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# Head Start and child care providers' motivators, barriers and facilitators to practicing family-style meal service

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#### **Abstract**

This paper presents a qualitative investigation of the motivators, barriers, and facilitators for practicing family-style meal service (FSMS) from the perspective of 18 child care providers serving preschool children in Head Start (HS), Child and Adult Care Food Program (CACFP) funded, and non-CACFP child-care centers. Providers were selected based on maximum variation purposive sampling and semi-structured interviews were conducted until saturation was reached. Provider responses were systematically coded using thematic analysis. HS and CACFP providers reported being motivated to practice FSMS because it created pleasant mealtimes, opportunities to role model healthy eating, and healthful child development. CACFP and non-CACFP providers reported not using FSMS because it was resource intensive, messy, and seemed to violate CACFP policy. HS and CACFP providers offered suggestions to overcome these barriers. They suggested that FSMS eventually becomes easier with practice, children can self-regulate their energy intake, and teaching children self-help skills during play time can avoid messes during mealtimes. Findings from this study have implications for programming, policy, and research.

Keywords: Family-style meals, Child care, Feeding, Self-regulation, Obesity, Nutrition policy

#### Introduction

Despite the recent favorable news of reduction in childhood obesity rates, obesity prevalence in the United States has dramatically increased during the past 20 years and is among the highest in the world (Centers for Disease Control & Prevention, 2012). Twenty three percent of two-to-five-year-old US children are over-weight (≥85th to < 95th percentile for age-and gender-adjusted percentiles for body mass index) or obese (≥95th percentile age-and gender-adjusted percentiles for body mass index) (Ogden, Carroll, Kit, & Flegal, 2014). There is no single cause of obesity,

however factors at multiple levels influence the onset of childhood obesity (Dev, McBride, Fiese, et al., 2013). The prevalence of childhood obesity among preschoolers is of particular concern because excess weight during early childhood increases the risk for obesity and its

associated health complications in adolescence and adult-hood (Reilly & Kelly, 2010). Further, childhood obesity has been projected to contribute to increased morbidity and mortality in adulthood and premature death (Biro & Wien, 2010; Reilly & Kelly,2010). Overweight in childhood is a precursor of long-term health complications such as type 2 diabetes, hypertension, cardiovascular disease, asthma and sleep apnea, low self-esteem, psychological and social stress, and poor academic performance (Datar & Sturm,2006; Freedman, Dietz, Srinivasan, & Berenson, 1999; French, Story,& Perry, 1995; Puhl & Latner, 2007; Taveras, Rifas-Shiman, Oken, Gunderson, & Gillman, 2008).

The early childhood years are a formative period for many weight-related behaviors such as dietary intake, eating habits, and physical activity (Birch, 1999). During early childhood, children make a dramatic transition from breast feeding to consuming anodized adult diet (Birch, 1999). Children learn about food and portion sizes and develop food

preferences more than any other developmental period (Birch & Fisher, 1998). Eating behaviors acquired during the preschool years continue to shape children's food habits and nutrient intake patterns (potential risk factors for obesity) through adolescence and adulthood (Shunk & Birch, 2004). Therefore, focusing on the development of healthful eating behaviors in early childhood is imperative for obesity prevention in later life.

Importance of Early Care and Education Programs (ECE) for obesity prevention

ECE settings provide an unparalleled opportunity for reaching the majority of U.S. preschool children. Fifty-seven percent of children under the age of 6 (or 12 million children) are cared for in center-based ECE programs (Administration for Children and Families, 2010a). These children spend, on average 30 h per week in ECE and typically consume half-to-three quarters of their daily energy while in full-time child care (Larson, Ward, Neelon, & Story, 2011).

ECE providers play a vital role in promoting children's health and reducing their risk for obesity by shaping their dietary consumption patterns and eating behaviors (Gubbels et al., 2010; Hughes et al., 2007). The number of meals that children consume in childcare, along with the fact that young children are more likely than older children to be influenced by adult caregivers in their eating environment; provides a unique opportunity to early childhood educators to instill healthy eating habits in preschool children (Addessi, Galloway, Visalberghi, & Birch, 2005). Further, early child-hood educators' feeding practices (behaviors and decisions about what, when, and how to feed young children) are associated with children's dietary intake (Gubbels et al., 2010).

Feeding practice recommendations for early childhood educators

In 2011, three national organizations released major reports outlining recommendations for child care policies and practices to reduce childhood obesity: (1) Benchmarks for Nutrition in Child Care from the Academy of Nutrition and Dietetics (the Academy); (2) The Institute of Medicine's Early Childhood Obesity Prevention Policies: Goals, Recommendations, and Potential Actions; and (3) Caring for Our Children: National Health and Safety Performance Standards; Guide-lines for Early Care and Education Programs (American Academy of Pediatrics, 2013; Benjamin Neelon & Briley, 2011; IOM, 2011). These reports have outlined a set of comprehensive standards that provide guidance for early childhood educators regarding feeding practices that facilitate long-term healthy eating behaviors and obesity prevention. Drawing on extensive research, child care providers are recommended to use healthful feeding practices (e.g., allowing children to control the amount of food they eat, modeling healthy eating, and serving meals family-style) that encourage children's self-regulation of energy intake, acceptance of new foods, and healthy eating. Further, providers are also recommended to avoid controlling feeding practices (e.g., pressuring children to eat or restricting access to food) that have been associated with the development of unhealthy eating behaviors and childhood obesity(Benjamin Neelon & Briley, 2011). Taken together, these guidelines provide a clear framework regarding healthful feeding practices(including serving meals family-style) for early childhood educators for shaping the health and reducing the obesity rates among our nation's children.

#### The importance of responsive feeding practices

Recent research suggests that how young children are fed by their caregivers is important for the development of healthy eating behaviors and the prevention of obesity (Birch & Ventura, 2009). There is some

evidence that when children are given little control over what, when, or how much they eat; they are less likely to eat in response to hunger and stop eating when they are full(Gregory, Paxton, & Brozovic, 2010). Drawing on this evidence, parents and other adult caregivers are encouraged to practice responsive feeding with young children. Responsive feeding pro-motes several positive child behaviors: attention to and interest in feeding, support of their internal cues of hunger and satiety, capability to communicate needs to their caregiver with discrete and meaningful signs, and successful advancement to independent feeding (Black & Aboud, 2011).

