you tell me about a time when you, or someone you know, had to do something that they didn't like to get food?

Transition into Module (administered to all households):

These next questions are about the food eaten in your household in the last 12 months, since (current month) of last year and whether you were able to afford the food you need.

Now I'm going to read you several statements that people have made about their food situation.

For these statements, please tell me whether the statement was often true, sometimes true, or never true for (you/your household) in the last 12 months—that is, since last (name of current month).

16.) The first statement is “(I/We) worried whether (my/our) food would run out before (I/we) got money to buy more.” Was that often true, sometimes true, or never true for (you/your household) in the last 12 months?

1. Often true
2. Sometimes true
3. Never true
4. DK or Refused

17.) “The food that (I/we) bought just didn't last, and (I/we) didn't have money to get more.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?

1. Often true
2. Sometimes true
3. Never true
4. DK or Refused

18.) “(I/we) couldn't afford to eat balanced meals.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?

1. Often true
2. Sometimes true
3. Never true

4. DK or Refused

If any of first 3 questions was “sometimes true” or “often true”, continue to 19, else skip to

23

- 19.) In the last 12 months, since last (name of current month), did (you/you or other adults in your household) ever cut the size of your meals or skip meals because there wasn't enough money for food?

1. Yes
 2. No (Skip 18)
 3. DK (Skip 18)

- 20.) **[IF YES ABOVE, ASK]** How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?

1. Almost every month
 2. Some months but not every month
 3. Only 1 or 2 months
 4. DK

- 21.) In the last 12 months, did you ever eat less than you felt you should because there wasn't enough money to buy food?

1. Yes
 2. No
 3. DK

- 22.) In the last 12 months, were you every hungry but didn't eat because there wasn't enough money for food?

- 1. Yes
- 2. No
- 3. DK

This last set of questions is about your household's finances. I realize this can be a sensitive topic – and I want to reassure you that we won't share your responses with anyone – we are only interested in this information as part of our research, and nothing you tell us will have any effect on any services or benefits you receive.

- 23.) On average, how much do you spend on housing? _____
 a. Is that: _____per day (1) _____per week (2) _____per month (3) _____per year (4) _____ Other (5)

- 24.) On average, how much do you spend on child care? _____
 a. _____per year (4) _____ Other (5) Is that: _____per day (1) _____per week (2) _____per month (3)

- 25.) On groceries? _____
 a. _____per year (4) _____ Other (5) Is that: _____per day (1) _____per week (2) _____per month (3)

- 26.) On health care? _____
 a. _____per year (4) _____ Other (5) Is that: _____per day (1) _____per week (2) _____per month (3)

- 27.) Do you drive your own car to get around? _____ Yes (1) _____ No (2) **[IF "NO" SKIP TO 31]**

- 28.) **[IF "YES"]** About how much do you spend for car payments? _____
 a. Is that: _____per day (1) _____per week (2) _____per month (3) _____per year (4) _____ Other (5)

29.) About how much do you spend on car insurance? _____

a. Is that: ____per day (1) ____per week (2) ____per month (3) ____per year (4) ____ Other (5)

30.) About how much do you spend on gas? _____

a. Is that: ____per day (1) ____per week (2) ____per month (3) ____per year (4) ____ Other (5)

[SKIP TO 32]

31.) **[ASK THIS #27 WAS “NO” (DON’T DRIVE CAR TO GET AROUND); ELSE SKIP TO 32]**

What do you do for transportation? _____

a. About how much does that cost?

b. Is that: ____per day (1) ____per week (2) ____per month (3) ____per year (4) ____ Other (5)

32.) Are there any other major expenses that your family has to pay for?

a. **[IF “YES”]** What?

b. About how much does [EXPENSE] cost? _____

c. Is that: ____per day (1) ____per week (2) ____per month (3) ____per year (4) ____ Other (5)

d. About how much does [EXPENSE] cost? _____

e. Is that: ____per day (1) ____per week (2) ____per month (3) ____per year (4) ____ Other (5)

f. About how much does [EXPENSE] cost? _____

g. Is that: ____per day (1) ____per week (2) ____per month (3) ____per year (4) ____ Other (5)

Now I want to ask you about the resources you have to meet your family's needs.

33.) First, can you please tell me who all lives with you in your home?

a. How many children?

i. What are their ages? _____ 1st child age _____ 2nd child age
 _____ 3rd child age _____ 4th child age

b. How many other adults?

i. What are their relationships to you?

interviewer writes list:

34.) Switching now to finances, on average, how much money do you make from work?

a. Is that: _____per day (1) _____per week (2) _____per month (3) _____per year (4) _____ Other (5)

35.) Again, everything you tell me is confidential – no one other than the research team will know what you’ve said. Do you have more than \$50 in savings?

36.) There are a number of benefits or programs that some families use to help make ends meet. I’m going to go through a list of those programs, and for each one, ask you to tell me if you participate in it.

