



Table talk: How mothers and adolescents across socioeconomic status discuss food



Priya Fielding-Singh ^{a, *}, Jennifer Wang ^b

^a Department of Sociology, Stanford University, 450 Serra Mall, Room 133, Stanford, CA 94305, United States

^b Emmett Interdisciplinary Program in Environment and Resources, Stanford University, 473 Via Ortega, Suite 226, Stanford, CA 94035, United States

ARTICLE INFO

Article history:

Received 1 February 2017

Received in revised form

13 June 2017

Accepted 14 June 2017

Available online 15 June 2017

Keywords:

United States

Food choice

Parents

Adolescents

Health disparities

Family

Socioeconomic status

Qualitative methods

ABSTRACT

This article reports findings from a qualitative study of food practices among families of differing socioeconomic circumstances. Using in-depth interviews from sixty-two families in the San Francisco Bay Area in 2015–2016, we find socioeconomic differences in how mothers and adolescents talk about food. Across SES, mothers and adolescents engage in discussions about healthy eating. However, these conversations are more commonplace and embedded within high-SES family life than among low-SES families. Beyond conversations about 1) healthy eating, the topics of 2) food quality and 3) price are discussed to varying degrees across SES. Within high-SES families, frequent discussions of healthy eating are paired with dialogue highlighting the importance of consuming higher quality food. Price is largely absent as a topic of conversation among high-SES families. On the other end of the socioeconomic spectrum, low-SES mothers and adolescents frequently engage in conversations about price when discussing food. Mentions of food quality are rare, but when they do occur, they underscore important trade-offs between food's healthiness, quality and price. Given prior research showing the impact of dialogue between parents and adolescents on adolescents' dietary behaviors, these findings help us understand how family discussions contribute to shaping adolescents' approaches to food. An important implication is that high-SES families' discussions of food quality may strengthen messages about healthy eating, while conversations about affordability within low-SES families may highlight financial barriers to healthy eating.

© 2017 Elsevier Ltd. All rights reserved.

1. Introduction

Socioeconomic inequities in diet-related health among adolescents in the United States continue to draw the attention of scholars and policymakers. Top concerns include high rates of type 2 diabetes and obesity among adolescents from disadvantaged socioeconomic backgrounds (Hanson and Chen, 2007; Daniels, 2009; Ogden et al., 2010, 2012; Frederick et al., 2014). Adolescents' sociocultural and familial circumstances contribute to these socioeconomic disparities. Within families, parents play a particularly large role in shaping adolescents' food intake (Larson and Story, 2009). Parents model eating behaviors (Savage et al., 2007), structure mealtimes (Hammons and Fiese, 2011), and mold tastes and preferences (Birch et al., 2007). Parents also talk to adolescents

about food (Berge et al., 2015, 2013). These discussions have important consequences for adolescents' dietary behaviors and health (Haines et al., 2006; Neumark-Sztainer et al., 2010; Berge et al., 2013, 2015). To date, however, scholarship on parent-adolescent dialogue about food has focused primarily on whether families encourage dieting, or discuss topics of healthy eating or weight (Neumark-Sztainer et al., 2010; Berge et al., 2013, 2015).

In this paper, we report the findings from a qualitative descriptive study that explored how mothers and adolescents across SES talk about food. Two primary research questions guided this study: what is the nature of food-related dialogue across SES? And how might these conversations further contribute to disparities in adolescents' diet quality? We answer these research questions by showing, through interviews with mothers and adolescents, that there are socioeconomic differences in the kinds of conversations that take place around food. Across SES, mothers and adolescents engage in discussions about healthy eating. However, these conversations are more routine and embedded within high-SES family life than within low-SES families, for whom these

* Corresponding author.

E-mail addresses: priyafs@stanford.edu (P. Fielding-Singh), jw56@stanford.edu (J. Wang).

conversations occur less frequently. Beyond conversations about 1) healthy eating, we find that the topics of 2) food quality and 3) price are discussed to varying degrees across SES.

2. Background

2.1. Socioeconomic diet disparities among adolescents

Adolescent health disparities are a national health concern in the United States. Just as these health issues follow a socioeconomic gradient, so too do the dietary practices that help drive them (Darmon and Drewnowski, 2008; Wang et al., 2014). Greater affluence is consistently associated with healthier diets for higher SES adolescents, who consume fewer energy-dense foods and drinks such as fast foods and sweetened beverages (Kant and Graubard, 2013). By contrast, children from lower SES families have the lowest fruit intake and the highest levels of sweetened beverage consumption (Frederick et al., 2014).

The sources of socioeconomic diet disparities among adolescents are myriad, ranging from structural and economic constraints (Caspi et al., 2012; Daniel, 2016) to biological (Björntorp, 2001) and sociocultural factors (Curtis et al., 2009). Given these diverse contributing factors, there is a call for more research that characterizes the socioeconomic and familial circumstances within which adolescents' food practices are embedded (Contento et al., 2006; Sarlio-Lähteenkorva, 2007).

2.2. Sociocultural and familial influences on adolescents' diets

With adolescence comes changes in eating behaviors: adolescents' greater freedom, preference for less healthy foods, and increased independent eating occasions all contribute to a decline in diet quality (Sargent et al., 2002). Adolescents' dietary choices are embedded in and reflect their everyday family life and their broader sociocultural environments (Curtis et al., 2009; Backett-Milburn et al., 2010a). Research shows that values around diet and consumption vary across SES: for instance, healthy eating can serve as a form of social, symbolic and cultural capital within high-, but not low-SES groups (Naccarato and LeBesco, 2012). As adolescents absorb the implicit food-related values and norms circulating in their respective groups, they come to unconsciously understand and enact the unspoken boundaries and rules of acceptable consumption. In this way, adolescents' food choices are gradually constructed from the accumulated habits and preferences built up in their familial and socioeconomic groups (Bourdieu, 1984).