Family-style meal service

A unique avenue for implementing responsive feeding within the ECE setting is to practice family-style meal service (FSMS) (IOM,2011). When FSMS is used, children are allowed to serve themselves and select their own portions from communal dishes and pitchers placed on the table (Benjamin Neelon & Briley, 2011). FSMS allows children to actively participate in selecting their food and determining their portion sizes in response to their internal cues of hunger and fullness (Benjamin Neelon & Briley, 2011; Branen, Fletcher, &Myers, 1997).

FSMS is a widely endorsed feeding practice. The Head Start Program Performance Standards require the use of FSMS while the USDA Child and Adult Care Food Program (CACFP) recommends this approach (Administration for Children and Families, 2013; CACFP,2012). Several national organizations including The Academy of Nutrition and Dietetics, the American Academy of Pediatrics (AAP),the American Public Health Association (APHA), and the Institute of Medicine (IOM) also advocate the use of FSMS to encourage improved self-regulation of intake in children, socialization during meals, as well as fine motor development (Benjamin Neelon &Briley, 2011).

#### FSMS and child outcomes

Several positive child outcomes have been identified when ECE programs practice family-style meal service including social, emotional, and gross and fine motor skill development (Benjamin Neelon & Briley, 2011). Allowing children to serve themselves as part of FSMS helps them practice social and motor skills including taking turns, passing bowls around the table, saying "please" and "thank you," and using serving spoons to move food from a bowl to their plate (Fletcher, Branen, & Price, 2005). Young children also improve their eye-hand coordination when they serve themselves (Endres & Rockwell, 1980; Pipes, 1977).

Self-serving, an important dimension of FSMS, has an intriguing relationship with childhood overweight. Preschool-aged children who served themselves wasted less food and ate around 25% less than children who were served pre-plated meals (Branen et al.,1997; Fisher, Rolls, & Birch, 2003). Therefore, when children serve themselves and select their portion sizes, their understanding of their internal hunger and fullness cues is enhanced; thereby sup-porting their self-regulation of energy intake (Benjamin Neelon &Briley, 2011).

Self-regulation is of growing interest in efforts to prevent child-hood obesity (Fox, Devaney, Reidy, Razafindrakoto, & Ziegler, 2006;Francis & Susman, 2009). Self-regulation in eating refers to the capability (innate and socialized) to eat and not eat in response to internal cues of hunger and fullness (Johnson, 2000). Evidence suggests that young children have the ability to self-regulate their caloric intake as early as infancy (Fox et al., 2006). Further, young children's caloric intake may vary from meal-to-meal, but their intake over 24-h periods is more stable, providing additional evidence for self-regulation (Birch, Johnson, Andresen, & Peters, 1991). Although research demonstrates that young children are aware of their feelings

of hunger and fullness, this ability begins to diminish by five years of age (Birch & Ventura, 2009). Therefore, serving meals family-style to preschool children in ECE programs may help leverage these opportunities identified by research to encourage better self-regulation of energy intake in early childhood.

FSMS also has a positive impact on early childhood educators' abilities to role model healthy eating and provide nutrition education during mealtimes. In a multistate study of teacher feeding practices, early childhood educators who used FSMS were significantly more likely to try new foods with the children and talk with the children about food than educators who served pre-plated meals or cared for children who brought their own lunches(Sigman-Grant, Christiansen, Branen, Fletcher, & Johnson, 2008).

#### Family-style meal service across policy-based contexts

Although FSMS has benefits for child development and is widely recommended by national organizations, it is not used in all childcare settings (Dev, McBride, & The STRONG Kids Research Team,2013). Variation in nutrition policies across child care contexts is likely an important determinant of whether FSMS is used. ECE pro-grams may fall into one of three nutrition policy contexts: Child and Adult Care Food Program (CACFP)-funded; Head Start (HS); or programs that only fall under the state's licensing requirements(referred to throughout this paper as non-CACFP programs).

CACFP is federally funded by the United States Department of Agriculture (USDA) and provides reimbursement for meals and snacks to 3.2 million low-income preschool children daily (CACFP,2012). CACFP guidelines allow providers to choose between family-style and pre-plated meal service (CACFP, 2012). Head Start (HS)programs are required to follow the HS Performance Standards for child nutrition which require HS providers to use FSMS (ACF, 2013). In general, non-CACFP centers are not required to use FSMS because most states' licensing requirements do not require or promote a specific method of meal service (Kaphingst & Story, 2009) The impact of these policy contexts can be seen in empirical work that has shown that HS providers practice FSMS significantly more often than CACFP or non-CACFP providers (Dev, McBride, & The STRONG Kids Research Team, 2013). Further, working in a Head Start program predicted practicing healthful feeding such as modeling healthy eating and teaching children about nutrition as compared to working in a CACFP or non-CACFP program (Dev, McBride, Speirs, Donovan, & Cho, 2014). In addition, a recent study that examined the mealtime mechanics at child care centers in four western states (California, Colorado, Idaho, and Nevada) found that59% of centers provided the food during mealtimes, as compared to 31% where food was provided by both the center and home, and in 10% of the centers all the food provided was brought from home. Regarding the meal service style, 38% of centers served meals family-style, 28% served meals pre-plated (food is placed on the dish for child) and in 34% of centers, children brought part or all of their lunch to their center. Further, CACFP-funded centers were consistent with supportive feeding practices as compared to non-funded centers (Sigman-Grant et al., 2008).

Given these differences by policy context, it is unfortunate that no study has examined the perceptions regarding FSMS among child care providers in various child care contexts (Head Start, CACFP and non-CACFP). This information would be helpful for efforts designed to promote FSMS in ECE programs. The current study fills this gap in the literature by addressing the following research question: What are child care providers' motivators, barriers, and facilitators regarding family-style meal service across the three policy-based child care contexts (HS, CACFP-funded, and non-CACFP)?

#### Method

A qualitative approach that utilized semi-structured interviews was taken to examine child care providers' perspectives on family-style meal service. A qualitative, rather than quantitative, approach was selected for several reasons. First, the use of qualitative semi-structured interviews best matches the objectives of this project: to describe, explain, and understand a complex concept (family-style meal service) (Baumgartner & McBride, 2009; Daly, 2007). Second, the limited literature prevents definitive conclusions to explore early childhood educators' perceptions of FSMS and how those perceptions influence their feeding practices in ECE settings. Third, semi-structured interviewing was chosen for this study as this method has been recommended for enabling a more conversational approach, eliciting richer descriptions regarding the participant's beliefs and attitudes, and encouraging the participant to become more like a partner in the research (Fontana & Frey, 2005).

This study was approved by the University of Illinois at Urbana-Champaign Institutional Review Board for research involving human subjects.

