



Published in final edited form as:

J Nutr Educ Behav. 2020 January ; 52(1): 10–20. doi:10.1016/j.jneb.2019.10.015.

Communication with Family Child Care Providers and Feeding Preschool-Aged Children: Parental Perspectives

Noereem Z. Mena, MS RDN LD¹, Patricia Markham Risica, DrPH^{2,3,4}, Kim M. Gans, PhD, MPH^{3,5}, Ingrid E. Lofgren, PhD, MPH, RD¹, Kathleen Gorman, PhD⁶, Fatima K. Tobar, BA, BS⁷, Alison Tovar, PhD, MPH¹

¹Department of Nutrition and Food Sciences, University of Rhode Island, Kingston, RI

²Center for Health Equity Research, Brown University School of Public Health, Providence, RI

³Department of Behavioral and Social Sciences, Brown University School of Public Health, Providence, RI

⁴Department of Epidemiology, Brown University School of Public Health, Providence, RI

⁵Department of Human Development and Family Studies and Institute for Collaboration in Health, Interventions and Policy, University of Connecticut, Storrs, CT

⁶Department of Psychology, University of Rhode Island, Kingston, RI

⁷SNAP-Ed Nutrition Education Program, University of Rhode Island, Providence, RI

Abstract

Objective: To describe parent communication about child nutrition-related topics with family child care providers (FCCPs).

Design: Five focus groups conducted December 2016 – July 2017.

Participants: Parents (n=25) of 2-to-5-year-old children attending Family Child Care Homes (FCCH) in Rhode Island.

Phenomenon of interest: How and what parents communicate about with FCCPs related to feeding young children.

Analysis: Recordings were transcribed verbatim. Content analysis was used to analyze transcripts by two independent coders. Reflections, emerging themes, and final themes were discussed. Microsoft NVivo 11[®] was used for data management.

Results: Participants were recruited via FCCPs, and mostly Hispanic and female. Parents mainly communicated with FCCPs in-person. Communication with FCCPs related to how and what children were fed did not occur frequently, and parents usually inquired about how much children ate.

Publisher's Disclaimer: This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Conclusions and Implications: Parents did not engage in frequent child nutrition-related communication with their FCCP. However, parents trusted FCCPs to provide healthy and sufficient food to children. More research is needed to identify effective strategies that facilitate child nutrition communication between parents and FCCPs

Keywords

parents; child care; communication; focus groups; feeding behavior

INTRODUCTION

In the United States, nearly 14% of preschool-aged children (ages 2 to 5 years) are obese.¹ Disparities continue to persist, with the highest prevalence of obesity among Hispanic preschool-aged children (17%), compared to 11% among non-Hispanic Black, and 3.5% non-Hispanic White preschool-aged children.^{2,3} Obesity in early childhood is of great concern as it is associated with obesity in adolescence and adulthood,⁴ and increased risk for the development of chronic disease (e.g., diabetes, cardiovascular diseases) and some cancers.⁵ Establishing healthy eating habits in early childhood is important for obesity prevention⁶ and promoting proper growth and development.⁷

Consistent with the ecological perspective of environmental influences on human development,⁸ evidence supports that both parents and child care providers play an important role in shaping children's eating behaviors.⁹⁻¹¹ Further, it is hypothesized that the home and child care environment interact with each other to influence children's eating behaviors and weight status.¹² Today, over 60% of US children under age 6 are enrolled in some form of child care, of which almost 25% attend a family child care home (FCCH).¹³ A FCCH is a form of child care in which children are cared for in the provider's home. These settings provide care for smaller groups of children, offer more flexible child care hours and tend to be more affordable in comparison to a child care center or facility.¹⁴

Children spend on average 30 hours per week in child care,¹³ and consume most of their daily nutritional requirements (up to 75%) in this setting.¹⁵ Studies suggest increased risk for overweight and obesity in children attending child care,^{16,17} with greater risk among children attending FCCHs at age 3 compared to children attending center-based care.¹⁷ Promoting the development of healthy eating habits during early years of life is important to support nutrient adequacy, promote a healthy body weight, and prevent chronic disease across the lifespan.¹⁸ It is the position of the Academy of Nutrition and Dietetics that child care providers communicate with parents to encourage serving healthy foods and teaching children about nutrition at home.¹⁹ Communication can foster parent-provider partnerships,^{20,21} and serve as a link to promote healthy eating habits in children attending child care by reinforcing consistent and similar opportunities to a healthy diet across settings.^{22,23}

When applied to the context of parent and child care provider relationships, effective partnerships can promote collaboration between parents and child care providers to address child nutrition-related concerns. Frequent and open communication, mutual trust or confidence, and respecting each individual's share of competency or knowledge are key relationship characteristics needed for effective partnerships.²⁰ In addition, parent

involvement can also promote parent and child care provider partnerships.²⁴ Parent involvement in child care-related activities is influenced by many factors such as cultural beliefs, past experiences, and social norms.²⁰ Understanding of these characteristics is important to the success of health promotion efforts targeting young children.²⁵ The increase utilization of child care in the US highlights the need understand parental perspectives as it pertains to engaging with their child care provider to promote child health. This is particularly important for populations at greater risk for obesity development (i.e., low-income, Hispanic,¹⁻³ and children attending FCCHs).¹⁷

Studies have found that when child care providers share nutrition information with parents, parents provide healthier meals for their children.^{26,27} However, there is limited evidence on what and how parents and family child care home providers (FCCPs) communicate about child-nutrition related topics, including food and beverages for preschool-aged children.^{21,28,29} Thus, understanding parental perspectives of the child care setting as it relates to child nutrition-related communication and child eating behaviors is important. Gaining insight on factors that may influence child-nutrition related communication can inform child health promotion efforts that involve both parents and child care providers.

