The intergenerational transmission of family meal practices: a mixed-methods study of parents of young children

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Abstract

Objective.—This mixed-methods study explored the qualitative accounts of prior childhood experiences and current contextual factors around family meals across three quantitatively-informed categories of family meal frequency patterns from adolescence to parenthood: (1) “maintainers” of family meals across generations (2) “starters” of family meals in the next generation and (3) “inconsistent” family meal patterns across generations.

Design.—Quantitative survey data collected as a part of the first (1998-1999) and fourth (2015-2016) waves of the longitudinal Project EAT study and qualitative interviews conducted with a subset (n=40) of Project EAT parent participants in 2016-17.

Setting.—Surveys were completed in school (Wave 1) and online (Wave 4); qualitative interviews were completed in-person or over the telephone.

Subjects.—Parents of preschool-aged children (n=40) who had also completed Project EAT surveys at Wave 1 and Wave 4.
Results.—Findings revealed salient variation within each overarching theme around family meal influences (early childhood experiences, influence of partner, household skills, and family priorities) across the three intergenerational family meal patterns, in which Maintainers had numerous influences that supported the practice of family meals; Starters experienced some supports and some challenges; Inconsistents experienced many barriers to making family meals a regular practice.

Conclusions.—Family meal interventions should address differences in cooking and planning skills, aim to reach all adults in home, and seek to help parents, who did not eat family meals as a child, develop an understanding of how and why they might start this tradition with their family.

Keywords
family meals; mixed methods; preschool children; parenting; intergenerational

Introduction
Over the past decade, research has shown that family meals are protective against poor dietary intake,(1-5) unhealthy weight-related outcomes (e.g., excessive weight gain, disordered eating behaviors), (5-17) substance use, (18-19) and poor psychosocial outcomes in children, adolescents and young adults. (20-22) Researchers posit that eating together yields both physical and psychosocial benefits for youth and adults alike by offering a daily opportunity for healthful eating and connection between family members. (17,23,24) Given existing findings, which strongly suggest that family meals can serve to protect youth from a number of harmful health-related outcomes, participation in regular family meals has been recommended by several prominent organizations, associations, and researchers. (25-29)

Unfortunately, despite numerous known health benefits and widespread public health messaging informing families of the importance of eating regular family meals, many families are not eating together, and data suggest that the frequency of family meal consumption has decreased overtime, particularly among low-income families. (30-31) In an effort to guide the development of interventions aimed at increasing the number of families who engage in regular family meals, it is important to explore mechanisms that may lead to the intergenerational transmission of family meals or changes in patterns across generations. (32) Researchers have begun to explore potential mechanisms by which the routine of eating family meals is passed between generations. (33,34) A study by Watts and colleagues, which utilized data collected as a part of the ongoing Project EAT cohort study found that frequency of family meals and the idea that family meals were “expected” during adolescence was associated with family meal frequency during early parenthood. (33) Using this same dataset, Berge et. al. examined intergenerational transmission of regular family meals from adolescence into parenthood; results indicated that young adult parents who reported having regular family meals as an adolescent and as a parent (“maintainers”), or who started having regular family meals with their own families (“starters”) reported more healthful dietary intake, weight-related behaviors, and psychosocial outcomes compared to young adults who never reported having regular family meals (“nevers”). (34) A retrospective study by Friend and colleagues found that recalling frequent family meals during childhood was associated with engaging in family meals as a parent as well as having more family
meal routines and higher expectations for their family meals with their current family. Overall, qualitative work exploring intergenerational family meal transmission has found that a parents’ childhood mealtime experiences, good and bad, impact their choices about how to engage in mealtime with their own children; a common theme across several studies was that parents desire to improve upon their own eating experience to make things better for their child. Taken together, these quantitative and qualitative findings suggest that a parent’s own childhood experience with family meals has an impact on the routines and expectations they have for meals with their own family.

Using a subset of the Project EAT parent sample, this study sought to step beyond the field’s current knowledge of intergenerational family meal transmission by using a novel mixed-methods approach to provide rich description of what may influence the transmission of family meal patterns across generations. This mixed-methods study used one-on-one interviews completed during 2016-2017 with parents of preschool children (2-5 years), who also completed a survey during 2015-2016 as part of the ongoing Project EAT cohort study, to explore the similarities and differences among parents’ qualitative accounts of prior childhood experiences and current contextual factors around family meals across quantitatively-informed categories of family meal frequency patterns from childhood to now as a parent. By better understanding the reasons why certain parents maintain their parents’ family meal practices and others may diverge, results from this study may help to identify relevant opportunities for interventions that support all families in positive family meal experiences.

