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A Qualitative Investigation of How Mothers from Low Income Households Perceive Their Role During Family Meals

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Abstract

Background—Having regular family meals has been shown to be protective for child dietary intake (e.g., higher intake of fruit and vegetables). Mothers appear to be most responsible for preparing family meals. Therefore, understanding how mothers perceive their roles around family meals may help identify ways in which to help more families have regular family meals.

Methods—United States mothers (n=83) from the Twin Cities, Minnesota were interviewed during an in-home visit. Researchers trained in qualitative interviewing used a semi-structured approach and asked questions regarding the mothers' overall perception of their role during family meals. Interviews were coded using a mixed deductive and inductive content analysis approach. The majority of mothers were from minority and low-income households.

Results—Mothers described their roles during family meals as the follows: 1) Helping children make healthy choices at family meals; 2) Making the meal happen; 3) Monitoring children's food intake; 4) Managing behavior at the family meal; 5) Making the family meal atmosphere enjoyable; and 6) Facilitating conversation/communication. Two secondary research questions also emerged about the specifics of the mothers' perception of her role at family meals (i.e., How do mothers deal with fighting or arguing if it occurs at family meals? and What do mothers talk about with children at family meals?)

Conclusions—Results show that mothers have a large and varied role during family meals. Additionally, they are willing to put effort into family meals and want them to be enjoyable.

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Findings also suggest that mothers can be supported by encouraging fuller family participation in family meals and by offering mothers quality nutrition and parent feeding practice information.

Keywords

family meals; qualitative; mothers; meal atmosphere; child dietary intake; parent feeding practices; siblings

Introduction

Family meals research has shown that having regular family meals are protective for child health, including better dietary intake (Christian, Evans, Hancock, Nykjaer, & Cade, 2013; Fulkerson, Kubik, Story, Lytle, & Arcan, 2009; Hammons & Fiese, 2011), less risk-taking behaviors (e.g., drug use) (Musick & Meier, 2012; Sen, 2010; White & Halliwell, 2010), fewer depressive symptoms (Skeer & Ballard, 2013), and lower likelihood of engaging in unhealthy weight control behaviors (Haines, Gillman, Rifas-Shiman, Field, & Austin, 2010; Wang et al., 2013). Some research has also shown that having regular family meals is protective against childhood overweight (Anderson & Whitaker, 2010; Berge et al., 2015; Fulkerson et al., 2009). Furthermore, regular family meals have been shown to be protective for adolescents and parents with regard to dietary intake (Berge et al., 2012; Christian et al., 2013; Fulkerson et al., 2009; Hammons & Fiese, 2011), thus suggesting that regular family meals may be beneficial for the entire family. While there is no specific recommendation regarding the number of meals families should eat together each week, research suggests that having three or more per week may be most protective for family members' health (Berge et al., 2015; Hammons & Fiese, 2011). Given these prior findings showing that having regular family meals is beneficial for child, adolescent, and parent health, and that family meals exist in all countries throughout the world (Meiselman, 2000), it is important to identify ways in which to help more families benefit from having regular family meals.

One important influential person at the family meal is the primary caregiver in the home, whom is usually the mother. Research suggests that women are most responsible for preparing family meals (Beagan, Chapman, D'Sylva, & Bassett, 2008; Bianchi, Milkie, Sayer, & Robinson, 2000; Harnack, Story, Martinson, Neumark-Sztainer, & Stang, 1998). In the United States, the second most common living arrangement for children (after living in a two-parent household) is living with a single mother ("America's Families and Living Arrangements: 2016," 2016). Also, since many households have siblings ("2010 Census Data," 2010), mothers are most often responsible for preparing meals for multiple family members. It is important to understand how mothers view their role regarding family meals given their outsized role in preparing them. For example, while previous research has suggested that family meals are seen as an opportune time for communication as a family (Fulkerson, Neumark-Sztainer, & Story, 2006; Gallegos, Dziurawiec, Fozdar, & Abernethie, 2011), it is unclear how mothers see their role with regards to communication (e.g., are they the facilitators of communication, what types of conversations do they promote at family meals?). Similarly, little is known about how mothers see their role in terms of discipline or maintaining order at family meals or how mothers respond to conflict that arises at family meals. Understanding how mother's view their role, either positively or negatively, during

family mealtimes may help inform the development of intervention targets to improve the emotional atmosphere (*e.g., communication and conflict resolution skills*) of family meals, and hence the frequency of family meals, so that more children and families can benefit from the protective nature of family meals (Hammons & Fiese, 2011; Skeer & Ballard, 2013).

This study aims to expand the limited existing research regarding mothers' roles during family mealtimes by qualitatively exploring the following research question, "How do mothers describe their role(s) during family meals?" This study employs the use of qualitative data, which is an important first step in deepening our understanding of mothers' perceptions of their roles during family mealtimes. Understanding how mothers see their role during family meals will help inform the development of future interventions aiming to increase family meals frequency and will provide guidance to practitioners seeking to help families improve the quality and frequency of their family meals.

Methods

The current study, Family Meals LIVE!: Sibling Edition (SE) (Berge, Tate, Trofholz, Conger, & Neumark-Sztainer, 2015; Berge, Trofholz, Schulte, & Neumark-Sztainer, 2015) is an ancillary study connected to the Family Meals, LIVE! (FML) study (Berge et al., 2014), which explored the home food environment of families with children ages 6–12 years old (target child) (n=120) and their siblings. FML was conducted in 2012–2013 in Minneapolis/St. Paul. Eligible participants were recruited from primary care clinics, which resulted in the majority of the sample being from low-income and minority households. SE was conducted one year after FML and explored parent feeding practices in households that have more than one child. Eighty-eight of the original 120 FML participants had two or more children (siblings) living in their home and agreed to participate in SE. Of the remaining families from FML, 22 did not have siblings in the home; the remaining 10 families either declined participation or were not able to be contacted for SE. A "sibling" was defined as a child between the ages of 2 and 18 who lived with the target child and primary caregiver from FML at least half of the time.

