



Economic and Cultural Influences on Parents' Food Decisions

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Economic and Cultural Influences on Parents' Food Decisions

A dissertation presented
by
Caitlin Daniel
to
The Committee on Higher Degrees in Sociology

in partial fulfillment of the requirements
for the degree of
Doctor of Philosophy
in the subject of
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Economic and Cultural Influences on Parents' Food Decisions

Abstract

In the United States, diet-related conditions including obesity and diabetes have risen across the socioeconomic spectrum, but low-income people are more likely to have diets that contribute to poor health. Using interviews and grocery-shopping observations, this dissertation compares how low-income parents and their higher-income peers decide what to feed their children, and it considers how these differences may contribute to health disparities. The food choices of low-income parents are not well understood. Public health research documents correlations between individuals' diets and both their food access and their income, but this scholarship does not establish the underlying mechanisms of food choice. Social scientists highlight how people select food according to cultural constructions of its meaning, but inquiry into the symbolic aspects of food choice in low-income American families remains limited.

This dissertation examines how parents choose foods on the basis of both their economic resources and their ideas about food and family. Chapter 3 outlines how low-income caregivers evaluate the cost and value of food—what is affordable, what is pricey, and what warrants the extra expense. To ascertain whether healthy diets are affordable, food-cost studies use objective cost metrics, such as price per calorie. I show that low-income respondents evaluate the affordability of food according to other, more subjective criteria, including whether one's children will consume the food and what it costs relative to plausible alternatives. While trying to economize in many areas, low-income parents sometimes spend more than “necessary” on foods that make their children happy, that buffer their children from deprivation, and that buoy their parental identity.

Chapter 4 shows how low-income parents avoid buying foods that their children might not like because food rejections erode scarce economic resources. Instead, these caregivers purchase what their children like, often highly palatable unhealthy foods. High-income respondents, in contrast, introduce new foods with little concern about the cost of waste. Existing diet-cost estimates exclude the food that children waste as they acquire new tastes. As a result, these calculations understate the true cost of providing children with a healthy diet.

Chapter 5 examines low-income parents' seemingly irrational decision to buy bottled water, even absent safety concerns about tap water. Some researchers assert that buying bottled water can exacerbate health disparities by diverting money away from health-enhancing options. Low-income respondents buy bottled water in part because they see it as cheap. In contrast, higher-income respondents find it expensive. These evaluations diverge because respondents implicitly compare bottled water to their default drink: bottled water costs less than the sugar-sweetened beverages that low-income families often consume, but it costs more than the tap water that higher-income parents favor. This chapter bridges cultural sociology and behavioral economics by proposing the concept of "cultural anchoring." According to behavioral economists, arbitrary information can influence, or anchor, people's judgments. I show how anchors can vary across groups in ways that lead to divergent evaluations of food cost.

To close, I discuss how economic resources and cultural schemas influence parents' food choice both additively and interactively. I highlight three types of interactive relationships: 1) the cultural constitution of economic judgments, 2) interdependence through budgetary depletion, and 3) the cultural delimitation of economically constrained options. This dissertation also suggests how to strengthen nutrition programming and policies, and how to increase public compassion for low-income families striving to nourish their children.

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I remember my mind buzzing as an undergraduate sociology major when I learned from Emile Durkheim that freedom hinges not on unfettered volition but on the interdependence between individuals. Although this is a dissertation and not the complex societies that Durkheim wrote about, his basic insight applies. Throughout graduate school, I have enjoyed great freedom—the freedom to pursue my interests, to express my ideas, to change my course—and it is only because of others' efforts that this freedom and its fruits have been possible. First, I want to thank my committee: Michèle Lamont, Jason Beckfield, Kathy Edin, Chris Wildeman, and Mark Pachucki. Each of them contributed essential elements to this dissertation and to my scholarly development more broadly.

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Jenny Stuber made me a sociologist. I cannot say exactly when she sealed my fate, but it might have happened the day that I shadowed Jenny at Normandale Community College for a middle-school assignment. I was tasked with learning about a job and imagining my future adult

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food practices. I had forgotten this part of myself. Chris saw it and returned it to me. Beyond this project and a piece of myself, Chris has given me a shared life and a home. I'm not sure that I can adequately thank him for that. But I am lucky to have a lifetime to try.

Chapter 1

Introduction

After my mother died, I reached for her recipe book. My father, widowed at age 40, was too shaken to cook. Save the occasional chicken chow mein casserole, dinners became a stale rotation of Stouffer's, Lean Cuisine, and Swanson's chicken potpies. After months of these soulless frozen meals, I itched for the dishes that my mother had made. I dug out oil-spattered recipes scrawled in her handwriting and, at age 11, I began to cook. Only half-aware of what I was doing, I sought someone who was gone and strove for normalcy in my shifting world. Over time, as I rehearsed the family meals, Thanksgiving dishes, and Christmas cookies of days past, I came to appreciate how people use food to create experience and emotion, to span social distance, and to reach back in time. I learned that people turn to food to feel whole.

When father's meager finances completely crumbled in my late teens and college years, I saw how poor people spend scarce money on food that feeds their humanity as well as their body. Once, my dad announced that he was getting coffee with a friend. As he spoke, he counted his last bit of money—the coins jangling at the bottom of his change jar—to make sure that he had enough. I asked how he could spend \$2.25 on a drink when the refrigerator lay bare. He spat back, "I get to have a life too." Furious in that moment, I realized with time that my father, too, sought connection and normalcy in food. Perhaps he sought it even more intensely because a life of scarcity and uncertainty brought few other rewards.

Yet reading about how low-income communities eat "junk" because they cannot access vegetables or about how poor people maximize caloric intake to stretch dwindling food dollars, one gets little sense of the symbolic and social aspects of food choice. What poor people eat is reduced to how far they live from the supermarket or to how much money lies in their pocket.

Certainly these conditions bear on people's food decisions, and certainly, not every eating occasion drips with symbolism. Sometimes we just eat. But without attending to the social and symbolic aspects of food in addition to material constraints, we risk hobbling our understanding of the food decisions made by people across the socioeconomic spectrum.

This dissertation examines 1) how parents decide what to feed their children, 2) how these decisions arise from the interaction between economic resources and ideas about food, and 3) how these decisions vary between low- and higher-income families. What Americans eat has become a matter of great public, governmental, and scholarly concern. Several diet-related health conditions, including obesity and diabetes, have become more prevalent since the 1970s (Chou et al 2004, Kanjilal et al 2006), prompting worry about individuals' health, medical spending, and the moral status of the country (Saguy 2013). While subpar diets and poor dietary health exist in all socioeconomic groups, low-income people tend to eat less nutritious diets (Hiza et al 2013, Wang et al 2014) and have higher rates of obesity (Ogden et al 2010a, 2010b) and diabetes (Kanjilal et al 2006). As a result, those who are least equipped to cope with a diet-related health condition (Lutfey and Freese 2005) are most likely to become ill.

Despite its relevance to understanding socioeconomic disparities in diet quality, relatively few studies have compared how low-income and higher-income parents in the United States decide how to feed their children. In taking up this question, I redress a gap at the intersection of two separate but related bodies of scholarship. In public health, several strands of research seek to explain socioeconomic disparities in diet quality by examining the structural and economic correlates of what people eat. From broad associations between individuals' material conditions and their dietary intake, scholars often infer that income and access are primary determinants of food choice. These studies typically posit rather than observe the behavioral mechanisms

underlying these correlations, however, and they do not document influences beyond material constraints.

In contrast, sociologists and anthropologists have examined food practices up close, highlighting how food's meaning deeply influences what we eat. Research on the food practices of cultural elites and ethnic minorities abounds, but inquiry into food and culture among "ordinary" American families—especially low-income families—is less extensive. Scholarship on this question is growing, however, with recent studies identifying material, cultural, social, and practical influences on what low-income people eat (Antin and Hunt 2012, Alkon et al 2013, Chen 2016). While this research highlights that food provisioning in disadvantaged households is complex and multi-causal, the precise mechanisms of food choice and the interplay between the various influences on food decisions remain inadequately understood. Because social action results from both material resources and shared schemas (Sewell 1992), a fuller understanding of families' food decisions requires examining the interaction between the economic resources parents have and the ideas that they hold (Delormier et al 2009).

I examine how, when selecting food, parents use their economic resources according to schemas and beliefs in two domains. First, I examine parents' *economic thinking*, or how they assess the cost and value of food, including what they find affordable, what is too pricey, and what warrants the extra expense. Second, I examine the *social meanings of food*, especially how parents understand the place of food in their children's life and in their identity as parents.

Broadly, I find that low-income primary caregivers emphasize the material imperative to conserve scarce economic resources while also striving to provide meaningful social and emotional experiences through food. I also argue that it is vital to understand how consumers themselves think about the cost and value of food. Respondents evaluate food's affordability

according to several criteria, some of which are not captured in standard cost calculations that undergird assertions about whether a healthy diet is affordable. Additionally, I show how seemingly irrational food decisions make economic sense—and social sense—to low-income consumers. Finally, I emphasize that economic explanations of food choice are often underdetermined and that a cultural perspective is vital to understanding the food choices of parents across the socioeconomic spectrum.

Background and Motivation

Socioeconomic Disparities in Diet Quality and Parents' Role in Children's Diets

Diet quality is consistently linked to health, including type 2 diabetes, cardiovascular disease, stroke, obesity, and several cancers (Micha et al 2017). Rates of diet-related disease such as obesity and diabetes have increased markedly since the 1970s (Chou et al 2004, Kanjilal et al 2006). Concern about this trend centers both on the growing prevalence of these conditions and on socioeconomic disparities in diet quality and dietary health. Rates of obesity (Ogden et al 2010a, 2010b) and diabetes (Kanjilal et al 2006) are typically higher among low-income individuals, with some variation by race and gender in the case of obesity (Ogden et al 2010a).

Socioeconomic disparities in diet-related health stem in part from differences in diet quality (Darmon and Drewnowski, 2008). Although Americans on average do not meet dietary guidelines (Wang et al 2014), poverty is associated with less healthy food purchases (Turrell et al 2002), a lower likelihood of adhering to nutrition guidelines (Kirkpatrick et al 2012), and worse overall diet quality (Hiza et al 2013, Darmon and Drewnowski 2008, Kant and Graubard 2007). American adults' diets improved modestly between 1999-2000 and 2009-2010, but low-income individuals saw no improvement, and initial socioeconomic disparities grew (Wang et al 2014).

Further concern about what we eat centers on the diets and dietary health of children. The childhood obesity rate of 16.9% (Ogden et al 2012) has more than tripled since the early 1970s. For children, too, worries about social disparities are salient, as low-income and minority children are most likely to be overweight or obese (Ogden et al 2012b). Although young people eat outside family contexts, and caregivers alone do not influence children's food preferences (Roberto et al 2010), families are central to explaining why children eat what they eat.

Parents' Influence on Children's Diets

Through various pathways, parents¹ create the physical and social settings in which children first encounter and learn about food (Rozin 1988, Davison and Birch 2001, Gruber and Haldeman 2009, Scaglioni et al 2008, Vaughn et al 2013). First, families structure children's immediate physical environments, especially the home food environment. The availability of food at home is associated with children's intake. For example, when fruits and vegetables are present and within reach, children are more likely to consume them (Hearn et al 2015, Pearson et al 2009, Jago et al 2007). By making some foods available, while keeping others off the table, families mediate the wider food environment, either potentiating or buffering against its "toxic" nutritional effects (Birch 2006).

Families also shape children's eating patterns through intentional and inadvertent modeling. When children observe esteemed others select and consume a given food, children are more willing to try and ingest that item as well (Birch 1999, Rozin 1996). Scholars hypothesize that children infer from others' actions which foods are safe and even desirable (Wertz and Wynn 2014). Primary caregivers are not the only esteemed individuals who influence kids' food choices. Observing a peer (Birch 1980), teacher (Birch et al 1980), or cartoon character (Roberto

¹ I use the terms "parent," "family," and "caregiver" synonymously, recognizing that these terms are not perfectly equivalent.

et al 2010) can prompt children to try a food and can even increase how much a child likes the item. Because families are central in kids' lives, however, they can consistently influence children's intake through their own eating habits.

Parents not only shape children's dietary intake, but they also influence children's very food preferences. Families do so by structuring opportunities for kids to experience the world of food (Birch 1999, Birch and Davison 2001). With the exception of an intrinsic preference for sweet and salt and an aversion to bitterness and sour, humans' food preferences are learned through experience. To complicate matters, children are neophobic, wary of unfamiliar foods, and they tend to reject new items (Rozin 1976). Psychologists posit that young humans' neophobia stems from our biological condition as omnivores, who need a range of nutrients from multiple food sources, but who lack an inborn sense of which potential edibles are nourishing, and which ones are noxious. Young humans are predisposed to learn about new foods, however, and over time, they associate the characteristics of a food—its flavor, texture, and smell—with safety and the gratifying physical sensation of being nourished (Johnson et al 1991, Capaldi 1996, Birch 1999). Through repeated exposure, children can come to tolerate or even like initially unfamiliar foods (Sullivan and Birch 1990).

Although these mechanisms of taste acquisition are psychological and deeply biological, they are socially structured, as other people create the settings in which children have opportunities to eat and develop new tastes (Rozin 1996: 252, Birch and Davison 2001). Because families influence children's intake and food preferences in various ways, parents and their food provisioning routines are important targets for policies and programming (Delormier et al 2009). Understanding how primary caregivers decide what to feed their families consequently can inform policies, including nutritional interventions that parents will endorse and adopt.

Economic Explanations of Food Choice

Researchers have advanced many explanations of food choice among limited-resource populations, including poverty-related stress that leads to excessive eating (Adam and Epel 2007); cycles of bingeing and fasting that stem from the monthly SNAP disbursement cycle (Dinour et al 2007, Kaufman and Karpati 2007); fewer perceived long-term benefits of eating healthily (Pampel et al 2010); offsetting the hardship of poverty with the pleasure of eating (Banerjee and Duflo 2011); the disproportionate saturation of food advertisement in poor minority neighborhoods (Kumanyika and Grier 2006); and time scarcity among low-wage workers who log long hours at work (Devine et al 2006).

Other scholars argue that poor people's diet quality and socioeconomic disparities in diet-related health outcomes reflect the high price of wholesome food. According to a recent meta-analysis, healthy diets cost \$1.48 more per day than unhealthy ones (Rao et al 2013). Energy-dense foods, which contain a large number of calories per gram and often have added fat and sugar, typically cost less per calorie than healthier foods such as vegetables, fruits, whole grains, nuts, and lean proteins (Darmon and Drewnowski, 2008). Low-income people are more likely to eat energy-dense foods that provide cheap calories (Aggarwal et al 2011), leading some researchers to posit that they do so to stretch scarce food dollars (Drewnowski and Specter 2004). Emphasizing the cost barriers to healthy eating, researchers imply that with more money, low-income people would select healthier groceries instead.

In multiple surveys and qualitative studies, low-income people report that prices are a primary consideration when they select foods (Glanz et al 1998, Edin et al 2013, McGee et al 2013, Alkon et al 2013, Charles and Kerr 1986, Inglis et al 2005, Dobson et al 1994, Beagan et al 2016), whereas higher-income people report less concern about food cost (Glanz et al 1998).

Low-income people not only attend closely to food prices and strive to minimize costs, but they also report having to forego healthier foods simply to have enough food (Edin et al 2013, Dobson et al 1994, Charles and Kerr 1986). Often, these families state that, given greater resources, they would purchase more healthful items (Edin et al 2013, Bowen and Elliott 2017; also Antin and Hunt 2012).

While some researchers and low-income consumers themselves find healthy food cost-prohibitive, other scholars and food justice advocates contend that people can eat healthily on a tight budget. Among researchers, disagreement about the affordability of healthy food centers largely on how food prices are measured. United States Department of Agriculture (USDA) analysts find that when measured by price per calorie, fruits and vegetables do cost more than less healthy options. When price is measured by serving or by edible weight, however, many healthy items cost less than foods containing added sugar, saturated fat, and/or salt (Carlson and Frazão 2012). USDA analysts consequently suggest that the typical price-per-calorie metric overstates the cost of energy-dilute foods and that many healthy options are affordable (Carlson and Frazão 2012). Similarly, some researchers claim that, with careful budgeting, Supplemental Nutritional Assistance Program (SNAP) recipients can satisfy dietary guidelines for fruits and vegetables (Stewart et al 2011); some food justice advocates contend that calorific “junk food” and fast food seem cheap, but actually cost more per meal than simple home-cooked food (Bittman 2011). Finally, although some healthy foods are pricey by any measure (Carlson and Frazão 2012), within certain categories of food and drink, healthy and unhealthy items have comparable costs (Bernstein et al 2010, Rao et al 2013).

Limited funds limit what one can buy, but they do not determine outright what foods people purchase. According to several qualitative studies, low-income people vary somewhat in

how they allocate their scarce resources for food (Webber et al 2010, Dowler and Calvert 1995, Charles and Kerr 1986, Mackereth and Milner 2007). For example, Dowler and Calvert (1995) found that limited-resource British mothers with the lowest incomes ate less healthful diets than their peers who earned slightly more, but among the lowest earning mothers, those who emphasized health had the healthiest diets. Additionally, studies have found that education moderates the strength of the association between income, diet cost, and diet quality (Aggarwal et al 2011). These studies suggest that economic resources set bounds on what one can eat, but that within those bounds, other considerations influence food choice and diet quality.

Access-Based Explanations of Food Choice

Other scholars argue that limited access to healthy food explains why low-income people have poorer diets than their higher-earning counterparts. Based on associations between distance to the nearest grocery store and individuals' diet quality, researchers have posited that limited access to salutary options may account for eating patterns. Because disadvantaged neighborhoods tend to have fewer full-service grocery stores and supermarkets than higher-income areas do (Walker et al 2010), a low-income household's limited access to food may contribute to socioeconomic disparities in diet quality.

The logic behind this assertion is compelling and intuitive: people want healthy food, but cannot eat what lies beyond reach. The "food desert" hypothesis has had a great influence on government policies. In 2014, the United States federal government budgeted \$125 million per year to finance initiatives aimed at increasing food access (Office of Community Services 2015), and throughout the Obama administration, the federal government identified food deserts as a major barrier to healthy eating among the poor (Let's Move Nd).