2.3. Parents' influences on adolescents' diets

Within the family context, parents play an important role in shaping adolescents' ideas and choices around food (Rasmussen et al., 2006). Our study advances two strands of social scientific scholarship examining parents' influences on adolescents' diets. First, and most broadly, we build on research showing important socioeconomic differences in how parents approach adolescents' consumption. Socioeconomic status underpins how parents navigate the dietary changes associated with adolescence (Eldridge and Murcott, 2000; Backett-Milburn et al., 2006). Studies show that parents vary in how much control they feel they can or should exercise over their adolescents' food consumption (Backett-Milburn et al., 2006). While low-SES mothers largely view adolescents' food preferences as beyond parental control and as progressively adolescents' own responsibility, middle-SES parents perceive it as their responsibility to mold adolescents' food practices "in the right direction". While much of this research assumes and occasionally alludes to the fact that parents and adolescents

talk about these food-related topics (Backett-Milburn et al., 2010b), little light is shed on the conversations themselves. We therefore lack an understanding of the similarities and differences between food-related discussions in families across SES backgrounds.

Second, our work advances an important and more focused research stream exploring food-related discussions within families (Berge et al., 2013, 2015). Berge's examinations of parents' conversations with adolescents about healthy eating and weight present two main findings. First, higher-SES mothers engage in more parent-adolescent conversations about healthy eating compared to lower-SES mothers, who report more conversations about adolescent weight (Berge et al., 2015). Second, how parents talk to adolescents about food impacts adolescent eating behaviors: while conversations focused on weight or size are associated with increased risk for adolescent disordered eating behaviors (Neumark-Sztainer et al., 2010), conversations about healthy eating are protective against disordered eating behaviors (Berge et al., 2013).

These findings reveal that how parents talk to their adolescents about food matters. Yet we lack a more holistic understanding of how food is discussed within families and the degree to which these conversations are central or peripheral to family life and adolescents' daily eating experiences. For example, while research shows that parents across SES consider different factors related to their adolescents' diets (Backett-Milburn et al., 2010a), it is less clear if and how parents communicate these factors to adolescents. Given these conversations' documented impact on adolescents' diets (Berge et al., 2013, 2015), understanding how food is discussed within families is essential for advancing our understanding of parental influences.

3. The study

3.1. Data collection

We draw on qualitative data collected between January 2015 and June 2016 in the San Francisco Bay Area, California. Data consist of interviews with one mother and one adolescent from 62 families across socioeconomic status. In total, 124 interviews were conducted from 20 high-SES, 21 middle-SES, and 21 low-SES families. Given study aims, families were purposefully selected on the basis of socioeconomic status and ethnicity. Inclusion criteria for the study included having a child between the ages of 12 and 19 who lived at home. All mothers identified as primary caregivers. The interview sample varied in ethnographic background, marital status, number of children, and employment status.

We categorized families by socioeconomic status primarily using parents' level of education and household income (Cooper, 2014). Consistent with other studies in the United States families were designated high-SES if at least one parent had a college education and family income was above 350% of the poverty line. In middle-SES families, both parents had at least a high school education and household income was between 180% and 350% of the poverty line. In low-SES families, neither parent had above a high school degree and household income was below 180% of the poverty line. Table 1 shows the sociodemographic composition of the interview sample.

Following ethics approval from relevant educational institutions, families were primarily recruited using purposive and theoretical sampling (Small, 2009). All names of interview respondents and institutions used in this paper are pseudonyms. We recruited approximately forty percent of families through a public high school, Hillview Central High School, where teachers, coaches, school administrators, and a parent newsletter facilitated contact with families. Hillview Central was chosen as a recruitment site

Table 1
Profile of interviewed families.

Selected characteristics	High	Middle	Low	Total
<i>Total</i>	20	21	21	62
By Family				
Race/Ethnicity				
White	5	5	5	15
African-American	5	5	5	15
Hispanic	5	6	6	17
Asian	5	5	5	15
Recruitment Location				
Hillview Central	7	11	8	26
Other	13	10	13	36
By Mother				
Marital Status				
Married	15	16	7	38
Single	5	5	14	24
Employment Status				
Employed	15	17	18	50
Stay-at-Home Parent	5	4	3	12
By Adolescent				
Gender				
Male	9	8	7	24
Female	11	13	14	38
Age				
12–15 years old	11	10	10	31
16–19 years old	9	11	11	31

because of its socioeconomically diverse student population. Table 2 provides demographics for Hillview Central.

We recruited additional families at food banks, toy drives, and shopping outlets (low-SES), or through professional emailing lists, flyers, and personal contacts (high- and middle-SES). We employed limited snowball sampling – capping referrals at two – in order to connect with families from hard-to-reach populations, such as those of low-SES Asian backgrounds. This study's sample comprises a subset of the full sample of a larger qualitative investigation of family food practices. We focus on mother-adolescent discussions here to limit potential variation due to parents' gender or relationship, and thus exclude families where other family members were primary caregivers.

The first author conducted separate, private semi-structured interviews with one mother and one adolescent from each family. Families were paid \$60 for participating. After receiving parents' consent and children's assent, all interviews were audio recorded, transcribed verbatim, and anonymized. Interviews lasted between 1 and 2 h. Interviews with mothers included questions about food provisioning priorities, food rules and challenges, and their adolescent's role in shaping family diet. For example, we asked parents explicitly, “tell me how, if at all, you talk to (teenager's name) about

Table 2
Profile of hillview central high school, 2012–2013.

Selected student population characteristics	N
Total Student Population	1456
Race/Ethnicity (%)	
White	32
Black	5
Hispanic	56
Other	7
Students Eligible for Free/Reduced Lunch (%)	47
Parental Level of Education (%)	
Less than High School	20
High School Graduate	19
Some College	25
College Graduate	24
Graduate School	12

food”, and followed that question with probes that elicited information and examples regarding the frequency of those conversations. Adolescent interviews included identical questions from the parent interviews, but also investigated adolescents' perceptions of their parents' food choices and their own independent choices. We asked adolescents questions including, “How does your mother talk to you about food?” and followed up to gather more information based on their responses. Interview guides were developed, tested, and refined by the first author in November and December 2014 before formal data collection began in January 2015. See Appendix A for parent and adolescent interview guides. We sought to mitigate the influence of social desirability on mothers' and adolescents' responses by conducting interviews in private and using open-ended questions that allowed respondents to guide the conversation. Moreover, we framed the study as being about “food” rather than about “health”, and did not mention terms such as “healthy/unhealthy” during the interview before respondents brought these terms up themselves. In addition, the consistency between mothers' and adolescents' accounts increased our confidence in the accuracy of reports. Field notes were taken during all interviews. Interview summaries were written to allow us to refer to the entire sample during more detailed analyses.

