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# “Great Job Cleaning Your Plate Today!” Determinants of Child-Care Providers’ Use of Controlling Feeding Practices: An Exploratory Examination

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## Abstract

**Background** National early childhood obesity prevention policies recommend that child-care providers avoid controlling feeding practices (CFP) (e.g., pressure-to-eat, food as reward, and praising children for cleaning their plates) with children to prevent unhealthy child eating behaviors and childhood obesity. However, evidence suggests that providers frequently use CFP during mealtimes.

**Objective** Using the Academy of Nutrition and Dietetics (2011) benchmarks for nutrition in child care as a framework, researchers assessed child-care providers’ perspectives regarding their use of mealtime CFP with young children (aged 2 to 5 years).

**Design** Using a qualitative design, individual, face-to-face, semi-structured interviews were conducted with providers until saturation was reached.

**Participants/setting** Providers were selected using maximum variation purposive sampling from varying child-care contexts (Head Start, Child and Adult Care Food Program [CACFP] e-funded centers, non-CACFP programs). All providers were employed full-time in Head Start or state-licensed center-based child-care programs, cared for children (aged 2 to 5 years), and were directly responsible for serving meals and snacks.

**Main outcome measure** Child-care providers’ perspectives regarding CFP.

**Statistical analyses performed** Thematic analysis using NVivo (version 9, 2010, QSR International Pty Ltd) to derive themes.

**Results** Providers’ perspectives showed barriers, motivators, and facilitators regarding their use of mealtime CFP. Providers reported barriers to avoiding CFP such as CFP were effective for encouraging desired behaviors, misconceptions that providers were encouraging but not controlling children’s eating, and fear of parents’ negative reaction if their child did not eat. Providers who did not practice CFP were motivated to avoid CFP because they were unnecessary for encouraging children to eat, and they resulted in negative child outcomes and obesity. Facilitators as an alternative to CFP included practicing healthful feeding practices such as role modeling, peer modeling, and sensory exploration of foods.

**Conclusions** Training providers about negative child outcomes associated with CFP, children’s ability to self-regulate energy intake, and differentiating between controlling and healthful feeding strategies may help providers to avoid CFP.

**Keywords:** Child-care nutrition policies, Child-care providers, Controlling feeding practices, Head Start program, Child and Adult Care Food Program

The necessity of preventing childhood obesity is widely recognized, and early childhood (ages 2 to 5 years) is a formative period in which to intervene.<sup>1</sup> In conjunction with genetic and ecological factors, children’s feeding environment (i.e., the “what” and “how” of feeding) shapes their eating behaviors and dietary intake.<sup>2</sup> Child feeding practices that are not responsive to children’s internal cues of hunger and fullness can override a child’s innate ability to self-regulate energy intake.<sup>3</sup> Nonresponsive or controlling feeding practices (CFP) include pressuring children to eat healthy foods, restricting unhealthy foods, praising children for finishing their food (clean plate), and offering energy-dense

foods as a reward for consuming nutrient-dense foods.<sup>4,5</sup> These CFP have been associated with negative child outcomes such as increased consumption of sugar-sweetened beverages, palatable snack foods, and calorie-dense food items<sup>6</sup>; lowered self-regulation of caloric intake<sup>7-10</sup>; increased food refusals<sup>11</sup>; and childhood obesity.<sup>12-15</sup> Conversely, using responsive or healthful feeding practices (HFP), in which the adult caregiver allows the child to decide what and how much she or he eats, gently encourages the child to try foods by modeling healthy eating and provides repeated exposure to novel foods; it also supports children’s self-regulation of energy intake<sup>3,16</sup> and acceptance of new foods.<sup>17,18</sup>

Drawing from the aforementioned evidence, national policies for early childhood obesity prevention recommend that child-care providers avoid CFP and use HFP.<sup>19-22</sup> Young children consume approximately half to three-quarters of their daily energy intake while in a full-time child-care program,<sup>23</sup> and child-care providers' mealtime feeding practices are associated with children's dietary intake.<sup>18,24,25</sup> Therefore, providers' feeding practices are important in shaping children's dietary intake and eating behaviors and in reducing their risk for obesity.<sup>26</sup> The Position Paper of the Academy of Nutrition and Dietetics (Academy) benchmarks for nutrition in child care targets children aged 2 to 5 years and recommends that child-care providers use HFP and avoid CFP to promote children's optimal growth and development.<sup>20</sup> Despite the recommendations for avoiding CFP because of negative outcomes related to eating and weight,<sup>9,27-29</sup> childcare providers frequently use CFP with children.<sup>30-32</sup> In examining compliance to the Academy's benchmarks, childcare providers from all contexts (Head Start, Child and Adult Care Food Program [CACFP]-funded, and nonfunded centers) reported using significantly more controlling mealtime verbal comments than responsive comments.<sup>33</sup> Research is needed to understand this disconnect between recommendations and the practice of CFP in child care. The current study, a subsample from this larger quantitative study,<sup>33</sup> is a follow-up qualitative investigation to explore the child-care providers' perspectives regarding the underlying determinants that may influence them to practice CFP. Given that providers' perspectives predict their feeding practices,<sup>34-36</sup> examining providers' perspectives regarding their use of CFP during child-care mealtimes is a step toward improving their feeding practices. Using the Academy's benchmarks as a framework, the objective of the study is to examine child-care providers' perspectives regarding their use of controlling mealtime feeding practices with young children (aged 2 to 5 years) in their care.