The food desert hypothesis rests on three key assumptions: 1) that individuals purchase and eat foods available in their neighborhood (Caspi et al 2012b: 1184)—presumably calorific foods from convenience stores and fast-food outlets; 2) that they eat foods procured from their neighborhood because they cannot access foods from farther away; and 3) that provided with more proximate supermarkets and grocery stores, food desert residents would eat more healthily.

However, evidence that geographic proximity to food outlets explains individuals' consumption and attendant health outcomes is mixed. Although studies do find positive associations between store proximity and BMI (Fiechtner et al 2013, Gamba et al 2015), other studies find no association between individuals' distance from food vendors and their dietary intake or body mass index (Hattori et al 2013, Lee 2012, An & Sturm 2012, Caspi et al 2012; also Van Hook & Altman 2012). Several studies that track where people buy groceries cast doubt on the underlying assumption that people consume what is in their immediate environment. For example, a study in Seattle shows that low-income people typically travel outside their neighborhood in order to shop at more affordable venues, even when more expensive full-service stores are closer (Aggarwal et al 2014; also Dubowitz et al 2015). Additionally, quasi-experimental studies fail to find strong evidence that food desert residents would eat differently given access to healthier foods. These studies suggest that the opening of a supermarket in low-income areas has a small or negligible effect on residents' diet quality and dietary health (Cummins et al 2005, Wrigley et al 2011, Cummins et al 2014, Elbel et al 2015). Even within the same store, low-income customers choose less healthy foods than their higher-income counterparts (Handbury et al 2015).

Some recent research recognizes that explaining the influence of food access on diet quality requires going beyond mapping retail outlets and calculating correlations between

distance and diet. In fact, some public health scholars have advocated for abandoning policies that aim to improve people's diets by increasing their access to healthy food outlets (Block and Subramanian 2015). Fundamentally, understanding the relationship between the physical food environment and diet quality requires understanding where people shop and why they shop there (e.g. Webber et al 2012, Cannuscio et al 2014, Hillier et al 2015, Young et al 2016). In this vein, recent research on food access has begun to consider what aspects of the food environment are salient to people (Cannuscio et al 2010), how people's subjective evaluations of access compare to objective measures (Caspi et al 2012a), and how the health consequences of the food environment may go beyond dietary health to include mental health and overall stress (Cannuscio et al 2010).

Even with a greater understanding of how people decide *where* to shop, research on food access gives somewhat limited insight into *what* people buy. Certainly physical access to food stores and household finances limit what people can eat, but these structural and material circumstances do not determine food choice. People also act based on their shared understandings, or cultural schemas, of their worlds (Strauss and Quinn 1997, Lamont et al 2010). Both material resources and schemas shape how individuals act: people use the resources they have according to the ideas they hold, and they can act according to their ideas when they have the resources to do so (Sewell 1992, Swidler 1986).

Delormier and colleagues (2009) have argued that understanding families' food decisions requires examining the interplay between material resources and the sociocultural environment of shared meanings and norms. Drawing on theories of structuration that integrate both sociocultural "rules" and material resources, these researchers contend that food choice results neither from unencumbered individual volition nor from overbearing structural constraints.

Instead, food choice stems from how people approach and adapt to their food environment, given their material resources and their cultural schemas. Understanding the role of shared schemas in food choice requires drawing on culturally focused studies of food and eating in sociology, anthropology, and psychology.

Symbolic Aspects of Food and Eating

While major strands of public health research highlight the structural and material determinants of food choice, social scientists emphasize how people select foods according to cultural constructions of food's meaning and value. In fact, scholars state in almost mantric fashion that beyond sustaining a physical body, food is inescapably symbolic and social (Rozin 1988, Beardsworth and Keil 1997: 6, Belasco 2008, Lupton 1996). The very act of eating requires an act of interpretation.

At the most basic level, all human groups must discern which edibles are nourishing and which are noxious (Rozin 1976). At another fundamental level, we see in food our basic humanity. Claude Lévi-Strauss (1966) argued famously that in transforming raw natural material through human effort, cooking encodes the fundamental duality of nature and culture, thus locating humans in relation to the untamed world around them. Although individuals can develop idiosyncratic notions and emotions regarding food² (Capaldi 1996), many understandings of food and eating are created collectively and transmitted through social experience (Rozin 1996).

Beyond the elemental classification of whether something counts as food nor non-food (Rozin and Fallon 1980), cultural schemas define what types of foods exist and which items belong to which category (Blake et al 2007, Biltekoff 2013). Cultural schemas also specify which foods and flavors complement one another and which ones clash (Rozin and Rozin 1981,

² For example, random negative experiences, such as getting a food-borne illness, can strongly shape people's taste for and feelings toward the offending food.

Sullivan and Birch 1990). Additionally, cultural schemas define the structure and timing of meals, which can vary across time and place (Douglas 1972, Charles and Kerr 1988, Rozin 1996).

Cultural constructions of food also include the criteria that people use when evaluating food and food-provisioning activities. Some criteria of evaluation concern aspects of the food itself, such as its aesthetic and sensory characteristics (Bourdieu 1984, Johnston and Bauman 2010), healthfulness (Pill 1983, Fischler 1986, Charles and Kerr 1988), and the consequences of eating it (Fischler 1986). Other evaluative criteria relate to the social aspects of food, including its social acceptability (Douglas 1972, Bourdieu 1984, Ludvigson and Scott 2009, Elliott 2014) and its perceived morality (Douglas 1997, Rozin 1988, Weber et al 2008, Johnston and Bauman 2010, Johnston et al 2011). Often, different social groups have different food-related schemas and criteria of evaluation, giving rise to group-level variations in how people think and feel about what foods are acceptable, what foods are desirable, and why.

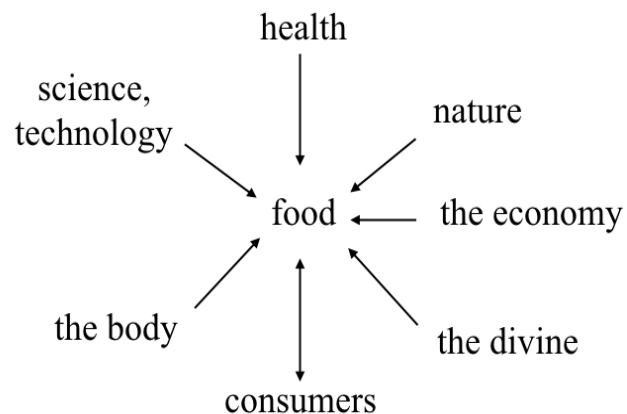
As with cultural schemas more broadly (D'Andrade 1995), food-related cultural schemas describe the world, and in doing so, they also prescribe and proscribe action. In specifying what is typical and acceptable, they outline, through contrast, what is non-normative (e.g., Backett-Milburn et al 2010). Thus, these schemas prescribe implicitly what one can eat and what one should avoid (Rozin 1988).

Often, shared understandings of food incorporate meanings stemming from domains and entities that are associated with food. These domains and entities include nature (Lévi-Strauss 1964, Gusfield 1992, Barnard 2016), the body (Bourdieu 1984, Fischler 1986, Levenstein 2003, Lupton 1996), technology and progress (Levenstein 2003, Wardle 1997), and health (Levenstein 2003, Fischler 1986).

A sociological axiom asserts further that we not only judge people on the basis of what they eat, but we evaluate food on the basis of who consumes it. According to this argument, we appreciate and enjoy foods not only because we like or dislike their sensory characteristics, but also because we associate foods with groups of persons we hold in esteem or disregard (Bourdieu 1984, Ray 2016, Biltekoff 2013, Charles and Kerr 1986, Dobson et al 1994; also Bryson 1996, Lizardo and Skiles 2016).

Figure 1 shows how the meanings of food derive from shared understandings of related domains. Figure 1 also shows that people attribute meaning to consumers—be they individuals, families, and social groups—on the basis of the food that they eat.

Figure 1. The Relationship Between the Meanings of Food and of Related Domains



Often, food takes on moral valence because the domains associated with food engage, however implicitly, fundamental moral questions of the proper balance between competing imperatives—nature and civilization (Lévi-Strauss 1964, Barnard 2016, Gusfield 1992), change and tradition (Warde 1997, Levenstein 2003), desire and restraint (Warde 1997, Fischler 1986), self and other (Saguy 2013, Biltekoff 2013, Charles and Kerr 1988, Dobson et al 1994, Meigs 1987, Douglas 1972), the mundane and the cosmic (Meigs 1987, Fischler 1986, Douglas 2013).

An imbalance of these elements can threaten disorder, thereby endangering what we find good, pure, and secure.

Food-Related Culture in Action

Social scientific and historical scholarship examines how food-related cultural schemas enable a range of social actions. Some actions pertain to food and eating, especially how people decide what to eat and what to feed others (Sobal and Bisogni 2009); how they experience these acts (Young 2016, DeVault 1991, Bowen et al 2014, Lupton 1996, Barthes 1997[1961], Johnston and Cairns 2014); and how we form socially patterned tastes (Bourdieu 1984, Rozin 1996). The meanings attributed to food even influence how people perceive and interpret the flavors and smells of what they eat (Lupton 1996, Wansink 2006).

Other actions go beyond food decisions *per se* to include matters that are more explicitly social, including how people construct a self-concept through food; how they judge others (Backett-Milburn et al 2010); how they foster social ties and enforce social distance (Douglas 1972, Biltekoff 2013); how they uphold a sense of what is right and wrong (Charles and Kerr 1988, Johnston et al 2011, Biltekoff 2013); and how food is involved in reproducing social hierarchies (Charles and Kerr 1988, Bourdieu 1984, Johnston and Bauman 2010). Food thus encompasses issues of personhood, inclusion and exclusion, morality, power, and social stratification.

More specifically, a wealth of scholarship has examined the role of food in the twinned processes of identification and affiliation, on the one hand, and judgment and social differentiation, on the other. Through eating, people experience and express proximity with a wide range of entities, including ethnic group (Ray 2004, Gabaccia 2009, Vallianatos and Raine 2008, Chapman and Beagan 2013), country (Ferguson 1998, DeSoucey 2010), region (Bell and

Valentine 1997), religious community (Sered 1988, Douglas 2013), gendered social roles (DeVault 1991, Charles and Kerr 1988, Hirsch 2016), social class (Mennell 1996, Bourdieu 1984, Heldke 2003, Mintz 1985, Bugge 2011, Beagan et al 2015, Johnston and Bauman 2010, Backett-Milburn et al 2010), age group (Fantasia 1995, Chapman and Maclean 1993, Ludvigson and Scott 2009, Stead et al 2011, Elliott 2014), family unit (Ochs and Shohet 2006, Charles and Kerr 1988), and even previous eras (Shortridge 2004, Barthes 1997[1961]). Through eating, we align ourselves, intentionally or not, with the meanings associated with food (Fischler 1988, Lupton 1996). Scholars argue that in doing so, we demonstrate to ourselves and to others where our commitments lie (e.g., Barnard 2016) and what kind of person we are—or at least what kind of person we aspire to be, even if we are not quite there yet (Fischler 1988).

Similarly, people classify and judge others on the basis of what they eat (Bourdieu 1984, Stein and Nemeroff 1995), how they eat (Bourdieu 1984), how much they eat (Taubes 2011), and how they feed others (Charles and Kerr 1988). Beyond dividing people into categories—“good” eater, “bad” eater, “healthy” eater, “meat lover,”—we also infer the contours of one’s character from what they consume (Bourdieu 1984, Stein and Nemeroff 1995, Lupton 1996, Saguy 2013). Classification and judgment on the basis of food consumption operate at a further level of abstraction. In addition to classifying cultural objects and practices such as food and eating, people classify others according to how others classify food (Bourdieu 1984). Someone who makes the “right” or “wrong” distinctions between kinds of foods reveals the type of person he is.

Food, Culture, and Inequality

Sociologists, especially feminist and Bourdieusian scholars, argue that food-related schemas, self-concepts, and social judgment help to reproduce a stratified social order. Some posit that people prefer to interact with those who eat in similar ways, forming socially differentiated networks as a result (Pachucki et al 2011). Researchers also find that people avoid foods that they associate with the social groups that they devalue (Bourdieu 1984, Johnston and Bauman 2010). Not infrequently, scholars suggest that consumers avoid these foods instrumentally, in order to draw boundaries against less worthy groups and, in doing so, elevate themselves (Biltekoff 2013, Johnston and Bauman 2010). As a result, authors argue, high-status consumers help to reify a widespread association between virtuous food and virtuous people.

Social scientists also assert that food practices and judgments thereof can justify and therefore reproduce social stratification. If people believe that food preferences stem from one's intrinsic nature rather than from socialization, they may conclude that those with low-status tastes are unworthy, while those with high-status tastes are virtuous (Bourdieu 1984). If people believe that food preferences reveal one's basic nature as virtuous or vulgar, they may conclude further that people deserve their position in the social hierarchy. As Pierre Bourdieu (1984) writes, when people attribute the working classes' taste for heavy, filling food to this group's intrinsic preferences, these tastes appear to evince that workers "don't know how to live" and "only get what they deserve" (179). By framing social stratification as legitimate, inferences about the link between consumption and character can help to perpetuate an unequal social order.

In a similar vein, historian Charlotte Biltekoff (2013) argues that in the United States, the dietary guidelines developed by nutrition scientists and government agencies enshrined middle-class tastes as healthy and virtuous, while casting the tastes of the poor and working class as

deficient, even detrimental to the nation's wellbeing. Biltekoff argues that in imposing definitions of good food, nutrition elites created a class-differentiated moral hierarchy of eaters.

Despite its relevance to understanding social inequality, relatively few systematic studies have examined how poor people in the United States decide what to eat and what to feed their families, as well as how these decisions compare to those of their higher-income peers and how differences between the two groups may contribute to socioeconomic disparities in diet quality. In the social sciences, scholarship on the social and symbolic aspects of food choice has tended to overlook low-income communities. For its part, the public health research on the diets of low-income populations tends to bypass the social and symbolic determinants of food choice. As a result, few studies examine the role of both material resources and culture in food decisions of low-income North Americans. Additionally, much of the scholarship on food and stratification assumes rather than demonstrates that the social judgment of taste reproduces social inequalities. Given evident social inequalities in diet-related health risks, a more explicit focus on health is warranted.

Food Provisioning in Low-Income Households

Food Coping Strategies

To be sure, researchers have not ignored the food provisioning activities and strategies of low-income households. Numerous studies examine the strategies that low-income households use to cope when money and food run short. These strategies differ according to whether they involve food *acquisition* or food *management* (Kempton et al 2003). Kempton and colleagues documented 56 food-acquisition coping strategies and 29 food-management strategies that fell into 25 categories, including *accessing food programs*, both federal and local; *increasing unreported income* by doing odd jobs, selling blood, pawning valuables, and participating in paid

research studies; *regulating food supplies* by controlling portion sizes, restricting family members' access to food, eating less, skipping meals, and avoiding having guests over; *reducing expenditures* by shopping at discount stores, buying cheaper foods, looking for deals, using coupons, and avoiding waste; and *drawing on social networks* to borrow food or secure meal invitations. Other studies find similar strategies (e.g., Radimer et al 1992, Maxwell 1996, Dobson et al 1994, Hamelin et al 2002, Edin et al 2013) and document others, such as avoiding extraneous food purchases by sticking to a shopping list (Beagan et al 2016); buying food without other household members, especially children, who may make requests or sneak items in the cart (Beagan et al 2016, Dobson et al 1994); sending children to play at a friend's house during mealtime so that they can eat (Hamelin et al 2002); and putting items on the check-out conveyor belt in order of importance, just in case one's money runs out (Edin et al 2013).

Food-coping strategies vary according to whether they increase resources or reduce expenditures.³ They vary further according to the level at which they operate, be it at the level of individual decision-making, social networks, or neighborhood resources. Families differ in whether they have food-coping opportunities at a given level. For example, finding deals and using coupons requires individual-level skill and know-how, while falling back on family depends on whether one has better-off kin (Edin et al 2013). Food-coping strategies also vary in severity and timing, since people tend to adapt in different ways as they progress from food insufficiency to hunger (Hamelin et al 2002, Kempson et al 2003). Additionally, people may use “proactive coping strategies” to avoid food shortages or they may cope with food insufficiency *reactively*, once food supplies shrink (Edin et al 2013)

³ A small number of food-coping strategies rely on *synergizing* resources, e.g., pooling items from multiple households to make a dish that no single household had all the ingredients for (Kempson et al 2003).

Other scholars distinguish between food coping strategies, which people resort to during temporary bouts of food scarcity, and food-related “adaptive strategies,” which are more general, longer-term attempts to enhance a household’s ability to acquire food and resources for food (Maxwell 1996). Over time, a short-term coping mechanism, such as using food pantries, can become a stable fixture of a household’s food-acquisition routine (Hamelin et al 2002; also Dobson et al 1994). When these tactics become a way of life, parents tend to feel less overtly discontent about regularly relying on coping strategies (Dobson et al 1994), if they do not come to feel outright resigned (Hamelin et al 2002).

A related strand of scholarship examines the emotional and social consequences of food insecurity. In fact, the very definition of food insecurity includes psychological and social components in addition to quantity and quality of food (Radimer et al 1992). However, the conceptualization of these psychosocial dimensions centers primarily on anxiety about procuring food and the inability to access food in socially acceptable ways. A more detailed interview study of limited-resource families in Quebec finds that food insecurity involves a wide range of emotions and social concerns. These include feelings of anxiety, impotence, guilt, shame, frustration, and marginality, as well as the fear of judgment, the loss of dignity, and the desire to dissimulate hardship (Hamelin et al 2002). Having enough food thus extends beyond biological requirements to include “*higher order needs* of a social nature,” such as fulfilling the parental obligation to feed one’s children (Hamelin et al 2002: 121, emphasis in original).

Food coping strategies are an essential part of low-income families’ food-related decisions and experiences, but coping strategies do not encompass the full range of food-provisioning decisions that these households make. Although some food-coping strategies are proactive (Edin et al 2013) and can become enmeshed in routine food acquisition (Dobson et al

1994, Walker et al 2012), people often resort to these strategies during times of food scarcity. Consequently, research on food coping strategies sheds little light on how families make food decisions when they have greater resources, such as when a new month's SNAP benefits arrive. Understanding low-income families' food decisions more broadly requires expanding the purview of inquiry beyond food coping strategies.