3.2. Data analysis

Data were analyzed using qualitative content analysis (Sandelowski, 2000). Qualitative content analysis is an inductive, dynamic form of analysis that is oriented toward summarizing informational contents of the data (Morgan, 1993). All coding was conducted using Dedoose, a qualitative software package that allows users to attach coding categories to blocks of text and compare interview responses across interviews. Selected transcripts were read by both authors and discussed in analytical team meetings to ensure rigor and consistency in data analysis. We first developed an initial coding scheme to code for emergent topics and themes. We progressed through an iterative revision of the coding scheme as additional interviews were coded. Through these multiple rounds of coding, three major topics of conversation related to diet quality emerged: healthy eating, quality and price. Rather than impose our definitions of “healthy eating”, “quality” and “price” on the data, we let mothers and adolescents define and discuss these concepts in their own terms. We mapped variation in these types of food-related dialogue onto families of different SES backgrounds, engaging with existing theory and empirical research to contextualize this variation.

4. Findings

Analysis of the conversations recounted by mothers and adolescents across SES illustrated how various aspects of food are highlighted in dialogue. We focus on three important topics – healthy eating, quality, and price – that manifested differently in conversations across SES. We begin by showing how families across SES discuss healthy eating, as the nature and extent of these conversations vary. We then show the consistent differences observed in the occurrence of the topics of quality and price in mother-adolescent conversations. While discussions within high-SES families highlight the importance of food quality, conversations that underscore the trade-offs between food quality and affordability emerge within middle-SES families. Within low-SES families, conversations about food quality are virtually nonexistent and conversations about affordability prevail. We found that the existence and nature of food discussions mapped more concretely onto socioeconomic status than onto other potentially relevant family characteristics such as household composition, employment status,

or ethnoracial background. Consistent with prior research, we did not find differences by adolescents' age or gender (Berge et al., 2015).

4.1. Discussions of healthy eating across socioeconomic status

We found, in line with socioeconomic diet disparities research (Haines et al., 2006; Kanjilal et al., 2006), that most of the middle- and high-SES families in our study reported following a diet more closely aligned with federal nutrition guidelines (USDA, 2015). Moving down the socioeconomic spectrum was associated with increased consumption of processed foods, soda, and fast food, and a decrease in fruit and vegetable consumption. While how mothers defined healthy eating varied, there were also areas of convergence: for example, mothers and adolescents across SES agreed that fruits and vegetables were healthy and that soda and fast food were less healthy. Irrespective of the nutritional quality of the family diet or mothers' definitions of a healthy diet, mothers and adolescents across SES reported having conversations on the topic of healthy eating.

There was, however, variation across SES in mothers' and adolescents' accounts of the frequency and centrality of such conversations about healthy eating. High-SES mothers and adolescents reported that conversations about healthy eating were commonplace within family life, occurring regularly during mealtimes, shopping trips, and restaurant outings. As Emma, a high-SES white mother told us, "it's been an ongoing discussion for a long time about what's healthy and what's not as healthy."

Such conversations in high-SES families sometimes arose from maternal responses to adolescents' unhealthy dietary preferences or behaviors. High-SES mothers in our study saw conversations about healthy eating as a critical part of molding their adolescents' preferences. These mothers often used dialogue to explain and justify to their adolescents their dietary standards. Lola, a high-SES Hispanic mother of two adolescent sons, gave us an example of a conversation in her household:

We try to educate them I guess, about the food. Sometimes they will say, "Can we get the regular crackers instead of the low fat?" [...] When they do have crackers, I ask them if they have had their fruit yet.

Many high-SES mothers like Lola viewed discussions of healthy eating as an important component of setting expectations about diet. High-SES adolescents in our study recalled various conversations with their mothers about healthy eating. Many adolescents told us about conversations whereby their mothers sought to guide their choices, or instill lessons to help them make healthier choices on their own.

Relative to high-SES families, conversations about healthy eating were less central within middle-SES family life. Like high-SES mothers, middle-SES mothers saw themselves as partially responsible for molding adolescents' tastes. However, whereas almost all high-SES mothers and adolescents reported that conversations about healthy eating occurred as often as daily, there was considerable variation among middle-SES mothers and adolescents in how often they discussed healthy eating.

Eleven of 21 middle-SES mothers resembled high-SES mothers in engaging regularly in such conversations in response to their adolescent's unhealthy decisions. The other 10 middle-SES mothers and adolescents reported that conversations about healthy eating were less commonplace or arose primarily when mothers perceived their adolescents' unhealthy choices as excessive. Nan, a white married mother, illustrated this latter approach in explaining that she felt that she finally needed to say something when her 15-

year-old daughter went overboard stacking her plate with carbohydrates:

We had stir-fry the other night. They had rice and then picked out all the chicken from the stir-fry and I'm like, "You gotta eat some of the vegetables. You need vegetables. You gotta have protein." Carbs, they get plenty 'cause they could live on rice and bread and pasta.

Similarly, Noah, a 17-year-old Vietnamese adolescent explained that his mother would only speak to him about healthy eating when she perceived that his behavior was excessive: "It's easy-going. She's more like, 'Let Noah eat what he wants, unless it gets too much.'"

Finally, a few middle-SES mothers and adolescents echoed Adelina, a 16-year-old Hispanic adolescent, who did not think of healthy eating as a topic of conversation within her family:

We don't really talk about it. We don't ask if it's healthy or not. We just ask, is this food? You're alive, eat it. That's about it.