## Design and population

Participants were recruited from a pool of 118 providers at 24licensed center-based child care programs (6 HS, 11 CACFP, 7 non-CACFP) in Central Illinois that had participated in a larger study on the determinants of childhood obesity (Dev, McBride, Fiese, et al.,2013; Dev, McBride, & The STRONG Kids Research Team, 2013). All providers were: employed full-time at the child care program; were present with children at lunchtime or, at a minimum, during snack time; and cared for children between ages two-to-five years. Further, all the participating sites served meals to the children at the center, and children did not bring food from home.

Participants for this study were selected using maximum variation purposive sampling to allow for diverse perspectives regarding FSMS (Patton, 2001). Providers were sampled based on their childcare context (HS, CACFP, or non-CACFP) to account for the variation in child care nutrition policies. Findings from the larger study, from which participants were pooled, suggested that HS providers served meals family-style significantly more often than CACFP and non-CACFP providers (Dev, McBride, & The STRONG Kids Research Team, 2013). As such, for the current study, providers were sampled so that there was an equal distribution of HS, CACFP and non-CACFP providers in order to account for the variation in the nutrition policies across contexts. Providers were also selected so that the sample included variation in providers' race, age, number of their own children, education, nutrition training, and feeding style to allow for diverse perspectives regarding FSMS.

# Recruitment

Out of 118 providers who completed a survey as part of the larger study on feeding practices, 90 provided informed consent to participate in an interview for the present study, if contacted. Potential interview participants were randomly selected from the 90 providers who consented and contacted by phone or email. All providers who were contacted agreed to participate. Providers received a \$25 gift card for participating and all participants provided written informed consent before being interviewed.

#### Data collection

To determine the number of interview participants, the concept of saturation was employed. Saturation involves conducting interviews until additional interviews reveal no new information on the topic being studied (Bowen, 2008). Researchers agreed that saturation was achieved after 15 interviews. An additional three interviews were conducted to confirm that saturation had been reached. So, a total of 18 providers were interviewed from 90providers who had consented to participate in the study. A modified semi-structured interview protocol from the About Feeding Children Study (Price, 2005) was used in order to inquire about the motivators, barriers, and facilitators that child care providers experienced in practicing FSMS, as well as 17 other feeding practices recommended by the Academy (Benjamin Neelon & Briley,2011). Motivators were defined as reasons to use family-style meal service, barriers were defined as factors that inhibited providers 'ability to serve meals family-style, and facilitators were defined as factors that promoted providers' ability to serve meals family-style.

In asking about facilitators, the researchers also asked for advice from child care providers on how to overcome commonly cited barriers to using FSMS. The interview protocol was reviewed for content by a panel of ECE experts and pilot tested with seven child care providers for face validity. The interview protocol was modified to focus on feeding practice benchmarks and exclude questions about mealtime environment and roles. It was important to maintain the interview duration between 45 min and 1 h to reduce participant burden. All interviews were conducted by the lead author in unoccupied classrooms within the ECE set-ting and lasted approximately one hour. The interviewer began by assuring providers that individual responses would not be shared with anyone outside the research team and that data were not being collected to evaluate program practices. Providers' perceptions regarding 18 recommended feeding practices (including FSMS) were gathered as part of a closed card sorting task (Rugg & McGeorge, 1997). Providers were presented with 18 cards that described or defined a feeding practice. FSMS was defined as "Children are served foods and beverages family-style where children select their own portions and serve themselves." Providers were then asked to indicate whether or not they used that feeding practice. If they used the feeding practice, they were asked to explain why they used it, the benefits of using it, and to respond to some common barriers to using it from other providers. If they did not use the practice, they were asked to explain why not. The full interview protocol is described in online Supplementary material.

Rigor was ensured in this research in several ways. An attempt to reduce bias during data collection was made by asking the same questions to all respondents in the same order (see inter-view protocol). All interviews were completed in an empty room behind a closed door and participants were assured that their answers would not be shared with anyone outside of the study team to reduce social desirability bias. Credibility and dependability were addressed by peer examination (Krefting, 1991). A team of five scholars (the third author and four others) from different fields including human development, child development, and food science and human nutrition who have experience with qualitative methods examined the protocol before data collection to ensure that it would capture participants' responses. Further, the interview protocol was pilot tested for face validity. The multi-disciplinary team also examined the codes that were developed out of the interview data to determine if they represented the participants' responses. Additionally, having multiple coders from different scholarly backgrounds to code the data independently and then resolve any discrepancies helped reduce bias in the codes.

#### Data analysis

All interviews were digitally recorded and transcribed verbatim by a professional transcription agency. The first author checked transcripts against the voice recordings to confirm accuracy. The data were then imported into NVivo, a qualitative data analysis soft-ware (QSR International Pty Ltd. Version 9, 2010) (Auld et al., 2007; Hoover & Koerber,

2011; Welsh, 2002). Data analysis involved moving through the six steps of thematic analysis outlined by Braun and Clarke (2006). (1) Becoming familiar with the data; (2) generating initial codes (categories) and applying them to interview transcripts; (3) creating potential themes by examining all quotes associated with each code and organizing codes into themes; (4) refining themes by examining all codes and quotes associated with a theme, collapsing several themes into one theme, and eliminating themes; (5) defining and naming themes by describing the essence of each theme and giving it a compelling name; and (6) producing the report.

Both the first and second authors analyzed the data. Both authors read through the interview transcripts and created a list of codes and their definitions. These codes described the motivators, barriers and facilitators reported by the providers in the sample. Coding was done using the constant comparison method (Leech & Onwuegbuzie, 2011). After both authors had read through all inter-views, they discussed any differences between their lists of codes. After reconciling these differences they created a codebook that included three components for each code: the code name/label; a full definition; and example quotes that best illustrated the code (DeCuir-Gunby, Marshall, & McCulloch, 2011). Working together in this way allowed the authors to examine how their data supported or contradicted each code and flesh out the nuances of each code. The first two authors then grouped together similar codes to create themes. The third author reviewed the codes and themes as they were developed. Differences in generated themes were reconciled prior to summarization. Further, the authors worked together and selected representative quotes to be used in this paper.

#### Results

The final study sample included 18 providers with an equal numbers of providers (n = 6) from HS programs, CACFP-funded centers, and non-CACFP centers. The demographic characteristics of the sample are presented in Table 1. All six of the HS providers in the sample served meals family-style, as compared to four CACFP providers and no non-CACFP providers. This distribution is representative of the sample for the larger study (n = 118) where 96% of the HS providers, 34% of the CACFP and 7% of the non-CACFP providers used FSMS (Dev, McBride, & The STRONG Kids Research Team, 2013). This increased compliance of HS providers to FSMS can be attributed to HS performance standards that require HS providers to serve meals family-style, whereas CACFP providers can choose between FSMS and proportioned meal service (Dev, McBride, & The STRONG Kids Research Team, 2013).