Methods

Study participants

Participants in the current mixed-methods study were Project EAT (Eating and Activity in Adolescents and Young Adults) participants that completed (1) a self-report survey at the first (1998-1999) and fourth (2015-2016) waves of Project EAT, and (2) a one-on-one interview as part of an ancillary study (i.e., Child Feeding Study) in 2016-2017 with Project EAT parents of children aged 2-5 years old. Project EAT is a longitudinal study on eating and weight-related health during the transition from adolescence to young adulthood, and in 2016-17, an ancillary qualitative study was conducted to further explore parents’ experiences of feeding their preschool-aged child and the factors influencing the choices they made about feeding. Parents of preschool-aged children were targeted in the ancillary study as both parents and the home environment are a primary influence for children in this young age group. The participant sample for the current study includes 40 parents. See Figure 1 for details on data collection and analysis timeline.

Participant recruitment

Project EAT study participants were recruited as students (n= 4746) in 1998-1999 from 31 public middle and high schools in Minneapolis-Saint Paul. Students completed self-report surveys and anthropometric measures during selected health/physical education classes. In 2015-2016, all participants in the original sample, who could be contacted, were invited to complete the EAT-IV survey (n=1830 completed the survey), which was designed to follow
up on the participants as they were progressing through young adulthood at a time of life when many participants would become parents. In 2016-2017, a convenience sample of EAT-IV parent participants was then recruited to participate in the ancillary Child Feeding Study. Eligibility criteria included having at least one child aged 2-5 years who lived with them at least 50% of the time at the time of the EAT-IV survey. Participants meeting this criteria (n=492) were then invited by email to participate in a study of qualitative interviews to learn more about parents’ experiences feeding their pre-school aged child. Participants were recruited in randomly selected batches of 20 parents and recruitment ended when theoretical saturation was reached. (40,41) Participant demographic characteristics are included in Table 1.

Data Collection

Quantitative.—At EAT I, participants self-reported demographic information on their sex, age, and ethnicity/race. At EAT-IV, participants self-reported their income, employment status, and educational attainment, in addition to the number of children they have, their ages, and their current custodial arrangement. At both time points participants reported family meal frequency by responding to the following question: “During the past seven days, how many times did all, or most, of your family living in your house eat a meal together?” Response options included: never, 1-2 times, 3-4 times, 5-6 times, 7 times and more than 7 times. [Test retest: (EAT-I r=.70), (EAT-IV r=.64)]. Responses to these questions were used to categorize participants into an intergenerational family meal pattern trajectory; the categorization scheme utilized was based on previous research conducted by Dr. Berge and colleagues (details below). (34)

Qualitative.—The research team conducting the parent interviews was comprised of one faculty member and three graduate research assistants. The research team members were between the ages of 20-40 years and represent a combination of Caucasian, Hispanic, and Asian racial/ethnic groups. Before data collection, a series of research team meetings were held where research team members were trained in qualitative data collection methods (42) and standardized interview protocols (43); to improve reliability and consistency of interview methods, research assistants conducted several practice interviews and observed at least one participant interview (conducted by KAL) prior to conducting interviews independently.

Semi-structured interview guides were used and questions covered a range of topics related to child feeding and weight-related behaviors. Questions specific to the current analysis of intergenerational transmission of family meal routines (Table 2) were based on: 1) Family Systems Theory tenets regarding intergenerational transmission of family patterns/practices, (44) 2) recommendations from the literature to explore intergenerational transmission of mealtime practices, (32) and 3) gaps in the extant literature on family meal routines and child feeding practices. Specific interview questions explored parents’ family meal practices when they were children, what practices they had transmitted to their own children, and the role of their partner and their partner’s upbringing in their current family meal practices; the overarching goal of these questions was to deepen our understanding of what might influence the intergenerational transmission of family meal patterns. The interview guide was first piloted with two content area experts, three graduate students, and four parents of
children aged 2-5 to make sure questions were clear, elicited in-depth discussion, and were acceptable to participants; feedback from pilot testing was used to modify the wording, content and order of interview questions prior to fielding.

Although interviews were semi-structured, probes were used to facilitate fuller responses to questions. Interviews ranged in length from 30 to 60 minutes. The majority of interviews (n=30) took place in a private room on the University campus, while 10 interviews took place over the telephone due to the participant not living locally or having other barriers to meeting in person (e.g., childcare challenges). There were no major differences between in-person interviews and phone interviews with regard to interview length and participant responses. Interviews were audio-recorded and written consent from participants was obtained before commencing the interview. All study protocols were approved by the University of Minnesota’s Institutional Review Board Human Subjects Committee.