In contrast to high- and many middle-SES mothers, low-SES mothers and adolescents reported few, if any, conversations about healthy eating – or about food in general. When asked how her mother talked to her about food, Jasmine, a low-SES African-American adolescent, first responded like many low-SES adolescents: her mother didn't. And many low-SES mothers like Laura, a white mother of one adolescent son, did not regard food as a central topic of discussion:

He knows to eat, eat what he wants in the house [...] I don't know. I really don't talk to him about it or make a big discussion of it.

Upon further probing, however, we found that low-SES families *did* have conversations about food, as well as about healthy eating – just with less frequency and regularity. Compared to middle- and high-SES families, low-SES mothers and adolescents characterized these discussions as more sporadic. Although these mothers wished for their adolescents to follow a healthy diet, low-SES mothers did not regularly discuss healthy eating because the healthiness of their adolescents' consumption was not a top concern. Indeed, Laura reported that she was more concerned for her son's safety walking home from school than about him buying an energy drink – which she told him was an unhealthy choice – on the same walk home.

In addition, many low-SES mothers felt that they were not modeling their own ideals of healthy eating, which they believed limited their ability to talk to their adolescents about healthy eating. For instance, Nyah, a low-SES African-American mother, expressed concern of appearing hypocritical to her two adolescent daughters:

I know we need to start eating healthy. What looks good and tastes good is not always good for you. I know that. I know that. But I just feel like I can't tell them 'cause I'm not eating healthy, and I'm eating all the junk food too.

For this reason, when healthy eating was discussed, conversations between low-SES mothers and adolescents were often less directed toward specifically improving the adolescent's diet, and rather toward improving the diet of the entire family. Mothers believed that the diets of most family members – not just adolescents – could be improved. When Nyah did speak to her daughters

about healthy eating, it was with the family in mind:

I just try to tell them that I know we eat a lot of unhealthy stuff, but we need to start eating better [...] We joined the gym and stuff, trying to lose weight 'cause we know we're kind of big or whatever, but it's all because we're making unhealthy choices and the stuff that we eat. I know it's not healthy. We all know it's not healthy, but it just tastes so good. (laughs) We talk about that type of stuff.

In contrast to high-SES mothers' perceptions of dialogue as an important component of setting food standards for their adolescents, many low-SES mothers expressed that they felt less in control and less able to shift their adolescents' unhealthy food habits toward healthier choices. A low-SES Hispanic mother, Elissa, articulated this sentiment in her exasperation about not being able to prevent her 17-year-old son's unhealthy habits:

What's the next thing? Put locks on the fridge? What can I do? And as he became an adult there wasn't much I could say anymore. "You're an adult. Put it in your body if you want it in your body."

Low-SES adolescents such as Melanie, a 16-year-old low-SES Filipina daughter, reported conversations about healthy eating, but also explained that these conversations did not always translate into enforced rules around food:

[My mom] just tells me, "Oh, you're getting fat. You should stop eating this." But she's never really like, "Oh, you can't eat it." She doesn't take it away from me. She's like, "Oh, that's bad for you." That's it.

Melanie's account also shows how conversations about healthy eating more often related to weight within low-SES families than in high- and middle-SES families. While high- and middle-SES mothers sometimes referenced their adolescent's weight during interviews, the topic was addressed gingerly, and mothers often chose to frame concerns about their adolescent's weight as concerns about eating healthy and being healthy. In contrast, most low-SES mothers reported little worry about the negative consequences of discussing weight with their adolescents. Melanie's mother echoed Melanie in describing to us how weight arose in conversations with Melanie and her other 13-year-old daughter:

I talk to them as far as wanting to eat right to slim down [...] I try to let her know that, "You don't want to get to the stage where it's so hard for you to lose weight because your metabolism starts slowing down, especially when you're overweight." So I try to tell her, "You're hungry? Go ahead and eat, but eat fruits."

4.2. High-SES families: Primacy of food quality over price

Within high-SES families, discussions of healthy eating took place alongside conversations about food quality. While there was variation in mothers' definitions of healthy eating and higher quality food, most high-SES mothers agreed that organic and local foods were higher quality, and that foods with artificial flavoring, chemicals, and additional processing were lower quality. While not all adolescents used these exact terms, high-SES adolescents' definitions generally mapped onto their mothers', presumably reflecting the fact that their mothers had spoken to them about such topics.

High-SES mothers and adolescents reported that they discussed these facets of food quality, with mothers encouraging adolescents to choose higher quality over lower quality foods. In addition, high-SES mothers often framed healthy food as having the characteristics of higher quality food in their conversations. For example, mothers told us that they did not like their adolescents to eat fast food not only because it was less healthy, but also because they perceived it as lower quality. High-SES mothers communicated this viewpoint to their adolescents. Alejandro, a 19-year-old high-SES Hispanic son, recalled an illustrative conversation with his mother, in which his mother communicated the message that eating higher quality food and following a healthy diet were one and the same:

Alejandro: [My mother] says, "I always like to try to keep it healthy. I buy all organic ..." She goes to Whole Foods or Safeway just to find what she thinks is healthiest and the best for us to eat.

Interviewer: Does your mom talk to you about why she buys organic?

Alejandro: Yeah, she does a lot whenever my brothers complain. She just says she wants us to be healthy. If we eat stuff that has artificial flavoring and chemicals, we're gonna get really sick.

While high-SES mothers reported that their financial means enabled them to purchase healthier and higher quality foods, these mothers still considered food prices when making purchases. Price motivated these mothers to shop at multiple supermarkets to get the best deals, use coupons, or purchase generic brands. Emma, a high-SES mother of three adolescent sons, illustrated this:

I'm very blessed to be in a situation where I can buy those organic strawberries if I want those organic strawberries [...] But there are things I don't buy if it just seems like it's too much money. So I go, "that's ridiculous, I won't pay that for grapes or [...] I'm not going to splurge on that."

However, these mothers largely kept these financial considerations to themselves, omitting price as a topic of conversation with their adolescents. This may be because, while they considered price, high-SES mothers did not see their food purchases as driven primarily by financial considerations. Their discussions with adolescents reflected this. While high-SES adolescents depicted conversations about healthy eating and food quality as routine within family life, many struggled to recall any conversations about price or affordability. When asked specifically during interviews, the majority reported that they did not believe that price mattered in their mothers' food decisions.