#### Motivations for using FSMS

The 10 providers who reported serving meals family-style (six from Head Start programs and four from CACFP-funded centers)articulated many reasons for serving meals family-style. These motivators to FSMS are presented below.

#### Pleasant mealtimes

Many providers indicated that FSMS reduced child distress related to the meal. A CACFP provider who practiced family-style suggested FSMS is calmer because the children serve themselves with a choice of selecting their own portions and, thereby, do not object to having foods they did not want to eat on their plates. She explained:

They (children) can say yes and no instead of it (food) being on their plate and causing distress if something is on their plate that they don't like. Right now, we don't have too much of that, but I've seen it before where the kids get really distressed if it's

Table 1. Baseline characteristics across Head Start, CACFP and non-CACFP child care providers (n = 18).

Characteristic H			Head Start (n = 6)	CACFP (n = 6)	Non-CACFP (n = 6)
Race	NH Black NH White		3	3	3
Have children	No Yes		1 5	3	2 4
Education	Some college or technical school (1–3 years) College graduate (4 years or more)		2	4 2	4 2
Nutrition training	< 1time/year		0	4	4
	>1 time/year		6	2	2
Feeding style <sup>a</sup>	Authoritative Authoritarian Indulgent Uninvolved		2 1 3 0	1 2 3 0	1 1 1
Provider age Mean (SD) Years of experience as childcare teacher Mean (SD) Lunch time (min) Mean (SD) Number of children at the table during meals Mean (SD)		41.76 (12.3)	41.23 (12.1)	41.56 (17.06)	
		10.2 (6.6)	17.6 (11.6)	8.4 (8)	
		34.2 (8.6)	32.5 (6.1)	41.3(11.34)	
		10 (7.07)	9.2 (3.37)	15.5 (4.1)	
Type of meal service	Family style		6	4	0
	Food delivered and served in prepared portions		s 0	1	1
	Food delivered in bulk and portioned by staff		0	1	5
Sit with the children during meals		Sometimes	0	0	1
		Mostly	1	2	2
		Always	5	4	3
Eat meals with children		Rarely	0	1	0
		Sometimes	0	0	3
		Mostly	0	1	1
		Always	6	4	2
Ages of children in the classroom		2 yrs	1	2	3
		3 yrs	6	4	3
		4 yrs	5	4	3
		5 yrs	5	4	2

Abbreviations: CACFP, Child and Adult Care Food Program. NH, non-Hispanic.

something that they know they don't like, or they think they know they don't like, and it's on the plate.

# Promotes healthy child development

Beyond making for more pleasant mealtime experiences for both children and staff, many of the providers who served meals family-style expressed FSMS had benefits for child development, especially as it relates to self-regulation, social, and self-help skills.

Allows for self-regulation. Some providers explained that they used FSMS because it allowed the children to self-regulate their food intake. When asked why she thought it was important to allow children to select their own portions, a Head Start teacher explained, "because they may be hungry, and if they get hungry, they're going to get a little more. And if they're not hungry, they're not going to get that much." These providers also explained that allowing children to self-regulate their food intake decreased the amount of food that was wasted because the children ate most of what they put on their plates. A CACFP teacher who practiced FSMS in her reason to practice family-style explained, "So they will know how much they want and how much they don't want, and they don't waste food. They actually eat the food, what they put on their plates."

Children learn about social skills. Many providers in this study who served meals family-style also suggested that when children serve themselves, it provides opportunities for children to learn about social skills such as patience, turn taking, sharing and passing food, and

table manners. Several of these providers expressed it was important for the children to learn basic table manners at the childcare center. When asked why it was important to use FSMS, a provider from a CACFP center who practiced family-style explained, "It's the manners thing. I mean you don't go to a restaurant and eat on the floor or eat wherever you want to. You eat at a table, and they need to be accustomed to that." Other providers explained that because FSMS requires that a child takes food from a communal serving dish, children learn social skills such as waiting one's turn and sharing.

Children develop self-help skills. The providers also thought that FSMS allowed them to teach children how to use utensils, an important self-help skill. A Head Start teacher explained, "The kids learn how to scoop, and use the tongs to get their food and put it on their plate." Finally, some providers indicated that self-serving was helpful because children learned about proportions and counting (one scoop, two spoons, etc.).

# Facilitates modeling of healthy eating

Some providers who used FSMS suggested this approach allowed opportunities for them to model healthy eating because they were sitting with the children and sharing food. A Head Start teacher explained, "They're sitting down and we're talking about food and what they're eating. And sometimes it's like encouraging them to eat it. If they see you eating it, they'll try it." Another CACFP teacher who practiced family-style stated, "(We do family-style) to show that the teacher is also a part of it and also eats the same food and is a good model for

a. Provider feeding style was measured by the Child Feeding Style Questionnaire (Hughes et al., 2007).

the kids as to healthy eating." Similarly, other providers explained that when food was served family-style, the children served as role models for one another in that a child might try a food that she saw another child happily eating. A Head Start provider explained, "Well you know, we sit family-style. When the kids see the other kids trying and eating stuff, they're going to – they'll say, 'Oh, okay,' then they'll do it because they're modeling from their peers."

The providers also reported that a benefit of FSMS was that it promoted communication between the providers and children. By not having to put food on each child's plate or retrieve second helpings from the kitchen, providers indicated they had more time to sit and talk with the children. One Head Start teacher said that mealtime was one of the few times that she was able to talk and connect with the children she cared for. She explained her reason for preferring FSMS as:

to get that connection with them, to get them to sit-down, this is how we all eat together. We talk about our day and stuff like that. Because in this type of place, this is sometimes the only time that they get to talk about things like that over a meal.

In addition to facilitating communication between providers and children, some providers also expressed that using FSMS gave the children more opportunities to talk among themselves. "Well, there was a lot of communication between the teacher and the kids. And that family-style setting worked out really well with every-body."

#### Integrated in curriculum

Finally, one provider, from a CACFP center who practiced familystyle, explained that one reason she used FSMS was because it was a part of the curriculum. She explained that FSMS was:

Something that we're told to do from the beginning, and it's just something, a practice that we follow every day, and breakfast, snack, lunch, everything. It's just integrated into our curriculum. It's kind of expected for us to do it.