Culture and Food Choice of the Poor

With the goal of explaining socioeconomic disparities in diet quality, an increasing number of researchers are working to understand the dietary decision-making of low-income populations. These scholars note that ample research documents associations between socioeconomic status and diet quality, but does not observe the dietary practices underlying these statistics (Cannuscio et al 2010, Alkon et al 2013, Hillier et al 2015, Inglis et al 2005). Working inductively, these scholars explore the preferences, priorities, beliefs, and material constraints that structure food decisions in economically disadvantaged households (Antin and Hunt 2012, Wiig and Smith 2008, Johnson et al 2011, Alkon et al 2013, Edin et al 2013, Inglis et al 2005, Cannuscio et al 2010, Cannuscio et al 2014, Webber et al 2010, Mackereth and Milner 2007, Walker et al 2012; also Dobson et al 1994; Charles and Kerr 1986; Dowler and Calvert 1995).

Principally, this research has identified factors at various levels that shape food-provisioning decisions, especially store choice and food choice. These influences include individual and family preferences (Alkon et al 2013, Bowen et al 2014; also Dobson et al 1994), familiarity with food (Antin and Hunt 2012), household economic situation and food cost, limited store access, transportation (Alkon et al 2013), time scarcity (Inglis et al 2005; Wiig and Smith 2008), family culture (Mackereth and Milner 2007), dietary health concerns or lack thereof (Johnson et al 2011, Backett-Milburn et al 2006), cultural acceptability (Dobson et al

1994), social meanings (Antin and Hunt 2012), social norms, including gender norms (DeVault 1991), and limited food storage space (Wiig and Smith 2008). These studies document the relative salience of various influences on food choice, such the primacy of food prices over geographic access in several communities (Alkon et al 2013). Studies also document low-income consumers' strategies for getting to the supermarket (Cannuscio et al 2010, Alkon et al 2013, Cannuscio et al 2014), for shopping (Beagan et al 2016, Webber et al 2010, Dobson et al 1994), for managing food supplies (Edin et al 2013, Dobson et al 1994), and for coping with food scarcity (Edin et al 2013, Charles and Kerr 1986).

One goal of this scholarship is to characterize the conditions under which limited-resource households make food decisions. Sometimes contrasting their approach with studies that highlight only one determinant of food decisions, several researchers characterize food choice as complex (Alkon et al 2013), multidimensional (Antin and Hunt 2012), and “layered” (Cannuscio et al 2010: 389). Similarly, various researchers characterize low-income people themselves as skillful, adaptive, and resourceful in their food provisioning (Beagan et al 2016, Cannuscio et al 2014, Edin et al 2013; also Dobson et al 1994). For example, sociologist Alison Alkon and colleagues (2013) write:

[L]ow-income people are neither unthinking dupes of the corporate food system motivated only by appetite, nor overly rational calculators driven only by price, but inhabitants of marginalized yet complex social worlds in which they must actively navigate a variety of barriers to obtain the foods they prefer (132).

By portraying economically disadvantaged consumers as savvy actors pursuing meaningful goals under material constraints, this research aims, in part, to refute stereotypes about the poor and to sensitize readers to the complexity and human agency involved in procuring food under conditions of scarcity.

This scholarship has several merits. First, these studies have yielded observations that might not be evident to researchers *a priori*. For example, separate studies find that although food desert residents often shop at affordable supermarkets outside their neighborhood (Aggarwal et al 2014, Cannuscio et al 2014), this strategy imposes additional transportation costs for gas or a taxi (Alkon et al 2013, Wiig and Smith 2008, Cannuscio et al 2010: 383).

Second, drawing attention to the multiple determinants of food choice is an important corrective to focusing heavily, if not exclusively, on one influence. This corrective is especially useful when the barriers to healthy eating that researchers highlight, such as access, are not the primary obstacles from consumers' perspective (Alkon et al 2013) or when research suggests that addressing one influence on food choice will not lead to dietary change if other influences remain unaltered. For example, scholars have suggested that because people select foods on the basis of social and symbolic criteria such as familiarity and comfort, increasing food access without addressing the multiplex nature of food choice may not spur consumers to modify their intake (Antin and Hunt 2012: 862).

Third, recent studies of food choice in low-income communities counterbalance health advice that urges individual-level behavior changes but glosses over the multiple considerations and conditions of low-income people (Travers 1996, Bowen et al 2014, Alkon et al 2013). These conditions can stymie individual-level behavior changes (Lutfey and Freese 2005), and when influences on food choice lie beyond individuals' control, people face lessened prospects of making nutritional gains. By drawing attention to these issues, recent studies sensitize researchers and practitioners to the difficulty of diet change for many low-income people.

Because social scientific research on the food decisions of low-income consumers is in its early stages, however, it has several limitations. To date, much of this scholarship describes

various influences on food but has made less progress in identifying concrete mechanisms of food choice. Similarly, this research has made less headway in showing how various determinants of food choice operate together. Additionally, some of this research operates at fairly general level, stating, for example, that cost influences low-income consumers' food decisions. Additional insights may result from examining these influences at a greater level of granularity. It would be helpful, for example, to examine how people choose among specific, similarly priced alternatives; to probe further how people understand how particular conditions such as cost or access affect their food choices; and to inquire what items they would select if material constraints were lifted. For example, when low-income people state that healthy food costs too much, what foods do they have in mind? What do they think of foods such as beans, carrots, and cabbage that are both healthy and economical? What foods do people buy even when they find them somewhat pricey, and why are these purchases worth the extra expense?

Several studies do reach greater levels of specificity. For example, Mackereth and Milner (2007) create a typology of "family cultures" around food. Beyond identifying parents' priorities, beliefs, and barriers, these researchers track how such concerns cohere as distinct approaches to feeding a family. Additionally, several studies suggest that people interpret the material aspects of food choice, such as accessibility and convenience, in ways that include both objective and subjective criteria. For example, when low-income people consider whether a food outlet is "accessible," they consider not only physical distance to the store but also social distance from shop owners and other patrons (Cannuscio et al 2010, Hillier et al 2015, Young 2016). This research finds further that people make food choices on the basis of these subjective constructions, above and beyond the material conditions themselves (Cannuscio et al 2010, Caspi et al 2012, Fong et al 2016).

Some of the most insightful analyses of food decisions in low-income households come from British studies of food provisioning in the 1980's and early 1990's. This scholarship examines how low-income families struggle to attain mainstream diets given their economic constraints (Charles and Kerr 1986, Charles and Kerr 1988, Dobson et al 1994). Importantly, this research addresses primary caregivers' specific food goals, their strategies for approximating these goals, and the consequences of doing so, including the nutritional, financial, and psychological consequences.

These studies find, for example, that mothers spend disproportionate sums of money on ingredients for "proper" dinners, defined as a meat entrée with two vegetable sides. This meal format proved expensive for low-income households, and to adhere to it, mothers had cut the quality and quantity of foods for other meals (Charles and Kerr 1986). Had they deviated from the logic of the "proper" meal, low-income families could have afforded a healthy diet including legumes, whole grains, yogurt, and fruit. However, the reigning family ideology in 1980's England posited that proper meals make proper families because meals reconstitute the family unit, convening its members and organizing them according to their respective social roles in the patriarchal family system (Charles and Kerr 1988). Low-income mothers worried that without proper meals, their family would lose both internal cohesion and cultural membership in the imagined community of "normal" people (Charles and Kerr 1986). Given mothers' commitment to the dominant family ideology, abandoning proper meals was not an option. Although striving for this cultural ideal eroded the food budget, not providing a proper meal eroded mothers' subjective sense of social wellbeing. Similarly, mothers saw treats as a nutritionally added expense, but purchased them to buoy their children's social wellbeing, as children who came to

school without snacks risked being teased about being poor (Dobson et al 1994; also Hamilton 2012).

Thus, these studies suggest that culture provides definitions of proper food and that eating in culturally recognized ways sustains a sense of dignity and normalcy (also Poppendieck 1998). As a result, low-income people may strive to consume salient, legitimate food, even if doing so is economically and nutritionally “irrational.” These studies suggest that even within economic constraints, a crucial factor underlying parents’ food decisions is their understanding of “good” food, of what children need and deserve, and of what defines the “good” parent.

This previous research leaves important questions unanswered. First, much of the culturally focused research on low-income families’ foodways comes from the United Kingdom during the 1980’s and early 1990’s (e.g., Charles and Kerr 1986, Charles and Kerr 1988, Dobson et al 1994, Dowler and Calvert 1995). The cultural and economic circumstances of these families vary from those of contemporary North American families in at least two significant ways. First, these studies show that the notion of the “proper” family meal was well defined, highly salient, and widely shared across socioeconomic groups. Consequently, low-income British families aspired to an easily identifiable standard. Furthermore, because this cultural standard cut across class lines, families who could not afford regular proper meals received a clear signal about their position relative to better-off households who could achieve the cultural standard (Charles and Kerr 1986, Dobson et al 1994). Given that food norms are less well defined in the contemporary United States, it is less clear what dietary ideals low-income consumers strive for and judge themselves against.

Additionally, contemporary North American families face distinct food-budgeting dynamics than those described in British scholarship. Whereas British families purchased food

from their general income, many low-income Americans receive Supplemental Nutrition Assistance Program (SNAP) benefits. SNAP has two key characteristics that bear on families' food-budgeting and food-purchasing patterns. First, SNAP comes once per month as a lump sum, leaving households temporarily food "rich." With this larger-than-usual sum of liquid assets, families can buy higher-priced foods that would lie out of reach if their SNAP benefits came in smaller increments or if households had to scrape together food money throughout the month from general household funds. Second, SNAP is earmarked exclusively for food and beverages. Because British families' food expenditures came from their general household income, they sometimes minimized food expenditures in order to allocate that money to other spending categories. SNAP recipients do not have this option because they cannot redirect SNAP to other household expenses—at least not without illegally selling their benefits for cash (see Edin and Shaefer 2015). Because of these differences, findings about British families may not generalize to the United States.

Consequently, while these prior studies indicate that culture sets the parameters of parents' food choices, they do not establish what these parameters might be for North American families. Recent research in the United States suggests that low-income consumers may accord social significance to particular categories of food. Edin and colleagues (2013) suggest that, like their British counterparts, North American parents see snacks and treats as part of being a good parent. Similarly, Wiig and Smith (2008) find that low-income mothers allocated over 50% of a hypothetical food budget to meat, suggesting that this foodstuff has particular cultural salience (also Alkon et al 2013, Edin 2013). Although these findings are suggestive, studies have not mapped the culturally salient categories of food that low-income parents prioritize. Furthermore, despite insightful observations in some existing studies (e.g., Charles and Kerr 1986), scholarly

understanding of the interplay between culture and material resources in the food decisions of the poor remains underdeveloped.

Additionally, many of the most detailed studies on low-income parents' food choices precede major increases in childhood obesity. Consequently, they do not capture how parents feed their children amidst heightened public anxiety about children's weight. Further, with some exceptions (e.g., Charles and Kerr 1998, DeVault 1991) studies tend to focus on either low-income families (Dobson et al 1994, Dowler and Calvert 1995, Wiig and Smith 2008, Edin et al 2013) or middle-class families (Ochs et al 1996). As a result, they cannot examine how food's meaning and value may differ by socioeconomic status in ways that could contribute to social disparities in dietary health.

To investigate how parents decide what to feed their children, I examine schemas and beliefs in two areas: 1) the *social meanings of food* and 2) *economic thinking*. Regarding the social meanings of food, I examine 1.a) how parents think about the place of food in their children's lives, 1.b) the connection between food provisioning and parents' identity, and 1.c) social judgment of taste and food choice. In examining economic thinking about food and resources for acquiring food, I focus on how people assess the cost and value of food, including what is cheap, what is affordable, what is too pricey, and what is worth the expense. To examine how people evaluate the affordability of food, I integrate cultural sociology's attention to shared interpretive frameworks—ways of seeing the world that we acquire through our participation in the social world—and behavioral economics' focus on heuristics and biases, which are thought to stem from general cognitive processes.⁴ In doing so, I aim to bridge cultural sociology and

⁴ Of note, although cognitive biases and heuristics are widespread in the countries where they have been studied, researchers debate whether they are universal (Henrich et al 2010).

behavioral economics by showing how the cognitive shortcuts studied by behavioral economists can have cultural foundations.

Overview of Chapters

The rest of the dissertation is organized as follows. Chapter 2 describes the data and methods used in this project. Chapter 3 examines how low-income respondents think about the cost and value of food—what is cheap, what is affordable, what is too expensive, and why. I analyze these subjective evaluations of food cost in relation to objective metrics that analysts use to estimate the cost of a healthy diet. Chapter 4 examines in detail one of the cost parameters that low-income parents consider: the cost of food that their children waste. To avoid losing money on food that no one will eat, low-income respondents tend to choose foods that their children will consume reliably. Often, these are highly palatable, energy-dense, nutrient-poor foods. Higher-income respondents are more likely to provide a food that their children might not like and to do so repeatedly in hopes of developing their children's tastes. These findings suggest that without repeated exposure to a diversity of foods, low-income children may not come to like foods that are not inherently palatable. These findings also have implications for how food cost is calculated, since food- and diet-cost estimates typically omit the cost of food that children waste in the process of acquiring new tastes.

Chapter 5 examines why low-income respondents spend scarce food dollars on bottled water, even when they have no concerns about the safety of tap water. I also address the paradoxical finding that whereas most low-income respondents find bottled water cheap, most higher-income study participants find it expensive. Drawing on the concept of anchoring from behavioral economics, I propose the concept of cultural anchoring to explain this inverted

evaluation of food cost. The conclusion closes with a framework for organizing the different types of relationships between economic resources and cultural schemas in parents' food choice.

Chapter 2

Data and Methods

Subject Recruitment

I conducted interviews and grocery-shopping observations in the Boston area between summer 2013 and spring 2016. To qualify, respondents had to live with their children at least half time and make most of the household's food decisions. To minimize variation due to ethnoracial background, the study was limited to non-Hispanic white and non-Hispanic Black caregivers who have lived in the United States since early childhood. I also included biracial respondents with a white or Black parent. In order to compare how low-income parents and higher-income counterparts decide what to feed their children, I sought an economically diverse sample and consequently had no income-related inclusion or exclusion criteria. Additionally, I did not include or exclude respondents based on their education, occupation, or employment status because I had no theoretical motivations for restricting the sample along these lines. I targeted families with children between four and eight years old because children in this age range are still forming food preferences and depend largely on caregivers for food (Birch 1999), but I accepted families with children ages two to fourteen in cases where I thought that the respondent would further the study's theoretical aims. For example, I interviewed LaToya, whose daughter was obese by age 1.5. At 37 pounds, the girl weighed as much as many four-year-olds. Although LaToya's daughter was two years below the target age range, I hoped to learn how LaToya made sense of the girl's elevated weight.

Using purposive and snowball sampling, I recruited participants through several avenues in order to increase variability in the sample (Small 2009). Because low-income people often rely on organizations to procure the resources that they need to get by, I started contacting low-

income respondents through organizations that serve this population. Specifically, I recruited low-income respondents through a food pantry in a mixed-income neighborhood; a clothing and toy exchange center near a housing project in a low-income/working-class neighborhood on the cusp of gentrification; a women's center in a low-income, predominantly African-American neighborhood in Boston; and a homeless shelter in Boston for families awaiting permanent housing. Below, I discuss each recruitment location in turn.

In anticipation of recruiting study participants, I began volunteering weekly at a food pantry in 2012, a year before I planned to collect data. I chose this pantry, which I call Cornucopia, because it was in a mixed-income neighborhood whose residents had access to an array of food outlets, including supermarket, a natural foods co-op, a high-end natural foods supermarket, convenience stores, coffee shops, fast-food establishments, and mid-range restaurants. For this project, I had initially planned to focus on this neighborhood because it would give me theoretical leverage. By bracketing access as an explanation for socioeconomic disparities in diet quality, I would be able to focus instead on the role of economic resources and culture. At the pantry, I approached caregivers in person, explaining the goals and procedure of the study, in addition to posting flyers. By that time, many recognized me as a fixture of the food pantry and may have felt more comfortable talking with me as a result.

I also recruited low-income respondents from a non-governmental organization where parents can trade in toys and clothing that their children have outgrown; they also have a "dress for success" style program for both men and women. I encountered this center inadvertently as I went to public housing buildings looking to talk with managers who might let me post study flyers. The clothing and toy center's program associate let me approach six mothers on the spot, including herself. The associate invited me to return another day, and I did.

This recruitment opportunity quickly evaporated. Seeing me approach a woman browsing clothing, the executive director, who was not there during my first visit, called me into her office. Her face oozed displeasure, and she told me to stop. I suspect that initially, she thought that I was somehow preying on clients, either trying to sell them something or otherwise profit unfairly off of them. Even after I showed her the research project's funding application and IRB approval, she asserted, for unclear reasons, that I could somehow compromise "her" "vulnerable" clients. The program associate who initially let me approach clients was furious that her boss shut me out of the organization, but could do little to help me.

I also posted flyers at an organization for women's educational and occupational empowerment in a low-income predominantly African-American neighborhood of Boston. A friend who had sought services there some years before put me in touch with a contact person, who hung up flyers that I sent by mail. In this case, I did not contact potential study participants in person. Two respondents replied to this flyer, although I do not know how many people took the flyer. I did receive two calls from people in low-income neighborhoods of Boston saying that someone had given them a flyer—one was a father who said someone was handing them out on the street. Neither caller knew where the flyers originated. Based on the callers' location and the fact that I had not yet posted other flyers in other locations, I suspect that it was the women's empowerment center.