Therefore, the purpose of this qualitative study was to explore: 1) *How* parents communicate with FCCP, 2) *What* parents communicate about with FCCPs, including the topic of foods and beverages for young children, and 3) parental perceptions of foods and beverages served and nutrition-related changes in the FCCH.

METHODS

Study design

This exploratory study was a supplement study to Healthy Start/Comienzos Sanos, a cluster randomized trial testing the efficacy of an 8-month nutrition intervention designed to improve the nutrition and physical activity environment of FCCHs.³⁰ This supplemental study focused on parents who utilize FCCHs to inform future research efforts to engage parents in FCCH-based health promotion interventions. Parent participants for the supplemental study were recruited via FCCPs using a separate protocol. A publicly available contact list of FCCPs on the RI Department of Children, Youth & Families' website was used to identify a sample of FCCPs to contact for parent recruitment.

Given that FCCPs in Providence, RI were being targeted for Healthy Start/Comienzos Sanos, recruitment calls targeted FCCPs in other urban, diverse RI cities, i.e. Central Falls, Pawtucket, Cranston, and Warwick. Recruitment efforts were primarily focused in Central Falls and Pawtucket, where more than a quarter of children live in poverty, 41% and 25.3%, respectively.³¹ Lead researcher NM identified 92 FCCPs in Pawtucket/Central Falls (n=41), Cranston/Warwick (n=50), and Providence (n=1). Of those identified, 59 had a phone number listed, (Pawtucket/Central Falls, n=20, Cranston/Warwick, n=38, Providence n=1) and were contacted. Messages were left for FCCPs that did not answer and were contacted no more than two times. Additionally, FCCPs who did not care for children between the ages of 2-5 were considered ineligible.

A total of 31 eligible FCCPs were successfully contacted (i.e., live contact as opposed to leaving a message). Each FCCP was given a brief overview of the study and asked if recruitment efforts could take place at the FCCH. Of all contacted, 13 (Central Falls/Pawtucket, n=5, Cranston/Warwick, n=7, Providence, n=1) agreed to parent focus group discussion (FGD) recruitment efforts at the FCCH. All FCCPs were given study flyers and a contact form and were asked to share study information with parents. To compensate FCCPs for their time, each were given a \$25 gift card to a local store.

Sample

In Rhode Island (RI), 28% of children under age 6 in RI attend a FCCH, nearly half of FCCPs report that enrolled children speak another language at home, and more than half (54%) report 100% of children enrolled in child care subsidies.³² Given these characteristics and disparities in obesity among Hispanic preschool-aged children,³³ parents of Hispanic preschool-aged children attending FCCHs were targeted. Interested parents completed the contact form at the FCCH. Contact forms were then collected in-person by NM, who also provided “save-the-date” reminders to the FCCPs to share with parents.

Consistent with previous literature,³⁴ four FGDs with 6-8 parents per group (24-32 total) was proposed as the target sample size. Initially, a total of 20 parents from six FCCHs completed the contact form and participated in four FGDs. However, an additional recruitment effort for a fifth FGD was conducted to achieve the initial proposed sample size of 24-32 participants total. NM called parents, screened them for eligibility, and provided further project details. All parents were determined to be eligible. Eligible parents were at least 18 years of age, spoke English and/or Spanish, and had a child between the ages of 2-5 years attending a FCCH in RI. Parents who were still interested confirmed their attendance to one of five FGD. Reminder text messages were sent to participants the day before and the day of the scheduled FGD.

Procedures

The moderator guide used to facilitate the FGDs was developed using the Social Ecological Model (SEM),³⁵ within the context of the home-daycare link model.²³ The SEM accounts for the complex interaction between environmental influences on children’s behaviors and development.³⁵ The home-daycare link model acknowledges the role of the caregiver-parent relationship and interactions as it pertains to child outcomes.²³ Currently, there is limited evidence on how factors in the home and child care environment *together* influence eating behaviors of preschool-aged children. Previous evidence suggests that communication can serve as a link between home and school,³⁶ thus the moderator guide questions were developed to align with the home-daycare link model to identify how and what parents communicate with FCCPs. The moderator guide also included questions to address communication specific to foods and beverages for young children, parental perceptions of foods and beverages served in child care, and involvement in nutrition-related changes in child care environment.

Once developed, the moderator guide was reviewed with research team members and content area experts. The moderator guide was then pilot tested. The pilot FGD included 5

participants of similar demographics as the target population. The goal of the pilot FGD was to ensure that questions were clear, facilitated in-depth discussions, and were culturally relevant and acceptable to participants. Feedback from both the content review and pilot were used to finalize the moderator guide. The moderator guide contained a total of 11 questions organized into four domains: **I. Communication with FCCPs, II. Awareness of the FCCH nutrition and food environment, and III. Involvement in nutrition-related changes in the FCCH and IV. How parents feed their preschool-aged children outside of the FCCH.** This paper reports findings from the first 8 questions (Domains I-III), as those address the primary research questions of this study (Table 1).

Five FGDs with parents of preschool-aged children attending FCCHs were facilitated by lead researcher NM. Three FGDs were conducted in Spanish, two in English. A total of 25 parents participated. At each FGD, parents were asked to describe how they communicate with FCCPs, and the topics usually discussed. Parents were also asked how they communicate specifically about foods and beverages for young children, awareness of foods and beverages served in the FCCH and involvement in nutrition-related changes in the FCCH. A bilingual assistant moderator took notes, operated the digital recorder, and provided logistical support. At the end of each FGD, NM and the assistant moderator met to discuss preliminary findings, ultimately allowing for the discussion of similar and new findings within and across all FGDs. This systematic process helped the researchers determine when data saturation was achieved, that is no new emergent themes were identified from the FGDs. Data saturation was evident after the fourth FGD, and the findings were further confirmed by the fifth FGD.