Overall providers who practiced family-style, explained that FSMS resulted in pleasant mealtimes because FSMS was easier to conduct, reduced child distress and encouraged communication at meals. These providers also suggested that FSMS provided opportunities for healthful child development because they perceived FSMS to allow children to self-regulate their food intake by eating in response to their hunger and fullness, as well as learn social, self-help, vocabulary, and math skills. Providers also reported that serving meals family-style offered opportunities for modeling healthy eating. In addition, all of the providers who used FSMS strongly endorsed it. Some providers did talk about FSMS being integrated in the curriculum so they were expected to do it. However, none of them suggested that such an approach did not have a benefit, expressed a preference for an alternative style of meal service, or suggested that they served meals family-style only because they were expected to do so.

#### Barriers to FSMS and strategies to overcome these barriers

Data from the eight providers (two CACFP, six non-CACFP) who were not using family-style meal service revealed six barriers to using FSMS. Although these providers were adamant in their reasoning for why FSMS was difficult to implement, data from their counterparts that were practicing FSMS revealed suggestions for overcoming each of these barriers. Barriers and suggestions for overcoming each barrier offered by providers who were practicing FSMS are presented below.

Difficult to change

Some providers explained that it would be hard to use FSMS because they had not practiced it before and it would be difficult to change from what they were comfortable doing. A provider from anon-CACFP center explained, "It (FSMS) would be a big change here, and since they (the center) haven't incorporated that, I think some of the children would make it – it would be a bigger deal making the changeover."

The providers who were using FSMS offered several suggestions for providers who thought making a change would be difficult. These providers suggested that FSMS would become easier overtime. A CACFP provider who practiced FSMS suggested, "If you keep doing it over and over, they (the children) will get it. They will eventually get it." Additionally, two providers at CACFP centers who served meals family-style suggested that starting with a snack or meal that was easy for children to serve themselves (such as finger foods, meals that are not too hot) might be a good way to ease into FSMS.

Messy and unhygienic

Many providers that did not use FSMS explained that they did not allow children to serve themselves because it would be too messy and unhygienic. A provider from a non-CACFP center explained that allowing children to serve themselves from a communal serving dish would result in, "a mess. It would be food everywhere. They can barely hold their cups to keep from dropping their milk." A provider from a non-CACFP center explained that she was reluctant to use FSMS instead of having the providers plate the food, because allowing children to serve themselves would be unhygienic. She explained:

He's laying there picking his nose. Do you really want his hand in the container before he hands it to his next buddy? Here's the chips and all my germs. So if (for) nothing else, for hygiene's sake. We wear gloves, we use the service utensils and things like that. I think for hygiene it's probably a better idea to do it the way we're doing it.

Therefore, these providers were concerned that allowing young children to take food from a communal dish would result in messy spills and the transfer of germs.

In talking about their own approaches to mealtime, the providers who were using FSMS offered several useful and practical suggestions for providers who are concerned about mess and hygiene. The most commonly mentioned solutions were for providers to consistently use FSMS because children will eventually learn to serve themselves, to teach the children how to serve themselves, and to accept that messes are a part of learning and children can be taught to clean the messes. A provider from a CACFP center who practiced FSMS suggested:

If you keep doing it over and over, they will get it. . . . Have them help clean up the mess and they'll eventually get it. It takes awhile, but they do. It's real easy in our room. I have five to a table, so they actually serve and pass and serve and it's really easy.

Providers who were serving meals family-style also offered many strategies to teach children to serve themselves during play-time by using fake foods, sand, clay, and water to practice scooping food in a bowl and pouring water. Sand box games include ladling, pouring, smearing, scooping that mirrors skills required for self-serving during meals.

The providers suggested that children could serve themselves if they were given a chance to practice the motions that are necessary for taking food from a serving dish and putting it on a plate during playtime. A CACFP provider who practiced FSMS explained this approach:

When you're not at lunch and dinner we use sand, we use moon clay, we use water, we use actual one fourth, one third, one half serving cups. . . And we use those and we practice the dipping, the serving. . . Now there are times for mashed potatoes they do need help. They do. But that's just the consistency of the potatoes and that kind of thing. But I think when they try this skill out – and you need to be very practical about (this) – this is how you do it.

In this way the providers suggested using meal time as well as playtime activities to practice the motions needed for self-service and avoid messes. These activities may help children with their motor development and also self-help skills during mealtimes to avoid messes.

Further, providers reminded children when they are serving themselves to, "Hold the bowl with both hands." "Keep the pitcher in the air and hold the glass while serving," "Sit up to the table," "Don't feed the floor," showing children how to scoop and pour foods, and holding a child's hand when s/he is learning how to scoop foods.

Providers who were using FSMS also suggested that messes should be expected and accepted as a part of the learning process, and providers could teach children to wash their hands before each meal and clean up after themselves (e.g., making paper towels avail-able to children). In helping teachers change their mindset about messes, a CACFP teacher gave an analogy and explained, "I mean if paint gets on the floor, you're not going to paint anymore? No. You're going to still paint but try to help teach them to help you clean the paint. It's the same principle."

A provider from a CACFP center who served meals family-style suggested:

The mess thing is something I think they (teachers) just need to get over because I'm particular about messes, too, but it's something I just had to let go of. They're kids, and they're not trying to make a mess or cause a mess. But they need that experience and that hands on. So that's kind of something that the teachers themselves need to just get in the mindset of it's a mess (that)can be cleaned up. It's not a big deal! The sticking the fingers and the hands, it's happened before. And you just – that's a teaching moment. "No, we don't grab. We use the spoon or the scoop". And I think just through practice is a best way to get over it.

#### Resource intensive

Some providers who were not using FSMS thought this approach would be resource intensive. In particular, they mentioned that it would require more time and labor from the providers and kitchen staff, and that they would become overwhelmed by having to help the children serve themselves. A non-CACFP provider suggested "If I didn't have to worry about 12 other kids in the classroom, I would love sitting down with my kids at a round table and do it (Family-style)." A non-CACFP provider explained:

I mean you look at cost-wise for buying extra bowls and the big spoons and all of that extra, and I know – and we've only got one cook who does the dishes and the cooking and ordering, and the mopping and sweeping of all the kitchen. It would be a lot of extra on her part as well.

A different perspective on this issue emerged from the inter-views of providers that were using FSMS. These providers suggested that FSMS is less labor intensive because they did not have to get up during the meal and that such an approach also saves time because children serve themselves. A CACFP provider who served meals family-style explained:

I think that the family-style dining works the best. Have all the food available in the middle, and so you don't have to leave the table necessarily. You just kind of reach over and help the kids if they need it, or they can help themselves.