High-SES adolescents in our study described that when food prices came up in conversations with their mothers, it did so as a side note rather than as a determining factor of food purchases. Sarika, a 14-year-old high-SES Asian adolescent, reported that even though her mother would occasionally comment on the price of food at the supermarket, it never prevented her mother from purchasing an item:

Interviewer: When you're grocery shopping, do they talk about the price of food?

Sarika: No, she may want something. I think it's me that's like, "oh, that's sort of expensive." They don't really talk like, "oh, we can't get that because it's too expensive".

Thus, while high-SES mothers thought about price, the scarcity

of dialogue related to price conveyed the message to their adolescents that price was not a consideration. High-SES adolescents described their mothers' concerns for health and food quality as being the most important factors in food purchases. In this way, conversations within high-SES families did not highlight the trade-offs between healthy eating, food quality, and price. These trade-offs began to emerge in discussions within middle-SES families.

4.3. Middle-SES families: Trade-offs between food quality and price

Like high-SES mothers, middle-SES mothers discussed food quality with their adolescents. Among middle-SES families, however, the theme of finances increasingly permeated discussions and highlighted the perceived trade-offs between eating healthy and higher quality foods, and eating affordably. Middle-SES mothers defined high-quality similarly to high-SES mothers. Many middle-SES mothers reported a desire to shop at higher-end grocery stores to purchase organic and local foods.

In contrast to high-SES mothers, however, middle-SES mothers saw price as a constraint on their ability to purchase the highest quality food. Catalina, a middle-SES mother of two daughters, explained that while she felt her family was doing well financially, shopping at Whole Foods to purchase the higher quality food she desired for her family was usually beyond financial reach. Other middle-SES mothers said that they sought to prioritize buying higher quality food, but quality was not the only consideration. As Abby, a white middle-SES single mother, told us:

I do look at organic versus non-organic. I don't tend to be somebody who buys a lot of generic brands for some reason 'cause I have this feeling [...] that's low quality food. So I try to buy higher quality things that I don't feel like are really processed or just yucky or factory stuff. But also looking at price.

Middle-SES mothers' considerations differed from those within high-SES families, and these differences manifested in discussions. While high-SES mothers largely kept their financial reasoning to themselves or emphasized healthiness and quality over price, many middle-SES mothers discussed all three of these considerations with their adolescents. Reflecting on past conversations with her mother, Abby's 17-year-old daughter, Taylor, reflected an acute awareness of the higher cost of quality food:

Organic is more expensive so if [my mom] does get something that is organic, like a tomato, she washes it so good. She's like, "oh my god, make sure you wash the tomato, make sure you do this ... we have to cook this, we can't just eat it!"

These conversations communicated to middle-SES adolescents that their mothers faced trade-offs between health, quality, and price in their food purchases. Through conversations with their mothers, middle-SES adolescents like Abby came to believe that while eating higher quality foods was not out of reach, it was neither to be taken for granted nor was it always possible. Whereas high-SES adolescents were consistently told by their parents that health and food quality were the primary metrics to use in making healthy eating decisions, middle-SES adolescents said they understood from their mothers that price was also an important consideration when choosing what to eat.

4.4. Low-SES families: Primacy of price over food quality

Whereas conversations about price were largely absent within high-SES families and emerged within middle-SES families,

mothers and adolescents within low-SES families reported frequent conversations about food where cost featured prominently. Conversations featuring price were a regular occurrence when families grocery shopped or ate out. Eighteen out of 21 low-SES adolescents reported that price mattered greatly to their mothers. Shanice, a 17-year-old low-SES African American adolescent, explained that the price of food often arose in discussion when she and her mother went grocery shopping. These conversations highlighted the trade-offs between the cost, quality and the healthiness of food:

[Price] matters a lot because say we want avocados to make guacamole and it's very expensive per pound. I think it's like 69 cents a pound? [...] To me, looking at it as a kid, I was like, that's not that expensive. But my mom was like, "no, that adds up. That's not that many avocados" [...] And I'm like, oh, so it matters for the vegetables that you want, whereas the packaged food is a lot cheaper. That sometimes can be a problem.

While price did not preclude low-SES mothers from discussing healthy eating with their adolescents, discussions about cost considerations often made explicit the incongruities between healthy and affordable consumption. Carmel, a 16-year-old low-SES Hispanic adolescent, reported that her mother sometimes spoke of improving the family diet. At the same time, Carmel told us that most conversations about food with her mother across a variety of settings revolved around price. Carmel even received positive feedback from her mother for identifying low-cost options when grocery shopping:

Carmel: If my mom doesn't have a lot of money, she'll say, "Get [something] off the dollar menu."

Interviewer: What about when she goes grocery shopping?

Carmel: Yeah, sometimes. I'll be like, "Oh, you should get these chicken nuggets. They're only \$1.50." [...] My mom will be like, "Oh, that's a good deal!"

We found that many low-SES adolescents like Carmel came to understand from discussions with their mothers that their family diet was less healthy because they could not afford the high cost of healthy eating. Adolescents recounted conversations with their mothers whereby they learned that how their family ate hinged primarily on finances. Chloe, a 12-year-old low-SES white adolescent, recalled a discussion that articulated this view:

Interviewer: If your family had a lot more money, how do you think you would eat?

Chloe: Probably healthier because most of the healthy things are pretty expensive.

Interviewer: Does your mom ever talk about that?

Chloe: She actually does. She'd be like, "Well, if we had this amount of money, we would eat a lil' bit healthier than what we're used to."

Sometimes these conversations communicated conflicting messages about food to low-SES adolescents. On the one hand, conversations about healthy eating communicated to adolescents its importance. At the same time, low-SES adolescents learned that these healthy habits were largely out of reach.

While conversations about price were common within low-SES families, conversations about food quality were rare. This did not mean that low-SES mothers ignored quality when grocery

shopping. Low-SES mothers saw organic food as out of reach, but still sought to buy fresh foods, which they deemed higher quality than canned alternatives. Yet, just as many high-SES mothers thought of but did not speak to their adolescents about price, many low-SES mothers thought of but did not bring up food quality with their adolescents.