Data Analysis

Quantitative.—Following the approach in Berge et al 2017, we first created a binary variable to define the regularity of family meals reported on the EAT-I (1998-1999) and at EAT-IV (2015-2016) surveys, with five or more family meals per week categorized as “regular”. Initially, four family meal frequency patterns were created including: nevers, starters, stoppers, and maintainers. ‘Nevers’ (n=4) reported not having regular family meals both at EAT-I and EAT-IV; ‘starters’ (n=23) reported not having regular family meals at EAT-I but having regular family meals at EAT-IV; ‘stoppers’ (n=3) reported having regular family meals at EAT-I but not at EAT-IV; and ‘maintainers’ (n=9) reported having regular family meals both at EAT-I and EAT-IV. Upon further review of participant responses, the “never” and “stopper” categories were collapsed and re-named “inconsistent,” as all participants reported eating at least some family meals at both time points, making “inconsistent” a more apt description of this group. Dr. Berge’s previous research using this categorization scheme found that family meal frequency patterns over time tended to be similar across the following sociodemographic characteristics: sex, race/ethnicity, SES and number of children living in the home; the lack of demographic differences between the “never” and “stopper” categories within the larger Project EAT sample provided additional evidence that collapsing these two categories was an acceptable approach. The current study builds on and expands this prior study by conducting an in-depth examination of parents’ perspectives of what factors influenced whether they continued the family meal routines (i.e., regular or irregular family meals) experienced in adolescence now as a parent.

Qualitative.—Audio-recorded interviews with parents (n=40) from the 2016-2017 ancillary study were transcribed verbatim and coded using a hybrid deductive and inductive content analysis approach using NVivo10 software (NVivo, QSR International Pty Ltd, Burlington, MA 2014). The hybrid deductive/inductive qualitative approach allowed the initial research questions to guide the development of the coding tree (deductive), while also allowing for unique data-derived concepts and themes to be identified (inductive). After an initial coding tree was created (by KAL), coding of all interview transcripts was conducted by two coders (KAL and MU) in multiple stages: 1) line by line coding of all interviews, and 2) organization of codes into initial themes/sub-themes. The two coders met after each stage.
of coding to review all coding decisions; discrepancies revealed at each stage were discussed until agreement was reached and then both coders moved on to the next stage. (47-49)

**Mixed Methods.**—The quantitative survey data and qualitative interview data were then merged during a final stage of analysis. In particular, after the initial round of coding and theme development, qualitative data were stratified by the three quantitatively-informed groups based on intergenerational family meal patterns (described above); “maintainers” (n=9), “starters” (n=24), and “inconsistent” (n=7). Codes and initial themes and sub-themes were then further analyzed using a matrix that facilitated comparisons across the three intergenerational family meals pattern groups. This process led to further refinement of overarching themes as well as sub-themes for each intergenerational family meal pattern group.

**Results**

We identified four overarching themes regarding influences on intergenerational transmission of family meals, including: 1) early experiences; 2) influence of the partner; 3) household skills, and 4) parent priorities. For each of these overarching themes, sub-themes were identified within each of the intergenerational family meal pattern groups (maintainers, starters, inconsistent). Below, we provide a description of each overarching theme (bolded for emphasis) and sub-themes for each family meal pattern group (underlined for emphasis) along with illustrative quotes. Table 3 highlights overarching themes, sub-themes, and associated quotes by intergenerational family meal pattern groups.

**Early Experiences.**

The majority of participants in the “maintainers” family meal pattern recalled family meals as being expected and reported having positive memories associated with eating family meals during childhood and adolescence. For many, these positive memories played a role in their decision to continue the tradition of family meals with their own children. For example, “I mean, I always really enjoyed that time of like sit down and conversation, and my dad would even quiz me on like math problems, so it was kind of like an interactive time. I wouldn’t say it was chaotic by any means. It was definitely like a sit-down meal, and that, to me, growing up I think was a huge — I mean, if I remember it so vividly, I would call it a pretty impactful moment, so that’s kind of the same moments we’re trying to carry forward to my kids as well.” (Father)

Participants in the “starters” family meal pattern described having mixed memories of their early meal experiences with some participants describing occasional meals eaten together and others not having any strong childhood memories of eating with their family. For example, one participant said, “Growing up, I came from a family that, if we remembered to eat, it was great, but no one in my family was really big on food [or eating together].” (Mother) Further, many participants in this group talked about having fewer opportunities to learn or practice food preparation or meal planning skills during childhood. For example, “I’ve tried to change [from how things were when I was a child], because my mom was one who never meal planned, and we ate out a lot, tons. And so I’d come
home from school, and I remember my mom would be standing at the pantry looking in there, being like, “What should we have for dinner?” You know, it’s 4:30, and then she didn’t know or she didn’t have groceries, so we’d get in the car and we’d go out to eat.” (Mother)

Several families in the “inconsistent” pattern discussed having fewer memories or less positive memories of eating family meals as a child. One participant recalled,

“So I guess I remember we [my sisters and mom] used to take turns cooking dinner or something like that, but I don’t remember a lot of meals besides special occasions or holidays.” (Mother)