## Methods

### Research Design

In-depth, face-to-face, semi-structured interviews were conducted with child-care providers. An interdisciplinary research team (nutrition, child development, child care, and qualitative methods) designed and conducted the study. The University of Illinois at Urbana Champaign Institutional Review Board approved the study methods. A detailed description of the methodology and interview protocol has been previously published.<sup>33,34</sup>

### Sampling and Recruitment

Participants were randomly selected from a sampling frame of 90 providers from 24 state-licensed center-based childcare programs,<sup>12</sup> using maximum-variation purposive sampling, to allow a balanced perspective from varying child-care contexts (Head Start, CACFP-funded, and non-CACFP programs).<sup>37</sup> All providers had participated in a larger survey study, were full-time child-care teachers responsible for supervising meals or snacks for 2- to 5-year-old children, and had provided written consent to participate in the interviews if contacted.<sup>33</sup> All providers who were contacted agreed to participate in an interview. Participants received a \$25 gift card.

### Interview Protocol

A semi-structured interview guide from the About Feeding Children Study<sup>30,38</sup> was used to examine providers' perspectives regarding avoiding CFP. CFP were defined based on the recommendations from the Academy of Nutrition and Dietetics<sup>20</sup> and outlined in the *Head Start Performance Standards*<sup>19</sup>: a) children are not pressured to eat; b) providers do not praise children for finishing food or cleaning their plates; c) food is not used as punishment or reward; and d) each child is encouraged, but not forced, to eat or taste his or her food. Before data collection, the interdisciplinary research team reviewed the interview protocol, and the lead author (interviewer) completed training on strategies to remain open, unbiased, and nonjudgmental during the interview.<sup>39</sup> The lead author pilot tested the interview protocol for face validity with seven child-care providers.<sup>39</sup>

### Data Collection

The lead author, who had no prior relationship with the child-care programs or providers, conducted one-on-one, face-to-face interviews with child-care providers until data saturation was reached (i.e., additional interviews did not reveal new relevant information).<sup>40</sup> One-on-one interviews were conducted between August and November 2012 at the participants' center, in a quiet, unoccupied room.<sup>39</sup> Each interview lasted 45 to 60 minutes; each was audio recorded, and field notes were taken. Pseudonyms were used for all child-care providers to maintain confidentiality.

### Data Analysis

All interviews were transcribed verbatim by a professional transcription agency and imported into NVivo (version 9, 2010, QSR International Pty Ltd) for analysis.<sup>41</sup> Data analysis followed the six steps for thematic analysis outlined by Braun and Clarke<sup>42</sup>: familiarizing with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. Categories and themes were further reviewed for validity, to crosswalk the data to identify common elements from and draw overarching themes from the entire data.<sup>43</sup>

The first and third authors independently read each transcript twice and identified a set of codes, code definitions, and themes. These coders then met to achieve consensus about codes and themes.<sup>44</sup> If disagreement occurred, the two coders modified and refined the coding and themes until any disagreements were resolved. Members of the research team who did not code the transcripts verified that the codes and themes were supported by the interview data. Throughout the data collection and analysis process, the researchers ensured accountability and accuracy and monitored researchers' biases through ongoing peer debriefing consultations and frequent research team meetings.<sup>39</sup>

## Results

The final sample included 18 full-time female child-care providers. Demographic characteristics of the sample are summarized in the Table. Providers' perspectives emerged within the framework of barriers, motivators, and facilitators for avoiding CFP.