The "decision" to contact low-income families through a homeless shelter was less a research strategy than it was pure happenstance. On my way to interview a mother in Boston, a train broke down on the tracks and stalled all the trains behind it. According to the conductor, the delay would be considerable. Behind me, a young white woman with tight black French braids, searing blue eyes, and press-on French manicured nails talked on the phone with apparent calm

as her boyfriend pulled his hair and grabbed at his face in desperation. The woman's son played on a tablet and picked at an egg-and-cheese wrap in his stroller. Eavesdropping, I learned that the woman was talking to the TANF office, explaining that, because of the train delay, she would miss a meeting to renew her benefits. I sensed the woman's effort to muster composure as the receptionist told her that there were no more slots that day. Given the boyfriend's apparent agony, missing the meeting seemed to mean that her benefits could lapse. When the phone call ended, the woman's poise crumbled, and she began speaking sharply, ordering her son to put away his games and eat the food he was ignoring, telling her boyfriend that he was getting on her nerves. Her tension radiated, as if each stationary moment on the train portended peril. I wanted to interview her. But this was not the moment to approach a stranger.

Five hours later, as I waited for the train home from my interview, the same woman was waiting for the train back. This time, I approached her and introduced myself. I gave her a flyer, telling that she could call me if she was interested. She agreed immediately and told me that she lived in a motel that the state of Massachusetts was renting for homeless families awaiting housing. Through Colleen, I was able to access this group of parents. A social worker at the shelter enthusiastically introduced me to families; I approached parents whom I saw with their children; and Colleen referred me to her acquaintance LaToya.

Interviewing homeless mothers provided me insight into how highly constrained families feed their children. Shelter residents had only a mini-fridge and no place to cook. In fact, using appliances was prohibited. They also had to avoid perishable foods that would attract mice and cockroaches. To offset the fact that I was observing families in especially difficult material circumstances, I followed two shelter residents over the next two years as they received Section 8 vouchers and moved to an independent apartment.

Some people who received flyers through organizations distributed these flyers themselves. Pamphlets reached both low-income and higher-income respondents. For example, a client at the food pantry took a flyer for her daughter, a college-educated administrative assistant at a local university. A low-income mother I met at the toy and clothing exchange posted the flyer at a center for women leaving abusive domestic partners, prompting both a low-income client and a higher-income social worker to contact me.

Dead Ends

These recruitment sites resulted from a broader search that also turned up dead ends. I contacted three additional food pantries that did not respond to multiple emails. I approached a housing assistance organization near Cornucopia, whose staff assured me that they would hang up flyers. When I returned, I did not see any postings and moved on.

I also attempted to post flyers at in Cambridge Public housing buildings. After multiple visits and emails to the Cambridge Housing Authority (CHA), someone finally agreed to distribute the study flyer. The man had asked if the study was opened to everyone. I fudged the truth and said yes, figuring that I would work out this detail later. Almost, immediately, I got a call from an older woman with a 20-year-old daughter who wanted to participate. When explained that the study was for parents with younger children, the woman became irate, insisting that how a poor parent feeds her family has nothing to do with the child's age. After a heated exchange, I declined apologetically to talk to the woman (only to call her back saying that I had changed my mind—what was one useless interview if it meant maintaining goodwill with CHA?). I sent CHA a modified flyer that included the permissible age range. I did not hear from any other CHA residents. I suspect that the new flyer was never posted.

On several occasions, the director of Cornucopia agreed to distribute a recruitment flyer

to the church that Cornucopia is affiliated with. This congregation is largely Black and socioeconomically diverse, which would have helped me to contact middle-class Black parents. The director's offer never materialized, and I became sufficiently tied up with data collection and writing that I did not pursue this option independently.

Second Phase of Recruitment

To contact a broader range of respondents, especially higher-income families, a research assistant sent 1000 flyers to non-Hispanic white and Black caregivers with children ages four to eight. I restricted the pool to families living in Cambridge, Somerville, and Boston. Names and addresses came from InfoUSA, which sells contact information for marketing and research. Additionally, a research assistant posted flyers at businesses and libraries in high-income and mixed-income neighborhoods.

To recruit more higher-income families, especially African-American families, I ordered a second list of names from InfoUSA with a request to oversample African-Americans and to restrict them to a household income of \$60,000 or above. InfoUSA sent an imperfect list, as I got multiple responses from lower-income Blacks. A notable limitation of this study is the small number of higher-income African-American respondents.

I also interviewed the friends, family, and neighbors of study participants. Subjects construct ideas about food in relation to those around them, and sampling people who know each other let me observe some social elements of respondents' food environment. I asked both referrers and those they referred the same questions. I capped referrals at three; in most cases, referral chains included one or two referrals.

In the second phase of recruitment, I interviewed two Hispanic mothers despite the criteria that respondents be non-Hispanic. One participant was a Venezuelan woman whose non-

Hispanic white, U.S.-born husband received a study flyer in the mail. Because this woman did not have a Hispanic first name or surname—she goes by the Anglicized version of her given name and has taken her husband’s last name—I did not realize until meeting her that she was born and raised in South America. The other respondent moved from Honduras to the U.S. as a young girl. Another study participant, referred her to me, saying that she did a “good job” feeding her daughter. Thinking that I might learn about the referrer’s own food beliefs by seeing what a doing “good job” entailed, I approached the Honduran-born woman. Initially, I limited the sample to non-Hispanic parents in order to minimize variation due ethnicity and nationality. Both Hispanic mothers’ approaches to food choice paralleled those of other higher-income rather than primarily reflecting their nationality or ethnicity. As a result, I retained them in the final sample.

Final Sample

Table 1 (see following page) presents the sociodemographic breakdown of the interview sample and the grocery-shopping subsample. I categorized participants by income level using poverty income ratios (PIR) of <130%, 130-350%, and \geq 350%. These income groupings are used in recent studies of diet quality (Wang et al 2014) and in reports on obesity from the Centers for Disease Control and Prevention (CDC) (Ogden et al 2010a, 2010b). I label these categories “low-income,” “moderate-income,” and “high-income,” respectively. PIR is calculated by dividing a household’s annual income by the poverty threshold for that household’s size. Because the study focuses on the varied perspectives of economically disadvantaged families, the majority of the sample is low-income.

Table 1. Sociodemographic Information of Participants in Full Sample and Observation Subsample

	PIR (%)	N	Age (mean)	Age range	White	Black	Biracial	Gender (Women)	Born in U.S
Full Sample	<130	48 (60%)	38.5	21-62	19 (24%)	27 (38%)	2 (2.5%)	47 (59%)	47 (59%)
	130-350	11 (14%)	39	24-51	5 (6%)	4 (5%)	2 (2.5%)	10 (12.5%)	10 (12.5%)
	≥350	21 (26%)	40.6	28-46	20 (25%)	0 (0%)	1 (1.3%)	20 (25%)	18 (22.5%)
	Total	80	39	21-62	44 (55%)	31 (39%)	5 (6%)	77 (96%)	75 (94%)
Subsample	<130	34 (83%)	40	21-62	12 (29%)	21 (51%)	1 (2.5%)	33 (80%)	33 (80%)
	130-350	3 (7%)	39	24-51	1 (2.5%)	2 (5%)	0 (0%)	3 (7%)	2 (5%)
	≥350	4 (10%)	42	41-46	4 (5%)	0 (0%)	0 (0%)	3 (7%)	3 (7%)
	Total	41	40	21-62	17 (41%)	23 (56%)	1 (2.5%)	39 (95%)	38 (93%)

Note: PIR is poverty income ratio, presented as a percentage of the federal poverty threshold.

Table 2 presents information on the marital status of study respondents and on the age of target children, including the percentage of children in the target age range of four to eight years.

Table 2. Respondent Marital Status and Target Child’s Age in Full Sample and Observation Subsample

	PIR (%)	N	Married/ Partnered	Single	Divorced/ Widowed	Child age (mean)	Child age range	Child age 4-8
Full Sample	<130	48 (60%)	12 (15%)	27 (34%)	9 (11%)	6.3	2-14	80%
	130-350	11 (14%)	7 (9%)	3 (4%)	1 (1.3%)	7	4-14	73%
	≥350	21 (26%)	21 (26%)	0 (0%)	0 (0%)	5.5	4-9	95%
	Total	80	40 (50%)	30 (37.5%)	10 (12.5%)	6	2-14	79%
Subsample	<130	34 (83%)	9 (22%)	17 (41%)	8 (19.5%)	5.5	2-11	74%
	130-350	3 (7%)	3 (7%)	0 (0%)	0 (0%)	7.3	4-14	66.7%
	≥350	4 (10%)	4 (5%)	0 (0%)	0 (0%)	5	4-7	100%
	Total	41	16 (39%)	17 (41%)	8 (19.5%)	5.7	2-14	76%

Note: PIR is poverty income ratio, presented as a percentage of the federal poverty threshold.

Methods: In-Depth Interviews

I used in-depth, semi-structured interviews to understand parents’ approaches to feeding a family because discourse provides indispensable access to cultural frameworks and subjective experience (Lamont 1992, Lamont et al 2016). My interviews included open-ended questions about respondents’ grocery shopping and meal patterns; food-provisioning priorities, constraints, and ideals; and the role of food in their children’s lives. Questions focused on, but were not limited to, the youngest child in the target age range; if children fell outside this range, questions

centered on the child closest to it. After several low-income respondents discussed unexpected topics, such as falling back on their children's preferences to avoid losing money and buying bottled water on a tight budget, I added related interview questions.

One challenge of interviews was that a non-negligible number of respondents did not have an especially well developed food discourse. They discussed food and their food decisions in fairly cursory terms, focusing mostly how much they and their family liked a given food. This, in and of itself, was a finding. I sensed nonetheless that more structured questions might yield additional insights. As a result, I added a highly structured interview card-sorting activity. Respondents sorted cards labeled with commonly consumed foods according to how often their children ate those foods. They then sorted the same cards according to how often they ideally would like their children to eat those items and discussed the reasons for the discrepancies between real levels of consumption and ideal levels of consumption.

Another challenge of some interviews was that the social meaning and social underpinnings of food choice emerged only with a fair amount of probing. Because British scholarship on food in low-income families highlights that parents experience social deprivation when they cannot afford regular "proper" meals, I was surprised that more participants in my study did not express these concerns as readily. Not infrequently, they spoke at length about the physical and sensory characteristics of foods—their taste, their ingredients, the multiple flavors and permutations of packaged foods, the merits of one brand versus another. The social significance of food sometimes lay beneath its observable traits. For example, when I asked Suzanne why she gets her son Lunchables for a snack, she began by detailing how this product contains juice, fruit, lunchmeat, and cheese, sauce, pepperoni, and bread for a mini "pizza." Discussing the pizza version of Lunchables, she got herself talking about English muffin pizzas.

Only once I had this information to probe further did the social significance of Lunchables emerge, as shown below:

Suzanne: Sometime what we do is buy separate pepperonis and stuff, or we'll make, if we're going to have the Lunchables, we'll have something you can put in the oven. You can put pizza [sauce?] on it, homemade. Oh, English muffins, and that's something me and him, we'll get together, and I'll let him work with me, and it's like we're having home economics or something like that, and we'll create pizza.

CD: So if you can do it home with the English muffins, why buy the Lunchables?

Suzanne: I just buy sometimes because other kids be eating it and sometimes I don't want him to feel left out, that's why I buy it sometimes.

Because the social meaning of food sometimes emerged only with a bit of prodding, it is possible that in instances where I did not probe enough, I failed to capture the underlying social significance of respondents' food choices. On the other hand, because the social meaning of food lay below the surface at times, I also tried not to exaggerate its centrality, especially when other factors were at play operate. For example, Rebecca told me that she sometimes buys a small amount of chilled lobster from a deli by her work.

CD: When you eat lobster, do you feel kind of luxurious?

Rebecca: Oh yeah, all the time.

CD: Is that why you eat it?

Rebecca <pausing, looking upward, thinking>: No, that's not why I eat it. I just like how it tastes.

If I assumed that lobster signified deep indulgence, I might conclude that Rebecca actively seeks it to escape from the grind of life on a low income. Surely Rebecca does experience luxury when she eats lobster, but in focusing exclusively on the class-related connotations of this food, I would overlook the importance of variety and pleasure in their own right. Similarly, on a grocery-shopping observation, LaToya decided to "treat" herself by buying crab legs and shrimp. She put the seafood first on the supermarket conveyor belt to ensure that she had enough food stamps to buy them. When I asked LaToya if she bought crab to escape for a moment from the difficulties she faces, LaToya looked at me skeptically. "No, it's not like, 'Crab, take me away

from here!’ I can’t escape when [my daughter] is here saying she wants some too.” Thus, I strove to elicit the social meaning of food, but when other influences were at work, I tried to recognize their importance as well.

Interviews were recorded and transcribed verbatim. I took field notes on respondents’ non-verbal communication and demeanor. Most interviews took place in respondents’ homes; the remainder occurred in fast-food restaurants, cafes, or parks. Interviews ranged from 1.5 to 3.5 hours, averaging 2.25 hours. A payment of \$40 was offered for the interview.

Grocery-Shopping Observation

To triangulate interview data and observe caregivers’ food selection directly, I followed 41 interview participants on a grocery-shopping trip. To develop a sense of food-shopping patterns, I began by observing the first 23 interviewees, most of them low-income. Thereafter, I sought greater economic variation by approaching higher-income respondents. Among low-income respondents, I sought variation in caregivers’ approach to healthy eating to understand better the interaction between material resources and cultural constructions in food choice. Because many respondents do large shopping trips only once a month, and they could wait long to buy more food, observations also depended on scheduling. One respondent declined because she shops frequently for small amounts of food, and planned observations with two high-income families fell through. One family moved out of state just a week after the initial interview; in the other case, the observation fell through due to ongoing scheduling conflicts.

During the observations, I noted how respondents reacted to items, what foods they considered, and what foods they selected. Unprompted, most respondents narrated their thought process. If participants fell silent, I sometimes asked, “What are you thinking?” or “How does that look?” to jumpstart conversation. Immediately thereafter, I interviewed respondents about

their shopping experience and purchases. Shopping trips ranged from 20 minutes to three hours, typically taking 1-1.5 hours; post-shopping interviews averaged 60-90 minutes. The observation and subsequent interview were recorded and transcribed verbatim. I also took detailed field notes, and all participants gave me their receipt to record their purchases. Respondents received \$100 for taking part in the grocery-shopping observation.

Through observing families' grocery-shopping routines, I not only learned which foods people select and on what basis, but I also gained a sense of how people experience shopping and how food shopping fits into their lives more broadly. In particular, shopping with respondents gave me a closer look at their lives because what they must do to shop for food renders observable the broader circumstances they face. For example, as LaToya and I rode home in a gypsy cab with a good-natured driver listening to Christmas music, it became clear that the corner store kitty-corner from LaToya's apartment was a crime scene. Traffic piled up for blocks. LaToya's street had been barricaded on both ends by the police.

Shopping with an observer is somewhat unusual. Although it is possible that I could have influenced participants' decisions, social desirability bias was likely attenuated because buying "better" food to avoid judgment costs extra money, and foregoing habitual purchases requires another shopping trip—an inconvenience for the many respondents who shop outside their neighborhood or who rely on the bus or a ride for transportation. Participants did not refrain from buying unhealthy foods. Three respondents stole despite knowing I was watching. LaToya, who successfully stole a sippy cup and who *tried* to steal diapers (but was caught) on the first shopping observation also stole on the second shopping trip over a year later.

Grocery-shopping observations taxed me cognitively. They involved taking in the physical environment, with its hundreds of products; registering study participants' words and

actions so that I wouldn't forget what the recorder failed to pick up; remembering and jotting down follow-up questions for the post-shopping interview; keeping up conversation and probing where useful; judging when not to probe and when to let the respondent continue their line of action unencumbered; managing respondents' impression of me so as to signal that I was not judging their choices, which I often did by saying that I also liked a given food or had fond memories of eating it; not managing respondents' impression of me so much as to make my opinions overly salient, lest respondents adjust their behavior to match what they thought I might think; being helpful by pushing carts, handing respondents packages from the shelves, or running to get a forgotten item as the respondent stood in line; and trying to neutralize negative comments that respondents made about their food choices, food preferences, and body size, lest they think that I shared that unfavorable opinion. Many times, I came back from shopping observations mentally drained and unable to do much for the rest of the day.

Rapport and Social Desirability Bias

Because eating patterns can elicit others' judgment (Bourdieu 1984, Crawford 2006), I attempted to quell respondents' sense that I was scrutinizing how they feed their children. Especially because the public often associates healthy eating with upper middle-class consumers (Guthman 2003) while construing the poor's food choices as unhealthy, if not irresponsible, I wanted to convey to low-income respondents that they could speak without fear of rebuke. Coming from a fairly slim, relatively fit, white non-Hispanic young woman with straight unblemished teeth who studies at an elite university and speaks Standard American English with an upper-middle class accent, the promise of compassion might have rung hollow. Indeed, it was not lost on low-income respondents that I probably ate differently than they did. For example, after I brought baked goods to the interview with Tychel, she reported, "I put them on the table,

and my children ate them all up. They were gone in no time. I got some though, and they were really good. I thought they were going to be organic.”

I tried in several ways to distance myself from the figure of nutrition police or judgey middle-class white person. First, I tried to communicate that I like or otherwise find acceptable the foods that respondents purchase. For example, when Monica grabbed two packages of bacon during the grocery-shopping trip, I said, quite sincerely, “Mmmm...bacon. There is just nothing bad about bacon.” She responded enthusiastically, “Oh, I know. I’m the same way. I love a BLT.” To avoid highlighting my opinion too heavily and thus prompt respondents to care about my views more than they already did, I moderated how much I offered my opinion. In many cases, this strategy seemed to work. With time, however, I realized its drawbacks. In some cases, it gave way to a less than useful discussion of respondents’ idiosyncratic food preferences. Additionally, I appreciated only after the fact that I might have highlighted differences instead of bridging them. Sometimes, I talked about liking and eating foods as a kid. When the food in question was for the respondents’ children or could be classified as “kids’ food,” this search for commonality probably did no harm. When the food in question was for the respondent, I might have inadvertently made respondents think that I saw them as a younger, less sophisticated version of myself. I did not sense, however, that anyone felt infantilized.

To ease low-income respondents’ potential sense that I would judge their food choices or their poverty, I sometimes mentioned that my father receives SNAP and struggles financially. Although invoking my own family does not mean that I could not conceivably judge my father for his circumstances or his food choices, I hoped to signal that I am close to people whose financial situations resemble those of respondents. Additionally, because I like to bake, I sometimes brought cookies, cakes, and muffins to study participants. Often, I mentioned

deliberately that the sweets contained ample butter and sugar, lest respondents suspect that I was the kind of person who tries to cut calories or make indulgent foods more nutritious.