Role of Partner

The majority of parents in the “maintainers” pattern discussed the fact that their partners shared a similar childhood tradition of eating regular family meals, which made it easy for them to prioritize carrying forward this same tradition with their children. For example,

“We both [my wife and I] were raised in a family that always ate together. Always.” (Father)

The few participants in this pattern whose partners did not eat family meals during their childhood discussed that their partner seemed to appreciate or understand the value of family meals, despite not having engaged in them themselves. One participant described,

“I think, once we started combining our two ways of doing things when we first were married, he just kind of naturally felt more comfortable about my way of doing things, …and so he seemed to kind of like my way of doing things better, and so that’s kind of just how we naturally fell into place before we had kids, and that has continued with the kids.” (Mother)

Several participants in the “starter” pattern shared that it was the influence of their partner that led them to start to eat family meals, as their partner brought with them new family traditions or values around eating together. As described by one participant,

“They [husband’s family] always had a really strong family base and doing — like they’d always eat together, and wash the dishes after meals. That was always their big thing. And so we (my husband and I) kind of brought that into our home and helping out afterwards and washing dishes and having the family environment is important to us.” (Mother)

Several families who were part of the “inconsistent” family meal pattern discussed the role that work and schedule conflicts with their partner played in their inability to have consistent family meals. Some participants talked about how eating together was a priority for their family and emphasized that when their schedule allowed them to, they always took advantage by having meals with their family. For example, one participant said,

“Well, this summer I was on first shift at my work. I was able to get off at 3:00 in the afternoon, and come get the kids, and come home and make dinner, but now I’ve got shifted back to the second shift, so currently it’s just my wife and those two at dinnertime. Sometimes I’ll get home early enough, and they’ll be still sitting
at the table, and I’ll join them, then generally all four of us around the table, trying to have a family meal, with no distractions.” (Father)

**Household Skills**

Many participants across meal pattern groups discussed the impact that specific household skills had on their ability to eat home-cooked family meals. Participants in the “maintainer” pattern noted that either they or their partner (or both) felt confident in their food preparation and meal planning skills, which made it easy for them to carry on the tradition of family meals. For example, one participant said,

“We are absolutely comfortable (cooking). We watch cooking shows and have far too many cookbooks that we never read, and cooking emails. Yeah, we keep working on it, and we’ll try something and it won’t work, and we’ll try it again a little bit differently the next time.” (Mother)

Participants in the “starter” category exhibited some diversity around who possessed the household skills but in all instances at least one of the parents had developed the skills for family meals. Several indicated that they developed cooking skills during adulthood and went beyond their own parents’ skills, which made them more confident to prepare a wider variety of foods for their family. For example, “My mom always laughs and says, ‘I don’t know where your cooking skills came from’, but you just learn. You just do and learn and practice and try.” (Mother) Some also discussed developing meal planning skills which allowed them to plan ahead for the shopping and food preparation that goes into making a family meal. Alternatively, some participants discussed the important role of the cooking and meal planning skills that their partner brought into their household. For example, one participant said, “His parents were very good cooks and adventurous with their cooking style, so I think that he has that too and brings that in, where he’ll just kind of cook anything and try anything.” (Mother)

The cooking and meal preparation skills described by participants in the “inconsistent” pattern were quite mixed; some participants described feeling limited by their lack of skills, whereas others noted that they had the skills they needed to plan and prepare meals, but did not do so consistently for a variety of other reasons. For example,

“Well, I’m not really much of a cook, so I’ve got two meals, and part of it is because if I’m cooking, it’s because [my husband] working late, and so I’m watching two kids and trying to put a meal together. So my cooking involves frozen pizza, chicken nuggets, fish sticks, mac and cheese, like really simple food that the kids actually eat.” (Mother)

Further, some participants described feeling like only one adult in their family had the skills needed, which meant that when that person was not available then family meals were not eaten. For example, one participant said,

“My wife’s a really good cook, and I could burn water. Yeah, so I — so that’s something that I actually want to get better at, because whenever my wife’s gone, then I find myself relying on a frozen pizza or macaroni and cheese. … I want to give my kids a good base for growing up, you know, that they start getting the good
habits in. But right now, I don’t know. That’s kind of my wheelhouse—is easy, unhealthy things, or like eating out at [fast food locales].” (Father).