**Table.** Demographics of a cohort of 18 child-care providers participating in semi-structured interview data collection on their use of controlling feeding practices with children aged 2 to 5 years

Characteristics	n
Head Start	6
Child and Adult Care Food Program (CACFP)	6
Non-CACFP	6
Race	
Non-Hispanic black	9
Non-Hispanic white	9
Education	
Some college or technical school (1-3 y)	10
College graduate (4 y or more)	8
Provider age, mean±standard deviation	41.52 ± 13.2
Years of experience as child-care teacher, mean±standard deviation	11.7 ± 9.1

#### Barriers

Three barriers were identified that made it challenging for providers to avoid using CFP.

**Controlling Feeding Practices Work.** Providers reported using CFP because they were effective for encouraging children to eat, especially “picky eaters and stubborn children who just won’t eat.” Trisha explained: “Sometimes you’ll have that stubborn kid that just won’t eat. Or they’ll throw the plate, or they just won’t want anything to do with it. So sometimes it is very hard to find away to get them to eat, find a way that’s fun without really pressuring them or yelling at them.”

Furthermore, some providers explained that using food as a reward made tasks outside of mealtime easier. For example, Hannah explained that it would be harder to toilet train the children if she did not use food as a reward. She stated:

*If I go get three kids right now and say, ‘If you all go [to the toilet] right now, [you] get a [piece of candy],’ I swear to you, all three of those kids go [on the toilet]. They’re probably not even thinking about [urinating]. But they will [go for a piece of candy]. [Food as reward] would be hard not to do. It would make [toilet] training so much worse.*

**Misconceptions.** Some providers said that they did not use CFP, but when they described their approaches to feeding children, they described CFP. These providers seemed to not understand the difference between encouraging and pressuring. Ashley explained, “I try not to pressure the child. I encourage maybe once, maybe twice. I’ll say, ‘Come on. Why don’t you be brave and give it a try and you might like it. Try at least a tiny bite.’” Similarly, Trisha explained, “We tell the children, ‘Great job eating.’ ‘Oh,

you cleaned your plate today. That’s awesome!’ ‘You know, it’s going to help your body grow. It’s going to give you fuel.’ I think that that is the kind of praising that we do.”

**Fear of Negative Parental Response.** Some providers expressed a fear that parents would respond negatively if their children did not eat while in child care. When asked why it would be difficult to not pressure children to eat, Hannah explained: “If I don’t say something to get [a child] to eat, [the child] won’t eat. And then whenever the child gets picked up, they go home, [child] I didn’t eat.’ The parent’s mad because we’re supposed to feed their kids at least two times per day.”

For this provider, the anticipation of a parent complaint was enough to motivate her to use pressure. Conversely, other providers reported that parents had complained to them that their children were not eating enough while in the provider’s care; however, they resisted using pressure or forcing the children to eat. Jasmine explained:

*I’ve had parents tell me they’re not eating enough, or they come home and tell me they’re hungry. And I said, ‘We have a menu, you can see what’s on the menu and that’s what we serve. And we don’t force kids to eat, that’s not part of my job to force anybody to eat.’ They usually understand. And if they don’t I just address them to my supervisor because I’m not gonna force any child to eat.*

#### Motivators

Three motivators, defined as reasons for avoiding CFP, emerged from the data. Child-care providers were motivated to avoid CFP because:

**CFP Are Ineffective at Encouraging Children to Eat.** Some providers who avoided CFP reported avoiding them because they believed that CFP are ineffective for encouraging children to eat. Maureen explained that she did not pressure children to eat because, “You can sit there with your horns locked, with the child and say, ‘You need to eat.’ No. You don’t have any control over that.” In addition, some providers explained that using CFP might result in the child eating so much that the child becomes sick or eventually dislikes mealtime.

**Children Can Self-Regulate Their Energy Intake.** Providers were motivated to avoid CFP because they believed that children know when they are hungry and will eat accordingly.

Abby stated: “If they say they’re full, then I’ve grown to learn that that’s okay. I don’t need to say, ‘Oh, you need to clean your plate.’ That’s up to the child. I don’t know how they’re personally feeling inside. Maybe they’re just not very hungry that day, or they had a big breakfast.”

Taylor explained that she does not praise children for cleaning their plate because “if they’re doing something for us, they’re not knowing whether they’re full or hungry. So we don’t say anything about ‘Good job!’ ‘Clean plate!’ We let them be when they’re done.”



CFP Are Associated with Negative Outcomes Related to Child Eating and Weight. Providers reported avoiding CFP because they believed that such practices could lead to poor eating habits and obesity. In the short term, providers believed that CFP may encourage children to overeat. As explained by Jasmine, “Kids love praise and they’ll do things for that praise. And if you’re praising one kid for finishing their plate, then they feel like they got to try to stuff themselves and try to finish their plate.” Some providers explained that CFP might, in the long term, habituate children to ignore their internal cues and eat in the absence of hunger. When asked why she avoided pressuring children to eat, Marisa explained: “You’re going to encourage overeating if the child is trying to comply with your wishes whether they’re hungry or not. They don’t learn what it feels like to be satiated; they’re just trying to comply with what you’re saying. And then they are not learning that when they are full that they should stop eating. You’re encouraging obesity.”