Four of the providers who used FSMS explained that serving meals family-style was easier than serving meals in other ways. These providers explained that because all of the food was on the table and the children were serving themselves, they did not have to move around the room as much. As one Head Start teacher explained:

If you sit and do family-style, you won't feel like you have to getup as much because you pass it to the children, and then if they need help, you can do hand over hand or you're just sitting with them having a conversation. So it's not as hard to be up running around doing things.

Other providers suggested that engaging the children during mealtimes by having them set the table using a placemat protocol and cleaning up saved time and made FSMS easy.

#### Children cannot self-regulate

Providers not using FSMS explained that children cannot select their own portions because they will make problematic selections such as over-serving themselves, leaving inadequate food for other children, or only eating foods they like. Additionally, some of these providers were concerned that some children will not serve them-selves enough, and will be hungry later. The section below describes these responses.

#### Children select inaccurate portion sizes

A concern mentioned by some providers who did not use FSMS was that if they allowed the children to serve themselves, they would make inaccurate portion size selection, where some children would take too much food, which would not leave enough for other children as well as potentially lead to overeating. A non-CACFP provider expressed "Well, when they select their own portions, they will grab too much, more than they could eat. And we just don't do that. They're family-style, they'd want everything and they'd serve it themselves." Another provider from a non-CACFP center explained:

They can't select their own portions—I mean their own portion size—I mean because everybody's got to get some. And if every-body wants a lot of chicken, somebody won't get some. Or, if everybody wants a lot of mashed potatoes, somebody won't get some.

A provider from a non-CACFP center was also concerned that children might only take the foods that they enjoy eating or take too little food and be hungry after the meal. She explained:

"They're going to want what they want and they're not gonna want what they don't think they like. We're like, "You should probably eat a little bit more than that. You're going to be hungry later"... Or "You shouldn't eat that much to begin with".

When providers who served meals family-style were prompted for advice to overcome this barrier, their responses elucidated that they believed that children can self-regulate their intake and should be allowed to eat according to their hunger and fullness. This ability to self-regulate energy intake was also a motivator for practicing FSMS. A Head Start provider explained, "I don't want to say, 'Well, you need to eat another bite.' You need to put more scoops on your plate.' Because I want them to decide if they think they're hungry or not."

Another Head Start provider stated:

They will know when they're hungry and when they're not hungry. We don't want to force them to choose their foods. We have it prepared and enough portions for all the children at the table. But they get to decide whether they're going to put a scoop or two scoops on their plate.

Providers who served meals family-style also admitted that children might serve themselves too much food. However, they suggested that providers set a rule about how much each child is allowed to take for their first serving and remind the children that they have to share the food with other children. A Head Start provider explained her approach:

We always tell them to take two spoonfuls. . . And so we show them, one, two. The spoons aren't so big where they can get a whole lot. But you do have those kids that just keep, keep, keep and you've got to keep reminding them, "How many do we get?" and they'll say, "Two." And then also I'll tell them, "Save some for your friends. And then after everybody has some, if you're done, you can get more. But you've got to save some for your friends." And they're usually like, "Okay."

Although the suggestion to provide a rule about how much each child can take may prevent children from taking too much food, it also undermines an important dimension of FSMS – that children should select their own portion sizes in response to internal hunger and satiety cues.

#### Children are too young

Some providers who did not use FSMS said the children they cared for were too young and did not have the motor skills required to be able to serve themselves. A provider from a non-CACFP center explained:

They're two. If we allow them to serve their own portions, it will be a real mess. It's just easier, a lot easier for us to lineup the plates to put the entrée and the vegetable on each one. . . . . I could see that as a good idea certainly in the school age, kindergarten age kids where they should learn how to serve themselves. But this age, no, I think it's a little young yet.

Although, a provider expressed a concern that children are too young to serve themselves, another provider from a CACFP-funded center suggested that they start family-style at 2 years of age, and children learn important developmental self-help skills such as serving themselves, passing the foods, eventually with practice.

"Yes, it (family-style) is pretty easy. We've been doing it – we start at 2 years old, so by the time they get to my class (3–5 year-olds), they already know how to – Just if you keep doing it over and over, they will get it. They will eventually get it, and cleanup the mess. . . I have five to a table, so they actually serve and pass and serve and it's really easy."

# Perceived conflict between FSMS and CACFP guidelines

Finally, one provider from a CACFP center who did not use FSMS expressed a concern over a perceived conflict between FSMS and CACFP guidelines regarding meal pattern requirements in childcare. She explained:

It's easy to do family-style at breakfast and snack, which we try to do as much as we can. At lunchtime, it's basically impossible because you have to serve them a certain amount. And everything has to be served at the same time. So it's not like you can say, "Well, pour a half a glass. . .of milk, and if you want more, you can just choose another half a glass later." They have to have their entire portion in front of them. Even though it goes back

to accreditation saying, "Just let them serve themselves, and put two green beans on their plate, if they would like to just try two green beans. They have control over what they put on their plate." The other side of it is . . . the Food Program (CACFP)is saying, "You must serve these children this amount. It all must be on the plate. It all must be in the cup. It all must be served together at the same time." So it's that discrepancy again of what one of our programs, so to speak, is saying is an okay thing, and then it goes against what the other program is saying.

#### Discussion

Although family-style meal service is widely endorsed for developmental and nutritional reasons, many child care providers do not follow this recommendation (Dev, McBride, & The STRONG Kids Research Team, 2013; Sigman-Grant et al., 2008). It is only within HS programs that FSMS is required. A possible positive benefit that has resulted from HS' emphasis on obesity prevention practices including FSMS has been a reduction in the obesity rates of children attending such programs (Frisvold & Lumeng, 2011). The present study examined motivators, barriers, and facilitators to FSMS among providers across a continuum of child care policy-based contexts (HS, CACFPfunded and non-CACFP). These findings offer new insights regarding providers' perceptions concerning FSMS across contexts and can have several implications for policy makers, program planners, and practitioners (center directors, providers, and food service coordinators) for implementing FSMS in child care.

Findings from the semi-structured interviews indicate that providers who served meals family-style related it with positive benefits for children such as self-regulation in eating and learning social and self-help skills. These perceived motivators for using FSMS are consistent with the literature on this approach (Branen & Fletcher, 1994; Fisher et al., 2003). This evidence suggests that providers can be educated to use FSMS by promoting the benefits of allowing children to self-select their portion sizes for the development of self-regulation of energy intake. It is encouraging that self-regulation resonated with the providers in the current study as a motivator to serve meals family-style.