One exception to this pattern was when adolescents' evolving preferences created situations that made the trade-offs between quality and price explicit. Monica, a low-SES white mother, told us that when her twin 17-year-old daughters started requesting organic food, these requests led to arguments at home:

I was arguing with them like, “You want organic food then you need to get an organic job because I can't afford organic food”.

For Monica, the conflict with her daughters ended with her message to them that unless the consideration of cost could be resolved, food quality would need to be sacrificed. Such conversations reinforced the message to low-SES adolescents that while their mothers might aspire to eat healthy or higher quality food, these goals were largely unattainable given the expenses required to do so.

5. Discussion and conclusions

This study examines differences in the nature of food-related dialogue within families. Our interviews reveal variation in how mothers talk to adolescents about three food-related topics: healthy eating, quality, and price. While mothers and adolescents across SES engage in discussions of healthy eating, such conversations are more commonplace and embedded within high-SES family life. For high-SES families, these conversations are accompanied by discussions about the importance of consuming higher quality food. Conversations among high-SES families that highlight the price of food are less common. Within middle-SES families' conversations, trade-offs between healthiness, quality and price start to emerge, as mothers discuss all three of these topics with their adolescents. Low-SES families' infrequent conversations about healthy eating are predominantly accompanied by conversations about price. Low-SES mothers rarely discuss food quality with adolescents, but when they do, such conversations underscore compromises between affordability, quality, and eating healthy.

This study makes important contributions to social scientific scholarship on the socioeconomic and familial circumstances within which adolescents' dietary beliefs and behaviors develop, particularly with respect to parental influences on adolescents' diets. Previous work has characterized how mothers across SES react differently to the challenges associated with adolescents' increased preferences for and autonomous access to calorie-dense, processed foods (Eldridge and Murcott, 2000). Overall, we find that how mothers perceive their own versus their adolescents' responsibility for healthy eating, and the degree to which mothers feel they can *make* adolescents eat healthfully, are tied to variation in conversations about healthy eating across SES. While high-SES mothers express the belief that they are responsible for and can still largely control their adolescents' diets, low-SES mothers' reports of infrequent healthy eating dialogue reflect an expectation of growing adolescent independence and waning parental control in the adolescent years (Backett-Milburn et al., 2006). These beliefs are consistent with documented differences in socioeconomic group members' attitudes towards health, where members of low-SES groups perceive having less efficacy to change their dietary and health-related outcomes, in contrast to high-SES group members' beliefs that they can control such health outcomes through lifestyle choices (Wardle and Steptoe, 2003).

In demonstrating how these different expectations manifest in

mothers' dialogue with their adolescents, we advance scholarship suggesting that high-SES mothers perceive improving adolescents' food practices as mothers' responsibility (Backett-Milburn et al., 2010b). High-SES mothers in our study use dialogue with their adolescents to explain and justify food standards. By contrast, low-SES mothers' discussions of food reveal a greater acceptance of adolescents' autonomy in food choices (Backett-Milburn et al., 2006). Low-SES mothers talk less frequently with their adolescents about food, viewing food choices as increasingly adolescents' responsibility. This is consistent with what previous scholars have found in that, given other pressing issues created by their socioeconomic contexts, adolescents' eating practices are lower in low-SES mothers' “hierarchy of worries” (Backett-Milburn et al., 2006).

We additionally contribute to the literature on parent-adolescent dialogue about food by showing important socioeconomic differences in the nature and extent of this dialogue. Such discussions occur within adolescents' wider socioeconomic and familial circumstances and serve to reflect – and arguably, to reproduce – broadly circulating implicit norms and expectations around food (Naccarato and LeBesco, 2012). In doing so, these conversations and the messages imparted to adolescents are one mechanism through which adolescents develop a socioeconomically-based habitus that reflects the implicit rules of acceptable consumption given their socioeconomic position (Bourdieu, 1984).

We contribute to scholarship on parent-adolescent discussions about food, which to date has mostly focused on SES differences in whether parents talk to adolescents about healthy eating and/or about weight (Berge et al., 2015, 2013). We broaden this field's scope by exploring the nature of conversations about healthy eating and by examining other discussed dimensions of food such as quality and cost. We show how food-related topics are framed in relation to each other during parent-adolescent discussions and suggest that this framing shapes the messages that adolescents take away. For instance, high-SES mothers consider but do not articulate their thoughts regarding price, leading high-SES adolescents to view price as unimportant. In contrast, since low-SES mothers consistently discuss price with their adolescents – perhaps because these mothers are less able to shield their adolescents from financial concerns – low-SES adolescents come to understand price as a central priority in food decisions.

One implication of our study is that high-SES families' discussions about food quality may serve to strengthen messages to adolescents about healthy eating, while discussions in low-SES families may reduce the perceived feasibility of healthy eating by pitting healthy eating against price. Messages about the importance of healthy eating, when paired with messages about the importance of food quality, can give high-SES adolescents clearer and consistent guidelines for making food choices. For high-SES adolescents, choosing healthy foods often means choosing higher quality foods. In contrast, low-SES adolescents told to make healthy food choices but also to prioritize affordability may have to navigate a more complex set of guidelines for making food choices, as they may view making a healthy choice as making a more expensive choice. Given messages communicating the financial challenges and trade-offs associated with making healthier, higher quality food choices, low-SES adolescents can come to learn that price is a more important consideration than health or quality. If low-SES adolescents come to see healthy food as unattainable and expensive, they may not learn how to seek out affordable, healthy food options.

This study has a set of limitations. Mother-adolescent food-related dialogue may differ in other regions, and the nature of parent-adolescent dialogue may vary between mothers and fathers (Miller-Day, 2002; Berge et al., 2013). Second, while our

interviewees' accounts revealed the topics most salient and prevalent from the perspectives of mothers and adolescents, additional topics such as convenience (Devine et al., 2006; Jabs et al., 2007), availability (Caspi et al., 2012) or food waste (Daniel, 2016) warrant closer examination. While these topics did not emerge as consistently in our respondents' accounts of food-related discussions, future research should examine them. Moreover, adolescents may engage in conversations with additional family members and peers. Finally, our cross-sectional data preclude us from assessing causal impacts of food discourses on adolescents' eating habits. We hope that future research will assess the long-term implications of these conversation topics on adolescents' dietary health.