Four focus groups were conducted at a local public library, and one was conducted at a FCCH. Upon arrival, consent forms were reviewed and signed by each participant, who then also completed a 22-item demographic survey. The survey included questions on age, race, ethnicity, education level, household income, and federal nutrition program participation (i.e., the Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)). The survey also included three items pertaining to frequency of parent communication with FCCPs about foods and beverages, physical activity, and screen time for young children (*never, rarely, sometimes, often, or always*). Responses were coded as 0-5 respectively, with higher scores indicating greater frequency of parent-FCCP communication related to child nutrition and health topics.

The survey also included the two validated Household Food Insecurity (HFI) screener items: 1) *Within the past 12 months, we worried whether our food would run out before we got to buy more*, and 2) *Within the past 12 months, the food we bought just didn't last, and we didn't have money to get more.*³⁷ Response options to these items were: *often true, sometimes true, and never true*. A validation study of the HFI screener examined patterns of negative health outcomes compared to the 18-item US Household Food Security Scale, and found that most respondents who were food insecure answered affirmatively “often true” or “sometimes true” to questions 1 and 2 (93% and 82%, respectively).³⁷ Additionally, the HFI screener was determined to have a sensitivity of 97%, and specificity of 83%, indicating that

only 3% of families who experienced food insecurity were likely to be misclassified, and 17% of families who were food secure were classified as *at risk* by the HFI screener.³⁷

All FGDs were digitally recorded and averaged 45 minutes in length. At the end of each FGD, participants received a US\$30 gift card to a local supermarket for their participation. Full review of study protocol, and study approval were obtained from the Institutional Review Board at Brown University (Providence, RI). An Institutional Review Board Authorization Agreement was obtained from the University of Rhode Island (Kingston, RI).

Data Analysis

English audio-recordings were transcribed verbatim into Microsoft Word by research assistant LS, and Spanish audio-recordings were transcribed verbatim by research assistant FT. NM created structural codes from the moderator guide questions and key phrases (Table 1) to facilitate a systematic review of the transcripts and categorize the data.³⁸ To identify factors within both the home and FCCH that could potentially impact child eating habits, codes were developed to align with the SEM within the context of the home-daycare link model to capture interactions or communication between parents and FCCPs related to child nutrition (e.g., foods and beverages for young children, and parent involvement in nutrition environment changes in the FCCH). Microsoft NVivo 11® (QSR International, Melbourne, Australia) was used for data management and organization. Using a deductive and inductive content analysis approach, and the structural codes as a guide^{39,40} NM read, reviewed, and coded the transcripts, and identified initial concepts, themes, and supporting texts. Group coding was used to train additional coder FT. Transcripts coded by NM were then reviewed and coded independently by FT. Concepts, themes, and supporting text segments identified from the Spanish-language transcripts were translated into English. The data analysis process consisted of several team meetings between NM, FT, and a third independent researcher AT to review and discuss reflections, emerging themes, final themes, and supporting text segments to ensure that all *a priori* and emergent themes were captured. Descriptive statistics were computed from the survey data using SAS 9.4.

RESULTS

Demographic Survey Results

Participant Characteristics.—Participants (N=25) were primarily Hispanic (n=23), female (n=21), and mothers (n=18). The remaining caregivers were fathers (n=3), or other caregiver/relative (n=4), (e.g., grandmother, aunt). More than half (n=15) reported being born outside of the US, living in the US on average for 6.4 years. Of those born outside of the US, most reported the Dominican Republic as their country of origin (n=7); followed by Puerto Rico (n=4), and Colombia or El Salvador (n=3). High school diploma or GED was reported as the highest level of education attained by most participants (n=12), followed by some college (n=6), and college degree or higher (n=5). More than half (n=14) reported being married or living with partner. Nearly half (n=12) of the sample reported participating in SNAP or WIC in the past 12 months. See Table 2 for full participant demographics.

HFI Screener.—Findings from the HFI screener (not reported in table) suggest that more than half of the sample (n=14) represent households with young children at risk for food insecurity. More than a third (n=9) reported “sometimes true” to ‘*Within the past 12 months, we worried whether our food would run out before we got to buy more*’, and five reported “sometimes true” to ‘*Within the past 12 months, the food we bought just didn't last, and we didn't have money to get more.*’

Frequency of parent communication with FCCPs about child nutrition and health topics.—In-person during drop-off and pick-up was the primary method of communication reported by the majority of participants (n=20), followed by over the phone (n=18). Parents also reported communicating with their FCCP during formal meetings (n=10), and via text (n=10). Newsletters and email were rarely used (21 and 23 reporting “no”, respectively). Less than half reported “often or always” seeking advice from their FCCP about healthy foods and beverages (n=12), physical activity (n=9), and screen time recommendations (n=6) for their child.

Focus Group Results

Emergent themes are presented by moderator guide domains (Table 3), with supporting text segments and quotes provided. Quotes that were translated into English are noted with an asterisk (*).

Domain I: Communication with FCCPs

Parents primarily communicate with FCCPs in-person.—Consistent with the survey data,, parents in the FGDs also reported that in-person was the primary method of communication with FCCPs. Parents reported that in-person communication was preferred because it was a more personal form of engagement, and the most convenient way to engage with FCCPs. One parent stated, “**For me, it is easier in person than giving me something in writing.*” Parents were satisfied with primarily communicating with their FCCP face-to-face. Although infrequent, as it was limited to transition times and varied depending on parents’ schedules, parents were confident that the FCCP would contact them throughout the day when necessary (e.g., child is sick). Engaging in face-to-face communication with FCCPs reinforced the personal relationship parents had and valued with FCCPs (Table 3). Handouts and newsletter, although reported as infrequently used, were viewed as an effective strategy to share information about foods/beverages served and consumed in the FCCH, in particular to overcome language barriers (Table 3).