Parent priorities

Many participants who had maintained, or carried on the tradition of eating family meals with their own family, discussed how their desire to maintain this tradition with their family significantly influenced their practice of having family meals as a parent. Several participants in the maintainer pattern also reflected on the types of foods they ate growing up and noted that they have prioritized preparing and serving healthier food options for their children. For example one participant said,

“And so, you know, I’m trying to break the cycle and give her more variety and things than I was ever exposed to when she is a kid, so I can show my kids and give them a good base for cooking at home and family dinners and things like that.” (Mother)

Another participant stated,

“I would say we try and eat ourselves and feed our daughter less processed kind of foods than we probably ate growing up. I mean, I remember growing up eating a lot of like frozen microwave stuff like for a snack or something. My mom would always cook like a good meal for dinner, but for a snack or lunch when I’m on my own or whatever, you know, and I would just eat a lot of processed junk. I probably drank a lot more pop. We’re trying not to do that.” (Father)

Participants within the starter pattern discussed the significance of making family meals a priority; some talked about rearranging work schedules or limiting evening activities, whatever needed to be done to make sure that they preserved this time with their family for most evenings. For example, one participant said,

“I remember having specific like conversations, especially when you’re signing your kids up for sports and you’re looking at times. If there were options, we’d always sign up for a later time so we could make sure it didn’t run into the dinner hour. Now, it could change when they’re older, … but I love our dinnertimes together.” (Mother)

A few parents within the starter pattern talked about the desire to do things differently with their children from the way their parents had done things with them. Some parents discussed this desire broadly, for example, one parent said: “I’ve intentionally done things differently (than my parents)” (Mother), whereas another said, “So some traditions we’re trying to carry on and then other things we’re intentionally going against, you know, a reversal of what we grew up with.” (Father) Other parents were more specific about these differences; for example, one parent discussed trying to limit eating out through meal planning,

“Yeah, I’ve really tried to change, because my mom was one who never meal planned, and we ate out a lot, tons. [Now] we probably eat out once a week, or we get pizza once a week because it’s fun for the kids, and it gives me a break, honestly, once a week. But I have tried to meal plan so we wouldn’t be eating out so much— so I would have all the groceries for the week.” (Mother)
For families in the “inconsistent” meal pattern category, preparing and eating dinner together as a family was not or was inconsistently a top priority. Some participants talked about prioritizing “relaxed rules” over strict mealtimes together as a family. Many participants in this group discussed general inconsistency in their expectations for mealtimes. As one participant said,

“I find myself being like, ‘Okay, come sit down. Okay, come sit down. Come sit down.’ And it’s like — so I think it’s good for him. I’m like, ‘Please come up here and eat.’ But sometimes I’m like, ‘Whatever. I don’t care. Sit under the table.’ So I’m not super consistent at all.” (Mother)

**Discussion**

This mixed-methods study aimed to expand current knowledge of intergenerational family meal transmission by illuminating how parent perceptions/accounts about what influences family meals map onto intergenerational family meal patterns. Specifically, this study used one-on-one qualitative interviews with parents to understand childhood experiences and current contextual factors around family meals across different quantitatively-informed categorizations of intergenerational family meal patterns. Findings revealed salient variation within each overarching theme around family meal influences (early childhood experiences, influence of partner, household skills, and family priorities) across the different intergenerational family meal patterns (maintainer, starter, inconsistent), in which Maintainers had numerous influences that supported the practice of family meals; Starters experienced some supports and some challenges; while the Inconsistent group experienced many barriers to making family meals a regular practice.

Participants who reported eating frequent family meals during adolescence as well as during adulthood (maintainers) shared a common set of early childhood experiences that led them to prioritize carrying on the tradition of eating family meals; eating meals with their family during their childhood was expected and routine, as well as an overall positive experience. Many maintainers had partners that either shared a similar tradition of eating family meals, or, at minimum, appreciated the value of adding this type of routine to their current family. Finally, one or both partners possessed the skills needed to plan and prepare family meals. Interestingly, several participants in this category discussed their goal to serve healthier food to their children than they ate as a child; for these participants it seemed that because they came into adulthood with the skills needed to prioritize, plan and prepare family meals, they felt capable of working to improve upon the types of foods served during their childhood.

For the participants who did not engage in frequent family meals as children, but began to engage in family meals as adults (starters), the “desire to do things differently” with their own family was frequently discussed. Their desire to do things differently led them to prioritize eating meals with their family and to work to overcome barriers, such as lack of cooking or meal planning skills in order to make this priority a reality. For some, this meant that they taught themselves to cook or spent time developing organizational skills and planning strategies that extended well-beyond what they learned from their own parents. For others, their partner played a strong influential role in their ability to begin the tradition of
eating family meals by bringing new traditions or skills sets into their relationship that made eating regular family meals more doable.

The group of participants who only engaged in family meals inconsistently or irregularly, both during childhood and with their own families (inconsistents), was quite heterogeneous in terms of what kept them from eating regular family meals. Some members of this group placed a high value on family meals, but faced significant barriers, including challenging schedules and limited cooking/meal planning skills, that interfered with making regular family meals a reality. Some of these participants talked about how they would eat family meals when their schedules permitted (e.g. weekend mornings or holidays). Other individuals in the “inconsistent meal pattern” discussed the role of competing priorities; for example, a few parents talked about prioritizing their child’s freedom to eat when and where they wanted, over eating as a family. Overall, this group reported fewer memories or less positive memories of eating family meals as a child, and faced several barriers including inconsistent levels of cooking and food preparation skills and challenging evening schedules.