In line with other studies of low-income families' food decisions (Edin et al 2013), I found that low-income respondents did not present wholly sanitized accounts of their food choices. Many discussed consuming fairly large quantities of sugar, fat, and “junk” and about giving their children caloric, nutrient-poor foods. During the shopping observation, these foods certainly were not absent from respondents' grocery carts. Additionally, a handful of respondents explicitly eschewed the dominant ideology of healthy eating; scholars have argued that this rejection can mark a person as a cultural outsider (Crawford 2006). Other respondents talked about going hungry at the end of the month.

Similarly, respondents generally did not hide the difficult details of their lives. Two mothers told me that when poverty's pressure mounts, they lock themselves in the bathroom to cry where their children cannot see them. Some told me about their recovery from drug addiction, their history of incarceration, their experiences of abuse, and their issues of mental illness. Unprompted, one respondent showed me the ankle bracelet that she must wear as a result of hitting another woman with a cell phone and breaking her jaw. Another respondent told me enthusiastically about her regular use of “boosters,” who steal food and sell it at a reduced priced. Just so I didn't think she was “making it up,” she texted me pictures of boosted meats from Whole Foods posed next to vegetables and bread from a food pantry. One woman who cried as she talked about growing up hungry hugged me at the end of the interview, saying she never talks about that experience even though it still lives in her psyche. A mother in a crisis situation spent the second interview sobbing and wailing as she mopped the floor. She was facing eviction and feared that her children would be taken away from her—again—if she could

not provide them a home. The most she could do was keep a clean home in the meantime. Of course, not all respondents talked so candidly. Two mothers offered short answers where other respondents provided greater detail, but the reticent participants were relatively few.

One major exception, Dorice, stands out, and I dropped her from the study. I thought that Dorice had said over the phone that she left home early and returned late because she worked at a Tedeschi's convenience store in a small city some 45 minutes away. I was surprised when, during the interview, Dorice reported making \$80,000 a year as a social worker. On top of the fact that I thought that she worked at a convenience store, her self-presentation didn't suggest that she was comfortably employed. She had no front top teeth and wore a scrubby T-shirt, sweatpants, and slippers. I tried to check my stereotypes—perhaps she simply enjoyed unwinding at home or was still unpacking nicer clothing from the boxes from her recent move. But she avoided eye contact, evaded questions, and told dubious stories about the lavish lifestyle that her previous husband afforded her. At the end of the interview, when I asked how she had learned about my study, she swore she saw an ad in a free local weekly magazine. I had never placed an announcement there. The whole interview felt off.

Some months later, while volunteering at a food pantry, I saw a vaguely familiar face. I struggled to place it. As the woman approached me to get fruits and vegetables, I realized that it was Dorice. She averted her gaze, saying nothing, acting as though she had never met me. Uneasy, I followed suit. I never found out Dorice's true story. The most I could do was drop her from the study.

It is conceivable that, although most respondents were forthcoming about their food habits, the \$100 incentive could have affected what study participants purchased on the shopping observation. For several reasons, I think that this influence is limited, especially for low-income

respondents. Life on a limited budget involves multiple unsatisfied material needs that the study incentive could have gone to. Households often juggle multiple bills and other expenditures, paying one bill and leaving another until more money comes in, or paying down enough of a bill to prevent a service from being turned off and hoping to cover the remaining balance at a later date (Edin et al 2013). For example, at the end of a grocery shopping observation with Dawn, the high prices of the supermarket that she went to⁵ prompted her to reflect on pending other expenses:

I'm limited on my funds, and then I have to do school shopping, and then my daughter's birthday party is on Saturday. [...] I have to go school-clothes shopping, buy uniforms, sneakers, book bags, school supplies, the birthday party, and still trying to feed them all at the same time. I'm stressed out doing a food shopping anyways, and then that just added to it, the financial part of it.

CD: So on a scale from one to five, where one is no stress and five is really stressed?

Dawn: A ten.

Dawn got hit with multiple simultaneous expenses, but low-income respondents without the same confluence of demands also remarked on other needs they had to cover—and fast. Noticing that she forgot her grocery list, LaToya explained:

I was just so tired. I just been, just, I'm stressed out because of cable that's going off Monday. Somebody was supposed to go and put \$50 on [the account]. They decided they wanted to let them people [at the store] say, "Oh, well that's not enough," so they just decided not to put nothin' on it. Like, "No, idiot, why would you do that? You're supposed to pay on it." Because my thing was Monday, I was gonna put \$16 or \$23 on it. You know what I'm saying? Then I would've been good. [...] So I'm just frustrated by that.

During the post-shopping interview, LaToya repeatedly returned to the topic of how she would pay her cable bill. Despite signing the consent form, she somehow hadn't realized that she would receive \$100 for participating in a second observation. When I gave her the envelope, she said, "And I've been worrying about how I'm going to pay my cable bill!" indicating that the study incentive would go directly to this expenditure. Given that respondents had multiple bills beyond

⁵ She went to a store that charges more for identical items because the lower-cost store that she frequents was closed due to an employee strike.

food, and given that these needs often required prompt attention, low-income respondents likely used the study incentive for these expenses.

Additionally, respondents' use of SNAP during shopping observations aligned with what they reported in the interviews. Overwhelming, low-income families do a "big shop" at the beginning of the month, but save a portion of their SNAP benefits to purchase food later in the month. Had shopping observation participants seen the study incentive as a resource for extra or "better" food, I would have expected them to spend more of their SNAP allotment, with intention to the incentive for food later in the month. However, participants overwhelmingly saved a portion of their SNAP benefits for in the month, suggesting that they did not overspend in anticipation of the incentive. Additionally, when I asked respondents how their purchases compared to what they normally get, they tended to report that they bought similar if not identical items.

Finally, one exception, borne of a miscommunication with the participant, suggests that most respondents followed a normal shopping routine. When I initially explained the logistics of the shopping observation, Rachelle seemed not to notice that I said she would get \$100 after the observation and interview. Before the shopping observation, I did not get to run through the full consent form. Rachelle called me with little forewarning to say that she was heading to the supermarket. I rushed to meet her, but by the time I arrived, she had already begun wheeling her cart through the crowded store, with her two young children, two adult friends, and one of these friend's nine-year-old daughter and her friend in tow. Because shopping felt rushed and stressful, I went over the consent form only briefly, glossing over when exactly Rachelle would get the incentive. I did not know it at the time, but she assumed that it was for food shopping. This misunderstanding became clear as Rachelle stood awkwardly by the cash register, money still

owed even after she spent all her SNAP dollars. In the post-shopping interview, Rachelle explained that she would have bought fewer snacks and treats, such as the multiple boxes of fruit snacks that were on sale for two for \$4, if she didn't have an extra \$100 for food. No other respondents made such a comment and instead asserted that they shopped as usual.

Data Analysis

The details of data analysis appear in each empirical chapter, as I followed a somewhat different process in each case.

Chapter 3:

Is Healthy Eating Too Expensive?: How Low-Income Parents Evaluate the Cost and Value of Food

Introduction

Some major diet-related health conditions, including obesity and diabetes, have become more prevalent across the socioeconomic spectrum since the 1970s (Chou et al 2004, Kanjilal et al 2006), but rates are typically higher among low-income individuals (Kanjilal et al 2006, Ogden et al 2010a, 2010b). While many Americans do not meet dietary guidelines, low-income people are disproportionately likely to eat less healthily, and they have not experienced the improvements in diet quality enjoyed by their higher earning and more highly educated peers (Wang et al 2014). These trends have important implications for socioeconomic disparities in dietary health.

Many researchers and food-justice advocates argue that healthy food is cost prohibitive for people on limited budgets (Drewnowski and Darmon 2005). Others contend that healthy eating is affordable (Raynor et al 2002, Stewart et al 2011, Bittman 2011, Brown 2014). To some extent, how one measures food cost—by calorie, by serving, by weight, or by daily food costs—affects conclusions about whether economically disadvantaged people can bear the expense of nourishing food. Given that multiple food-cost metrics exist, some researchers have argued that measures should parallel the experiences and perceptions of consumers themselves (Frazão et al 2011). Yet few studies systematically address how low-income people evaluate the cost and value of food, and the research that does exist suggests that these evaluations do not always straightforwardly reflect food prices (Giskes et al 2007, Cade et al 1999). Why, for example, do some low-income parents find convenience food to be the most affordable option whereas others

see home-cooked food from raw ingredients as more economical (Mackereth and Milner 2007)?

Drawing on interviews with 48 low-income primary caregivers and on grocery-shopping observations with a subset of 33 interviewees, I examine how low-income people assess the cost and value of food—what is affordable, what is pricey, what is worth spending more than “necessary,” and why. I find that respondents make two broad types of food-cost evaluations: *evaluations of resource conservation* and *comparative evaluations*. In evaluations of conservation, respondents assess affordability on the basis of how long a food will last—a question that is especially salient given that low-income people’s needs often outstrip their resources. This criterion of evaluation corresponds most closely to the cost-per-serving metric and is consistent with previous observations that resource-constrained consumers often try to “stretch” their scarce food dollars (Wiig and Cherry 2008, Edin et al 2013).

In comparative evaluations, respondents judge foods’ affordability in relation to other foods, especially dishes that respondents could cook themselves or options that are common in respondents’ food environment. These plausible alternatives make the food in question look economical or expensive by contrast. Paradoxically, foods that appear affordable relative to an alternative are not necessarily the cheapest option and may therefore appear economically irrational to buy. This finding parallels the insight from behavioral economics that when a quantity is difficult to judge, such as whether it is worth it to make a special trip for a sale, people evaluate the quantity in relative rather than absolute terms, such as the percent discount rather than the total amount saved (Fetherstonhaugh et al 1997; Hsee 1998).

Because people experience real economic constraints, relational evaluations have material limits; if comparison alone undergirded evaluations of affordability, almost everything would seem affordable simply because another good costs more. For foods to appear affordable

by comparison, they also must fit in respondents' overall budget, such that they do not displace a desired purchase. Thus, I theorize that low-income respondents conceptualize the affordability of food as a combination of its absolute lastingness and of resource-bounded relational comparisons.

The findings of this study illustrate the importance of studying how people understand health-related conditions that are typically studied using objective, standardized metrics such as price per calorie or price per serving (Lamont 2012). In particular, I highlight the specific heuristics that underlie low-income consumers' assessments of food cost, which can lead to discrepancies between objective measures and subjective perceptions. Based on my observation that people evaluate food costs relative to other options available to them, I also argue for an expanded notion of how the food environment affects food choice. In particular, I advocate for conceptualizing the food environment as not only the built environment of food establishments and advertisements that whet people's appetites and erode their willpower, but also as a cognitive map of culturally salient referents that undergird comparative evaluations of food cost.

These findings also have implications for policy and programming. Researchers have argued that "helping consumers select affordable yet nutritious diets ought to be a priority for researchers and health professionals" (Rehm et al 2011). By understanding better how people themselves think about food cost, health professionals may be able to craft messages that resonate more effectively with target audiences.

Background and Motivation: Food Cost and Diet Quality

Scholars have traced socioeconomic disparities in diet quality to various sources, ranging from biological mechanisms such as stress eating (Adam and Epel 2007); disproportionate exposure to food advertising (Kumanyika & Grier, 2006); and the structural constraint of limited

access to supermarkets (Caspi et al 2012, Walker et al 2010). Additionally, many public health scholars and food justice advocates argue that low-income people cannot afford healthy food. According to a recent meta-analysis, a healthy diet averages \$1.48 more per day than an unhealthy one (Rao et al 2013). Mathematical modeling has shown that reducing daily expenditures without compromising caloric intake requires a reduction in diet quality, as measured by energy density (calories per gram) (Drewnowski and Darmon 2005). On these bases, some scholars posit that poor people have poor diets because they extend scarce resources by selecting foods with cheap dietary energy (Drewnowski and Specter 2004). These analyses accord with low-income people's reports of attending closely to food prices (Dobson et al 1994, Glanz et al 1998, Alkon et al 2013, Antin and Hunt 2012, Edin et al 2013) and of sometimes prioritizing cost over health (Inglis et al 2005, DiSantis et al 2013, Connors et al 2001, Antin and Hunt 2012).

Not all researchers agree that nutritious food lies beyond the budgets of low-income eaters. According to several analyses, switching to more nutritious, less energy-dense foods need not cost more (Raynor et al 2002, Wilson et al 2013). Similarly, analysts at the United States Department of Agriculture have found that with careful budgeting, Supplemental Nutritional Assistance Program (SNAP) recipients can satisfy dietary guidelines for fruits and vegetables (Stewart et al 2011). Additionally, for some types of food and drink, healthy and unhealthy items have comparable costs (Bernstein et al 2010; Rao et al 2013; also Drewnowski 2010). Several food-justice and health advocates also argue that people with limited means can eat with their health in mind. Leanne Brown, author of the award-winning cookbook *Good and Cheap: Eat Well on \$4/Day*, assures readers that although eating healthfully on a SNAP can prove challenging and although the cookbook cannot help those without a cooking space, “[k]itchen

skill, not budget, is the key to great food” (2014: 5). Challenging the notion that health food is too expensive for low-income communities, Stic of the hip-hop duo Dead Prez outlines “How to Eat Good On a Hood Budget” (2013). Journalist and cookbook author Mark Bittman contends that “junk” and fast food seem cheap, but actually cost more per meal than simple home-cooked dishes (Bittman 2011).

Key to what foods we consider affordable and whether we conclude that low-income people can afford them is how we measure food price (Carlson and Frazão 2012, Rao et al 2013). Several metrics exist. Often, researchers calculate the cost of dietary *energy*, or the cost of calories, measured as the price per calorie or per 100 calories. This metric reflects the important fact that food provides necessary fuel for life. Additionally, because low-income individuals tend to eat foods containing more calories per gram—and because these foods often cost less per calorie than more nutritious options--, the price-per-calorie metric seems to capture something important about the relationship between socioeconomic status and dietary health (Drewnowski and Darmon 2005, Drewnowski and Specter 2004).

Critics argue, however, that measuring food cost according to the price of calories has several limitations. One criticism is that the cost-per-calorie metric may not reflect what people actually spend on food. For example, researchers at the United States Department of Agriculture argue that “there is no evidence that consumers have or use any type of a ‘cost-per-calorie’ budget” (Frazão et al 2011). While the per-calorie metric captures the cost of dietary energy, dietary energy does not necessarily correspond to the quantities of food that people purchase and eat in practice (Carlson and Frazão 2012, Frazão 2009). For many consumers, dieters notwithstanding, energy density is not an especially intuitive or recognizable quantity of food. Instead of relating to food as bundles of calories, people encounter edibles in certain volumes,

such as serving sizes and packages. Often, these quantities influence how much people eat more than the food's calorie content does (Wansink 2006, Rolls et al 1999).

To illustrate the disjuncture between the price-per-calorie metric and consumers' experiences, Frazão and colleagues (2011) and Rao and colleagues (2013) both note that according to the price-per-calorie metric, skim milk costs twice as much as whole milk because skim contains approximately half as many calories from fat. But consumers likely see a gallon of skim milk and a gallon of whole milk comparably priced, and it is implausible that skim-milk drinkers consume half as much milk to adjust for its higher per-calorie cost. Similarly, the amount of celery that contains as many calories as a donut would far exceed the amount that people typically eat and consequently would cost significantly more than what people typically spend on celery.

As a result, some researchers have argued that food-cost metrics should correspond to consumers' experience of what they spend on groceries (Frazão et al 2011, Carlson and Frazão 2012). Implicitly, this appeal suggests that if people buy food on the basis of price, they must be acting according to some idea of cost. Without a valid cost metric, researchers risk making inaccurate assertions about whether a healthy diet is affordable and about why poor people tend to have poorer diets than their higher SES peers. Despite advocating for more realistic, experientially valid food-cost metrics, however, is it not clear whether alternatives to the price per calorie metric reflect how consumers themselves evaluate the cost and value of food. To develop more valid metrics, it is essential to understand how consumers themselves think about the cost and value of food—what is cheap, what is affordable, what is expensive, and why.

Several studies of food choice suggest that attending to how people understand their conditions of food choice is an important complement to studying these conditions according to

more formal, “objective” metrics such as price per calorie or price per serving. Specifically, people sometimes construct the “objective” conditions of food procurement in “subjective” ways, and these subjective evaluations influence food-provisioning practices above and beyond the objective factors themselves. For example, whether public housing residents in the Boston area felt that they lived within walking distance of a supermarket was more strongly associated with their produce intake than was an objective GIS-based measure of food access (Caspi et al 2012a). Similarly, a small interview study found that for Philadelphia residents, the concept of food access encompasses both objective criteria, especially physical distance to the store, and subjective social criteria, including perceived social distance from shop owners who appear to discriminate against African-Americans (Cannuscio et al 2010). An Australian study found that subjective evaluations of price—but not objective prices—predicted whether respondents purchased the healthier versions of 14 common foods (Giskes et al 2007).

Similarly, in studying why eligible households do not use food pantries, Fong and colleagues (2016) argue that explaining non-usage requires understanding how people construct seemingly objective barriers such as financial need, lack of information, and convenience. Despite their food insecurity, non-users declined assistance because they saw themselves as distinct from “genuinely” needy people, whom they constructed as the intended target population for pantries. Furthermore, not seeing themselves in this category, non-users did not seek information on pantries. Thus, the seemingly objective barrier of information has roots in non-users’ self-concept. Additionally, respondents found pantries’ long lines inconvenient. However, this evaluation encompassed not only time and the discomfort of standing, but also disdain for other ethnoracial groups and “rude” behaviors that they associated with pantry users. These

cultural constructions did not operate apart from concrete obstacles, but rather constituted these very obstacles in ways that influenced whether people who qualified for a food pantry used it.