#### Facilitators

Three facilitators, defined as factors that promoted providers’ ability to avoid CFP, emerged from the data. Providers who reported not using CFP explained strategies that enabled them to avoid CFP.

Use Healthful Feeding Practices as an Alternative to CFP. Many of the providers reported that avoiding CFP was easy because they had alternative feeding strategies that worked better than pressure, praise, or rewards to get children to try new foods. For example, role modeling healthy eating and using other children as models (peer modeling) were consistently identified as more effective feeding practices than CFP. Jade explained, “Well, you don’t want to force the kid to eat something. We just encourage. We don’t raise our voices or demand they try something. But we kind of put a different spin on it, and we model. If we taste it, (telling the child) ‘Give it a try. You might like it.’”

Maureen explained that she avoided pressure because:

*We already see a lot of peer pressure working in a good way. Like one little girl’s best friend loves [toasted oats cereal]. She’s going to say, ‘I love [toasted oats cereal]. They’re my favorite.’ And this other little girl, who maybe isn’t really fond of [toasted oats cereal], is probably going to say, ‘I like [toasted oats cereal] too, and let’s eat [toasted oats cereal] together.’ So they get each other to eat, when maybe a teacher couldn’t.*

Other providers identified educating children about nutrition by engaging them in sensory exploration of foods as an effective strategy to help them to try new foods. Jade explained that it is important to engage children’s senses to explore food, “Because I think that’s where the children learn to try new things. You know, if they’re able to kind of touch it and pick it up and look at it and smell it, they’re more apt to taste it.” Providers suggested using nonfood rewards such as stickers or reading a favorite book for encouraging desired behaviors not related to food intake. Maureen suggested an alternative to food to encourage toilet training; the child could “choose between the cherry-smelling

soap or the strawberry-smelling soap to wash (his or her) hands. There are so many other options besides adding food to something like [toilet training].”

Policies Help Restrict the Use of CFP. Some providers reported that center policies prohibited them from using CFP to encourage children to eat. Trisha explained that she did not offer food as a reward because “we have a food program that we get reimbursed for. So we can’t give them anything else, unless it’s a holiday or something, maybe a little treat. But it’s to take home, not to eat while in the school.” Unhealthy treats from home were also avoided by communicating with parents about the policy regarding serving nutritious foods at the child-care center. Maureen described that the CACFP guidelines helped set standards about the nutritious quality of the foods served at the center. She explained, “It is easy to do because we follow the Food Program (CACFP). We follow the Illinois Department of Children and Family Services rules if parents bring things in; it has to meet certain nutritional aspects.” Providers also mentioned that policies helped them communicate with parents regarding avoiding the use of CFP. Jasmine, a Head Start provider, stated, “I let them (parents) know we encouraged them (children) to take a thank you bite, and if they don’t want it, I’m not gonna force them. That’s not part of our policy.”

Training. Few providers attributed their knowledge about avoiding CFP to nutrition trainings. Taylor explained that she received training regarding “portion controls, not letting children overchoose one food item, encouraging children to try all foods on their plate, but not forcing them or praising them for doing either one.” Another provider mentioned, “I’ve gone to training before about kids and food, and they said that as long as you give everybody the same thing, and the teachers model what they’re eating, the kids will eat.”

#### Discussion

Although providers are recommended to avoid CFP because of negative outcomes related to child eating and weight, evidence suggests that providers from all child-care contexts continue to use such practices.<sup>30-33</sup> Current study findings provide unique insight regarding providers’ perspectives that serve as barriers to avoiding CFP and that motivate and facilitate providers’ avoidance of CFP, which could be leveraged to mitigate the identified barriers.

Providers who used CFP reported barriers to avoiding CFP, including that CFP are effective to get children to eat, especially for stubborn and picky eaters. Food refusal is a common challenge for preschool staff that has been shown to increase their use of CFP such as pressure or reward.<sup>31,45</sup> Providers who avoid CFP described motivators and facilitators that illuminate strategies for training providers to avoid CFP while still achieving their overarching objective of getting children to eat. First, providers who avoided CFP reported using HFP such as role modeling, peer modeling, sensory exploration, and using praise and nonfood rewards as an effective alternative to CFP to encourage children to try new and healthier foods. HFP have been associated with positive outcomes related to child eating<sup>21,46</sup> and are recommended by the Academy’s benchmarks. Furthermore,

providers have expressed the need to learn about strategies to get children to try new foods and to eat fruits and vegetables.<sup>31</sup> Therefore, nutrition training should focus not only on offering nutritious foods to children and avoiding CFP, but also on practicing HFP as an effective alternative to CFP, for encouraging children to try new foods and to eat fruits and vegetables.