Parents trust that the FCCH is a safe environment.—Parents emphasized that if they did not trust their FCCP to adequately care for their child, they would not feel comfortable leaving their child at the FCCH. Parents took comfort in knowing that their children were being well taken care of, given the significant amount of time spent in FCCHs, and their children’s behavior during transition time (happy during drop-off, and not wanting to leave during pick-up). One mother stated, “**(My daughter) spends more time during the day with her provider than with me. If I did not trust her, know that my daughter is fine, I would be worried at work.*” Parents viewed FCCPs as the primary caregiver while they were at work, and receptive to parent-initiated communication (Table 3).

Lack of time is a barrier to effective communication.—Despite brief, but frequent communication occurring during drop-off and pick-up, parents felt that engaging in more in-depth conversations with FCCPs was limited during this transition period. Many parents expressed other competing life demands after the workday, causing these transition periods to be rushed. Parents also wanted to be respectful of FCCP responsibilities, understanding that they had multiple children to care for, thus limiting their ability to fully engage in a conversation with parents (Table 3).

FCCPs are not frequently utilized as a source of child nutrition information.—Parents reported in the FGDs that they usually sought advice related to child nutrition and health from pediatricians or primary care physicians. This is supportive of the survey data findings in which less than half of parents sought advice from their FCCP regarding nutrition, physical activity and screen time recommendations for young children. Encounters with pediatricians or primary care physicians however, appeared limited to annual exams or visits when parents sought treatment (e.g., child is sick). As one mom stated, “**(My daughter) is 4. She (has) annual exams, or if there is an emergency.*” WIC Nutritionists were also reported by parents as a source for child nutrition information, although at times, the information received from health professionals conflicted with parents’ own beliefs. For example, one mom stated, “**They’re like forcing you (to accept the messages). I would tell them my daughter has a small frame. I am (feeding her) but she also burns calories. You have an appointment, and they expect for my daughter to have gained 5-6 pounds. Her father and I are not heavy. I just gave up fighting with them.*”

Parents were more willing to accept information from health care professionals when messages were reinforced by the FCCP. One mother explained, “*She (FCCP) told me that you are not supposed to serve juice to children every day, and at first I questioned why. She said it was not good because it contains a lot of sugar. And it’s true, because the WIC Nutritionist told me that it’s not good to do that (serve juice) every day.*” Parents also reported using social media apps such as Instagram, and the search engine Google for tips related to child feeding and nutrition, such as creative ways to introduce new foods, kid friendly recipes, and healthy foods for their child (Table 3).

Apprehensiveness to discuss child nutrition-related concerns with FCCPs.—Several parents in this study expressed child nutrition-related concerns in the FCCP (Table 3). One mother, for example, stated “*When she comes home with her sippy cup, there is a lot of juice all the time. A lot of times, I think it’s like a guava or (some type of fruit juice). Not like soda, or nothing like that. But I never see water.*” Another said, “*The provider usually tells me what (my child) eats or drinks. She does give her water. But I feel like she gives her juice, more than twice a day. I feel like that’s a little concerning.*” Although parents reported these concerns, they also expressed apprehensiveness to discuss concerns related to child eating with their FCCP. Parents stated that they did not inquire about the foods/beverages served to children because they felt it may contradict FCCPs’ cultural beliefs, and those beliefs may influence what is served to children. Parents also stated being worried about their questions or concerns being perceived as undermining the FCCP (Table 3).

Despite these challenges, parents overwhelmingly expressed feeling confident in approaching their FCCP with child-related concerns, and that their concerns would be well received. As one mother shared her experiences communicating her concerns about candy as a choking hazard to her FCCP, *“(I noticed) they give (my daughter) lollipops and candy. Growing up... we never had that, we never were able to have that stuff, so I think that was a culture thing. I wrote her a note, in Spanish just explaining, I got nervous in the car when I thought (my daughter) was coughing, I was afraid she would choke (on the candy). It never happened again. And she even wrote back on the note saying ‘sorry’.”*

Domain II: Awareness of the FCCH nutrition and food environment

Parents trust FCCPs to serve healthy, and sufficient food.—Foods served by FCCPs were perceived as healthy. Most parents reported that they did not inquire about foods and beverages served. However, because parents were aware that meals served to children were home-cooked meals, they viewed the foods being served to children as healthy. (Table 3). Furthermore, types of foods were not of concern as long as it was reported that the child ate well. As one father stated, *“*It’s not about knowing (what my son ate) but to be sure that the child ate. When they don’t eat a lot, that’s when it’s worrisome.”* All parents unanimously agreed that FCCPs served adequate amounts of food to satisfy their child’s hunger (Table 3).

FCCH/FCCP can influence foods served at home.—Parents stated that what occurred in the FCCH could positively impact mealtimes at home. For example, positive changes in their children’s eating habits at home due to eating and food experiences at the FCCH (Table 3). Some parents reported that children’s eating habits did differ in the FCCH, prompting them to inquire about foods/beverages served in the FCCH. This information was used by parents to serve similar foods at home, or to complement child care food intake at home (Table 3).

Domain III: Involvement in nutrition-related changes in the child care environment

Parental concern for additional burden on FCCPs.—Parents acknowledged the importance and value of engaging in nutrition-related communication with FCCPs. As one mother stated, *“*I say it’s a good thing because at home, you can practice the same behavior.”* However, there was great concern over creating additional work for the FCCP. Parents viewed FCCPs as already investing quality time over the course of the day while caring for their child. Parents stated that additional work may not be respectful of the providers’ child care responsibilities by taking time away from caring for children and expecting providers to work beyond traditional work hours. As one parent put it... *“She had such a stressful day. *Why give her more (work)? After 5pm, that’s her free time. And during the day, she does not have time...because she is taking care of children.”* Parents also acknowledged that it is more difficult for FCCPs to facilitate opportunities for nutrition communication with parents due to lack of staff in comparison to center-based facilities (Table 3).