Several studies documenting how people assess food cost more specifically suggest that people use criteria other than objective price *per se*. This is evident in the fact that people sometimes disagree whether a given food is affordable (Connors et al 2001: 193). A large survey of British women found that although eating healthfully tended to cost more, 71% of respondents with the healthiest diets and 60% of those with the least healthy diets did not find healthy eating more costly (Cade et al 1999). The authors interpret this finding as evidence that “the individual assessment of costs is a matter of subjective perception rather than of objective facts” (Cade et al 1999: 511). Similar discrepancies in how people assess food cost extend to low-income populations, as well. Mackereth and Milner (2007) found that a subset of low-income parents see convenience food as the most affordable option, whereas others see food cooked from raw ingredients as more economical. Similarly, whereas some low-income African-American women see fast food as accessible and convenient, the most economically constrained participants found it prohibitive (Antin and Hunt 2012). In an interview study of Australian women, Inglis and collaborators (2005) find that low-income respondents saw cost as a barrier to healthy eating despite evidence that people on a tight budget can afford nutritious food. These researchers posit that respondents may have erroneous views about how much a healthy diet actually costs (Inglis et al 2005: 341)

Some evidence suggests that people assess various aspects of food, including cost, in relation to other foods. People do not just think of foods as tasty or cheap, but as tastier *than* or cheaper *than* something else. In an interview study of food-related values and priorities, Connors and colleagues (2001) find that “The phrase ‘not as expensive as’ demonstrates the manner in

which foods were usually categorized in reference to other foods along a value continuum,” including “the cost/value continuum” (193-4). In addition to finding that people evaluate foods relationally, Connors and colleagues suggest that how people classify a food shapes their evaluations of its cost. For example, one respondent reported that apples are “an expensive snack,” a judgment that rests on categorizing apples as a snack and on the woman’s experience that apples cost more than other snacks (Ibid: 193). If classified differently—as a health food, for example—apples might seem less expensive. Overall, Connors and colleagues imply that people evaluate the cost and value of food in relation to analogous products, such as reduced-fat versus full-fat cheese, and in relation to other members of the class of foods. Although the authors provide evidence that people assess the cost of food in relation to other foods, they do not discuss systematically what these relational criteria of evaluation are.

These studies do not coalesce as a unified body of research on how people assess food’s affordability, but together they suggest that 1) people use criteria in addition to price *per se* when evaluating whether a food is affordable, 2) subjective assessments of affordability may not align with objective price, and 3) people evaluate the cost of food items relative to other products and classes of products. Because the question of how people think about food cost was often part of a broader study, however, these suggestions are not studied systematically. In what follows, I address this question specifically.

To be clear, some foods are expensive, especially for those whose basic needs outstrip their resources. The material world is not infinitely amenable to cultural construction, and whether someone sees a food as costly or cheap is not a question of interpretation alone. When the maximum per person SNAP allotment is \$194 per month (United States Department of Agriculture 2016)—about \$6.25 per day—and the average allotment is \$124.92 (United States

Department of Agriculture 2017)—or about \$4 a day—it stretches credulity to argue that paying \$10 per pound for fish, \$4 per pound for sugar snap peas, or \$8 per pound for almonds is cheap.

Data and Methods

Data collection for this chapter is described in Chapter 2. I analyzed these data in the following way: Through focused coding (Charmaz, 2006: 57-60), I sought to identify transcript passages related to food costs, budgeting, and expenditures. I began by searching for terms that I thought would appear in pertinent passages, such as waste, afford, expense, budget, cheap, econom*, money, and value. The resulting text included other relevant terms, which I added to the list of codes. Scanning several transcripts yielded several other terms, for the final list of search terms: wast*, expense/expensive, cheap, high, low, afford*, price, cost, econom*, charge/d, sell/sold, pay/paid, buy/bought, spend/t, SNAP, stamp, resource, cash, money, *n't/too/so much, not bad/ *n't bad, enough, worth, only/just a, only/just \$, free, econom*, stretch, value, price, charg*, budget, save/saving, coupon, add* up, cost, free, dollar, cent, penny, change, buck, deal, steal, bargain, treat, splurge, luxury, extra, limit, have/not/*n't enough, tight, pocket, full/fill, hold, stick, run/ran out, and last. I scanned transcripts for additional passages related to the cost and value of food that did not come up in this focused search. I compiled relevant passages in a Word document organized by respondent.

From these passages, I identified key themes related to how respondents assess the cost and value of food. These themes were: evaluating food cost in relation to how long the food lasts; evaluating food cost in relation to an external referent; and reasoning about when it is reasonable to spend more than “necessary” on food. Within each of these three themes, I created more specific codes corresponding to the heuristics that respondents use to assess food cost: “cost by duration,” “cost by speed of consumption,” “cost by satiety,” “cost relative to alternate

product,” “cost relative to alternate scenario.” Because the heuristics of cost by duration, by speed of consumption, and by satiety all relate to how long food lasts, I grouped them together as *heuristics of conservation*. Similarly, I grouped the heuristics of cost relative to alternate products and alternate scenarios as *heuristics of comparison*. An elaboration of these heuristics constitutes the core of this paper’s empirical findings.

I was struck that these two classes of heuristics operate according to conflicting premises: absolute maximization and relative judgment. From my initial read of the data, I posited that when low-income respondents found foods affordable compared to something else, that food also had to “fit” in the overall budget, where “fitting in the budget” means that it did not displace another expected or desired purchase. In contrast, if a food costs less than an alternate option but displaces another item, it would seem expensive. I revisited the data to evaluate this hunch. On this basis I developed a broader conceptualization of what it means, from the perspective of limited-resource consumers, for a food to be affordable.

Findings

What is Expensive?

In saying that cost is, to some extent, constructed, I in no way mean to negate that economically constrained people have too little money and, sometimes, too little food. Low-income people do find a range of foods expensive. Some of the foods that they found pricey should come as no surprise. As one might predict, this category included high-status meats and seafood, particularly lobster, crab, steak, lamb, and sushi. Also unsurprisingly, low-income parents found higher-priced fruits such as cherries and berries expensive. Several respondents also mentioned the relatively high cost of fresh fruit in general. Nuts, including almonds,

cashews, and Brazil nuts, also fell in the “expensive” category—an unsurprising classification given that nuts rarely cost under \$6 per pound.

Sometimes, respondents found that food in general was pricey. Rachele, a low-income Black mother of two young boys, explains that although she receives SNAP, “[The benefits are] not that much. It sounds like a lot, 'cause it's like dollars, but nowadays, food is so expensive. It's like nothing. That \$300 goes so fast. It's so hard.” Echoing Rachele, Brittany, a low-income white mother, remarks, “Food's just, it's so expensive.” Sometimes, respondents found food too expensive to buy. For example, during the shopping observation, Pamela, a low-income white mother, left 1.5 pounds of cherries at the cash register when she realized that they would cost \$10.

Sometimes, though, respondents found fairly mundane items expensive, including potato chips, bread flour, granola bars, Hot Pockets, pizza rolls, canned soda, canned vegetables, and canned ravioli. Sometimes, respondents in similar economic circumstances disagreed about what foods were pricey. More generally, I find that low-income parents sometimes use unexpected criteria to assess a food’s affordability, and sometimes these criteria differ from those used in formal food-cost calculations. Better understanding these criteria of evaluation may lend insights into food choice among groups most vulnerable to diet related health issues. In what follows, I examine how people evaluate whether foods are affordable and how they decide when it is worth it to get something that costs a more than “necessary.”

Criteria of Conservation: Cost by Duration: Servings over Time

Low-income respondents often emphasized the need to make food last until more resources come in, which typically happens once a month when SNAP benefits arrive. Buying foods that do not last can prematurely erode the tight food budget, leaving families without funds

for other needs. Natalee, an African-American mother of a four-year-old boy, explains: “I always try to shop where I know it's going to last us. I don't like frivolous shopping, 'cause we lose out if it's the end of the month and I know I'm not going to get assistance until the next month.” When food does not last through the month, families resort to inconvenient, uncomfortable, and potentially embarrassing food-coping strategies such as borrowing money or food, patronizing food pantries, and falling behind on bills to buy groceries; eating less varied, lower-quality food; or simply eating less. Most respondents had to fall back on these coping strategies, sometimes on a regular basis. By making food last as long as possible, they can delay turning to such tactics.

As a result, low-income respondents often evaluated food according to how long it would last. Foods' lastingness is, in part, a function of how many servings they provide for a given amount of money. Keith, an African-American father of two young children, explains how he has adapted to a 36.5% reduction in his SNAP benefits:

I bag up two pieces [of chicken] in a bag. I cook it, eat one piece that night, one piece the next night. So if I make 12 bags of that, 12 bags of pork chops, 12 bags of sausage, 12 bags of anything else, my ribs. That's what? 32 bags. Make me last all month.

Keith spontaneously assesses his food-provisioning routine according to how long it supplies him with food. Even Keith's computational error—12 bags of meat times four types of meat equals not 32 but 48 bags—highlights the importance of seeing food in terms of how much of the month it will last, as 32 is just over the number of days in a month. For Keith, having food last is not divorced from his assessment of its affordability. For him, as for other respondents, lastingness and affordability are intertwined. As Keith says, “Got 10-pound bag of pork chops for \$14. Get about 15-20 pork chops—can't beat that for \$14, know what I'm sayin'?”

When respondents do not get many servings for their money, they view that food as pricey. Alice, the mother of two teenage boys and grandmother of a three-year-old girl, illustrates this point. When I asked, “Are there any foods you get for them that are maybe a little

expensive, but totally worth it?,” she nominated a particular brand of frozen heat-and-serve chicken wings. “These Murry’s, wing dings, [my sons] like those. Those are \$12 a bag and they’re not enough. Those boys, they’ll eat that whole bag. [It’s] just like two plates.” Alice highlights that what makes this produce expensive is that it provides too few servings—just two places—which Alice sees as “not enough.”

This heuristic of “food that lasts is affordable” parallels the price per serving metric that some researchers suggest is a more faithful reflection of consumers’ out-of-pocket cost than the price-per-calorie measure (Carlson and Frazão 2012, Frazão et al 2011). From respondents’ perspective, how long a food lasts not only relates to how many standard servings it provides, but also to how fast it is consumed, as I discuss below.

Cost by Duration: Speed of Consumption

To minimize the risk of food running out before more resources come in, some respondents avoid buying foods that they and their children would consume too quickly. Explaining why she doesn’t buy many snacks at the grocery store, Terry, a low-income white mother of four, says:

Terry: If [my kids] get 50 cents, they’re at the store buying a honey bun. If they get their allowance, they’re in the store spending the five dollars on snacks. So it’s like they’re not deprived of snacks. But if they’re in the house and the snack’s there, they have to eat the whole box. They don’t know how to [drifts off, apparently searching for a word]...

CD: Pace?

Terry: Yeah. So I’d rather spend 50 cents a day⁶ than maybe spend three dollars on a box and they be gone in a day.

Terry does not resist buying boxes of cookies because she worries about the health consequences of eating too many snacks in one sitting. On a second interview, Terry was sorting food donations at the organization she managed. Her 11-year-old son was also present. Terry pulled a

⁶ Terry subsequently clarified that she actually gives each child about \$1 per week, not 50 cents per day.

box of Keebler brand E.L. Fudge cookies from a bag of donations, held it up and said, “Look, Josh, you’re getting cookies!” Turning to me, Terry said, “See? This is the kind of thing I don’t buy because it never lasts. But if I get it somewhere, I’ll give it to them.”

When food does not last because household members consume it too quickly, the food does not feel economical. This evaluation of cost can diverge from what the metrics of price per calorie, per serving, and by edible weight would suggest. According to these latter measures, single-serving packages typically cost more than larger boxes of the same food. For example, a single-serving Little Debbie honey bun costs 50 cents, whereas a six-pack is \$1.79, for a per-serving cost of 30 cents.⁷ Per serving, a box of six honey buns represents a 40% savings per unit. But for Terry, providing \$4 a week for multiple smaller snacks is more economical than spending \$3 on a larger package that lasts only a moment. Terry pays more per serving, per calorie, and by edible weight because it is more expensive for her children to overeat a highly palatable food. As Terry says, “Food, I try to make it stretch.”

Chellise, an African-American mother, also thinks about food cost, in part, as a function of how quickly the item is consumed. While grocery shopping, she contemplated different flavors of tea bags, trying to decide which to buy.

Chellise: Sometimes I feel like making it [tea] is better than buying it, like buying the big consumption of drinks that are already made.

CD: Have you ever done a price comparison?

Chellise: I have. And I feel like you get [i.e., save] more money making those versus if you buy these [bottled drinks]. They go so fast. You know what I mean?

Chellise is right that bottled iced tea can cost more than its home-brewed counterpart, as a per-serving cost comparison shows. The box of Twinings tea that Chellise ultimately bought cost \$2.99 and contained 20 servings, for a per-serving cost of 15 cents. Bottles and can of tea from

⁷ <https://www.farmandfleet.com/products/526334-little-debbie-honey-buns.html>

companies such as Lipton and Arizona sell for .30 to \$1.⁸ At a bargain supermarket that Chellise sometimes patronizes, a six-pack of generic iced tea that she likes costs about \$2, or about 33 cents per can. (Of note, gallon jugs of tea cost less per serving than do smaller bottles and cans. Containing 16 servings and costing approximately \$2.50, tea in gallon jug costs about 15 cents, the same as Chellise's bags of tea.) Chellise highlights that brewing tea is more economical not because it costs less serving or provides cheaper calories, but rather because bottled drinks "go so fast." Rapid consumption means that foods and drinks seem more expensive because these items run out quickly. Here, what Chellise *experiences* is how long food lasts, and its duration stems in part from how fast she and others consume it.

The rate of consumption can compound the cost of something that parents already find relatively expensive. In discussing how she would like to offer fruit at breakfast, Natasha, a health-conscious biracial mother who strives to improve her daughters' diets, alludes to this conundrum:

It's just so expensive to make a fruit salad. It's so expensive for just one bowl, and I have to make a decent size because all my kids like fruit. Especially my oldest [teenage] daughter, she's always snackin,' always lookin' for something. I'll make a bowl of fruit salad tonight [Saturday], it might be gone by Sunday morning.

Natasha suggests that a food's baseline cost per serving and how fast one's family consumes it are separate ways of conceptualizing food cost. While conceptually distinct, they can operate simultaneously, exacerbating a food's expense.

In some ways, the cost-by-speed-of-consumption heuristic parallels the price-per-serving metric—they both relate to how long food will remain available. Similarly, in some cases, the heuristic of cost by speed of consumption does correspond to the price-per-serving metric. If two foods cost the same, but one has more servings than the other, and if household members eat

⁸ The cost depends on the brand and whether the drink comes in a single container or a multi-pack. Also, because larger bottles and cans contain more than a single serving, their per-serving price is lower than the per-container price, although people often consume the entire container, even when it contains multiple servings (Wansink 2006).

each food at the same speed, the package with fewer servings will both run out sooner and cost more per serving. But the speed of consumption heuristic also relates to a different consideration: the *rate* at which household member eat a given food. When families eat something too quickly—whether because they eat too much in one sitting or they eat it frequently—primary caregivers must decide whether to buy more, which they may not have money for, or to go without the item.

Primary caregivers could conceivably ration food so that their family do not consume it quickly and thus make buying it feel costly. Some respondents do take this tack with children whose consumption can be monitored and controlled. Natalee keeps tabs on how much of the month's supply of snacks her son has gone through. She explains,

I try to stretch that towards the end of the month, so if you come to me every day for the first two weeks, twice a day, and say "I want, I want, I want," there's not going to be nothing for the next week or two. [...] So I always stretch [...] 'cos I keep track how much I gave to him and how much we're going to have left to last us until the end of the month.

Similarly, Rosalyn, a food-insecure grandmother and mother of a teenage daughter and an autistic young man, calibrates the amount of peanut butter that she gives her son to match the amount that remains. Although her son loves sandwiches thick with peanut butter, she uses less when she nears the end of the jar and cannot purchase more. This strategy is possible in part because her son cannot make a sandwich himself.

The ability to monitor the speed of consumption also depends on the type of food. Terry, who prefers to spend more per serving on snacks to keep her children from overeating a larger unit, buys other foods in large quantities when she can control their use. At the beginning of the month, she purchases a large amount of meat and divides it into bags containing just enough for each family member to have one serving. Then, Terry freezes the meat for dinners throughout the month. Because the meat is frozen and raw, their children are not at risk of eating it. Keith, a

low-income African-American father, also buys all his meat at once and bags it into individual servings that last the whole month. This strategy works because, as he says, “I don't go in [the freezer] and eat chicken like a snack.” In contrast, when foods are accessible, ready-to-eat, and highly palatable, monitoring and controlling their consumption can prove challenging.

Cost by Duration: Cost of Satiety

Some respondents also think about food cost in relation to how long a food keeps their family full. Pauline, a low-income white grandmother who lives with her adult daughter and two grandchildren, discusses whether it is true that healthy food is simply too expensive:

It is true to a certain extent. [...] I live off \$700 a month. Yes, it is hard. It's easy to buy quick, fast shit to feed your kids, to say, “Oh, I can get three boxes of these for four bucks instead of payin' four bucks for this one box.” But that one box is gonna sustain your child more. Your kids are gonna eat them three boxes in one day because a half an hour later it's gone through 'em. They go to the bathroom, and it's gone through 'em, honey. It only subsidizes [sic] that feelin' for a minute.

Pauline considers another aspect of how long food lasts—the duration of the satiety it provides. This criterion—the duration of satiety that a food provides—parallels the cost-per-calorie metric to some extent. Both concern sustenance that a food offers. But Pauline's way of thinking about the cost of food differs in an important way: she considers cost as a function of the *time* that this sustenance lasts. This temporal dimension means that a food that seems cheaper according to the metrics of price per calorie, price per serving, and price by weight may actually prove more expensive if one considers how long this energy lasts. Over several hours, multiple servings of a cheaper but less satiating food may outstrip the cost of a more expensive food that provides greater satiety.

Food Cost Includes Food Waste

When low-income respondents think about the cost of food, they factor in the food that goes uneaten because, ultimately, they must pay for what their family eats as well as what their

family wastes. Although Trisha’s experience is somewhat idiosyncratic, her case illustrates this point. Trisha’s seven-year-old daughter, Sara, has what Trisha calls “very expensive tastes,” including sushi, quinoa, asparagus, salmon, and organic poultry. As Trisha explains, trying to find what Sara will eat has strained her budget.

Trisha: I'm like, "I ain't got the money to keep tryin' to figure out what you're gonna eat." 'Cause sometimes I have to say, "Look, this is what you gonna eat. [...] You gonna eat and that's all to it, 'cause I can't afford to go through this trial and error with you."