Conversations between mothers and adolescents contribute to adolescents' understandings of food as well as to adolescents' perspectives on their families' food practices and priorities. In presenting a more holistic view of food-related dialogue within families, we propose that scholars should not only study the range of food-related topics covered in conversation, but also seek to understand how these topics are understood and interpreted both on their own and in relation to each other. How these topics are framed and understood by adolescents may strengthen or undermine messages about dietary health, and in doing so, contribute to socioeconomic disparities in adolescents' diet quality and diet-related health outcomes.

Acknowledgments

This work was conducted with support from the Stanford Vice Provost for Graduate Education and the Stanford Department of Sociology. The content is solely the responsibility of the authors and does not necessarily represent the official views of Stanford University. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors. We thank Tomás Jiménez, Michelle Jackson, Douglas McAdam, Dale Miller, Christopher Gardner, Caitlin Daniel, Sandra Nakagawa, Julian Zlatev, Gregg Sparkman, Anshuman Sahoo, Susana Claro, David Koweek, Miriam Hambarchyan, and Adina Abeles. We also thank our collaborators at Hillview Central High School and our anonymous reviewers for their invaluable input for our final manuscript.

Appendix A. Supplementary data

Supplementary data related to this chapter can be found at <http://dx.doi.org/10.1016/j.socscimed.2017.06.016>.