The extant literature on routines and rituals provides a useful framework to assist with interpretation of the findings from this mixed methods study. (50) Family routines and rituals both refer to specific, repeated practices that involve two or more family members. (50) Yet they are distinct and can be contrasted along the dimensions of communication, commitment, and continuity. (50) Family routines are characterized by communication that is instrumental (e.g. this is what needs to be done), involve a momentary time commitment, and are repeated regularly, but hold special meaning. (50) Family rituals, on the other hand, involve symbolic communication (e.g. this is who we are). (50) The time commitment and continuity involved in the performance of rituals moves beyond the current moment and can include repetition across generations. (50) Although rituals and routines are distinct, they are often interwoven in daily interactions. Family meals are frequently used as an example of an activity that is not purely a routine or a ritual, but rather contains features of both. (51,52) Findings from the present study highlight examples of the blending of ritual and routine and themes that emerged suggest that the strength of meal-related routines and rituals play a role in the intergenerational transmission of family meals. For example, it is easy to identify the role that firmly established routines (e.g. food preparation and meal planning skills) and rituals (e.g. value placed on the tradition of meals eaten together) played in the maintenance of regular family meals from one generation to the next, whereas families within the inconsistent intergenerational family meal trajectory described fewer routines and rituals surrounding meals, both during childhood and adulthood. Families in the starter trajectory described working to develop and maintain routines that allowed them to start having regular family meals; perhaps maintenance of these routines over time will allow these family meals within these families to become more of a ritual. Future research on family meals should continue to explore the role of routines and rituals in the maintenance and disruption of intergenerational family meal patterns; and, interventions focused on the maintenance of family meals or seeking to encourage families to begin eating together should consider using a routines and rituals framework to guide their program development.

Findings from this mixed-methods study support and extend prior quantitative work on intergenerational transmission of family meals (32,33,36,53) by providing rich, detailed
information on factors that distinguish how different family meal patterns are passed between generations. That said, it should be noted that although study participants were drawn from a large, population-based sample, this sample is overrepresented by white, upper middle class, college educated parents and therefore is not representative of the population at large. Future work should seek to understand if parents of diverse racial/ethnic and socioeconomic backgrounds describe similar factors as influencing intergenerational family meal transmission. Further, given that “influence of partner” emerged as a salient theme, future research on intergenerational transmission of family meals should consider collecting information from both parents. Finally the number of participants within each of the family meal pattern groups was relatively small and findings should be interpreted with this limitation in mind. Future research should consider the use of cluster analysis to investigate whether salient subthemes identified within this small sample exist at a population level.

Conclusion

The current study adds significantly to the literature by illuminating specific details about what may influence the transmission of family meal patterns across generations (early experiences, partners, skills, priorities) and identifying specific opportunities for clinicians and public health professionals to intervene to support positive family meal experiences for all families. Specifically, clinical and public health interventions should seek to provide young people with opportunities to learn and practice cooking and meal planning skills during adolescence or young adulthood. Across groups, possessing cooking and planning skills was paramount to making regular family meals a reality; among maintainers these skills were ingrained, allowing them to move toward a focus on improving the healthfulness of meals served, whereas among starters, these skills were developed, allowing them to take on the new tradition of having regular family meals, and among the inconsistent group, lack of skills was cited as a barrier. Study findings also suggest the important role that partners play in the development and maintenance of household routines, indicating that future family meal interventions should seek to reach all adults within the home environment. Finally, given the important role that childhood memories played in the transmission of family meals across generations, an effort should be made to reach out to parents for whom family meals during their childhood were not routine or positive, with the goal of helping them to develop an understanding how and why they might work to incorporate this tradition/ritual into their own family; primary care providers should consider facilitating a discussion with parents about their former and current family meal routines, as well as educating parents on the health benefits of shared mealtimes, during pediatric primary care visits.

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Fig. 1.
Data collection and analysis flowchart (EAT-I, wave 1 of Project EAT; EAT-IV, wave 4 of Project EAT; Project EAT, Eating and Activity in Adolescents and Young Adults)
Table 1.