Data collection for SE occurred in the participant's home during one in-person visit. The parent/primary guardian from FML completed a survey and trained research staff conducted a qualitative interview with the parent. All participants consented to being in the study prior to data collection, and all study protocols were approved by the University of Minnesota's Institutional Review Board. This study will focus only on data collected in the qualitative interview.

As this study focuses on the role of mothers during family meals, only data from 83 of the 88 participants was used; 5 of the participants were fathers. The mean age of study participants (n=83, all female) was 34 (sd=6). Almost two-thirds of participants identified as Black/African American (62%), nearly one fifth identified as White (18%); the remaining participants identified as Asian (5%), American Indian (4%), and more than one race (11%). Of the mothers interviewed, over one-fourth (28%) worked full-time; 21% worked part-time, and half (50%) either stayed at home with children (11%), were seeking work (18%), or

were not working (22%). Households were primarily low-income with over half (54%) earning less than \$20,000 per year. Nearly all (86%) households earned less than \$50,000 per year.

Qualitative Interview

Research staff were trained and certified in conducting structured interviews, according to qualitative research best practices (Crabtree & Miller, 1992; Creswell, 1994; Meissner, Creswell, Klassen, Plano, & Smith, 2011). Interview questions explored mothers' overall perception of their role during family meals (i.e., Overall, how do you see your role as a parent during mealtimes with your children?). Additionally questions focused on fleshing out specifics about the mother's perception of their role at family meals (i.e., How do you influence what your children eat at family meals? How do you deal with fighting or arguing if it occurs during family meals?; What do you talk about with your children during meals?). Researchers were trained to ask follow-up questions to further explore the responses mothers gave to interview questions (Crabtree & Miller, 1992).

Analysis

Audio interviews were transcribed verbatim. To ensure saturation of themes, the coders (first and second authors of this study) coded all transcripts using a mixed deductive and inductive content analysis approach (Elo & Kyngäs, 2008). This approach allowed for the main research question to guide theme development (deductive), as well as allowing themes to emerge from the data during the coding process (inductive) regarding mothers' role at the family meal. Interviews were coded in three stages (Krippendorff, 2004). The first stage involved identifying broad themes by coding each line of the transcript. These broad themes were then organized into sub-themes during the second stage. Finally, major overarching themes were identified during the third stage of coding. Mothers were able to endorse multiple themes during interviews; therefore, themes are not mutually exclusive.

In order to reach 95% inter-coder reliability, coders double coded the first twenty transcripts. To ensure inter-coder reliability was maintained, coders then double coded every fifth interview. Therefore, nearly 40% (33/83) of the transcripts were double coded. During consensus on the double-coded interviews, coders discussed any interview discrepancies until 100% agreement was reached. NVivo 10 software (NVivo 10, 2014, QSR International Pty Ltd), was used to code the qualitative data. Any names used in the transcript have been changed to protect participant confidentiality. As this study explores mothers, all quotes are from females and are additionally identified by the mothers' race and age.

Results

Research Question: How do mothers describe their role(s) in having family meals?

Six main themes were identified regarding how mothers described their roles during family meals. The main themes included: 1) Helping children make healthy choices at family meals 2) Making the meal happen; 3) Monitoring children's food intake; 4) Managing behavior at the family meal; 5) Making the family meal atmosphere enjoyable; 6) Facilitating conversation. In addition, there were two secondary research questions that are included that

help illuminate how the mothers put the role into practice. These secondary questions include, “How do mothers describe dealing with conflict between their children at family meals?” and “How do mothers describe facilitating conversations at family meals?” For ease of the reader, these secondary questions are placed throughout the results section next to the sub-theme it most closely matches. For example, the question, “How do mothers describe dealing with conflict between their children at family meals?” follows the sub-theme “Behavior management at the family meal”.

Theme 1: Helping children make healthy choices at family meals—Mothers reported four main strategies for their role of encouraging children to make healthy choices at family meals: 1) Provide healthy foods or discuss nutrition at family meals; 2) Model healthy eating at family meals; 3) “Dress up” meal or offer dessert; 4) Have child participate in preparing the meal. Each is discussed as a sub-theme below.

Sub-theme 1: Provide healthy foods or discuss nutrition at family meals: Over half (45/83) of mothers reported consciously trying to provide healthy foods for their children in order to encourage healthy eating and/or discussing nutrition at the family meal. One mother said, “Yeah in a healthy way. We eat vegetables, you know.... I cook a lot of vegetable[s]... like broccoli or bok choy those kinds, those are healthy for kids. Whatever I cook, they’ll eat it all. Even the vegetables too...” (Asian, 31 yrs).

One mother stated,

I try to tell him the importance of eating, you know, especially when it come[s] down to vegetables. See, I don’t really have a problem with Jamal eating what I cook. Sometimes it’s really vegetables that I have a problem with him not eating. And I just let him know, I try to influence him just let him know the importance of eating vegetables, especially green vegetables. I just let him know that it’s good for you know good for your heart, it’s good for your body period just to get those nutrients, those nourishments from the vegetables and I hope that it work[s] one day (African American, 37 yrs).