References

- Backett-Milburn, K.C., Wills, W.J., Gregory, S., Lawton, J., 2006. Making sense of eating, weight and risk in the early teenage years: views and concerns of parents in poorer socio-economic circumstances. *Soc. Sci. Med.* 63, 624–635. <http://dx.doi.org/10.1016/j.socscimed.2006.02.011>.
- Backett-Milburn, K.C., Wills, W.J., Roberts, M.-L., Lawton, J., 2010. Food and family practices: teenagers, eating and domestic life in differing socio-economic circumstances. *Child. Geogr.* 8, 303–314. <http://dx.doi.org/10.1080/14733285.2010.494882>.
- Backett-Milburn, K.C., Wills, W.J., Roberts, M.L., Lawton, J., 2010. Food, eating and taste: parents' perspectives on the making of the middle class teenager. *Soc. Sci. Med.* 71, 1316–1323. <http://dx.doi.org/10.1016/j.socscimed.2010.06.021>.
- Berge, J.M., MacLehose, R., Loth, K.A., Eisenberg, M., Bucchianeri, M.M., Neumark-Sztainer, D., 2013. Parent conversations about healthful eating and weight. *JAMA Pediatr.* 167, 746–753. <http://dx.doi.org/10.1001/jamapediatrics.2013.78>.
- Berge, J.M., MacLehose, R.F., Loth, K.A., Eisenberg, M.E., Fulkerson, J.A., Neumark-Sztainer, D., 2015. Parent-adolescent conversations about eating, physical activity and weight: prevalence across sociodemographic characteristics and associations with adolescent weight and weight-related behaviors. *J. Behav. Med.* 38, 122–135. <http://dx.doi.org/10.1002/aur.1474>. Replication.
- Birch, L., Savage, J.S., Ventura, A., 2007. Influences on the development of Children's eating behaviours: from infancy to adolescence. *Can. J. Diet. Pract. Res.* 68, S1–S56. <http://dx.doi.org/10.1097/MD.0000000000000215>.
- Björntorp, P., 2001. Do stress reactions cause abdominal obesity and comorbidities? *Obes. Rev.* 2, 73–86. <http://dx.doi.org/10.1046/j.1467-789x.2001.00027.x>.
- Bourdieu, P., 1984. *Distinction: a Social Critique of the Judgment of Taste*. Harvard University Press, Cambridge, MA.
- Caspi, C., Sorensen, G., Subramanian, S.V., Kawachi, I., 2012. The local food environment and diet: a systematic review. *Health Place* 18, 1172–1187. <http://dx.doi.org/10.1016/j.healthplace.2012.05.006>. The.
- Contento, I.R., Williams, S.S., Michela, J.L., Franklin, A.B., 2006. Understanding the food choice process of adolescents in the context of family and friends. *J. Adolesc. Heal.* 38, 575–582. <http://dx.doi.org/10.1016/j.jadohealth.2005.05.025>.
- Cooper, M., 2014. *Cut Adrift: Families in Insecure Times*. University of California Press, Oakland, CA.
- Curtis, P., James, A., Ellis, K., 2009. Fathering through food: children's perceptions of fathers' contributions to family food practices. In: *Children, Food and Identity in Everyday Life*. Palgrave Macmillan, UK, pp. 94–111. http://dx.doi.org/10.1057/9780230244979_6.
- Daniel, C., 2016. Economic constraints on taste formation and the true cost of healthy eating. *Soc. Sci. Med.* 148, 34–41. <http://dx.doi.org/10.1016/j.socscimed.2015.11.025>.
- Daniels, S., 2009. Complications of obesity in children and adolescents. *Int. J. Obes.* 33, S60–S65. <http://dx.doi.org/10.1038/ijo.2009.20>.
- Darmon, R., Drewnowski, A., 2008. Does social class predict diet quality? *Am. J. Clin. Nutr.* 87, 1107–1117 doi:87/5/1107 [pii].
- Devine, C.M., Jastran, M., Jabs, J.A., Wethington, E., Farrell, T.J., Bisogni, C.A., 2006. "A lot of sacrifices:" Work-family spillover and the food choice coping strategies of low wage employed parents. *Soc. Sci. Med.* 63, 2591–2603. <http://dx.doi.org/10.1097/OPX.0b013e3182540562>. The.
- Eldridge, J., Murcott, A., 2000. Adolescents' dietary habits and attitudes: unpacking the "problem of (parental) influence". *Health (Irvine, Calif.)* 4, 25–49. <http://dx.doi.org/10.1177/136345930000400102>.
- Frederick, C.B., Snellman, K., Putnam, R.D., 2014. Increasing socioeconomic disparities in adolescent obesity. *Proc. Natl. Acad. Sci. U. S. A.* 111, 1338–1342. <http://dx.doi.org/10.1073/pnas.1321355110>.
- Haines, J., Neumark-Sztainer, D., Eisenberg, M.E., Hannan, P.J., 2006. Weight teasing and disordered eating behaviors in adolescents: longitudinal findings from project EAT (eating among teens). *Pediatrics* 117, e209–e215. <http://dx.doi.org/10.1542/peds.2005-1242>.
- Hammons, A.J., Fiese, B.H., 2011. Is frequency of shared family meals related to the nutritional health of children and adolescents? *Pediatrics* 127, e1565–e1574. <http://dx.doi.org/10.1542/peds.2010-1440>.
- Hanson, M.D., Chen, E., 2007. Socioeconomic status and health behaviors in adolescence: a review of the literature. *J. Behav. Med.* 30, 263–285. <http://dx.doi.org/10.1007/s10865-007-9098-3>.
- Jabs, J., Devine, C.M., Bisogni, C.A., Farrell, T.J., Jastran, M., Wethington, E., 2007. Trying to find the quickest way: employed mothers' constructions of time for food. *J. Nutr. Educ. Behav.* 39, 18–25. <http://dx.doi.org/10.1016/j.jneb.2006.08.011>.
- Kanjilal, S., Gregg, E.W., Cheng, Y.J., Zhang, P., Nelson, D.E., Mensah, G., Beckles, G.L.A., 2006. Socioeconomic status and trends in disparities in 4 major risk factors for cardiovascular disease among us adults, 1971–2002. *Arch. Intern. Med.* 166, 2348–2355. <http://dx.doi.org/10.1001/archinte.166.21.2348>.
- Kant, A.K., Graubard, B.I., 2013. Family income and education were related with 30-year time trends in dietary and meal behaviors of american children and adolescents. *J. Nutr.* 143, 690–700. <http://dx.doi.org/10.3945/jn.112.165258>.
- Larson, N., Story, M., 2009. A review of environmental influences on food choices. *Ann. Behav. Med.* 38, 56–73. <http://dx.doi.org/10.1007/s12160-009-9120-9>.
- Miller-Day, M., 2002. Parent-adolescent communication about alcohol, tobacco, and other drug use. *J. Adolesc. Res.* 17, 604–616. <http://dx.doi.org/10.1177/074355802237466>.
- Morgan, D.L., 1993. *Qualitative content analysis: a guide to paths not taken*. *Qual. Health Res.* 3 (1), 112–121.
- Naccarato, P., LeBesco, K., 2012. *Culinary Capital* (Berg, London).
- Neumark-Sztainer, D., Bauer, K.W., Friend, S., Hannan, P.J., Story, M., Berge, J.M., 2010. Family weight talk and dieting: how much do they matter for body dissatisfaction and disordered eating behaviors in adolescent girls? *J. Adolesc. Heal.* 47, 270–276. <http://dx.doi.org/10.1016/j.jadohealth.2010.02.001>. Family.
- Ogden, C.L., Carroll, M.D., Kit, B.K., Flegal, K.M., 2012. Prevalence of obesity and trends in body mass index among US children and adolescents, 1999–2010. *J. Am. Med. Assoc.* 307, 483–490. <http://dx.doi.org/10.1001/jama.2012.40>.
- Ogden, C.L., Lamb, M.M., Carroll, M.D., Flegal, K.M., 2010. *Obesity and Socioeconomic Status in Children and Adolescents: United States, 2005–2008* (NCHS Data Brief).
- Rasmussen, M., Krølner, R., Klepp, K.-I., Lytle, L., Brug, J., Bere, E., Due, P., 2006. Determinants of fruit and vegetable consumption among children and adolescents: a review of the literature. Part I: quantitative studies. *Int. J. Behav. Nutr. Phys. Act.* 3, 22. <http://dx.doi.org/10.1186/1479-5868-3-22>.
- Sandelowski, M., 2000. Focus on research methods whatever happened to qualitative description? *Res. Nurs. Health* 23, 334–340. [http://dx.doi.org/10.1002/1098-240x\(200008\)23,4<334::aid-nur9>3.0.co;2-g](http://dx.doi.org/10.1002/1098-240x(200008)23,4<334::aid-nur9>3.0.co;2-g).
- Sargent, R.G., Yagi, S., Shoo, H., Corwin, S., Rogan, T., Drane, J., 2002. Differences in diet quality among fourth and seventh grade public school students in South Carolina. *J. S. C. Med. Assoc.* 54–60.
- Sarlio-Lähteenkorva, S., 2007. Determinants of long-term weight maintenance. *Acta Paediatr.* 96, 26–28. <http://dx.doi.org/10.1111/j.1651-2227.2007.00166.x>.
- Savage, J., Fisher, J., Birch, L., 2007. Parental influences on eating behavior:

- conception to adolescence. *J. Law. Med. Ethics* 35, 22–34.
- Small, M.L., 2009. 'How many cases do I need?': on science and the logic of case selection in field-based research. *Ethnography* 10, 5–38. <http://dx.doi.org/10.1177/1466138108099586>.
- U.S. Department of Health and Human Services and U.S. Department of Agriculture, 2015. 2015–2020 Dietary Guidelines for Americans, 2015–2020 Diet. Guidel. Am. (8th Ed. 18. <http://dx.doi.org/10.1097/NT.0b013e31826c50af>.
- Wang, D.D., Leung, C.W., Li, Y., Ding, E.L., Chiuve, S.E., Hu, F.B., Willett, W.C., 2014. Trends in dietary quality among adults in the United States, 1999 through 2010. *JAMA Intern. Med.* 174, 1587–1595. <http://dx.doi.org/10.1001/jamainternmed.2014.3422>.
- Wardle, J., Steptoe, A., 2003. Socioeconomic differences in attitudes and beliefs about healthy lifestyles. *J. Epidemiol. Community Health* 57, 440–443.