Intergenerational Family Meal Patterns by Participant Demographic Characteristics

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<th>Demographic Characteristics</th>
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<td>Maintainers</td>
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<td>Age</td>
<td>31.2 (1.3)</td>
<td>31.6 (1.2)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>33.3 (3)</td>
<td>20.8 (5)</td>
</tr>
<tr>
<td>Female</td>
<td>66.7 (6)</td>
<td>79.2 (19)</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>66.7 (6)</td>
<td>83.3 (20)</td>
</tr>
<tr>
<td>Parents of color</td>
<td>33.3 (3)</td>
<td>16.7 (4)</td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $50,000</td>
<td>33.3 (3)</td>
<td>16.6 (4)</td>
</tr>
<tr>
<td>$50,000 - $99,999</td>
<td>33.3 (3)</td>
<td>45.8 (11)</td>
</tr>
<tr>
<td>$100,000 or more</td>
<td>33.3 (3)</td>
<td>37.5 (9)</td>
</tr>
<tr>
<td>Employment Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working full time</td>
<td>77.8 (7)</td>
<td>70.8 (17)</td>
</tr>
<tr>
<td>Working part time</td>
<td>22.2 (2)</td>
<td>16.7 (4)</td>
</tr>
<tr>
<td>Stay at home caregiver</td>
<td>0 (0)</td>
<td>12.5 (3)</td>
</tr>
<tr>
<td>Educational Attainment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school or less</td>
<td>0 (0)</td>
<td>4.2 (1)</td>
</tr>
<tr>
<td>Technical school or Associate’s Degree</td>
<td>11.1 (1)</td>
<td>20.8 (5)</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>66.7 (6)</td>
<td>50.0 (12)</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>22.2 (2)</td>
<td>25.0 (6)</td>
</tr>
<tr>
<td>Number of Children</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>44.4 (4)</td>
<td>33.3 (3)</td>
</tr>
<tr>
<td></td>
<td>8.3 (2)</td>
<td>75.0 (18)</td>
</tr>
<tr>
<td>Demographic Characteristics</td>
<td>Intergenerational Family Meal Patterns</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maintainers</td>
<td>Starters</td>
</tr>
<tr>
<td>N=9</td>
<td>N=24</td>
<td>N=7</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>3+</td>
<td>22.2 (2)</td>
<td>16.7 (4)</td>
</tr>
</tbody>
</table>

Relationship Status

- Single, casually dating: 0 (0) | 12.5 (3) | 0 (0)
- Committed relationship: 22.2 (2) | 4.2 (1) | 14.3 (1)
- Married, Domestic Partner: 77.8 (7) | 83.3 (20) | 85.7 (6)

Note: ‘Maintainers’ (n=9) reported having regular family meals both at baseline and 15-year follow-up. ‘Starters’ (n=24) reported not having regular family meals at baseline but having regular family meals at 15-year follow-up. ‘Inconsistents’ (n=7) reported having infrequent/irregular family meals at baseline and at 15-year follow-up. (See manuscript for details.)
Semi-structured interview guide

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) To start out, can you tell me a little bit about how meals and snacks look for your child? For example, I am interested in learning…</td>
</tr>
<tr>
<td>2) <strong>When</strong> do you feed your child a meal/snack?</td>
</tr>
<tr>
<td>3) Who decides <strong>what</strong> your child will eat for a meal/snack?</td>
</tr>
<tr>
<td>4) Is your child allowed to help themselves to food without asking you first?</td>
</tr>
<tr>
<td>5) Who decides <strong>how much</strong> food your child eats for a meal/snack?</td>
</tr>
<tr>
<td>6) What do you do if your child <strong>refuses</strong> to have certain foods put on their plate (or refuses to eat certain foods they are served)? Is this always handled in the same way or does it change?</td>
</tr>
<tr>
<td>7) How is it handled if your child says they are done eating/no longer hungry but there is still food left on their plate or you feel like they have not eaten enough?</td>
</tr>
<tr>
<td>8) How is it handled if your child wants more food than you put on his or her plate (or than they put on their plate)? More snack during a snack time?</td>
</tr>
<tr>
<td>9) We have talked today about many different decisions you make about how to feed your child. Are there any guidelines, rules or routines that you follow when feeding your child that I did not ask about?</td>
</tr>
<tr>
<td>10) In what way, if at all, do you feel like the way meals looked for you as a child has impacted what you do with your child?</td>
</tr>
<tr>
<td>11) In what way, if at all, do you feel like the way meals looked for you as a child has impacted what you do with your child? (<em>additional probes that touched on rules, routines, types of foods, family meals</em>)</td>
</tr>
<tr>
<td>12) How about your partner and the way they were brought up – do you feel like that has had any impact on what you do with your child? (<em>additional probes that touched on rules, routines, types of foods, family meals</em>)</td>
</tr>
<tr>
<td>13) How did it go for you and your partner to blend together the different experiences you had growing up as you developed your own family routines?</td>
</tr>
</tbody>
</table>
Table 3.