CD: Yeah. So tell me about that trial and error that you've done.

Trisha: Okay, we tried veggie burgers; she didn't like that. We tried—what did we try? Chicken hot dogs; she didn't like that. So I'm, like, I'm goin' through a lot of money.

Trisha’s daughter is unusually selective, but like other respondents, Trisha does not see wasted food as independent of the food budget because she has to pay for what her daughter refuses, not just for what her daughter eats. Consequently, respondents consider food waste when they assess whether a food is affordable. When waste is involved, foods that seems affordable according to the metrics of price per calorie, per serving, or by weight can be expensive in practice, relative to her monthly food budget. To the extent that children reject food because they are still acquiring new tastes, objective cost metrics, which do not account for food waste, underestimate the out-of-pocket costs that families experience. I explore this mechanism in more detail in the following chapter.

Criteria of Comparison: Cost Relative to Alternatives

Respondents consistently evaluate the cost and value of food relative to what those foods cost in other stores. After grocery shopping for side dishes and breakfast foods with me, Kevin still had to purchase meat, which he routinely gets from a local meat market. He explained his choice of store: “I stopped getting my meats from [Save-A-Lot supermarket] because, like, the meats in there high. I go down to Angel's Meat Market. \$20 here and \$20 there and \$20 there,

it'll fill my freezer up.” Paying more for the same food can be painful. Natalee reflected on a recent experience at a supermarket that she typically avoids because of its cost. “Stop ‘n’ Shop is so expensive. I was like, oh my goodness, and when I got to the cash register, I just wanted to put everything back.” Similarly, when I shopped with Dawn and Sally, a pair of low-income white cousins, their go-to supermarket was closed due to an employee strike. Instead, they went to a supermarket with higher prices for identical foods. While shopping, Denise and Sally noted repeatedly what various items would have cost at the more affordable store. Right after checking out, Dawn lamented, “This makes me want to cry.” These findings echo existing studies that also note that people compare a food’s price to what it costs at other stores and at other times (Connors et al 2001).

It makes sense that people would compare an item to itself because this is the most direct comparison that one can make. Yet I find that respondents also evaluate the cost of food in relation to *different* foods that they might plausibly purchase. In what follows, I elaborate on two sub-types of this heuristic of cost relative to alternatives: cost relative to alternate products and cost relative to alternate scenarios.

Cost Relative to Alternatives: Alternate Product

Respondents also assess the affordability of a given food by comparing it to the price of a different item that they are familiar with or that they might buy instead. For example, Rosalyn, inspected the bacon options during the grocery-shopping trip. She noted that she dislikes the turkey bacon that her daughter prefers, but buys it for her anyway. Spontaneously, Rosalyn added:

And it’s reasonably priced! Turkey bacon is very cheap. And a pack of [pork] bacon, a good pack of bacon, Smithfield’s, you’re talkin’ almost \$4. You know, Oscar Meyer, you’re definitely talkin’ \$4. Okay? Turkey bacon’s \$1.99, for Jennie-O.

When evaluated according to price per serving, by weight, or by calorie content, it is not readily apparent that a 12-ounce package of turkey bacon for \$1.99 is “very cheap.” At \$2.67 per pound, turkey bacon is priced slightly higher than boneless, skinless chicken breast, which cost \$2.50 per pound at the same store. Rosalyn’s juxtaposition of turkey bacon and its pork counterpart makes clear that she thinks of cost in relative terms. With the more expensive pork bacon as a referent, turkey bacon feels “very cheap.”

Respondents also evaluate foods’ cost in relation to similar options in their food environment. Dana, a low-income white mother of three, illustrates this kind of relational evaluation. After the grocery shopping observation, Dana assessed the affordability of her purchases in relation to a similar product that she could potentially have bought. When I asked what Dana would cut if she had to reduce her spending by \$10, Dana said that she would give up her own snacks—Craisins and breakfast bars—before sacrificing ice cream and toppings for her children. She wanted to show them love and give them enjoyment: “They do good all week, and if they want, like, this, that’s what they want.” But Dana also cited an economic reason for prioritizing sundae fixings: “It’s still saving me money instead of goin’ out to Coldstone [ice cream shop], which we actually love—and I can eat there every single day 'cause I love ice cream—but it’s still savin’ us.” Certainly, some observers would question whether buying two quarts of ice cream and two toppings is a financially sound decision for a struggling mother. But compared to the next most likely scenario of going out for ice cream, Dana’s decision looks and feels financially prudent. Thus, referents in the food environment provide referents against which respondents evaluate the cost of other foods.

Respondents not only evaluate food cost relative to other options in their food environment, but also in relation to what they could make themselves. What they could make

themselves is defined largely by respondents' practices and skills. For example, two mothers in similar economic positions, view the cost of microwave popcorn in contradictory ways. Brittany, a low-income white mother who prefers to make popcorn on the stove from whole kernels, says:

The bag's like this <shows size with hands⁹>, and it's like \$1.99 or .99; it just depends on if you want a name brand or not, you know what I mean? Microwave popcorn is so expensive. I have one in there, but only because my sister likes that. *I don't eat that. I like when I make it myself.*

Given that she can buy a two-pound bag of popcorn kernels for no more than \$1.99, paying \$1.99 for a package of microwave popcorn, which typically contains three bags, feels like a loss because she could have popped her own for less.

In contrast, Melissa, a low-income white mother, finds microwave popcorn economical. Discussing the particular kind she can get for her son with food allergies, she spontaneously remarks on its price:

[He] can only have the plain: all natural, no butter, just salted. There's one Stop n Shop [brand] one that's \$1.99. It's so cheap.

For Melissa, microwave popcorn's affordability—at least kind she buys—is one of its noteworthy features. She not only finds it cheap, but “*so* cheap,” and mentions its low cost without prompting. Because she does not make loose popcorn on the stovetop, this option is not a salient referent, and Melissa consequently does not compare its cost to that of raw kernels. Without this referent, microwave popcorn does not feel like a loss of money, as it does for Brittany. Instead, Melissa likely thinks of microwave popcorn as analogous to crackers and evaluates its cost accordingly. Thus, families' existing food practices define the alternatives against which they evaluate the cost of a related food item.

Similarly, respondents evaluate the cost of food items in relation to that of foods that they know how to prepare. During the shopping observation, Sarena, a low-income African American

⁹ I verified in store that the bag she is referring to weighs two pounds: <https://www.instacart.com/store/items/447225?source1=search&source2=popcorn+kernels&sid=2c8adf50-61ad-46f6-ae7f-17e03c06f67a&impressionId=d630b250-bb3b-4028-9a15-93310f3f3bad>

mother, grimaced at something while walking down the frozen isle.

Sarena: I be looking at that like, "Ugh, I'm never gettin' that."

CD: What was that?

Sarena: Shepherd's pie. I'd rather make it myself.

CD: Are there any other things in the store where you look at and you're like, "Blech, not in my house"?

Sarena: Yeah.

CD: Like what?

Sarena: Just certain stuff that, like, I'm not gonna buy that; I'm gonna make it. It looks cheap, but I'll make it myself, and I'll make more of it.

Sarena reacted emotionally, almost viscerally, to what she saw in the freezer case, as if offended at the suggestion that she pay more for something that only *"looks cheap."* For Sarena, what appears affordable on the surface is actually expensive because she could make it—and more of it—for less.

Yet another frozen, heat-and-serve item, General Tso's chicken, did not provoke such a reaction. After shopping with Sarena, I asked "What were the things you got today where you're like, 'Well, it's a little expensive but I'm gonna go ahead [and buy it]?'?" She replied:

I didn't really get nothin' that was too expensive. Like, one thing wasn't too much. I got the General Tso's chicken. That's like \$5 somethin, but that's not really much. That's not that high of a price to me. I didn't do those super, "Oh, let me try this," and it's so much. Like the shepherd's pie, like, I always look at it like, *\$10.90 for that? For \$5 I could make that, or even two of them for that*, so I didn't get that.

By nominating General Tso's chicken in response to my question about purchases that were somewhat expensive, Sarena signals that she did not, strictly speaking, need frozen Chinese-American food. Sarena did not, however, find it expensive. Incidentally, the shepherd's pie *is* actually pricier according to the metrics of cost per calorie and cost per serving. But Sarena does not evaluate the affordability of these two dishes according to these criteria. Instead, Sarena finds the shepherd's pie unacceptably expensive because she can make it herself. General Tso's

chicken, in contrast, is not in Sarena's repertoire of recipes. To get eat this dish, Sarena would have to go out or get take out, both of which would cost more than the option in the frozen isle. Thus, families' skills help to define the alternatives against which they evaluate the cost of a given food.

Cost Relative to Plausible Alternatives: Alternate Situations

Respondents also evaluate the cost of food in relation to the other foods that are available in a particular situation. Natasha's evaluation of hot link sausages shows how this type of relational evaluation works. When I first met her, Natasha had been laid off from a job processing medical insurance claims. Several days a week, she went to the local employment center to look for work. After the food-shopping observation, Natasha talked about a package of hot links that she bought. From her perspective, they were a fiscally prudent purchase. Natasha explains:

I'm gonna be on my job search. Sometimes I take one of those [hot links]. It's not the healthiest, but I put it in a little paper towel and put it in a baggie and take it with me with a bread or whatever, so I'm not like, "I'm on a job search, I'm hungry, I'm gonna go to McDonald's." I'm gonna eat this, 'cause I can use that money towards either laundry or drier.

Natasha did not assess the cost and value of her hot links on the basis of how many calories they provided or how many servings the pack contained. Instead, she envisioned the next most likely eating scenario—getting something from a fast-food restaurant—and compared the sausages to it. The options in the next most likely scenario were constrained by what Natasha would find near the job center. Given that a pack of six sausages cost less than just one meal out, this purchase looked to Natasha like a source of savings.

Similarly, Melissa brings her son a white grape juice box when she picks him up from school and feels that she is saving money. These juice boxes are certainly not the cheapest beverage available. Single-serving packages, such as individual juice boxes, tend to cost more

per serving and per calorie than does the same product in a larger container, such as a jug or a cylinder of frozen juice from concentrate. Juice boxes certainly cost more than tap water, which is effectively free, and even bottled water that comes in a multipack. But Melissa envisions that if she did not supply juice boxes on the daily drive home from school, they would need to stop at a convenience store or fast-food drive-through, where a single beverage cost can significantly more. Melissa estimates that relative to this scenario, juice boxes save her \$6 per week. While Melissa's choice is economically irrational from the perspective of per-calorie and per-serving price metrics, it is situationally rational. As Melissa and Natasha show, people evaluate the cost of a given food in relation what they'd otherwise eat in a given *situation*, and what they would otherwise eat is constrained by what is available at that time.

When Criteria Conflict

When multiple criteria of evaluation are available, people may evaluate a food's affordability according to these multiple metrics. Sometimes these criteria complete, creating uncertainty about whether a food is a good buy. As discussed above, by taking hot links to the career center, Natasha avoids spending scarce money on fast food or take out. But Natasha felt torn about this purchase. In large part, her ambivalence stemmed from the fact that she assessed the sausages' cost according to three different criteria, and some of these criteria position her purchase as suboptimal. When I asked after grocery shopping, "Did you get anything today that was a *little* expensive but you're like, 'Eh, I'm gonna do it anyway'?" Natasha replied,

Natasha: I keep takin' it back to those damn sausages. Those sausages, they were \$4.59. You only got six for them. If you notice, those packs of meat that I got, [...] they were \$4-somethin'. *Couldda got an extra one of those*, know what I mean?

CD: So what compelled you to get the sausages?

Natasha: [seems to have misunderstood the question]: I'm thinkin' about my babies' gravy and their steak with their mashed potatoes or their rice, 'cause they love it. [...] *I'm thinkin' about them*.

CD: I can feel you feel a little guilty about it.

Natasha: I'm still thinkin' about it. \$4.59. Geez. Probably 'cause *they don't eat 'em*. If one of my kids ate—even one, just one of 'em—I wouldn't feel as bad. But knowin' that *I'm gonna be the only one* to consume 'em, it's like, really, you shouldda got somethin' that we all collectively eat. But I really like 'em, with the sauerkraut, I do. And again, *I take them with me on the go* sometimes.

CD: Yeah, I mean, and if you do take them to the career center and that's your lunch...

Natasha: I do, it beats \$6, \$7 at Dunk's [i.e., Dunkin' Donuts] or McDonald's or a little Spanish food restaurant or a Chinese food restaurant. And, you know, you grab somethin' for lunch, and you're not thinkin', and if I'm going three days out of the five, that's \$21. *I could wash a lot of clothes with \$21*, and I always have laundry. With five girls, you can imagine.

In this exchange, Natasha first compares the hot links to a hypothetical alternative: a package of steak that could have fed her daughters and made them happy. The “\$4-something” package of steak would feed this family of six for little more per serving than a package of six sausages. (Because sausages contain more fat than steak, they would have provided cheaper calories, but Natasha is evidently not considering the cost of dietary energy.) But, as detailed earlier, Natasha also recognizes that her purchase will yield savings compared to the visit to a fast-food outlet that she would otherwise make.

Natasha also evaluates the affordability of the hot links on the basis of whether they are essential or superfluous. In highlighting that she alone will eat them, Natasha implicitly casts her own consumption as optional, an area where expenditures can be reduced and funds can be reallocated to her family. In doing so, Natasha invokes a widespread notion that mothers can and even should override their own preferences for their family's sake (Charles and Kerr 1988, DeVault 1991, Dobson et al 1994, Hamilton 2012). When framed as optional, this purchase feels like a misuse of resources, and Natasha feels selfish and foolish for missing opportunity to be a good mother. Overall, Natasha draws on three criteria to assess whether the hot links were affordable: cost relative to an alternate product, cost relative to an alternate scenario, and whether the product was essential or extra. Two criteria position the hot links as a loss of money, while one positions it as a gain. When criteria conflict, as in this case,

individuals can have a hard time assessing whether a food is affordable. In Natasha’s case, by the end of the post-shopping interview, she still felt torn about whether the hot links were a fiscally prudent choice.

Affordability as Relative Evaluation within Absolute Resource Limitations

If low-income people assessed the affordability of food only relative to plausible alternatives, any food would seem affordable provided it cost less than something else: a simple steak would seem cheap because it costs less than filet mignon, haddock would seem cheap because it costs less than wild-caught sockeye salmon, almonds would appear economical because they cost less than pine nuts, and many vegetables would seem inexpensive because they cost less than wild mushrooms. Being relatively inelastic, however, low-income people’s budgets cannot accommodate such expansive definitions of what is affordable. And yet, in an apparent contradiction, resource-constrained respondents also conceptualize food cost in relational terms, as the previous sections show. How can absolute and relational criteria of evaluation co-exist?

I find that viewing a food as affordable according to comparative criteria entails that food not displacing another desired item. To the extent that a person can both purchase a given food and the other items they want, that food can qualify as affordable. Cassie, a low-income African-American mother of a three-year-old girl illustrates this point. On the big grocery-shopping trip at the beginning of the SNAP cycle, Cassie always buys one of her daughter’s favorites, grapes. Because researchers sometimes identify fruits and vegetables as outside the reach of low-income consumers, I asked:

CD: I’ve heard a lot of people say, you know, “Fruits are really high, like just really expensive and it’s hard to fit in my budget.” How is it for you? [1:51:00]

Cassie: I don’t think about that. I just know I have this much money when I go shopping, and I get the same things we always do, and fruit is part of that budget. It’s part of that budget.

When discussing how “fruit is part of that budget,” Cassie echoes the language I used to ask if fruit “fits” in her budget. But Cassie is not merely parroting the prompt. She details that she has developed a well-honed, highly routinized grocery-shopping pattern. Cassie purchases the same items regularly and, over time, she has figured out what she can buy with the resources she has. Because grapes “fit” into this overall configuration of routine purchases without prompting Cassie to sacrifice other items, she finds them affordable.

In contrast, foods feel expensive when they edge out other purchases. When I interviewed Trisha a second time, two and a half years after the first interview, she had taken to dividing her SNAP benefits 50/50 with her “picky” daughter Sara so that Sara could buy what she wants. Sara had recently had developed a penchant for Asian pears. Initially, Sara bought them in fairly large quantities, but discovered that she could not afford this level of consumption. In explaining her daughter’s learning curve, Trisha reveals her own thinking about the affordability of food:

Trisha: She don’t buy 12 of ‘em no more. She’ll buy like three. Cut it up, put the little lime on there [to prevent browning] <claps hands>, freeze ‘em. Cos she says, “I can’t afford 12.” I bet you can’t. [...]

CD: Yep, scalin’ back a little.

Trisha: [imitating a taunting exchange with daughter]: Yeah. Cos like, “You ain’t got no 12 Asian [pears]?” “I can’t afford them. That’s not funny. I can only get three if I wanna get somethin’ else.” *Bingo!* Now you know how I feel.

(emphasis in original)

Trisha’s daughter is learning what Trisha and other low-income respondents know well: a product is expensive not only when there is simply not enough money to buy it, but also when buying it would deplete the resources needed for other goods.

Respondents’ assessment of sales also shows that they view foods as pricey if they displace another purchase. Natalee discusses how discounts that require buying multiple packages are deceptively pricey.

You think, if you're buying three for ten [dollars] or two for five [dollars], you're gettin' deals. But you're really not, 'cause all that adds up. You keep saying, "Three for ten [dollars]," but you probably end up spendin' more than what you was actually going to spend if you get maybe one or two of those things.

As Natalie indicates, affordability relates not just to the per-unit price, but to overall expenditures. It can feel cheaper to buy fewer units at a higher per-unit price than to buy more units at a lower per-unit price because spending more money overall—even if it entails a lower per-unit price—can displace other items. This finding parallels the observation that often, low-income people cannot buy in bulk. Typically, bulk purchasing offers lower per-unit prices, making it a prudent money-saving strategy. However, it also requires spending a larger sum of money at once than one would when purchasing smaller several packages over time (Dowler 1997). Resource-constrained households often struggle to satisfy short-term needs and therefore cannot dedicate money to future demands.

I find that low-income people not only face barriers to buying in bulk because they lack the money to cover future needs. Additionally, some respondents judge the purchase of multiple packages for less per package as more expensive because such a purchase constrains their ability to buy additional items. Thus, paradoxically, while it can feel expensive to buy foods that get eaten too quickly, it can also feel expensive to buy foods in quantities that exceed the household's rate of consumption.