DISCUSSION

This study used FGDs to explore: 1) *How* parents communicate with FCCPs, 2) *What* parents communicate about with FCCPs, including health-related behaviors, and 3) parental perceptions of the FCCH nutrition environment. Consistent with other studies conducted with parents of preschool-aged children attending child care,^{22,25,29} parents in this study communicated with FCCPs in-person, during transition periods (drop-off and pick-up) about overall child wellness, including if the child ate well. Parents also acknowledged the importance of communicating with their FCCP, the role of FCCPs in caring for their children while at work, and how FCCH factors could influence eating behaviors at home.^{25,29} However, communication between parents and FCCPs related to child nutrition topics did not occur frequently. Parents in this study also reported that perceptions and awareness of foods and beverages served influenced what parents served children at home. Given the close and trusting relationship between FCCPs and parents, findings highlight the need to strengthen their communication around what and how children are fed to shape child healthy eating behaviors.⁴¹

Overall, parent-FCCP communication was brief, and friendly conversation centered around the child's well-being. Parents clearly trusted their FCCP to provide the best possible care for their children. Among parents with school-aged children, mutual trust and open communication are two of eight dimensions that support a parent-teacher relationship,²⁰ components important for the development of parent-teacher partnerships. These findings indicate that like with teachers and parents of school-aged children, partnerships between FCCPs and parents to support healthy eating habits in preschool-aged children is possible. Capitalizing on these relationship characteristics could be particularly beneficial to families that utilize FCCHs.

Parents in general perceived the foods served to children as healthy, and also trusted their FCCP to provide adequate food to their children. These findings are consistent with those of *Lindsay et al.*²⁹ whereby Latino parents also reported that foods served in FCCHs were more healthful than the foods served at home, and trusted FCCPs serve healthy foods to their children. Parents that did inquire about foods served to children at the FCCH found the information provided beneficial. Knowing what foods/beverages children consumed while at the FCCH helped parents decide which foods to serve to their children at home. Parents can also have an influence on child care provider feeding behaviors in the child care environment. Concern over ensuring that children eat enough, as expressed by parents in this study, has been found to impact provider practices in child care settings.^{22,42} One study conducted with child care providers found that fear of negative parental response to children not eating in child care was a barrier to communicating effectively with parents, and implementing practices that encourage healthy eating behaviors in young children.⁴² These findings align with the SEM,³⁵ and support the home-daycare link model that suggests caregiver-parent relationships and interactions are reciprocal and contribute to a continuity of care (consistency) across both environments.²³

Strategies to increase the frequency of parent-FCCP child nutrition related communication need to take into consideration the context of parents' daily life demands. It was evident that

daily routines were primarily influenced by parents' work schedules, which can interfere with a parents' ability to create and maintain healthy environments.^{29,43} Identifying strategies that are perceived by parents as less burdensome, may encourage parents to seek child nutrition information from their FCCP. Federal nutrition programs like the Child and Adult Care Food Program (CACFP) provide free child nutrition education resources for child care providers who participate in the program.⁴⁴ Communication related role of the federal nutrition programs such as CACFP in supporting healthy eating environments and practices that promote healthy eating habits may be beneficial. However, more research is needed to understand how FCCPs can effectively utilize these resources to engage with parents and encourage parent involvement in child nutrition and health promotion efforts.

This study was not without limitations. The sample size was relatively small, and while the study was intended to be inclusive of all parents and caregivers of preschool-aged children attending FCCHs, participants were primarily mothers. Fathers play an important role in feeding young children,^{45,46} and given the small proportion of fathers in this study, it was difficult to develop themes related to differences in perspectives or child nutrition-related concerns between mothers and fathers. Targeting specifically fathers to participate in FGDs may allow for a much more robust qualitative analysis of differences between mothers and fathers as it relates to child nutrition and feeding at home and in child care.

Other study limitations include lack of generalizability of findings to other Latinx/Hispanic immigrant parents/other caregivers of Hispanic preschool-aged children. There is also the potential for researcher and participant bias⁴⁷ related to recruitment methods and topic of discussion. Parents were informed as part of the consent process that the purpose of the FGDs was to gather feedback to inform intervention efforts to promote healthy eating in young children. It is possible that some parents may have been unwilling to share perspectives that may seem contradictory to what are appropriate eating behaviors for young children. However, these limitations were addressed as the research team included Latina bilingual researchers to make participants could feel more comfortable, and FGD transcripts were analyzed in their original language using a standardized analytic approach. Additionally, group coding used to examine the data allowed for verbal consensus to be achieved between coders, improving the trustworthiness of the study's qualitative findings. The qualitative findings of this study were also confirmed with the survey data study that indicated parent-FCCP communication related to children's eating habits and healthy foods and beverages for young children is limited.

ACKNOWLEDGEMENTS

This project was supported by the National Heart, Lung, And Blood Institute of the National Institutes of Health under Award Number 3R01HL123016-02S1 (Diversity Supplement). Findings are solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

References

1. Skinner AC, Ravanbakht SN, Skelton JA, Perrin EM, Armstrong SC. Prevalence of Obesity and Severe Obesity in US Children, 1999-2016. *Pediatrics*. 2018.