Sub-theme 2: Model healthy eating at family meals: One fourth (21/88) of mothers reported using modeling—even eating foods they did not like—to encourage their children to eat a healthy meal. Many mothers also reported that siblings were helpful in encouraging each other to make healthy choices at dinner. One mother said, “I just try to get right in there with them, because there are some vegetables that I don’t like, and then I’ll try it too” (African American, 31 yrs). Another mother said, “I have to pretty make him eat like green beans and different stuff, like vegetables and stuff like that. But if he sees like all of us eating it, like if me, Shayleen and Bode eat it, he’ll eat it too” (African American, 39 yrs).

Sub-theme 3: “Dress up” meal or offer dessert: Over fifteen percent (15/83) of mothers reported adding sauces, cheese, etc., to foods to make them more appealing to children and/or offering dessert to encourage children to eat the meal served. One mother described, “They won’t actually eat chili. They’ll eat chili mac and they’ll have sour cream on top and they’ll also have their cheese and you know and that’s how you get them to eat it” (African

American, 41 yrs). Another said, “Sometimes I hide veggies in stuff. Jon’s not the veggie eater...or we would “sauce it up” as he likes to say, put the Italian dressing on it or ranch dressing, or in Susie’s case, cheese” (White, 34 yrs). One mother stated, “Sometimes...it’s kind of a bribe thing...If you eat this, you can have a cupcake. You can have a fruit snack or something” (African American, 28 yrs).

Sub-theme 4: Have child participate in preparing the meal: Over ten percent (10/83) of mothers described having their child participate in preparing the family meal. These mothers felt that having the child participate would make the child more excited about the meal or more willing to eat the foods served. One mother said, “It is very important for all of the children to have a part in preparing the food because I found that when they do, they eat without a fuss, especially the smaller children” (Asian, 32 yrs).

Theme 2: Making the meal happen—More than one third (33/83) of mothers stated that their role during a family meal is to orchestrate the meal by planning, cooking, and/or serving the food. One mother said, “The provider, I guess. The person that prepares it and dishes it up and watches over mealtime, I’m the leader” (White, 32 yrs). Another mother describes her role as, “Planning the mealtime, planning what you’re having, planning who’s going to sit where, planning what’s going to happen after dinner, how things are going to go before dinner” (Native American, 32 yrs).

Another mother stated,

“I see myself as like the mother...the last one to sit down a little bit, because I’m getting their stuff together and you know with the day being grabbing this, grabbing that and putting it on the plate and then salt and pepper, something to drink, stuff like that” (African American, 29 yrs).

Theme 3: Monitoring children’s food intake—One-fifth of mothers (18/83) described their role at the family meal as making sure their children were eating enough food. One mother said, “And trying to basically make sure that they eat and that they have enough to eat” (African American, 39 yrs). Another mother said, “And then to try and make sure that they eat at least enough where I feel that they’re full. I’ll say, ‘Are you full now?’ And I want to make sure because, that’s just my job” (White, 36 yrs). One mother stated, “Sometimes it’s like ‘Hey, stop playing with your food.’ ‘Don’t do that.’ ‘Stop doing this.’ ‘Oh, eat that.’ ‘Oh, you’re not getting no more of this if you don’t eat that’” (African American, 28 yrs).

Theme 4: Managing behavior at the family meal—Some mothers (11/83) described their role at the family meals as being responsible for disciplining children or maintaining order at the family meal. One mother stated,

But you see a lot of families where brothers and sisters hate each other and they don’t speak and I never want that. And it could be something simple, like arguing over a fork or whatever but it’s like, in my mind, that can just lead to a pattern of complaining about everything. So today you’re at the table and you’re arguing because she elbowed you or her elbow was too close your plate, and then tomorrow

‘Oh, she touched me!’ You know, so I just think that certain behaviors can cause a pattern and I’m a very family-oriented person and I don’t tolerate that. (African American, 30 yrs).

Secondary Research Question: How do mothers describe dealing with conflict between their children at family meals?

In addition to some mothers describing their role as maintaining order or disciplining children at the family meal, mothers also described how they deal with conflict between their children at family meals. Four main sub-themes emerged to this secondary question: 1) Mother intervenes in conflict; 2) Children are sent away from table or are separated; 3) Children receive a punishment or consequence; 4) Need for conflict resolution between children is rare.

Sub-theme 1: Mother intervenes in conflict—Over half of mothers (42/83) said they intervene when there is conflict between siblings at the family meal, usually by asking the children to stop. One mother said, “They know it’s not allowed at the dinner table. I kind of made that rule. If it starts, I just, you know, tell Andrew it’s enough or Max it’s enough, and they know it’s not allowed at the table” (White, 33 yrs). Another mother said, “I just say ‘Don’t fight and don’t argue and sit down quiet and then to eat.’ And that’s it” (Asian, 32 yrs).

One mother said,

That’s actually one of the things we do not tolerate at our table. We don’t do arguing at all. Dinner is dinner. Nobody’s arguing. Nobody’s fussing and fighting. Like, they’ll go back and forth for a little bit. I’m like “What’s the rule?” “No arguing at the dinner table.” “Okay, that’s it.” and then that’s the end of the conversation. “You guys can talk about it when you go in your room, but not here (African American, 29 yrs).

Sub-theme 2: Children are sent away from table or are separated—Over one-third of mothers (29/83) said they either respond to conflict between children by making one/all of children leave the table, or they physically separate the children at the meal. One mother said, “I just make them leave the table. Or I’ll put them in a corner” (African American, 30 yrs). Another said, “Probably a little ‘Knock it off’ or ‘Get away from each other’ or something like that. If it’s Andrea and her, ‘Andrea, take yours to your room’ separate, because, yeah, that happens” (African American, 31 yrs). One mother stated, “I split them up, tell them to be quiet or go upstairs or go over there” (African American, 32 yrs).