[CHECK IF “YES”]

a. Family Independence Program (or welfare)	[] (1)
b. SSI	[] (1)
c. Unemployment Insurance	[] (1)
d. Food stamps (EBT or SNAP)	[] (1)
e. WIC	[] (1)
f. Child support	[] (1)
g. EITC (earned income tax credit)	[] (1)
h. Child care voucher/assistance	[] (1)

i. Housing voucher/assistance	[] (1)
j. Medicaid	[] (1)

37.) Do you usually get any financial help from friends of family?

a. If a family or friend offered help, would you take it?

[IF “YES”] What kind of help?

[IF “NO”] Why not?

b. Do friends of families ever ask you for help?

[IF “YES”] Can you tell me about that?

38.) If I want to have a really good understanding about how you and your family manage to have enough food, while also making ends meet in other ways, is there anything else I should know?

39.) Can you please tell me about a meal that you have for celebrations in your family?

Child Interview Guide

- 1.) Could you please tell me about your favorite holiday or birthday meal.^a

[PROBE as necessary: How would you go about preparing it? Who would help you prepare it? Who would enjoy the meal with you?]

How and when people eat is different for different families. I'm going to ask you a few questions to help me understand what eating is like in your family.

- 2.) Can you tell me about what you ate yesterday?

PROBE for breakfast/in the morning, lunch, dinner/in the evening

Summarize what participant said (e.g. If I understand you correctly . . .)

- 3.) Is this how it typically goes in your family?

[IF "NO"] How was yesterday different than normal?

- 4.) Thinking about a/this typical day,

- a. Does your family eat together? (**PROBE** – who is there, where do people eat, etc.)
- b. What else goes on while people are eating? (**PROBE** – TV, talking)
- c. Who decides what foods are eaten?
- d. Are there any rules about what people can eat? or when? Where?
- e. Who prepares food?
- f. Who cleans up after a meal?

- 5.) Please tell me about a time when, in your family, there has been a disagreement about food or drinks?

[if unclear --- what to eat for dinner? What to get at the grocery store? Where kids will eat?]

[PROBE *What was happening? Who was involved? How did it get resolved?]*

- 6.) Imagine a situation where there's a food or drink you'd really like to have but no one else in your family wants it. Please tell me about how you would get it.

- 7.) Can you tell me about a time when you've wanted [PARTICULAR FOOD or DRINK] but didn't end up getting it?

[PROBE *as necessary: Are there other reasons besides what you just mentioned?]*

- 8.) How do other people in your family try to get the foods or drinks that they really want to have?

- 9.) Can you please tell me about the last time you were hungry?ⁱ

a. What was going on then?

b. Why did it happen?

- 10.) When you worry about being hungry, what sorts of things do you worry about?^a

a. What is happening that you know you need to worry?

- 11.) Have you ever known kids from a family that almost ran out of food before the end of the month?^a

a. **[IF "YES"]** What happened?

- b. How did the kids feel about it?
- 12.) Has your family ever almost run out of food before the end of the month?
- [IF "YES"]** What did the grown-ups *say* that let you know that there wasn't enough money to get more food?
 - What did the grown-ups *do* that let you know that there wasn't enough money to get more food?
 - Did it make any difference in your life? How?
 - How did you feel about it?

Participation in food management strategies

- 13.) Thinking about a normal week, what are the ways that your family gets food?

[PROBE into roles the person plays in each situation]

- Does anyone in your family go to the store?
[IF "YES"] What store(s)?

Who usually goes to the store?
- Does anyone in your family eat at a restaurant?
[IF "YES"] What restaurants do you usually go to?

About how often do you eat out?
- Does anyone in your family eat at a friend's house or with relatives?
[IF "YES"] Can you please tell me more about that?
- Does anyone in your family borrow food from friends or neighbors?
[IF "YES"] Can you please tell me more about that?

m. Does anyone in your family use Food Stamps, or EBT, to help buy groceries at the store?

n. Does anyone in your family go to a food pantry – like at a church or Harvest Hope?
[IF “YES”] About how often?

Who usually goes to the food pantry?

o. Does anyone in your family get free or reduced lunch at school?
[IF “YES”] Who usually gets free or reduced lunch at school?

[IF “NO”] Why not?

p. Does anyone in your family get free breakfast at school?
[IF “YES”] Who usually gets free or reduced lunch at school?

[IF “NO”] Why not?

14.) Sometimes families have to do things they don't like to get food. Can you tell me about a time when you, or someone you know, had to do something that they didn't like to get food?

[PROBE for child's role/participation in this strategy]

15.) If a kid was worried about their family not having enough food, are there any ways that the kid could try to help their family?

16.) Can you tell me about something you have done to try to help your family have enough food or to make your food last?

17.) If you were going to make a meal tonight for supper, what would you make?

ⁱ Questions taken from: Connell, C.L., Lofton, K.L., Yadrick, K., & Rehner, T.A. (2005). Children's Experiences of Food Insecurity Can Assist in Understanding its Effect on their Well-Being. *Journal of Nutrition*, 135, 1683-1690.