2. Ogden CL, Carroll MD, Fryar CD, Flegal KM Prevalence of obesity among adults and youth: United States, 2011-2014 NCHS data brief, no. 219. National Center for Health Statistics 2015 Hyattsville, MD: National Center for Health Statistics 2015.
3. Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of childhood and adult obesity in the United States, 2011-2012. *JAMA*. 2014;311(8):806–814. [PubMed: 24570244]
4. Geserick M, Vogel M, Gausche R, et al. Acceleration of BMI in Early Childhood and Risk of Sustained Obesity. *N Engl J Med*. 2018;379(14):1303–1312. [PubMed: 30281992]
5. Sahoo K, Sahoo B, Choudhury AK, Sofi NY, Kumar R, Bhadoria AS. Childhood obesity: causes and consequences. *J Family Med Prim Care*. 2015;4(2):187–192. [PubMed: 25949965]
6. O'Brien M, Nader PR, Houts RM, et al. The ecology of childhood overweight: a 12-year longitudinal analysis. *Int J Obes (Lond)*. 2007;31(9):1469–1478. [PubMed: 17406272]
7. Martins VJ, Toledo Florencio TM, Grillo LP, et al. Long-lasting effects of undernutrition. *Int J Environ Res Public Health*. 2011;8(6):1817–1846. [PubMed: 21776204]
8. Wachs T The nature of nurture. Newbury Park, CA: Sage; 1992.
9. Lindsay AC, Sussner KM, Kim J, Gortmaker SL. The Role of Parents in Preventing Childhood Obesity. *The Future of Children*. 2006;16(1):169–186. [PubMed: 16532663]
10. Davison KK, Birch LL. Childhood overweight: a contextual model and recommendations for future research. *Obesity reviews : an official journal of the International Association for the Study of Obesity*. 2001;2(3):159–171. [PubMed: 12120101]
11. Natale RA, Messiah SE, Asfour L, Uhlhorn SB, Delamater A, Arheart KL. Role modeling as an early childhood obesity prevention strategy: effect of parents and teachers on preschool children's healthy lifestyle habits. *J Dev Behav Pediatr*. 2014;35(6):378–387. [PubMed: 25007060]
12. Kremers SP. Theory and practice in the study of influences on energy balance-related behaviors. *Patient Educ Couns*. 2010;79(3):291–298. [PubMed: 20371159]
13. Laughlin L, Bureau USC. Who's Minding the Kids?: Child Care Arrangements, Spring 2011. U.S. Department of Commerce, Bureau of the Census; 2013.
14. Tovar A, Vaughn AE, Grummon A, et al. Family child care home providers as role models for children: Cause for concern? *Prev Med Rep*. 2017;5:308–313. [PubMed: 28239538]
15. Larson N, Ward DS, Neelon SB, Story M. What role can child-care settings play in obesity prevention? A review of the evidence and call for research efforts. *J Am Diet Assoc*. 2011;111(9):1343–1362. [PubMed: 21872698]
16. Gubbels JS, Kremers SP, Stafleu A, et al. Child-care use and the association with body mass index and overweight in children from 7 months to 2 years of age. *Int J Obes (Lond)*. 2010;34(10):1480–1486. [PubMed: 20498654]
17. Benjamin SE, Rifas-Shiman SL, Taveras EM, et al. Early child care and adiposity at ages 1 and 3 years. *Pediatrics*. 2009;124(2):555–562. [PubMed: 19651579]
18. US Department of Health and Human Services aUDoA. 2015-2020 Dietary Guidelines For Americans In. 8th ed 2015.
19. Benjamin Neelon SE, Briley ME, American Dietetic A. Position of the American Dietetic Association: benchmarks for nutrition in child care. *Journal of the American Dietetic Association*. 2011;111(4):607–615. [PubMed: 21443997]
20. Elicker J, Noppe IC, Noppe LD, Fortner-Wood C. The Parent-Caregiver Relationship Scale: Rounding Out the Relationship System in Infant Child Care. Vol 81997.
21. Hobbins Mcgrath W Ambivalent partners: Power, trust, and partnership in relationships between mothers and teachers in a full-time child care center. Vol 1092007.
22. Johnson SL, Ramsay S, Shultz JA, Branen LJ, Fletcher JW. Creating potential for common ground and communication between early childhood program staff and parents about young children's eating. *J Nutr Educ Behav*. 2013;45(6):558–570. [PubMed: 23769298]
23. Shpancer N The home-daycare link: mapping children's new world order. *Early Child Res Q*. 2002;17(3):374–392.
24. Hoover-Dempsey KV, Sandler HM. Why Do Parents Become Involved in Their Children's Education? *Review of Educational Research*. 1997;67(1):3–42.