Sub-theme 3: Children receive a punishment or consequence—Some mothers (9/83) reported giving the child/ren a punishment or consequence if there is conflict between siblings. One mother said, “That’s when we have silent time...and then if you feel like you still can’t do that, then you’re not going to get a snack” (African American, 28 yrs).

Another mother stated,

“You want to sit there and be arguing and fussing, soon as you finish, go clean the bathroom. You’re going to wash these dishes. You’re going to clean the living room.” They say, “Oh, man.” I’m talking about you going to have some type of punishment for not listening, and they don’t like to clean (African American, 34 yrs).

Sub-theme 4: Need for conflict resolution between children is rare—About one-fifth (14/83) of mothers reported not generally needing a strategy for conflict resolution since conflict between siblings at family meals was rare. One mother said, “None of that, um-um. We don’t allow it...so they won’t even go there” (African American, 33 yrs). Another stated, “I’ve never had a problem at mealtimes, other kids running around, getting up, say, I don’t have any of those problems. They sit down, they eat. They go on about their day” (African American, 28 yrs).

One mother said,

You know, it just doesn’t occur, and I’m not sure if people are going to believe that or not, but they don’t do that stuff. You know, we don’t fight and argue during mealtimes, there’s no reason too. We might tease each other or laugh about something, but there’s no fighting (African American, 41 yrs).

Theme 5: Making the family meal atmosphere enjoyable—Some mothers (11/83) reported seeing it as their role to make the family meal an enjoyable event for the family. One mother said, “I’m concerned with having a conversation and people enjoying the food that we’re eating so that it will be an enjoyable experience” (White, 35 yrs). Another mother said of her role, “I think a motivator, a motivating parent...positive...I don’t make them fear eating foods or not eating food if they don’t like it. So it’s an open happy environment for them” (African American, 39 yrs). One mother stated, “So it be kind of fun because we laugh, we talk, we sometimes sing at the table and I try to make the best of dinnertime. Make it fun and easy, where they can have fun while they eat” (African American, 30 yrs).

Theme 6: Facilitating conversation—About twelve percent (10/83) of mothers described their role at the family meals as being responsible for facilitating conversation and checking in with their children. One mother said, “I would like to say I’m the person who keeps the minutes at the town meeting...I’m like, okay, we’re going to talk about how school was, and what’d you learn, and how your interactions went today” (African American, 35 yrs).

Secondary Research Question: How do mothers describe facilitating conversations at family meals?

In addition to mothers describing their role as facilitators of conversation/communication, mothers also reported the topics of conversation they promoted with their children at family meals. Five sub-themes emerged for this secondary question regarding what types of conversations mother’s promoted at family meals: 1) What happened during day?; 2) What is happening in family member’s lives?; 3) Family business; 4) No talking at family meals; 5) Food at the meal.

Sub-theme 1: What happened during day?—Nearly all participants (66/83) reported discussing happenings of the day at family meals. One mother said, “We’ll talk about school. We’ll go ‘what happened at school? What kind of projects are you doing?’” (White, 36 yrs). One mother stated, “About my day at work, that’s what they ask, and school, weather, their friends, homework, what’s going on that day for them” (African American, 39 yrs).

Sub-theme 2: What is happening in family member’s lives?—Over forty percent (34/83) reported discussing what is going on in the lives of family members, including discussing more serious topics. One mother reported discussing, “What’s happening at school, sports, friends, bullies” (White, 35 yrs). Another mother said her family discusses, “how we can get better as a better family” (African American, 35 yrs).

One mother stated,

I talk about, most of all, I talk about their education. I always tell Anna about education. That’s the first priority I want her to know about. Then we sit around, we talk about God, life, we just talk about her health, my health, her sister health, we just talk about a lot of stuff (African American, 34 yrs).

Sub theme 3: Family business—About thirty percent (24/83) of mothers reported discussing family business at their family meals such as family plans or family schedules. One mother said, “If we have something, some special event coming up at the end of the week, you know, we’ll talk about that and how excited they are” (Asian, 27 yrs).

Another mother reported discussing,

What you all want to do this weekend? We talk about his basketball practice or football practice, whatever, whatever comes up, they ask me about my school, what are we going to do tomorrow, what are we going to eat tomorrow, yeah (African American, 31 yrs).

Sub theme 4: No talking at family meals—Some mothers (15/83) reported that there was no talking at family meals, either because it was a rule (9/15) or because the family was absorbed with watching TV (6/15). One mother said, “I try to keep it quiet. Too much chatter, they won’t eat, they’ll sit there forever” (African American, 28 yrs). Another mother said, “Mainly we’ll watch TV and—but they really, they know it’s time to eat though. So it’s dinnertime, they’ll eat the food” (White, 35 yrs).

One mother stated,

No, the only thing I hate with her is when she talks at the table. When I grew up, we wasn’t allowed to talk at the table so when she start talking, I tell her to be quiet, you know, like eat your food and then you can talk (African American, 34 yrs).

Sub-theme 5: Food at the family meal—Some mothers (13/83) reported mealtime conversation focused on the food served at the meal. One mother reported discussing, “Food,

what we're going to eat the next day" (Asian, 31 yrs). Another said her family discusses, "What are we going to eat tomorrow" (African American, 31 yrs).

One mother stated,

It just depends. It's so fun to me because like the first thing that they always love to say is that I'm the best cook, so the meal always starts off with a ton of compliments, even if it's something that I just threw together. They always like show me a lot of love for cooking and I feel appreciated and so we talk about what we're eating (Mixed race, 26 yrs).

Discussion

The aim of the current study was to qualitatively explore how mothers describe their role(s) during family mealtimes. Results from the current study indicate that mothers play a major role in carrying out family meals. Results both support and extend previous findings in the field regarding family meals. First, study findings support past studies showing that mothers are more responsible than fathers in preparing family meals (Beagan et al., 2008; Bianchi et al., 2000; Harnack et al., 1998). Additionally, study findings extend previous research by showing that mothers see themselves as having varied roles in family meals, from implementing the meal, to monitoring children's food intake and behavior, to facilitating family conversation and making the meal enjoyable.

Results from the current study also provide potential implications for supporting mothers in carrying out frequent and enjoyable family meals. First, nearly forty percent (35/88) of mothers reported having the full responsibility of making the family meal happen, from cooking, serving the food, and getting the family to the table. While it is unclear if the mothers interviewed were dissatisfied having full responsibility for meals, previous research with parents (86% who were mothers) of a similar age group found that these parents desired more assistance with the family meal (e.g., food preparation, clean up) (Fulkerson, Story, Neumark-Sztainer, & Rydell, 2008). Mothers seeking assistance can be supported in this role by encouraging broader family participation in the implementation of family meals, which would remove some burden from mothers. One study found that mothers who were responsible for the household food role were more satisfied when they both expected and received help with food preparation (Blake et al., 2009). Encouraging other family members to contribute to food tasks could result in more satisfied mothers. Additionally, as busyness has been reported as a barrier to having family meals (Trofholz et al., 2017), providing assistance to mothers may, perhaps, lead to more frequent family meals. Additionally, mothers described the family meal as being a place where the family can connect through discussing their day and the happenings of their lives. Promoting the family meal as a place where family connection can occur—rather than it just being a necessity to feed the family—may also encourage mothers to have more frequent family meals.

Mothers also described the family meal as being a place where they can monitor their child's dietary intake, and they described various ways in which they encouraged their children to eat healthy foods (e.g. modeling healthy eating, discussing nutrition, having children participate in preparing the family meal). Research shows a significant association between

parent feeding practices (e.g., pressure-to-eat, restriction) and child weight status and child dietary intake (Birch & Fisher, 2000; Birch, Fisher, & Davison, 2003; Loth, MacLehose, Fulkerson, Crow, & Neumark-Sztainer, 2014; Loth, MacLehose, Fulkerson, Crow, & Neumark-Sztainer, 2013). Therefore, as mothers see the family meal as a place to monitor child dietary intake, they may need to be educated about more helpful (e.g., parent modeling) and less helpful (e.g., pressure-to-eat, restriction) ways of influencing child dietary intake. Additionally, nearly twenty percent (17/88) of mothers reported discussing nutrition with their children as a strategy to encourage healthy eating. Providing mothers with both accurate and accessible nutrition education will ensure that they are providing the best information to their children, and possibly, influencing a healthier dietary intake. See Table 1 for additional recommendations.

A new finding from the current study was that many families had rules about “no talking” during family meals. While significant associations have been found between TV viewing during the family meal—and hence, no or minimal talking amongst the family—and lower overall diet quality (in adolescents and adults) (Andaya, Arredondo, Alcaraz, Lindsay, & Elder, 2010; Boutelle, Birnbaum, Lytle, Murray, & Story, 2003; Feldman, Eisenberg, Neumark-Sztainer, & Story, 2007; Sweetman, McGowan, Croker, & Cooke, 2011), a lower quality family meal (FitzPatrick, Edmunds, & Dennison, 2007), and lower family meal importance (Fulkerson et al., 2014), future research needs to be conducted examining whether these associations are due to the presence of TV or a family rule dictating no talking at family meals. Additionally, more research needs to be done to understand the impact of family meals with a “no talking” rule (where TV is not present); do children reap the same benefits as those children at family meals with family conversation? Another new finding from the current study was related to how mothers respond to conflict resolution between siblings at family meals. The most frequent strategies used were intervening with the children and sending the child/ren away from the table. Less than twenty percent (16/88) of mothers reported never/rarely having frequently occurring. More positive family atmospheres have been associated with lower child weight status and more healthful dietary intake (Berge et al., 2014, 2013); therefore, mothers need to be provided with the best strategies to use in conflict resolution between siblings at family meals in order to promote the most positive family meal atmosphere.

This study has both strengths and limitations to consider when interpreting study findings. One strength of this study is the opportunity to explore mother’s perceptions of family meals in a low-income and minority population, whereas previous research on parent’s (primarily mother’s) perceptions of family meals has been done with higher income, white populations (Fulkerson et al., 2008). Another strength of the study is the large size of the qualitative sample. There are also limitations of this study. First, while this study examined mothers, who are most responsible for preparing family meals (Beagan et al., 2008; Bianchi et al., 2000; Harnack et al., 1998), results may vary if fathers’ or other caregivers’ perspectives were considered (Khandpur, Blaine, Fisher, & Davison, 2014). Therefore, it is unknown if family meal interventions targeting fathers or other caregivers would need to vary from ones targeting mothers, which is something future research should investigate. Additionally, the views shared by the mother about her role at the family meal may not align with other family members’ perception of the mother’s role at the family meal. Finally, although the sample

included a racially/ethnically diverse group, some racial/ethnic groups (e.g. Native American, Latino) were underrepresented in this sample. Future research should investigate how mothers/parents of different racial/ethnic groups perceive their role at family meals, and therefore, if the type of support mothers/parents may need varies by racial/ethnic group. In addition, it may be important to investigate the role television and screen time play in family meals and how mother's perceive their role with regard to screen time during family meals. It is also important when intervening on family meals to understand the barriers a family faces in having family meals and the value they place on family meals in order to best tailor the intervention to the family's circumstances.

Conclusions

Results of the current study show that mothers have a large and varied role in family meals. Findings from this study offer a variety of potential strategies for nutrition professionals and family practitioners to utilize when working with families to improve or encourage family meals. Results suggest that mothers can be supported in carrying out family meals by encouraging fuller family participation in preparing family meals and also by offering mothers quality information about parent feeding practices, nutrition, and conflict resolution between siblings. In addition, study results suggest that mothers are willing to put effort into carrying out family meals and want them to be enjoyable events, thus supporting mothers in these goals may have a positive effect on the frequency and quality of family meals.

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References

- 2010 Census Data. 2010. Retrieved from <http://www.census.gov/2010census/data/>
- America's Families and Living Arrangements: 2016. 2016. Retrieved December 5, 2017, from <https://www.census.gov/data/tables/2016/demo/families/cps-2016.html>
- Andaya, AA., Arredondo, EM., Alcaraz, JE., Lindsay, SP., Elder, JP. The association between family meals, TV viewing during meals, and fruit, vegetables, soda, and chips intake among Latino children. *Journal of Nutrition Education and Behavior*. 2010. <http://doi.org/10.1016/j.jneb.2009.11.005>
- Anderson SE, Whitaker RC. Household Routines and Obesity in US Preschool-Aged Children. *Pediatrics*. 2010; 125(3):420–428. <http://doi.org/10.1542/peds.2009-0417>. [PubMed: 20142280]
- Beagan B, Chapman GE, D'Sylva A, Bassett BR. "It's Just Easier for Me to Do It": Rationalizing the Family Division of Foodwork". *Sociology*. 2008; 42(4):653–671. <http://doi.org/10.1177/0038038508091621>.

- Benton D. Role of parents in the determination of the food preferences of children and the development of obesity. *Int J Obes Relat Metab Disord*. 2004; 28(7):858–869. <http://doi.org/10.1038/sj.ijo.0802532>. [PubMed: 15170463]
- Berge JM, Jin SW, Hannan P, Neumark-Sztainer D. Structural and interpersonal characteristics of family meals: associations with adolescent body mass index and dietary patterns. *Journal of the Academy of Nutrition and Dietetics*. 2013; 113(6):816–22. <http://doi.org/10.1016/j.jand.2013.02.004>. [PubMed: 23567247]
- Berge JM, MacLehose RF, Loth KA, Eisenberg ME, Fulkerson JA, Neumark-Sztainer D. Family meals. Associations with weight and eating behaviors among mothers and fathers. *Appetite*. 2012; 58(3):1128–1135. <http://doi.org/10.1016/j.appet.2012.03.008>. [PubMed: 22425759]
- Berge JM, Rowley S, Trofholz A, Hanson C, Rueter M, MacLehose RF, Neumark-Sztainer D. Childhood obesity and interpersonal dynamics during family meals. *Pediatrics*. 2014; 134(5):923–32. <http://doi.org/10.1542/peds.2014-1936>. [PubMed: 25311603]
- Berge JM, Rowley S, Trofholz A, Hanson C, Rueter M, MacLehose RF, Neumark-Sztainer D. Childhood obesity and interpersonal dynamics during family meals. *Pediatrics*. 2014; 134(5):923–32. <http://doi.org/10.1542/peds.2014-1936>. [PubMed: 25311603]
- Berge JM, Tate A, Trofholz A, Conger K, Neumark-Sztainer DR. Sibling eating behaviors and parent feeding practices with siblings: Similar or different? *Journal of the Academy of Nutrition and Dietetics*. 2015
- Berge JM, Trofholz A, Schulte A, Neumark-Sztainer DR. A qualitative investigation of parents' perspectives about feeding practices with siblings among racial/ethnic and socioeconomically diverse households. Under Review. 2015
- Berge JM, Wall M, Hsueh TF, Fulkerson JA, Larson N, Neumark-Sztainer D. The protective role of family meals for youth obesity: 10-year longitudinal associations. *Journal of Pediatrics*. 2015; 166(2):296–301. <http://doi.org/10.1016/j.jpeds.2014.08.030>. [PubMed: 25266343]
- Bianchi S, Milkie M, Sayer L, Robinson J. Is anyone doing the housework? Trends in the gender division of household labor. *Social Forces*. 2000; 79(1):191–228.
- Birch LL, Fisher JO. Mothers' child-feeding practices influence daughters' eating and weight. *American Journal of Clinical Nutrition*. 2000; 71(5):1054–1061. <http://doi.org/10.1016/j.biotechadv.2011.08.021.Secreted>. [PubMed: 10799366]
- Birch LL, Fisher JO, Davison KK. Learning to overeat: Maternal use of restrictive feeding practices promotes girls' eating in the absence of hunger. *American Journal of Clinical Nutrition*. 2003; 78(2):215–220. [PubMed: 12885700]
- Blake CE, Devine CM, Wethington E, Jastran M, Farrell TJ, Bisogni CA. Employed parents' satisfaction with food-choice coping strategies. Influence of gender and structure. *Appetite*. 2009; 52(3):711–719. <http://doi.org/10.1016/j.appet.2009.03.011>. [PubMed: 19501770]
- Boutelle K, Birnbaum A, Lytle L, Murray D, Story M. Associations between perceived family meal environment and parent intake of fruit, vegetables, and fat. *J Nutr Educ Behav*. 2003; 35(1):24–29. [PubMed: 12588677]
- Christian MS, Evans CEL, Hancock N, Nykjaer C, Cade JE. Family meals can help children reach their 5 A Day: a cross-sectional survey of children's dietary intake from London primary schools. *Journal of Epidemiology & Community Health*. 2013; 67(4):332–338. <http://doi.org/10.1136/jech-2012-201604>. [PubMed: 23254183]
- Christian MS, EL Evans C, Ransley JK, Greenwood DC, Thomas JD, Cade JE. Process evaluation of a cluster randomised controlled trial of a school-based fruit and vegetable intervention: Project Tomato. *Public Health Nutrition*. 2012; 15(3):459–465. <http://doi.org/10.1017/S1368980011001844>. [PubMed: 21835081]
- Crabtree, BF., Miller, WL. Doing qualitative research. Vol. 3. Newbury Park, CA: Sage Publications; 1992.
- Creswell, JW. Research design: Qualitative and quantitative. USA: Sage; 1994.
- Elo S, Kyngäs H. The qualitative content analysis process. *Journal of Advanced Nursing*. 2008; 62(1): 107–115. <http://doi.org/10.1111/j.1365-2648.2007.04569.x>. [PubMed: 18352969]