Second, providers who avoided CFP believed that children eat in response to their hunger and fullness. This strategy is recommended by the Academy's benchmarks and evidence documenting young children's ability to self-regulate their food intake<sup>45,47</sup> and its relationship to childhood obesity prevention.<sup>47,48</sup> Educating providers to trust that children can recognize and respond appropriately to their internal hunger and satiety cues may reduce the use of CFP.

Another barrier to avoiding CFP was providers' misconceptions related to what constitutes CFP. For example, providers believed using food as a reward was an effective way to manage children's behavior. Child-care providers have been found to regularly employ conditional rewards to motivate children to eat enough food or fruits and vegetables,<sup>31</sup> and do not perceive them as rewards but rather as a useful classroom management strategy.<sup>35</sup> Consistent with the current study, the providers have reported that they do not practice CFP but frequently use controlling verbal comments, which may override children's internal cues of hunger and satiety.<sup>12,32</sup> Given that reducing misconceptions significantly improved providers' feeding practices,<sup>28</sup> providing verbal examples to accompany and operationalize feeding recommendations may clarify misconceptions to improve providers' feeding practices. For example, providers can model healthy eating and engage children in sensory exploration of foods by saying, "This pineapple tastes so sweet and juicy! Would you like to try it?" rather than verbal statements that pressure children to eat, such as, "Be brave and try some pineapple."<sup>49</sup>

Finally, providers reported pressuring children to eat because of the fear of parents' negative reaction if their child did not eat while in the provider's care. Other researchers have also documented this concern from providers.<sup>50</sup> This concern may be addressed by shifting both providers' and parents' focus away from the perceived short-term benefits of CFP (i.e., getting children to eat during mealtimes) to the long-term adverse consequences of CFP (i.e., reduced self-regulation of eating, increased risk for overweight/obesity). Providers of the current study reported being motivated to avoid CFP because they believed that such practices have negative implications for children's eating and weight. Leveraging on the current study motivators by educating providers regarding the adverse long-term effects of CFP may reduce providers' use of CFP.

Previous research has demonstrated the positive impact of parental nutrition education on improving children's health outcomes.<sup>1</sup> However, parents frequently use CFP for feeding children.<sup>2,4-8,12</sup> Therefore, providers must work with parents to improve their feeding practices at home. This need for communication regarding children's nutrition between childcare providers and parents is recognized by the Head Start Performance Standards<sup>19</sup> and also the Academy.<sup>20</sup> Given that child-care providers have reported barriers to parent communication (e.g., fear of parents' negative reaction because parents are concerned about whether their child is eating enough; parents do not sit

with children during meals; and parents have little nutrition knowledge),<sup>50</sup> it is important to intentionally create resources for training providers regarding effective parent communication to promote children's nutrition and prevent obesity.

This study's limitations should be acknowledged. The results cannot be generalized to the population of all center-based child-care providers. Providers' demographic information may help researchers and policymakers make their own judgments about whether the study findings can be translated to their specific child-care programs of interest. Although steps were taken during the interview to minimize social desirability bias, the authors assumed that the providers' responses were honest and based on reality. Therefore, following up the results with an observational study is important. Future studies also should focus on determining whether provider demographics or training in nutrition and childhood obesity influence their perceptions regarding CFP.

## Conclusion

Given that children eat up to five meals and snacks per day in child care, opportunities for shaping children's dietary intake and eating behaviors exist for child-care providers. These opportunities are undermined when providers use CFP, as a result of children's food refusal, misconceptions about what constitutes CFP, and parental concerns about children's eating. Drawing on providers' perspectives and the supporting research, this study illuminates strategies for reducing providers' use of CFP at mealtimes. Identified strategies include training providers regarding a) children's ability to self-regulate their energy intake; b) using HFP as an effective alternative to CFP for encouraging children to try new and healthier foods; c) translating feeding recommendations to verbal examples to differentiate HFP from CFP; and d) educating parents to understand the adverse long-term effects of CFP on children's eating behaviors and weight outcomes. Future studies should evaluate the impact of using these strategies on child-care providers' feeding practices, child eating behaviors, and dietary intake.

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