25. Mena NZ, Gorman K, Dickin K, Greene G, Tovar A. Contextual and Cultural Influences on Parental Feeding Practices and Involvement in Child Care Centers among Hispanic Parents. *Child Obes.* 2015.
26. Sellers K RT, Baker I, Dennison BA. The role of child care providers in the prevention of childhood overweight. *J Early Child Res.* 2005;3:227–242.
27. Gupta RS, Shuman S, Taveras EM, Kulldorff M, Finkelstein JA. Opportunities for health promotion education in child care. *Pediatrics.* 2005;116(4):e499–505. [PubMed: 16199677]
28. Lindsay AC, Salkeld JA, Greaney ML, Sands FD. Latino family childcare providers' beliefs, attitudes, and practices related to promotion of healthy behaviors among preschool children: a qualitative study. *Journal of obesity.* 2015;2015:409742. [PubMed: 25874120]
29. Lindsay AC, Greaney ML, Wallington SF, Sands FD, Wright JA, Salkeld J. Latino parents' perceptions of the eating and physical activity experiences of their pre-school children at home and at family child-care homes: a qualitative study. *Public Health Nutr.* 2017;20(2): 346–356. [PubMed: 27539059]
30. NIH. Improving Nutrition and Physical Activity Environments in Home-based Child Care. 2015; <https://clinicaltrials.gov/ct2/show/NCT02452645>.
31. 2018 Rhode Island Kids Count Factbook. Providence, RI: Rhode Island KIDS COUNT;2018.
32. Oldham E. aH, S. Licensed Centers and Family Child Care Homes Rhode Island Early Learning Workforce Study. Rhode Island Early Learning Council;2014.
33. COUNT RIK. 2018 Rhode Island Kids Count Factbook. In. Providence, RI 2018.
34. Guest G, Namey E, McKenna K. How Many Focus Groups Are Enough? Building an Evidence Base for Nonprobability Sample Sizes. *Field Method.* 2017;29(1):3–22.
35. Bronfenbrenner. Contexts of Child Rearing: Problems and Prospects. *American Psychologist.* 1979;34(10): 844–850.
36. Powell D. Parents and programs: Early childhood as a pioneer in parent involvement and support. *The care and education of America's young children: Obstacles and opportunities.* 1991.
37. Hager ER, Quigg AM, Black MM, et al. Development and validity of a 2-item screen to identify families at risk for food insecurity. *Pediatrics.* 2010;126(1):e26–32. [PubMed: 20595453]
38. Batsell WR Jr., Brown AS, Ansfield ME, Paschall GY. "You will eat all of that!": a retrospective analysis of forced consumption episodes. *Appetite.* 2002;38(3):211–219. [PubMed: 12071687]
39. Krueger RA, & Casey MA (Eds.), ed *Focus groups: A practical guide for applied research.* Third ed. California: Sage Publications; 2000 Oaks T, ed.
40. Greg Guest KMM, Emily E. Name. *Applied Thematic Analysis.* SAGE; 2011.
41. Benjamin-Neelon SE. Position of the Academy of Nutrition and Dietetics: Benchmarks for Nutrition in Child Care. *Journal of the Academy of Nutrition and Dietetics.* 2018; 118(7): 1291–1300. [PubMed: 29937055]
42. Dev DA, McBride BA, Speirs KE, Blich KA, Williams NA. "Great Job Cleaning Your Plate Today!" Determinants of Child-Care Providers' Use of Controlling Feeding Practices: An Exploratory Examination. *Journal of the Academy of Nutrition and Dietetics.* 2016;116(11): 1803–1809. [PubMed: 27650534]
43. Penilla C, Tschann JM, Sanchez-Vaznaugh EV, Flores E, Ozer EJ. Obstacles to preventing obesity in children aged 2 to 5 years: Latino mothers' and fathers' experiences and perceptions of their urban environments. *Int J Behav Nutr Phys Act.* 2017;14(1):148. [PubMed: 29096651]
44. USDA. Food and Nutrition Service. Team Nutrition Resource Library 2018; <https://www.fns.usda.gov/tn/resource-library>. Accessed January 15, 2019.
45. Khandpur N, Blaine RE, Fisher JO, Davison KK. Fathers' child feeding practices: a review of the evidence. *Appetite.* 2014;78:110–121. [PubMed: 24667152]
46. Parada H, Ayala GX, Horton LA, Ibarra L, Arredondo EM. Latino fathers' feeding-related parenting strategies on children's eating. *Ecol Food Nutr.* 2016;55(3):292–307. [PubMed: 27065160]
47. Norris N. Error, Bias, and Validity in Qualitative Research. *Education Action Research.* 1997;5(1).

IMPLICATIONS FOR RESEARCH AND PRACTICE

Parents communicate with FCCPs frequently, however, communication specific to foods and beverages for young children is limited. This may be driven by parents' perceptions that foods and beverages served to children in child care are healthy and sufficient. Furthermore, parents also view engaging in FCCP-led health promotion efforts as potentially burdensome to FCCPs. More research is needed to understand effective communication methods about child nutrition in the context of other factors such as, acculturation level, parental daily life demands, and work schedules. Such efforts can inform health promotion interventions aimed to promote healthy eating behaviors among preschool-aged children at home and in child care.

Table 1.

Focus group moderator guide questions

Domain	Questions
<p>I. Communication with FCCH provider</p>	<p>1. What is the most common way you and your child care provider communicate? Probes:</p> <ul style="list-style-type: none"> a. In-person? b. Over the phone? c. Social Media d. Informal/formal meetings? <p>2. What are the most common things you talk about with your child care provider? Probes:</p> <ul style="list-style-type: none"> a. Child behavior? b. How the child slept? c. How the child ate? d. What die child ate? e. Specific health concerns? (weight status, eating behaviors) <p>3. In what ways do you talk to your child care provider about the foods and beverages served to your child with your child care provider? Probes:</p> <ul style="list-style-type: none"> a. In person? b. What do you typically ask? c. Are you aware of a menu/provided with a menu? d. Do you usually ask your child what they ate? e. Not really a concern? – Could you share why this may not be concern to you?³ <p>4. What might make it difficult to talk to your child care provider about the foods and beverages served to your child in the home daycare with? Probes:</p> <ul style="list-style-type: none"> a. Time b. Language barrier c. Cultural differences <p>5. If your provider wanted to share information on what foods and beverages are being served to your child when in child care, how would you want to receive that information? Probes:</p> <ul style="list-style-type: none"> a. In-person? b. Handouts or reports? c. Menu?
<p>II. Perception of FCCH food environment</p>	<p>1. What do you think about the food and beverages that are served at your child’s daycare? Probes:</p> <ul style="list-style-type: none"> a. Is enough food provided at each meal? b. Do you consider them healthy? c. Does your child like the food? d. Are there foods your child eats at child care but won’t eat at home?