Overarching qualitative themes and sub-themes across quantitative intergenerational family meal patterns

<table>
<thead>
<tr>
<th>Quantitative Categories</th>
<th>Overarching Themes</th>
<th>Qualitative Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intergenerational Family Meal Patterns</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintainers (n=9)</td>
<td>Early Experiences</td>
<td>Meals were expected, routine</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Positive memories of family meals</td>
</tr>
<tr>
<td></td>
<td>Influence of Partner</td>
<td>Partners shared similar tradition of eating family meals OR appreciated the value of family meals</td>
</tr>
<tr>
<td></td>
<td>Household Skills</td>
<td>One or both adults felt confident in their cooking and meal planning skills</td>
</tr>
<tr>
<td></td>
<td>Family Priorities</td>
<td>Desire to maintain tradition of family meals</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eager to prepare and serve healthier food than they ate during childhood</td>
</tr>
<tr>
<td>Starters (n=24)</td>
<td>Early Experiences</td>
<td>Mixed memories of family meals</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fewer opportunities to learn or practice food preparation or meal planning</td>
</tr>
<tr>
<td></td>
<td>Influence of Partner</td>
<td>Partner brought with them new family traditions or values around eating together</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Partner had cooking or meal planning skills</td>
</tr>
<tr>
<td></td>
<td>Household Skills</td>
<td>Developed cooking and meal preparation skills during adulthood</td>
</tr>
<tr>
<td></td>
<td>Family Priorities</td>
<td>Making family meals a priority</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Desire to do things differently</td>
</tr>
</tbody>
</table>

Example Quotes

For my parents, it was really important to have dinner together every night.

I love the memories of, you know, how your mom or your dad take care of you, you know, feeding you when you’re little. That also affects how I do it with my children.

Yes, because I think we both grew up eating family dinners, different types of dinners, but, I mean, it was something that was important for us, to eat dinners together, and we both grew up where our parents would cook.

I’ve got great cooking skills. They like everything. I mean, that’s why I think I enjoy cooking for them, because they really like it, so, yeah. She [my wife] can make anything, I can make things that require like three or four steps.

I think family dinners were very important, to us, to me growing up, and they remain important.

I try to do a lot more mixture, a lot more fruit and vegetables, than I was exposed to.

When I was young] we didn’t eat together often, or it was, you know, when we did it was always a convenience food or kind of a gross food, like frozen meals usually or take-out Chinese kind of thing.

We eat dinner out a lot, like at least three or four times a week, and my parents still do that.

My husband’s family was always really big into family dinners, and his mom cooked more Mexican meals, so he enjoys more like the Mexican meals than the rest of us because that’s his heritage. And so he brings in that tradition and cooking skills.

I guess, I mean, when I was younger and my cooking skills, they weren’t that great. I had to try things a couple of times before I got it right, and the more I did it, the better it was, and so I think that maybe that’s why — and I like doing it.

But I know that was something that she [my wife] stressed when we had our son and now daughter, we would all sit down and have a dinnertime meal, at least when we were able to.

I have three brothers, so [in childhood] we’d all kind of be at our own schedule. So I really wanted to change that [as a parent], and that’s why I always sit at the kitchen — or, you know, at the dining room table, and then we always talk about what was the worst part of your day, what was the best part of your day, so that we’re talking, we’re all together.
<table>
<thead>
<tr>
<th>Quantitative Categories</th>
<th>Overarching Themes</th>
<th>Sub-themes</th>
<th>Example Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intergenerational Family Meal Patterns</td>
<td>Early Experiences</td>
<td>Fewer memories or less positive memories of family meals</td>
<td>[We didn’t eat together], not very often. I was — once I hit probably high school, it would be come up, grab a plate, go downstairs to my room, in front of the TV, or something like that.</td>
</tr>
<tr>
<td></td>
<td>Influence of Partner</td>
<td>Work or schedule conflicts</td>
<td>Well, I am a stay-at-home mother, so it’s me and her all the time, and my husband works a lot, so pretty much all meals, except for one or two meals a week, are just me and her.</td>
</tr>
<tr>
<td></td>
<td>Household Skills</td>
<td>Inconsistent levels of cooking and food preparation skills.</td>
<td>Like maybe if I had more skills and knew how to — like my parents never really cooked when I was little, they just made like Hamburger Helper, or taught me how to make Hamburger Helper, or mac and cheese, and I don’t think that’s really cooking anything. It’s just kind of fixing the box. So I think like if I had more experience and more skills, I probably would know how to make more things that don’t take so much time and effort.</td>
</tr>
<tr>
<td></td>
<td>Family Priorities</td>
<td>Preparing and eating dinner together is not a priority.</td>
<td>So it is very all over the place. Some days … it’s like, “We didn’t even have lunch today,” or I pick him up [from daycare] and he falls asleep before he can even eat dinner, and I’m just like ‘whatever. He needs to sleep, too.’ So I guess it’s just based on our culture and the human body.</td>
</tr>
</tbody>
</table>