- Feldman S, Eisenberg ME, Neumark-Sztainer D, Story M. Associations between Watching TV during Family Meals and Dietary Intake Among Adolescents. *Journal of Nutrition Education and Behavior*. 2007; 39(5):257–263. <http://doi.org/10.1016/j.jneb.2007.04.181>. [PubMed: 17826345]
- FitzPatrick E, Edmunds LS, Dennison BA. Positive effects of family dinner are undone by television viewing. *Journal of the American Dietetic Association*. 2007; 107(4):666–671. <http://doi.org/10.1016/j.jada.2007.01.014>. [PubMed: 17383273]
- Fulkerson JA, Kubik MY, Story M, Lytle L, Arcan C. Are there nutritional and other benefits associated with family meals among at-risk youth? *Journal of Adolescent Health*. 2009; 45(4):389–395. <http://doi.org/10.1016/j.jadohealth.2009.02.011>. [PubMed: 19766944]
- Fulkerson JA, Loth K, Bruening M, Berge J, Eisenberg ME, Neumark-Sztainer D. Time 2 tlk 2nite: Use of electronic media by adolescents during family meals and associations with demographic characteristics, family characteristics, and foods served. *Journal of the Academy of Nutrition and Dietetics*. 2014; 114(7):1053–1058. <http://doi.org/10.1016/j.jand.2013.10.015>. [PubMed: 24361006]
- Fulkerson JA, Neumark-Sztainer D, Story M. Adolescent and parent views of family meals. *Journal of the American Dietetic Association*. 2006; 106(4):526–32. <http://doi.org/10.1016/j.jada.2006.01.006>. [PubMed: 16567147]
- Fulkerson JA, Story M, Neumark-Sztainer D, Rydell S. Family meals: perceptions of benefits and challenges among parents of 8- to 10-year-old children. *Journal of the American Dietetic Association*. 2008; 108(4):706–9. <http://doi.org/10.1016/j.jada.2008.01.005>. [PubMed: 18375230]
- Gallegos D, Dziurawiec S, Fozdar F, Abernethie L. Adolescent experiences of “family meals” in Australia. *Journal of Sociology*. 2011; 47(3):243–260. <http://doi.org/10.1177/1440783310386826>.
- Haines J, Gillman MW, Rifas-Shiman S, Field AE, Austin SB. Family dinner and disordered eating behaviors in a large cohort of adolescents. *Eating Disorders*. 2010; 18(1):10–24. <http://doi.org/10.1080/10640260903439516>. [PubMed: 20390605]
- Hammons AJ, Fiese BH. Is frequency of shared family meals related to the nutritional health of children and adolescents? *PEDIATRICS*. 2011; 127(6):e1565–e1574. <http://doi.org/10.1542/peds.2010-1440>. [PubMed: 21536618]
- Harnack, L., Story, M., Martinson, B., Neumark-Sztainer, D., Stang, J. Guess who’s cooking? The role of men in meal planning, shopping, and preparation in US families. *Journal of the American Dietetic Association*. 1998. [http://doi.org/10.1016/S0002-8223\(98\)00228-4](http://doi.org/10.1016/S0002-8223(98)00228-4)
- Khandpur N, Blaine RE, Fisher JO, Davison KK. Fathers’ child feeding practices: A review of the evidence. *Appetite*. 2014; 78:110–121. <http://doi.org/10.1016/j.appet.2014.03.015>. [PubMed: 24667152]
- Krippendorff, K. Content analysis: An introduction to its methodology. Sage; 2004.
- Kubik MY, Davey C, Fulkerson JA, Sirard J, Story M, Arcan C. Alternative high school students: Prevalence and correlates of overweight. *Am J Health Behav*. 2009; 33(5):600–609. [PubMed: 19296750]
- Larson NI, Story M, Eisenberg ME, Neumark-Sztainer D. Food preparation and purchasing roles among adolescents: Associations with sociodemographic characteristics and diet quality. *Journal of the American Dietetic Association*. 2006; 106(2):211–218. <http://doi.org/10.1016/j.jada.2005.10.029>. [PubMed: 16442868]
- Larson N, MacLehose R, Fulkerson JA, Berge JM, Story M, Neumark-Sztainer D. Eating breakfast and dinner together as a family: associations with sociodemographic characteristics and implications for diet quality and weight status. *Journal of the Academy of Nutrition and Dietetics*. 2013; 113(12):1601–9. <http://doi.org/10.1016/j.jand.2013.08.011>. [PubMed: 24139290]
- Loth KA, MacLehose RF, Fulkerson JA, Crow S, Neumark-Sztainer D. Are food restriction and pressure-to-eat parenting practices associated with adolescent disordered eating behaviors? *International Journal of Eating Disorders*. 2014; 47:310–314. <http://doi.org/10.1002/eat.22189>. [PubMed: 24105668]
- Loth KA, MacLehose RF, Fulkerson JA, Crow S, Neumark-Sztainer D. Eat this, not that! Parental demographic correlates of food-related parenting practices. *Appetite*. 2013; 60(1):140–147. <http://doi.org/10.1016/j.appet.2012.09.019>. [PubMed: 23022556]