Domain	Questions
III. Involvement in nutrition-related changes in the child care environment	<p>1. If your child care provider wanted to share information with you about food-related rules and polices of the home daycare, how would you like to receive that information?</p> <p>Probes:</p> <ul style="list-style-type: none"> a. Printed handouts? b. In-person communication? c. Interactive workshop or for parents? <p>Scenario: Your provider tells you that they will have to attend trainings to learn about new mealtime recommendations related to feeding young children in child care. Your child care provider also tells you that she would like to share the information with you so you can have it at home.</p> <p>2. What do you think about your provider giving you that type of information?</p> <p>Probes:</p> <ul style="list-style-type: none"> a. Is this information important to you? b. Would this information influence how you feel about the changes being made? c. Do you think this is information would be useful to when feeding your young child at home?

^aProbe added after initial two focus groups

Table 2.

Characteristics of the focus groups participants (n=25)

Parent Characteristics		(mean ± SD)
*Age, years (n=23)		33.4 ± 10.6
		n(%)
Sex		
	Female	21(84)
*Race (n=19)		
	White	6(32)
	Other**	13(68)
Born in the United States		
	Yes	10 (40%)
	No	15 (60%)
Years in US (mean ± SD)		6.4 ± 4.9
*Hispanic or Latino		n(%)
	Yes	23(96)
	No	1(4)
*Country of Origin		
	Dominican Republic	7(47)
	Puerto Rico	4(27)
	Other	3(20)
*Education		
	High school diploma/GED	12(50)
	Some college	6(25)
	College degree or higher	5(21)
Marital Status		
	Never married/single	9(36)
	Married/Living with partner	14(56)
	Separated or Divorced	2(8)
*Employment status		
	Employed, full time	11(48)
	Homemaker or student	6(26)
	Employed, part time/seasonal	4(17)
	Unemployed	1(4.3)
Yearly Household Income*		
	Less than \$29,999	13(65)
	Between \$30,000 - \$45,000	2(10)
	Greater than \$45,000	5(25)
Child Characteristics		(mean ± SD)
	***Child age	2.89 ± 1.08

Parent Characteristics	(mean ± SD)
*Total hours spent in FCCH per week (n=23)	33±10

* n<25 d/t missing data / wish not to answer: age, race, country of origin, Hispanic or Latino, employment status, education, and income.

** Other reported race categories: Hispanic (n=5); Latina (n=2); Puerto Rico (n=1); Taino (n=1); missing (n=4)

*** n=24, reported child age of 7 years, excluded from mean

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Table 3.

Supporting Quotes for Emergent Themes

Domain	Themes	Quotes
Communication with FCCPs	Parents primarily communicate with FCCPs in-person	“* I am not buying clothes from her; she is taking care of my daughter. So, it has to be a more personal relationship.”
		“(Handouts would be helpful) especially for me. I think its cause of the language barrier. You know [my daughter] could say (she had) rice and beans. I know she eats fruits, I could ask [my daughter] but I know she says yes to everything, so I don’t, like, 100% know every day.”
	Parents trust that the FCCH is a safe environment	“*She is your eyes when you are not there. The 40 hours or more one is working, you have to feel comfortable, even though you are not physically there, but you know everything is fine. And it’s like you being there, (just) not physically.”
		“I feel that I am able to communicate with her and feel open enough...and (my provider) feels comfortable (too). The same way with me, if there was a problem, she’d be able to tell me. We’re just very comfortable with each other. And I think that’s important.”
	Lack of time is a barrier to effective communication	“* Sometimes, its (lack of) time. Sometimes you are rushing out of work because you have something else to do. “
		“*I (don’t) think it’s the right time because there are other children that she has to be aware of. I go pick up my child, and if I have to talk to her, I try to arrive later, so he’s the last one left, so I do not take away the attention from another child.”
	FCCPs are not frequently utilized as source of child nutrition information	“*One doesn’t always have access to a nutritionist. But (there’s) WIC or the pediatrician.”
		“I always use Google.”
		“I learn on mom blogs, or on Instagram. I follow a lot (of) mothers. I’ve seen different options, where they take the reusable cupcake holders and put food in different ones, and let the child try different things. I’ve been meaning to try that (again). She was more into the playing with them than actually trying the food (the first time).”
	Apprehensiveness to discuss child nutrition-related concerns with FCCPs.	“What concerns me the most, is what she drinks. I feel like she has more (juice) than I would normally offer to her.”
“*I don’t ask specifically about what my child ate... I am ashamed for her to think that she is not feeding my child (well).” “I don’t want to offend her, because the cultural aspect too...I don’t want her to think, I’m telling her not to do something.”		
Perception of FCCH food environment	Parents trust FCCPs to serve healthy, and sufficient food	“* I think the FCCH nutrition environment is good, at least in the home (day care), they always cook.”
		“One can tell (when your child is eating well. For example, when my son leaves daycare, he does not come home hungry. [In contrast], *my daughter gets out of school, and she wants everything... something to eat, something to drink.”
	FCCH/FCCP can influence foods served at home.	“*The provider told me ‘don’t worry, healthy meals are served here’, and so I agreed to (my child) trying new things. And now I can say that (my daughter) eats excellent, she now eats things I’ve never served to her (before).”
		“*It’s very helpful when she (FCCP) tells me ‘yes, he ate this, he eats that’ and one knows that they are serving (certain foods) ...to then serve it at home. Sometimes at home, they are picky and sometimes don’t want to eat it there, but here (FCCH) they eat it.”
Involvement in nutrition- related changes in the FCCH	Parental concern for additional burden on FCCPs.	“I feel like it would take away from the child, like you know the day care centers, they do that, but a lot of its just paper work.”

Domain	Themes	Quotes
		<p>“There is more staffing (at daycare center), and all its going to do is take time away from the child, or the children they’re watching, that’s not right. You know, I wouldn’t want them to have to do that.”</p>

* Quotes have been translated from Spanish into English. FCCP=Family Child Care Provider

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript