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# Understanding Parental Ethnotheories and Practices About Healthy Eating: Exploring the Developmental Niche of Preschoolers

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#### **Abstract**

**Purpose:** To understand parental ethnotheories (*i.e.*, belief systems) and practices about preschoolers' healthy eating guided by the developmental niche framework.

**Design:** Qualitative hermeneutic phenomenology.

Setting: Home.

**Participants:** Participants were 20 parents of preschool-age children ages 3 to 5 years, recruited from a quantitative investigation. A majority of the participants were white, female, married, well educated, and working full time.

**Methods:** Participants who completed the quantitative survey were asked to provide their contact information if they were willing to be interviewed. From the pool of participants who expressed their willingness to participate in the interviews, 20 participants were selected using a random number generator. In-person semistructured interviews were conducted until data saturation (n = 20). Thematic analysis was performed.

**Results:** Three themes and 6 subthemes emerged: theme 1—parental ethnotheories about healthy eating included subthemes of knowledge about healthy eating, motivations to promote healthy child development through healthy eating, and sources of knowledge about healthy eating (*e.g.*, doctors, social media, government guidelines, positive family-of-origin experiences); theme 2—parental ethnotheories that supported organization of children's physical and social settings included structured mealtime routines and food socialization influences (*e.g.*, grandparents, siblings, and childcare programs); and theme 3—parental ethnotheories that supported children's learning about healthy eating included parent–child engagement, communication, and encouragement in food-related activities (*e.g.*, meal preparation, visiting farmer's market, grocery shopping, gardening, cooking, baking).

**Conclusion:** Findings advance the literature on parental practices about healthy eating. Parental ethnotheories (*e.g.*, beliefs, motivations, knowledge, and skills) matter. Developmental niche of preschoolers (*i.e.*, physical and social settings, childrearing practices, and parental ethnotheories) constitutes an interactive system in which ethnotheories serve as guides to parental practices. Fostering nutrition education and parent–child engagement, communication, and encouragement in food-related activities are recommended to promote children's healthy eating in daily routines.

**Keywords:** preschoolers, healthy eating, daily routines, parental ethnotheories, parental feeding practices, developmental niche

## **Purpose**

Poor dietary habits in young children are associated with childhood obesity and related chronic diseases. Although research has been conducted to improve eating behaviors among children, focus on young children's sociocultural environment and parental feeding practices is limited but continues to be of utmost importance for childhood obesity prevention. Evidence suggests that children's eating behaviors are developed in early childhood and that parents play a key role in shaping children's healthy eating habits. 6-8

Parents have the potential to create healthy eating environments at home by adopting healthful practices. For example, among preschool-age children, parental practices that are associated with children's healthy eating include home availability of vegetables and fruits,<sup>4,9</sup> mealtime structure,<sup>8</sup> autonomy support, <sup>5</sup> parent role modeling,<sup>10</sup> and family food involvement such as meal planning, shopping, and cooking.<sup>11</sup> Parental practice is a broad term that refers to behavioral strategies the caregiver uses for "child-rearing purposes that influence child's attitudes, behaviors, or

beliefs."<sup>5(p99)</sup> Healthy eating is an umbrella term that refers to consumption of foods from all food groups including fruits, vegetables, protein, grains, and dairy that supply necessary nutrients for children's growth and development.<sup>12</sup>

While the aforementioned research has focused on parental practices that support children's healthy eating, 5,8,10,11 less is known about parental ethnotheories about healthy eating which are important parent characteristics that influence parent feeding practices and young children's healthy eating. Parental ethnotheories are culturally structured belief systems about child development and childrearing practices that are developed in the course of growing up in their culture. 13-15 Parental ethnotheories also include implicit beliefs, values, expectations, motivations, ideas, attitudes, and ways of thinking. 15,16 Parental ethnotheories about child development and parental practices are widely studied in cultural anthropology. 14,15,17-19 Drawing from this literature, it is important to study parental ethnotheories in relationship with parental practices that shape children's healthy eating for many reasons. Firstly, ethnotheories help to explain what parents value and prioritize. 15,17,20,21 If parents do not view healthy eating as promoting their child's health, they may be less likely to engage in healthy practices for themselves and their children. Secondly, ethnotheories reflect the way parents think and act. 14,15,17,20,21 Therefore, studying parental ethnotheories can help us understand what motivates parents to organize the home environment and everyday routines in ways that support their children's healthy eating and development. 15,20,21 Finally, because parents are the proximal influences in terms of care, feeding, and education of young children including the transmission of shared cultural understandings, 15,18,20,21 studying ethnotheories about healthy eating can shed light on how culture and family-of-origin experiences influence parental practices to support young children's healthy eating.

To better understand parental ethnotheories about young children's healthy eating and how they influence parental feeding practices, this study is guided by the developmental niche framework. This framework considers children's physical, social, and cultural environments of daily routines and how they interact to influence healthy child development and parental practices. Super and Harkness Proposed that children's developmental niche is composed of 3 interacting systems that together form the cultural context of child development: (1) the physical and social settings of the child's everyday life, (2) culturally regulated customs of childcare and child rearing, and (3) parental ethnotheories or parents' cultural belief systems. Parental ethnotheories implicitly influence

children's physical, social, and cultural environment of daily routines and is a potential guide to understanding household factors that influence health outcomes. <sup>14,15</sup> Thus, the objectives of this study were to understand (1) parental ethnotheories and practices about healthy eating and (2) how parental ethnotheories about healthy eating are instantiated in preschoolage children's developmental niche.

# **Approach**

A qualitative hermeneutic phenomenological design<sup>22</sup> was used to capture the lived experiences of participants in order to expand scientific understanding of the content and contexts of parental ethnotheories about preschool-age children's healthy eating that shape parental practices in daily routines. The concept of lived experience emphasizes individuals' inner world of subjective feelings as well as the lived situation.<sup>22</sup> In this study, the nature of the phenomenon (*i.e.*, ethnotheories and practices about children's healthy eating) required a deeper understanding of parental ethnotheories and parental practices that occur in everyday routines and settings.

## Setting

Participants for this study were drawn from a larger quantitative investigation that had preschool-age children enrolled in the childcare centers/preschools.

#### **Participants**

Participants were 20 parents of preschool-age children ages 3 to 5 years (see Table 1). From the 188 participants who completed the survey in the larger quantitative investigation, 113 expressed willingness to be part of a qualitative interview. Potential participants were randomly selected from that pool. All parents who were contacted agreed to participate. Twenty primary caregivers participated, including 15 mothers, 2 female guardians (mean age: 35 years), and 3 fathers (mean age: 33.3 years). A majority of the participants were white, female, married, well educated, employed full time, and had an annual household income ranging from \$15 000 to \$90 000.

 Table 1. Characteristics of Study Participants.

Characteristics	N	
Primary caregiver		
Mother	15	
Father	3	
Guardian	2	
Ethnicity		
White	19	
Black	1	
Education		
Did not finish high school	1	
Finished high school/got General Education Diploma (GED	) 2	
Some college/training after high school	3	
Finished college	10	
Advanced degree	4	
Current work situation		
Working full time	16	
Working part time	2	
Stay at home caregiver	1	
Currently unemployed	О	
Not working for pay	1	
Annual gross household income		
Less than \$15,000	О	
\$15,000-\$29,999	3	
\$30,000-\$44,999	3	
\$45,000-\$59,999	1	
\$60,000-\$74,999	3	
\$75,000-\$89,999	3	
\$90,000 or more	7	
Primary caregiver marital status		
Single,	4	
Married	14	
Divorced	2	
Widowed	О	
Total number of persons (adult & children) living in the hous	ehold	
1-2	4	
3-4	13	
5-6	3	
7-8	О	
9-10	О	
11 or more	0	

#### Table 2. Parent Interview Protocol.

#### Interview Questions

- 1. What is the meaning of healthy eating?
- 2. Describe to me a healthy child. What does being a healthy child mean to you?
- 3. Describe for me the things parents can do to help their preschool children develop in a healthy way.
- 4. Describe your child's weekday/weekend family mealtimes (*e.g.*, breakfast, lunch, and dinner).
- 5. What are your family-of-origin experiences/memories around healthy eating during your childhood years?
- 6. How are your beliefs about healthy eating similar or different from your family-oforigin experiences?
- 7. What kind of food-related activities do you like to do with your child?
- 8. Is there anything else that you would like to share?

#### Methods

#### Data Collection

Interviews were conducted until saturation when additional data did not contribute new information to coded categories. <sup>23,24</sup> Participants received a \$25 gift card for participating and all participants provided informed consent before the interview. Individual in-depth interviews were conducted in a place selected by the participants such as participant's home, public place, and the university campus. This study was approved by the university institutional review board (IRB). The IRB approval number is: 20140414121 EX. Interview questions were semistructured and guided by the components of developmental niche theoretical framework. Each question included probe questions to elicit further detailed responses. Experts in qualitative research guided development of the protocol (see Table 2).

#### Analysis Strategies

All interviews were transcribed professionally, checked for accuracy, and analyzed by the lead author using MAXQDA Version 11 qualitative software. Each transcription was also independently analyzed and checked for accuracy by the second author. Thematic analysis was conducted using<sup>22</sup> a 3-step approach. Step 1 was holistic reading, which involved reading the entire text to make sense of the data. Step 2 was selective reading, which

involved looking for statements or phrases to sort the data into segments of information. Step 3 was a line-by-line reading in which codes were assigned to the segments of information. The coding process included extracting and connecting codes into themes and subthemes.<sup>25</sup> Seventeen codes were identified. Overlapping codes were combined and grouped into 3 themes and 6 subthemes that were checked again for accuracy by the research team.

Several steps were taken to ensure the quality and credibility of this hermeneutic phenomenology study. First, the researchers followed 4 rigor/ evaluation criteria recommended for hermeneutic phenomenology: orientation, strength, richness, and depth.<sup>22</sup> Orientation ensured that the researcher was involved in the psychological and social world of the research participants and their stories (e.g., field notes). Strength was maintained to understand the meanings as expressed by the participants through their stories (e.g., by reading through each transcript several times). Richness was accomplished by maintaining the meanings as perceived by the participants (e.g., participant quotes). Depth was maintained by reading transcripts to capture participants' voices (e.g., themes and subthemes). Second, the evaluation criterion was maintained by using procedures of interpretative phenomenological analysis for coding.<sup>25</sup> Third, the lead author discussed the coding process with the research team which included experts in child development and qualitative methodology. Fourth, the research team discussed the codes for credibility. The lead author coded the transcripts initially and then the research team reviewed each code and theme to reach consensus. The lead author and the research team verified that the themes were supported by the codes and quotations. Finally, the lead author used reflexivity<sup>26</sup> to make explicit potential biases and emergent patterns of themes and subthemes as the study progressed. The lead author who conducted the interviews continuously engaged in reflexivity throughout the interviews and during data analysis. Having a cultural background different from the participants, her definition and experience about food and healthy eating may have been different from the participants' experiences. Furthermore, the lead author was careful not to interpret the data according to her own beliefs and assumptions. Instead, she constantly referred to the objective and subjective field notes for maintaining reflexivity. Objective field notes documented all aspects of data collection (e.g., describing the setting for each interview such as location, time, and date) and subjective notes documented reflections that allowed the researcher to reflect on her own preconceived notions about healthy eating,

especially having received training and certification in childhood obesity prevention. It was important that the lead author suspends her own definitions of healthy eating and respects the views of the participants about the phenomenon. Additionally, having regular consultation with the research team minimized the likelihood that the lead author's personal biases influenced the interpretation of the data and ensured that the findings remained grounded to the data.

#### **Results**

Three overarching themes and 6 subthemes were derived from the qualitative data analysis.

### Theme 1. Parental Ethnotheories About Healthy Eating

1a. Parents' meaning-making of healthy eating. Participants' meaning-making about healthy eating demonstrated favorable attitude and knowledge of healthy foods (e.g., fruits and vegetables, proteins, dairy, and whole grains). Participants discussed the consequences that resulted from their child eating healthy foods such as better "energy levels," high "immunity" levels, good physical behavior, good eyesight, and good brain activity. Healthy eating as understood by participants included good diet, eating appropriately from basic food groups, eating lots of fruits and vegetables, trying different healthy foods, healthy snacks, eating in moderation, no junk food, and not being obese and overweight. Participants reported that their children ate healthy foods as part of their breakfast, lunch, snacks, and dinner. Furthermore, participants often described healthy eating in terms of creating a "balance" between eating "right foods" and "right amounts of food" and not "completely cutting out all bad things, but everything in moderation." Participants also described unhealthy foods such as sugars, soda, chips, candies as "junk foods," "garbage foods," and "industrialized foods."

*1b. Parents' motivations to support healthy eating.* Participants' motivations to support healthy eating included children's overall healthy development, participants' own well-being and weight issues during their growing years, and personal preferences for local, organic, and fresh foods. One participant commented:

... now I make choices based on what this food is giving to me in terms of health and nutritional value . . . having more of the family-style eating and actually preparing the food right then and there. More fresh food, too. We had a lot of processed foods growing up.

Participants were motivated to support children's healthy eating because they associated healthy eating with children's overall healthy development:

I think it's [healthy eating] important for the brain development; you need to have healthy fats, vitamins . . . all those things that provide healthy blood flow and help build pathways in your brain. I also think for a healthy muscular body, you need to eat your lean proteins, as opposed to the Pop-Tarts, which will build fat, so I think nutrition is very important for healthy development.

*nc. Parents' informational and experiential sources of knowledge about healthy eating.* Participants reported acquiring informational and experiential knowledge about healthy foods and nutrition from many sources to inform their decisions about healthy eating. Informational sources included pediatricians, MyPlate guidelines, participants' own profession in health care or childcare, family members with health-care background, health magazines and newspapers, health classes from grade school and college, nutrition class, social media, friends, and Women, Infants, and Children. Very few participants mentioned children's childcare programs as a source of information about healthy eating. Informational sources of knowledge in adult lives helped parents adopt healthy eating practices:

I think just more education as I grew older about the different ways of cooking and how that affects your body weight and your overall health and everything, so it was just kinda education as I grew up.

Participants' experiential sources of knowledge included their families-of-origin experiences during childhood, which included home-cooked meals, less eating outside the home, having a garden, eating together as a family, balanced meals from each food group, small portions, and "eating healthy and being healthy was very important." While most participants who had positive experiences in childhood adopted practices around healthy eating that were similar to their families of origin, some participants who had less healthy food experiences during their childhoods

intentionally adopted healthier eating habits with their own families. Most participants attributed eating unhealthy and processed foods during their childhoods to their culture of upbringing, "I think it is cultural. We were raised in the South, and a meal is chicken-fried steak and mashed potatoes and gravy and—if there's a green item on the plate, it's small and unimportant." Another participant mentioned:

I grew up in this like extremely Midwestern, Germanic influence kind of diet. I didn't have very many options growing up that just wasn't a very good—the culture was so predominant that was the way that you eat that I didn't realize, I think, how many other options I had. And I think just being around other people and other dietary choices . . . cooking shows . . . a lot of exposure to different kinds of food and seeing that it's not that difficult to prepare other kinds of foods.

# Theme 2. Parental Ethnotheories That Supported Organization of Children's Physical and Social Settings

2a. Structured mealtime routines. Family meals and preparing food at home was part of daily routines. Participants believed it is important to include foods from each food group—fruits and vegetables, proteins, dairy, and whole grains because it provides vitamins and minerals that help children grow healthy. Participants also considered the consequences of healthy versus unhealthy foods. Participants believed that eating fruits and vegetables would help their child have more energy as opposed to having unhealthy foods.

A few participants reported practical concerns that influenced their everyday healthy eating such as lack of time to cook at home due to work schedule, high cost of fresh fruits and vegetables, availability of convenience food, and food commercials that attract kids. Concerns regarding lack of time to cook at home were mitigated when parents planned meals ahead of time. Reasons to eat home-cooked dinners included eating healthy foods, budgeting, and saving money:

One of 'em is budget reasons; it's cheaper, as long as you did menu planning to know what you're gonna have; it is cheaper to cook at home and use those last few week—from—my wife and I use the left-overs for lunches at work. Having two kids under 3, it is easier just to stay at home and not have to take 'em places . . . it's mostly budget and money-saving issues.

Additionally, participants believed eating together as a family provided an opportunity to use various ways to encourage children to eat healthy foods:

while we're sitting at the table eating, we talk about our food and how good it is. So if my husband and I are eating something that he doesn't want to eat, we're like "Oh my gosh, this is so good. Do you like it, Dad? I like it." And I think that influences him a lot. "Oh, I want to try that.

*2b. Food socialization influences.* Participants mentioned that grandparents, siblings, and childcare centers influenced children's eating behaviors. Participants explained that grandparents had both positive and negative influences on children's healthy eating. While participants mentioned that they cannot control what their children eat when they are with grandparents, they believed in communicating and educating grandparents about healthy foods. For example, one participant explained, "I want them [grandparents] to be making sure he [child] gets at least a vegetable with every meal, and fruit for snacks." A few participants attributed food concerns to grandparents' cultural background:

That would be my mother-in-law and father-in-law, and their cultural background is Mennonite, which is kind of a Germanic religious background, and it focuses heavily on baked foods, and lots of desserts, lots of strudels and kolaches . . . creamy sauces and gravies, things like that. And I know that when he [child] goes over there to spend an afternoon with Grandma, there will be cookies. There just will be cookies [laughs], so. It's an old-fashioned way of eating that they still follow now.

A few participants also reported sibling influences on children's healthy eating patterns. For example, one participant described:

If brother was gonna eat something, then [daughter] was gonna eat it, too, he loved cooked broccoli and so she ate it all, and then he stopped liking cooked broccoli and he'll only eat it raw, so then she'd only eat it raw; she definitely follows him.

Most participants had positive experiences related to healthy eating in their child's early childhood program. Participants appreciated their childcare center's efforts in promoting healthy eating such as serving appropriate food to children who have health issues, communication about the menu and information on what the children eat every day at the centers, and their efforts to introduce new foods.

Participants discussed the role of peers, teachers, and parent education classes at the centers that help promote healthy eating knowledge and practices. One participant mentioned, "She [child] eats because she sees all the other kids eating." Another participant noted:

He [child] really likes what he eats at daycare, too, that we might not always make at home, and so then we'll try and bring some of that into the diet, as well, since he's voiced a liking for it, as long as it's something healthy.

A few participants also had less positive experiences related to the type of food served in the childcare center and lack of nutrition information. Most participants mentioned that they do not get information about dietary guidelines from the childcare centers/preschools. Four participants who were childcare center directors shared their experiences about how they were promoting healthy eating in their programs by buying organic fruits and vegetables, preparing food in the centers, not buying any food that is canned, switching to a vendor that serves fresh fruits and vegetables, having conversations everyday about healthy food with the children, and training the teachers to encourage healthy eating and to model trying new foods.

# Theme 3. Parental Ethnotheories of Children's Learning About Healthy Eating

*3a. Parent-child engagement in age-appropriate food-related activities.* Participants believed that parent engagement, communication, and encouragement are important for children to learn about healthy eating. Participants involved children in food-related activities such as cooking, baking, grilling, familiarizing with kitchen utensils, visiting farmer's markets, grocery shopping, and gardening. Meal preparation activities included making no-bake oatmeal bars, mashing, stirring, lifting a pot up, throwing stuff into blenders, and breaking eggs. Cooking activities were "kid-friendly" and "fun" that ensured children used kid-safe kitchen gadgets when working in the kitchen. Participants involved their children in gardening and mentioned the positive influences of home gardening and understanding

of food systems. These included connections to nature and exposure to a variety of fruits and vegetables, willingness to try new foods, consumption of vegetables, understanding where food comes from, and gardening as a fun activity for children to learn about healthy eating. Most participants had a garden in the backyard of their homes. A participant mentioned:

She's very interested in the garden, She'll smell it, we'll either give it to her raw and let her taste it. Or we'll cook it up. And then we actually make a dish that we're making with it and have her try to it again. Her best thing—broccoli. She ate it raw, 'cause we grew it and she really liked it 'cause it was in her backyard. And now anytime, that's her favorite 'cause she saw it start to finish.

Participants also allowed children to observe while they cook because they believed it provided opportunities for communication about healthy foods and for children to learn about healthy eating. One participant mentioned that while she cooks, her son asks questions such as, "Mom, how long do you cook that for? What is that you're cookin'?" Another participant mentioned that he allows his son to stand on a stool and calls it "learning tower" to watch him cook. Participants believed that the knowledge and skills children learnt at a young age sets them up for a lifetime of healthy habits. For example, a father of a 3-year-old boy believed:

not only does healthy eating help his body develop . . . at a healthy weight and kinda help 'im, but I think once he starts getting older and starts being able to cook on his own and kinda be a bit more independent, the foundation of having home-cooked meals, using fresh vegetables, and stuff like that he's [child] having now, will kinda help him to know what to cook and how to eat, be a healthy eater when he gets older.

Participants reported using grocery shopping and trips to the farmer's market as opportunities to communicate and teach children about healthy eating, cost of produce, planning meals for the week, and preparing the grocery list. One participant described:

there's times where he'll [child] say, 'Hey, can we get this?' and so then we talk about it, either why we would allow it or why we wouldn't, based on if it's bag of Doritos or it's bag of grapes. We can talk about why either for health reasons or for price reasons, we would let 'im choose those things.

Additionally, parent–child engagement in food-related practices allowed participants to use strategies such as encouraging children to try and eat fruits and vegetables in every meal, providing repeated exposure to new fruits and vegetables, parents eating fruits and vegetables in front of their children, parents making fruits and vegetables available and accessible in the home, participants having "conversation around why it's important to eat all your vegetables or eat a little bit of everything," and participants providing healthy food choices by asking questions such as, "do you want to have corn tonight, or do you want to have carrots?" According to participants, providing choices help children learn how to make healthy eating decisions. Another participant noted that providing choices helps "set a good example" for their children so that "they make good choices and they can be healthy adults." Yet another participant mentioned:

if they [child] want a snack they can come up with a choice, or you know I give them options . . . they know they have to ask and it has to be a good [healthy]choice.

#### **Conclusions**

The current study provides novel insights regarding the understanding of ethnotheories and experiences of parents of preschoolers about healthy eating. Data analysis revealed parental ethnotheories (*e.g.*, beliefs, attitudes, motivations, values) about healthy eating that served as guides for structuring their children's experiences and their own practices to support children's healthy eating. It is in this way that parental ethnotheories about healthy eating are instantiated in children's daily routines. Three overarching themes and 6 subthemes emerged from this research, with implications for nutrition program planners and practitioners to support children's healthy eating.

First, parental ethnotheories about healthy eating indicated beliefs, motivations, and cognitions as critical to shaping parental practices to support children's healthy eating. Parents understood healthy eating in ways that reflected their own personal, social, and cultural experiences. The knowledge and skills parents acquired from their culture and family-of-origin experiences and other sources over their adult lives in some cases motivated them to enact healthy practices with their families, and in other cases motivated them to make intentional changes away from less healthy practices. Previous studies have shown that early family experiences

contribute to eating habits and food attitudes in adult lives.<sup>27</sup> Therefore, it is important to draw on parents' childhood experiences to understand their social and cultural contexts and consider diversity of parents' ethnotheories such as motivations, knowledge, and skills when planning and conducting nutrition education for parents of preschoolers.

Second, parental ethnotheories were evident in ways that parents organized the physical and social contexts of children's daily routines, such as structuring of children's mealtime routines and encouragement of food socialization with grandparents, siblings, children's peers, and childcare program teachers. Existing research indicates that children's socialization experiences influence their eating behaviors. 28 Thus, ethnotheories related to how parents structure young children's mealtime routines and social relationships potentially represent promising strategies to improve children's healthy eating. Furthermore, the findings of this study indicated mixed feelings regarding participants' experiences around healthy eating in their child's early childhood programs. While most participants had positive experiences, a few participants had concerns regarding the type of food served in the childcare centers and limited communication from childcare providers about healthy eating indicating heterogeneity in the responses of parents in terms of childcare provider-parent communication about nutrition and dietary guidelines. Although the scope of this study was not to examine childcare provider practices, future research could explore childcare providers' strategies to understand how they communicate with parents regarding children's nutrition.29

Finally, parental ethnotheories indicated the importance of parentchild engagement, communication, and encouragement in daily routines to promote healthy eating, demonstrating that ethnotheories are grounded in everyday experiences shared by parents and children. 17,18-21 Parents used diverse strategies to encourage their children to eat healthy and also to teach children about healthy eating. For example, parents involved their children in age-appropriate food-related activities such as gardening and meal preparation with a belief that children learn from direct instruction and guidance. Existing studies have reported that garden activities<sup>30</sup> and family food involvement <sup>11</sup> increase children's fruits and vegetables consumption. Parents in this study also reported use of verbal and behavioral role modeling to encourage children's fruit and vegetable intake. This finding is important considering that previous studies have reported that young children's fruits and vegetables intake does not meet current recommendations.<sup>31</sup> Furthermore, considering the substantial decline in the United States regarding time spent on cooking and food preparation at home,<sup>32</sup> the findings of the current study revealed that a majority of parents prepared and ate home-cooked meals because they believed home-cooked meals are healthier, more cost-effective, and provide opportunities for children to learn about healthy eating. Nutrition education efforts should consider parent-child engagement in food-related activities using effective communication, encouragement, and role modeling strategies to improve children's healthy eating behaviors, specifically fruits and vegetables consumption.

This study has limitations as well. First, it was a challenge to directly compare our study findings with previous research because this is the first study to examine parental ethnotheories about healthy eating. Second, despite our efforts to recruit a more diverse sample, our sample was somewhat homogeneous with most participants being white, relatively well educated, working full time, and were generally a highly motivated group in terms of promoting children's healthy eating. Although socioeconomic status cannot account for better health outcomes on its own, higher education and income are associated with healthier eating.33 Thus, there was possibly some selection bias, as parents who were more interested in health and healthy eating may have been more likely to volunteer for this study, as well as potential social desirability in responses due to nature and sensitivity of topics covered. Whereas the current study is the first to examine parental ethnotheories about children's healthy eating, future investigations should be focused to include more diverse samples. For example, future research should use maximum variation purposive sampling strategy<sup>34</sup> to ensure heterogeneity in the sample. Future research should also explore ethnotheories of ethnically and economically diverse parents of preschool-age children in order to advance understanding of how culturally diverse families and those with limited resources support children's healthy eating. Additionally, more studies are needed to examine how parental beliefs are associated with parental feeding practices and preschoolage children's dietary intake.

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# So What?

## Implications for Health Promotion Practitioners and Researchers

## What is already known on this topic?

Parental ethnotheories are culturally structured belief systems for understanding child development and parental practices which are key to understanding young children's developmental niche. Parental ethnotheories are enacted in parent's relationships with their children within daily routines and are embedded in the everyday experiences that parents have with their children.

#### What does it add?

This study advances the literature on parental ethnotheories (e.g., beliefs, attitude, motivations, knowledge, and skills) about healthy eating among preschoolers. No prior research has examined parental ethnotheories about children's healthy eating. Parental ethnotheories includes parents' motivations to promote healthy child development through healthy eating, parents' knowledge about healthy foods, and parents' sources of knowledge and skills accumulated through their family-of-origin experiences. Additionally, ethnotheories play an important role in shaping parental practices such as providing mealtime structure, food socialization experiences, and parent—child engagement in food-related activities using effective communication, encouragement, and role modeling strategies.

# What are the implications for health promotion practice or research?

Health promotion practitioners should consider parental ethnotheories (e.g., beliefs, attitudes, motivations) that facilitate children's mealtime routines, food socialization, and parent–child engagement in food-related activities using effective communication, encouragement, and role modeling to improve children's healthy eating behaviors. Future research could explore parental ethnotheories and practices that effectively support young children's healthy eating across ethnically diverse families with young children including the role of mothers, fathers, and intergenerational transmission of food parenting practices in promoting children's healthy eating.

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