Further, providers in this study valued family-style meal service because it resulted in pleasant mealtimes and offered greater opportunities for providers to model healthy eating. These providers' reasons for using FSMS are consistent with the rationale described in the Caring for our Children report for recommending FSMS. Furthermore, Sigman-Grant et al. (2008) found that childcare providers are more likely to model tasting of new foods when children are allowed to serve themselves during FSMS. In addition, no HS or CACFP provider who served meals family-style mentioned that they practice FSMS only because they are required to follow it or would prefer an alternative approach to meal service. Taken together, the rationale and research-based outcomes for implementing FSMS are reflected in providers' motivators for FSMS in this study. Synthesizing providers' reasons and previous research in tandem further underscores the importance of FSMS, not only as a research-based healthful feeding recommendation, but also an effective feeding practice in the field.

CACFP and non-CACFP providers who did not serve meals family-style described many barriers such as time constraints, food wastage, and mess alluding to the impracticality of letting children serve themselves. However, Branen et al. (1997), found that FSMS did not significantly increase food wastage or the amount of time required for eating as compared to the pre-portioned food service in preschoolers. Another barrier was faulty portion size selection—specifically that children might over-serve themselves when allowed to self-serve. Although research has shown that children can self-regulate and eat less when

they serve themselves (Branen & Fletcher, 1994; Fisher et al., 2003), limited evidence does suggest that allowing preschoolers to self-serve without guidance resulted in larger portion sizes and intake relative to plated portions (Savage, Haisfield, Fisher, Marini, & Birch, 2012). Therefore, early childhood educators should provide guidance to help children learn to self-select age-appropriate portion sizes by providing physical assistance to scoop foods as well as verbal instruction to cue children to their internal signals of hunger and satiety (e.g., "Take one scoop now and you may have another if you are still hungry later," "Are you full?") (Ramsay et al., 2010; Savage et al., 2012). Verbally cueing children to attend to hunger and satiety can support their self-regulation of energy intake (Ramsay et al., 2010).

#### Limitations

The study findings must be interpreted within the framework of methodological limitations. As is the case with all non-probability samples, the participants in this qualitative interview study may not represent the larger population of all center-based providers, which impedes the ability to make generalizations beyond the study itself. However, maximum variation sampling was used to ensure that providers represented a variety of backgrounds and experiences, specifically in relation to the kind of ECE programs where they cared for children. A detailed description of the providers participating in the study sample and the ECE settings where they worked was provided so that other researchers, practitioners, and policymakers may make their own judgments about whether the findings from this study can be translated to the settings they are interested in. Additionally, this study examined the perspectives of center-based child care providers regarding family-style meal service, whereas in usual practice, child care directors and kitchen staff are also involved in mealtime practices. This may have led to an underestimation of the range of motivators, barriers, and facilitators regarding family-style within the child care setting. Thus, a broader perspective of viewpoints should be addressed in future studies. These data were not analyzed in a manner to allow comparison of the prevalence of themes across child care policy-based contexts (Head Start, CACFP, and non-CACFP). This is an area that deserves consideration in future work. Finally, as part of the semi-structured interview process, all participants were assured that their comments would remain confidential and the study was not being conducted as an assessment of program standards (see Supplementary table). Therefore, the researchers assumed that the child care provider responses were honest and based on reality.

# Strengths

This study provides insight into ECE providers' perspectives on FSMS. In order to encourage ECE providers to use FSMS, it is important to explore why some providers use this style of meal service and how they understand its benefits. Equally important is to understand why other providers are reluctant to use FSMS and how to help them overcome these barriers. In this area, the present study has a unique strength in that providers using FSMS were asked for recommendations for overcoming commonly cited barriers. Given that these recommendations are coming from their peer providers—not researchers who may be seen as removed from the day-to-day work of ECE—, they may be an important tool for encouraging providers to use FSMS.

# Implications for practice and programming

Few childhood obesity interventions in ECE settings focus on improving providers' feeding practices. Centering intervention efforts on serving meals family-style where providers sit and eat meals together

with children, model healthful eating, and children select their own portions and serve themselves is (1) inclusive of healthful feeding strategies such as division of responsibility (Satter, 2005), responsive feeding, and supporting children's self-regulation of energy intake and (2) limits use of controlling feeding practices (such as pressuring children to eat and restricting access to food) that negatively impact upon child eating and are an established risk factor for childhood obesity (Birch, Fisher, & Davison, 2003; Johannsen, Johannsen, & Specker, 2012). Given that extensive provider training is cost-and-resource-intensive, implementing FSMS is a low-cost option to implement healthful feeding in child care programs. Further, nutrition education efforts should focus on non-CACFP providers to help them implement FSMS. In order to reach this goal though, it is imperative to have an ecological approach toward implementation of family-style where providers sit and eat meals together with children, model healthful eating, and children select their own portions and serve themselves. Participation in CACFP programs with policies requiring providers to practice FSMS should be encouraged. CACFP policies could go beyond reimbursement for food to also provide support for healthful feeding in child care.

Child care provider support and instruction are crucial to the development of children's self-serving skills. Providers should be present with children during mealtimes to model healthy eating, provide instruction about age-appropriate portion sizes, use verbal cues to help children pay attention and eat according to their internal hunger and fullness cues, and physically assist children to serve themselves, monitor, and ensure sanitation. Like any developmental activity, providers should be patient initially, as the data suggest that FSMS becomes easier with repeated practice.

Findings from the current study also highlight how child care providers who are not using family-style meal service might benefit from reevaluating their perceptions regarding the barriers to FSMS and by learning from the experiences of HS and CACFP providers. This advice can be delivered to ECE providers through multiple mechanisms such as policy documents that recommend FSMS, Cooperative Extension programs for ECE providers such as Texts4Teachers (Extension Texts, University of Nebraska-Lincoln, 2013), and various child care interventions such as I am Moving, I am Learning (Administration for Children & Families, 2010b) HipHop for Health Jr. (Fitzgibbon et al., 2005), and Nutrition and Physical Activity Self-Assessment for Child Care (Ward et al., 2014). A follow-up exploration of feasibility, adaptability and acceptability for developing programming for communicating the barriers, and facilitators to move non-FSMS centers toward practicing FSMS is needed.

# Implications for policy

Findings from the current study also underscore the value in taking a bottom-up and collaborative approach with ECE providers to inform researchers and policy makers regarding their perceptions of family-style meal service. By taking these providers' perceptions into consideration, researchers and policy makers can not policy recommendations, but also offer practical strategies and targeted solutions to help ECE providers overcome barriers and effectively implement FSMS.

This study underscores the need to revise policies regarding FSMS in child care settings. First, it is imperative that the definition of FSMS includes allowing children to select their own portions, serve themselves, and providers sit and eat meals together with children to model healthful eating. These practices promote self-regulation of energy intake (Branen et al., 1997) are in-line with the Academy's benchmarks (Benjamin Neelon & Briley, 2011) and recommendations from the IOM (2011). Although HS and CACFP programs support FSMS, their policies could be strengthened by including specific recommendations about allowing children to self-serve. Second, CACFP could clarify

their policy regarding meal pattern requirements to resolve potential discrepancies (perceived or real) with other standards that recommend family-style meal service. It is important for CACFP to clarify the policy and teach sponsors and program officers that the child care providers are only responsible for making the age-appropriate portion sizes of foods available to children during mealtimes, but they are not responsible for feeding those portion sizes to the children. The CACFP guidelines only require that sufficient portion sizes be made available to children, but do not require providers to put a certain amount of food on each child's plate. Finally, the policies regarding FSMS for HS and CACFP programs should be consistent and also updated with new research and IOM recommendations.

## Implications for research

Findings from the current study highlight the need for future research that examines child care administrators' perceptions of FSMS. Since one of the barriers identified in the current study is that FSMS is resource-intensive, future research should focus on conducting a cost-benefit analysis to determine the true cost of using FSMS as compared to pre-portioned service. In addition, limited empirical data are available on the impact of FSMS on children's healthy food choice and intake (Savage et al., 2012). Further, research is needed that explores strategies for implementing FSMS in a way that addresses the specific needs of different groups of children (such as food-insecure and overweight children, picky eaters, and children who have dietary restrictions and allergies) when they are all eating at the same table and sharing the same food. Finally, future studies should focus on determining individual differences in children's self-serving behaviors that might be moderated by weight status, the child's responsiveness to food cues, appetite, varying palatability of foods, and combination of foods served across meals.

#### Conclusion

Family-style meal service is widely recommended as a best practice for feeding preschool children in child care settings. Providers' motivators for using family-style meal service are consistent with the research highlighting the healthful benefits of FSMS and reiterate its effectiveness in practice. Nevertheless, many providers refrain from using family-style meal service owing to its perceived impracticality for allowing children to self-serve. The present study offers new insights not only regarding providers' barriers to family-style meal service, but also strategies from providers to help overcome these barriers and allow for effective implementation of FSMS in child care settings. Providers should be encouraged to adopt family-style meal service because the long-term health consequences and learning opportunities of FSMS outweigh any barriers related to its practical implementation.

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*Appendix A. Supplementary data* — Supplementary data associated with this article (Supplementary Table 1. Child-care Provider Semistructured Interview Protocol) follows the References.

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# Supplementary Table 1. Child-care Provider Semi structured Interview Protocol Introduction

Thank you very much for agreeing to participate in this interview. My name is XXXX, I am a graduate student at XXXX.

Today, I am going to interview you about your views regarding feeding guidelines<sup>a</sup> for preschool aged children (2-5 years) attending child-care. This study is not an assessment of whether your program is meeting certain standards, for example the Head Start or CACFP standards. We expect that most programs have not adopted many of these guidelines. This is because these guidelines are not currently an explicit part of any child-care standards. Through this study we wish to take a collaborative approach with child-care providers and bridge disconnect between policy makers and child-care staff. This interview is a chance for you to describe some of the challenges you are facing to implement these guidelines in your program.

Everything you say will be kept confidential. You will not be quoted by name. Our report on the interviews will describe the range of views expressed by staff across programs, but specific comments will not be attributed to specific individuals or programs. I also ask that you not repeat any of our discussion after you leave today.

I would like to record our interview discussion using this digital recorder so I can listen to it later, when I write up my notes. No one outside of our research team will listen to the recordings. After my notes are finalized, I will erase/destroy the recordings. If you want to say anything that you don't want recorded, please let me know and I will be glad to pause the digital recorder. Do you have any objections to my recording our discussion?

The discussion will last about an hour, and we will not take any formal breaks. But please feel free to get up at any time to stretch or use the restroom.

Once again, thank you for coming today. Do you have any questions before we get started?

# **Interview Sequence**

# Part 1. Sorting the cards

Here is a stack of cards that list guidelines for feeding children (2-5 years) in child care.

Could you put these cards into 3 piles:

- 1. One pile for guidelines that your center uses,
- 2. One for guidelines that the center doesn't use, and
- 3. One for guidelines that you haven't heard about or are unsure about\*

Now, could you sort the cards your <u>center uses</u> into another 3 piles:

- 1. Those that are easy to do,
- 2. Those that you sometimes find hard to do, and
- 3. One pile for really hard to do.

# Part 2. Follow-up to explore provider motivators, facilitators and barriers.

Let's begin with guidelines that your center uses:

- a. Interviewer moves through each card in the stack of guidelines that are "easy to do."
  - i. What are the main reasons for doing (this)?/ What do you think are the most important reasons for following (this guideline) *Motivators*
  - ii. Why is (this) easy to do? Facilitators
  - iii. What advice would you give to providers who say that they are not able to follow (this guideline)? *Facilitators*
- b. Interviewer moves through each card in the stack that are "sometimes hard to do" and then "really hard to do."
  - i. Why is this hard to do? / What prevents you from meeting (this guideline)?

Barriers.

- ii. What are the main reasons for doing (this)?/ What do you think are the most important reasons for following (this guideline) *Motivators*
- iii. If you could change one thing to make (this guideline) easy to do, what would it be?/ What would make it easier to meet (this guideline)? *Facilitators*
- c. Let's look at this stack here. (Interviewer points to stack that aren't used.)
  - i. Why do you think the center doesn't use these?/ What are the main reasons for the center not doing (this)? / What prevents the center from doing (this)? *Barriers*

# Part 3. Conclusion

We are about done. Is there anything else you would like to add?

Do you have any questions?

\*Note, no providers identified a benchmark that they had not heard about or were unsure of.

<sup>a</sup> The guidelines constituted 18 benchmarks (listed on 18 different cards) including one card for family style dining, outlined in the Position paper by the Academy of Nutrition and Dietetics benchmarks for Nutrition in Child Care. Therefore data used in this paper is part of the larger study.

<sup>b.</sup> Actual guideline listed on the card was read during the interview instead of the words in the parenthesis.