- Meiselman, HL. Dimensions of the meal: the science, culture, business, and art of eating. Gaithersburg, MD: 2000.
- Meissner H, Creswell J, Klassen AC, Plano V, Smith KC. Best practices for mixed methods research in the health sciences. *Methods*. 2011; 29:1–39. <http://doi.org/10.1002/cdq.12009>.
- Musick K, Meier A. Assessing causality and persistence in associations between family dinners and adolescent well-being. *J Marriage Fam*. 2012; 74(3):476–493. <http://doi.org/10.1038/nature13314.A>. [PubMed: 23794750]
- Sen B. The relationship between frequency of family dinner and adolescent problem behaviors after adjusting for other family characteristics. *Journal of Adolescence*. 2010; 33(1):187–196. <http://doi.org/10.1016/j.adolescence.2009.03.011>. [PubMed: 19476994]
- Skeer MR, Ballard EL. Are family meals as good for youth as we think they are? A review of the literature on family meals as they pertain to adolescent risk prevention. *Journal of Youth and Adolescence*. 2013; 42(7):943–963. <http://doi.org/10.1007/s10964-013-9963-z>. [PubMed: 23712661]
- Sweetman C, McGowan L, Croker H, Cooke L. Characteristics of family mealtimes affecting children's vegetable consumption and liking. *Journal of the American Dietetic Association*. 2011; 111(2):269–73. <http://doi.org/10.1016/j.jada.2010.10.050>. [PubMed: 21272701]
- Trofholz A, Rowley S, Tate A, Draxten M, Schulte A, Neumark-Sztainer D, Berge J. What's being served for dinner?: Associations between the healthfulness of family meals and child dietary intake. *Journal of the Academy of Nutrition and Dietetics*. 2017; 117(1):102–109. [PubMed: 27666378]
- Trofholz A, Thao MS, Donley M, Smith M, Isaac H, Berge JM. Family Meals Then and Now: A Qualitative Investigation of Intergenerational Transmission of Family Meal Practices in a Racially/Ethnically Diverse and Immigrant Population. *Appetite*. 2017
- Wang ML, Peterson KE, Richmond TK, Spadano-Gasbarro J, Greaney ML, Mezgebu S, Austin SB. Family physical activity and meal practices associated with disordered weight control behaviors in a multiethnic sample of middle-school youth. *Academic Pediatrics*. 2013; 13(4):379–385. <http://doi.org/10.1016/j.acap.2013.04.012>. [PubMed: 23830023]
- White J, Halliwell E. Alcohol and tobacco use during adolescence: the importance of the family mealtime environment. *Journal of Health Psychology*. 2010; 15(4):526–32. <http://doi.org/10.1177/1359105309355337>. [PubMed: 20460409]

Table 1

Suggestions for family meal researchers or family practitioners who work with parents and families to promote family meals.

Theme	Recommendations for Consideration
Help children make healthy choices at family meals	<ul style="list-style-type: none"> • Provide mothers with accurate and accessible nutrition education. • Investigate the association between preparing food and child dietary intake in young children. • Encourage mothers to involve adolescents in meal preparation. (Larson, Story, Eisenberg, & Neumark-Sztainer, 2006) • Encourage mothers to continue exposing children to healthy foods at family meals. (Benton, 2004) • Discourage mothers from using food as a reward in order to encourage their children to eat healthy foods. (Benton, 2004)
Make the meal happen	<ul style="list-style-type: none"> • Encourage broader family participation in implementing family meals. (Blake et al., 2009)
Monitor children's food intake	<ul style="list-style-type: none"> • Educate mothers about appropriate parent feeding practices and the association of parent feeding practices (e.g., restriction, pressure-to-eat) with child weight status and child dietary intake. (Birch & Fisher, 2000; Loth et al., 2013; Loth et al., 2014)
Manage behavior at the meal	<ul style="list-style-type: none"> • Provide mothers with tailored recommendations for maintaining order when multiple siblings are present • Provide mothers tailored strategies to use in conflict resolution between siblings at family meals. • Investigate best practices for mothers dealing with conflict between siblings at meals.
Make the family meal atmosphere enjoyable	<ul style="list-style-type: none"> • Educate mothers on the association between a positive emotional atmosphere at meals and child weight status. (Berge et al., 2014) • Investigate further the family's perception about what makes a family meal enjoyable.
Facilitate conversation/communication	<ul style="list-style-type: none"> • Frame the family meal as a place where family connections can occur. (Fulkerson et al., 2006) <p>Investigate the impact of "no talking" rules at family meals with emotional atmosphere, child weight status, and child dietary intake.</p>