In general, I find that in order for a food to seem affordable according to the criteria of comparison, it also has to fit in the overall food budget, such that it does not displace other needed items.

When The Extra Expense is Worth It

Although respondents often strive to buy foods that they find affordable, they sometimes purchase items that they find somewhat expensive. They do so for in part for practical reasons.

One practical reason for spending more than “necessary” is that respondents’ families may not like the cheaper option. Families’ tastes matter not only because respondents want their children to enjoy what they eat, but also because when family members dislike the cheaper alternative, they may not eat it at all. Sarena explains this thinking after a grocery-shopping observation in which she selected the more expensive Prego tomato sauce over cheaper versions:

The other tomato sauces is just nasty. I don't like 'em, and the kids don't like it and they will not eat the spaghetti. [...] Prego's good. Now, I will do Ragu if I have to do Ragu. Yeah, I will. But then they're like, "Ugh." They just know, they smart. [...] Ragu's like liquid. I don't know, it tastes like liquid. But they like, Prego, Prego, Prego. It is expensive, but, you know, some things you have to.

Sarena highlights her families’ food preferences in accounting for why she purchased a slightly more expensive tomato sauce. Whether one’s family will eat something is important to respondents because it presents several practical issues. First, when household members turn down a disliked food, the range of options narrows. Without a spaghetti sauce that Sarena’s daughters will eat, pasta dinners are literally off the table. To replace them with something at a similar price point, Sarena would have to come up with alternate dishes that cost no more than spaghetti with the pricier Prego sauce. Doing so would entail an additional cognitive and logistical burden.

Second, it can ultimately cost less to pay more for foods that one’s children will eat than it does to spend less on a disliked food that no one will eat. When respondents’ families turn down a dish because they do not like it, respondents still feel compelled to feed them and would offer a more palatable alternative. Thus, the cost of offering a food that no one eats includes the uneaten food as well as its replacement. In theory, a parent could simply refuse to offer an alternative and insist that their children eat a dish that they dislike. Respondents find this suggestion implausible. In remarking, “some things you have to,” Sarena signals that she feels little recourse when her daughters turn down foods that they dislike, as I discuss in greater detail

in the next chapter. Faced with these alternate scenarios, Sarena and other respondents find that the extra money for a preferred product warrants the expense for practical and economic reasons.

Creating Positive Emotions and Social Experience

Most often, however, low-income respondents spend extra money on food in order to create positive emotional and social experiences. Sometimes respondents use food to create moments of respite and enjoyment for themselves. Dana, for example, sees her daily \$3 coffee from Dunkin' Donuts as a reward for her hard work as a highly involved single mother of three who tires herself out shuttling her children to and from multiple extracurriculars while trying to hold down a part-time job. Often, however, low-income respondents spend extra money on food in order to provide positive experiences not for themselves, but for their families. In particular, these parents used food to make their children happy and, more generally, to buffer their children from feeling the deprivation of poverty.

Low-income respondents sometimes turned to food to make their children happy. This goal was evident in both interviews and shopping observations. For example, on a shopping trip, Lauren, an African-American mother of two girls, reviewed her purchases with her ten-year-old daughter, Leila, as we waited in line to check out.

Lauren: I got your sister some snacks.

Leila: I know, I see. I've seen Mommy got Kit Kats—these <pulling out the package of Kit Kats>.

Lauren: Your favorites, right?

Leila: Ooh, you got the big ones!

Lauren: You happy?

Leila: Yeah, the big ones.

Food, a material object that parents can access with relative ease, grants them the ability to shape their children's subjective experience. Additionally, showing knowledge of the child's particular

preferences conveys attention and care that affirm the relationship between parent and child. Low-income parents could not indulge their children continuously. Often, these respondents bought treats for their children on their “big shop” the beginning of the month, warning their children that they may not get any additional indulgences until new SNAP benefits came in. But low-income parents try at least some of the time to bring happiness to their children through food.

Sometimes, being able to offer a special treat hinged on parents’ careful budgeting. For example, Natasha explains that if she has food left from the previous month and does not need to replenish her stock, she might use that money to

splurge \$9 on three boxes of those sorbet Italian ices. But it's worth it 'cause they're big, they're soft, and it does the trick. I don't always have money to go to the ice cream truck or let them go to the corner store, so I gotta make it work. They gotta be happy.

Natasha can spend \$9 on a non-essential food item only when she has conserved resources the prior month by diligently shopping sales at multiple stores to maximize her savings. Providing foods that make a child happy can also require sacrifice. Trisha occasionally buys her daughter cashews, a relatively expensive food, but to make this purchase, Trisha foregoes something herself. She thus treats her own satiety and enjoyment as a shared resource, available for allocation to her daughter. When low-income respondents discussed buying foods that make their children happy, they sometimes spoke of these foods and of economic constraints in the same breath. Nonetheless, low-income respondents like Natasha and Trisha find that the expense and effort are “worth it” because special foods bring their children enjoyment and excitement. In saying, “they gotta be happy,” Natasha echoes a common sentiment: that children’s contentment warrants serious consideration.

This emphasis on children’s emotional experience accords with widespread contemporary conceptions of good mothering that emphasize attentiveness and responsiveness to

children's emotions and desires (Hays 1996). Low-income parents are not unique in wanting make their children happy and in seeing food as a way to do so. Higher-income respondents, even highly health-conscious parents, gave children their favorite foods to make them happy. For example, during a grocery-shopping trip at Whole Foods, Beth, a higher-income white mother, emphasized her attempts to offer her four-year-old son healthy foods. Right after grabbing a shopping cart, Beth explained, "I start in the produce area and I always find a bunch of asparagus every week. And asparagus is commonly a vegetable that I cut and throw in soups. [...] I guess it's an easy way for my son to get more greens, you know?"

Toward the end of the shopping trip, Beth picked up a bread-wrapped sausage—a giant pig in a blanket—for her son. It stood out among the plums, pineapple, asparagus, strawberries, frozen peas, Greek yogurt, and cherry tomatoes in the cart. At the end of the interview, she nominated the pig in a blanket as one of the foods she looked forward to giving her son. Quite simply, he likes it—and he thinks that the name "pig" is cute. Parents across the socioeconomic spectrum want to safeguard their children's happiness. But economic hardship shifts what parents are trying to safeguard their children's happiness from.

Emotional Buffering from Poverty

Many low-income respondents were willing to spend more money on foods that buffer their children from the sting of poverty. Sociologists have shown how earnestly poor parents shield their children from the pain of scarcity by providing desirable consumer goods and experiences (Pugh 2009). In a world where other people seem to get what they want, having unfulfilled desires can leave a person feeling cheated and alone. With these concerns in mind, low-income respondents not only see food as a way to bring their children a moment of

excitement and enjoyment, but also to prevent their children from feeling deprived and excluded from the community of people whose desires are fulfilled.

This desire is evident in how Rachelle, a low-income mother with two young sons, approaches food choice. While agreeing that children should eat healthy foods such as yogurt with fruit, Rachelle noted that she would add something “fun” to food that she finds too “serious” for a child:

Whatever I’m throwing on top of the yogurt would have to be fun. Like, I’d probably do the Fruity Pebbles, you know? Something colorful. Maybe I do from experience. When I was a kid, my mom would give me oatmeal. I don’t want that oatmeal. But when I saw when they came with the little colorful things, although it’s the same thing, it’s like, okay, now, I’ll eat it. And with [my sons] it’s like, they don’t get it as it is. So, I can’t do extra things as it is, so I try to throw in the little treats for them so they know—you know—we *get something, we get stuff too*.

For Rachelle, a colorful, appealing addition to a “serious” food addresses a practical issue, persuading children to eat something that they might otherwise snub. But the “fun” addition has deeper social and emotional significance. As a poor parent, Rachelle feels acutely her inability to give her sons the things they want. When she has no money, Rachelle actively avoids public spaces where other children are consuming lollipops and ice cream that she cannot provide for her sons. But Rachelle wants her sons to feel like they do get what they want. In saying that she wants her boys to think “we get stuff *too*” (my emphasis), Rachelle implicitly references a group of people who do not have to go without. By giving her sons fun foods that go beyond the “serious” minimum, Rachelle gives her sons the ability to imagine themselves as belonging to this group, or at least the ability to feel that they do not stand wholly outside it.

Buffering children from feeling deprived yields emotional dividends not only for children, but also for the low-income parents themselves. Vicky, a poor African-American mother, illustrates this point. I asked her what she thought of food-budgeting advice to drink water instead of spending money on sugar-sweetened beverages like those she buys for her young sons. Vicky replied:

Kids like color and they like flavor, you know what I'm saying? And maybe if I would have started back when they was like one years old and they would be used to it, wouldn't know anything but water, but unfortunately I didn't have that information available to me, you know what I'm saying? And then to be honest, for a family like us, we live in poverty, so we try to satisfy our children so they don't feel like they're poor, you know? [...] We try to overcompensate our children, and that makes us feel better.

As Vicky notes, poverty exposes children to feeling deprived. In saying that offsetting the experience of poverty “makes us feel better,” Vicky indicates that being poor also makes parents emotionally vulnerable. Widespread notions of good mothering assert that mothers must attend closely to children’s desires, even putting their children’s wants before their own (Hays 1996; also Pugh 2009, Hamilton 2012, Dobson et al 1994, Charles and Kerr 1986). Because low-income parents lack the economic resources to consistently fulfill their children’s consumer desires, they risk feeling like inadequate caregivers. The desire to protect one’s self-concept as a good parent is highly motivating. Buying the foods that fulfill children’s desires may cost extra money, but low-income respondents find that preserving a sense of parental competence warrants the extra expense.

Sometimes, parents not only use food to buffer their children from poverty, but they also use food to actively compensate for hardship. My interviews suggest that the direr the family’s circumstances, the more intently parents will try to preserve a sense of competence by providing children with foods that create positive emotions. When I met Colleen, a Boston Irish mother recovering from a heroin addiction, she lived in a family homeless shelter with her three-year-old son, Mickey. During the first five minutes of the interview, Colleen noted that Mickey already had a cavity between his two front teeth because he eats a steady stream of sweet snacks and candy. Colleen finds this diet “sad” because “kids need their snacks, but kids need, like, well-balanced meals, too.” With only a microwave to cook with, however, Colleen finds that preparing nutritious meals in the shelter is almost impossible. While shelter life vastly constrains her ability to provide healthy food, Colleen also turns to sweets and candy for social and

emotional reasons. Colleen explains why she recently spent her very last pocket change to buy her son a \$2 lollipop:

When my son wants something, I have a hard time sayin' "no" because we're in this situation, and I feel like it's my fault that I didn't leave him better off. You know? So it's like I feel like I have something to make up for, so I spoil him a lot.

Colleen has few resources to offset the toll of living in poverty and to manage her feelings of maternal inadequacy. Food is one of the few resources that she does have, as she explains:

I give him junk. I give him sugar. He goes in the store and he sees a bag of Doritos, and he wants it; he sees juice and he wants it; he sees oatmeal cream pies, he wants them; he sees Starburst and M&M's and Butterfingers, and he *wants it all*. And I just kind of go with the flow, and when I don't have money, I will count out pennies to get him somethin. Like I had like \$3 the other day, and I spent like \$2 and change on that [lolly]pop. I'm, like, tryin' to make him happy. Like on the weekends, it's pourin,' we're stuck in a little room. There's nowhere to go. I can't just take him out in the rain, and it's like we have to just sit in that room. And like I know he goes stir crazy 'cos I go fuckin' stir crazy, and he has a lot of toys—he has all kinds of toys and stuff—but bein' in that room drives you like kinda cuckoo. You know what I mean? It really does.

Colleen must consistently battle the feeling that she has failed her son. Because they live in a shelter, Mickey does not enjoy a “normal” home. Because the shelter has no play area, only a parking lot, he has nowhere to play like a “normal” kid. Because his father is not involved in his life, Mickey does not have a “normal” family. Besides the ferocious love that she shows for her son, Colleen feels that she does not have much to give, and feeling like she has little to offer leaves Colleen with the sense that she has failed her son. She can afford gifts of food, however, and candy reliably makes Mickey happy. With the wide array of sweets and treats available at the nearest convenience store, Colleen can provide enjoyment, as well as variety and novelty that their life otherwise lacks. These food choices have already compromised Mickey's oral health. Arguably, Colleen could buy a healthier alternative with the little money she has. From this perspective, her food decisions look both insalubrious and economically irrational. But people also need to feel competent and needed. Colleen cannot count on these luxuries. Food makes her son happy, and in providing it to him, she rescues herself temporarily from feeling like a failed mother.

Mutual Reinforcement of Economic and Socioemotional Criteria

Economic and social criteria of evaluation can operate more or less independently, but they can also reinforce one another in a way that makes slightly expensive purchases seem reasonable. Stacy, a low-income white woman who lives with her teenage daughter and her six-year-old grandson, discusses how her children do not drink much soda. Instead, they opt for juice, sweetened tea, or milk. She explains:

Now they're on this kick where...what is it? Horizon [brand] or something? <sighs> 1% organic milk, and I'm like dying because [...] it's very expensive. And, they sell it in juice boxes, so [it's even more expensive]. And *these* [pointing to a case of San Pellegrino water bottles]. I think [it comes with] 12, and they're about \$12-13 [per case].

CD: So, like a buck apiece?

Stacy: Ridiculous.

CD: So, you say ridiculous 'cos—

Stacy: —But you know what? It's good for them. They like it. I'll spend the money to buy it. You know, it's kinda one of those things: you would rather spend the money for something they're gonna drink and eat than buy something you're gonna waste anyway. That's how I look at it.

Stacy might prefer that her daughter drink from the 28-pack of Poland Springs bottled water, which Stacy gets for \$2.99, and she would like her grandson to drink “regular milk.” But for Stacy and other low-income respondents, buying a slightly expensive food item feels fiscally responsible compared to the prospective of her children wasting something they do not like.

Trisha echoes this sentiment. As discussed above, she has to give up something that she enjoys in order to buy cashews for her daughter. This purchase is worth it, as Trisha says, “‘Cos she's happy, and she's gonna eat it. I know it's not gonna go to waste.” When low-income parents can feel that they are both making their children happy and avoiding costly food waste, spending extra money on a favorite food can feel like a financially defensible choice.

Conversely, a purchase that falls short of sociocultural ideals can feel like a poor use of funds. As discussed above, when Natasha purchased hot links that only she would consume, she

felt guilty for not buying something that her daughters enjoyed as well. Without saying so expressly, Natasha felt that she had fallen short of the mothering ideals that she subscribes to, an ideal in which mothers put their children's desires before their own (Hays 1996). As a result, buying hot links occasioned an emotional loss. Natasha felt guilty and selfish, and perhaps even cheated out of the opportunity to make her daughters happy and to feel like a good mother. Natasha transposed these misgivings, rooted in the symbolically and emotionally charged domain of cultural ideals, to her economic evaluation of food. Despite the fact that the price of hot links compared favorably to the price of several alternatives, Natasha's nagging sense that she had failed her daughters made this purchase feel economically as well as emotionally costly. Thus, economic and sociocultural criteria of evaluation can reinforce one another, with judgments according to one criterion influencing judgments according to the other.

Discussion and Conclusion

Does the cost of healthy food prevent low-income people from making healthier choices for themselves and their families? Despite the fact that this question would appear to be a straightforward yes/no affair to be resolved by numbers on a price tag, researchers and food justice advocates debate whether economically constrained consumers can afford to improve their diets. Disagreement stems in part from differing views of whether to measure food cost according to the price per calorie, the price of servings, the price by weight, or by another objective, standardized metric. Despite calls to use metrics that correspond to consumers' own experiences and perceptions of food cost (Frazão et al 2011), few studies have examined how low-income people evaluate what makes food cheap, what makes it acceptably priced, what makes it expensive, and why.

Using a combination of interviews and grocery-shopping observations, I find that low-income primary caregivers evaluate the cost and value of food according to two general types of criteria: *criteria of conservation* and *criteria of comparison*. In criteria of conservation, parents evaluate the affordability on the basis of how long it will last. This consideration is of particular concern because low-income households, by definition, have limited funds, and these funds must cover as many needs as possible until more resources come in. Whether a food will last comprises four related but distinct sub-criteria: whether the food provides enough servings over time; how fast household members eat it, especially whether they will eat it too quickly; how much satiety the food provides; and how much waste is generated.

I find that low-income primary caregivers also evaluate the cost of food in relation to alternate options. A small number of existing studies have suggested that people assess the cost of food relative to what similar items cost and relative to what the same item costs at another store (Connors et al 2001). While respondents in this study make these same comparisons, they also evaluate the cost of food in relation to a broader set of referents, including alternate products and alternate scenarios. Alternate products are defined not only by the analogous items available in the marketplace, such as full-fat yogurt versus reduced-fat yogurt, but also by the habits and skills of respondents themselves and by the options at other outlets in their food environment. The fact that people evaluate a given food's affordability in relation to the dishes that they know how to make may help to explain why people, even people in similar socioeconomic positions, sometimes disagree about what foods are affordable.

The finding that people evaluate the cost of a given food relative to other foods is consistent with research on biases and heuristics in behavioral economics. This scholarship shows that when a quantity or probability is hard to evaluate, people make judgments about it by

comparing it, often implicitly, to other quantities. Via contrast, this comparison converts the quantity in question into a proportion or percentage of something else. Interpreting a proportion or percentage is less cognitively demanding because it provides a standard to evaluate the quantity against. For example, a consumer may have a hard time discerning if they are paying a reasonable price for soft-serve ice cream. But if the ice cream is piled above the container's brim, it appears large relative to something, the container size. In this scenario, people are willing to pay more for a smaller amount of ice cream (seven ounces) in a smaller but overflowing container of five ounces than for a larger amount of ice cream (eight ounces) in an underfilled but larger container of ten ounces (Hsee 1998). It is the container size that makes the amount of ice cream seem large or small, which in turn affects people's economic judgments.

Often, behavioral economists use hypothetical and somewhat arbitrary scenarios to establish this heuristic of relative comparison, also called "proportion dominance." In addition to the ice cream valuation scenario, examples include how much people would support spending money on life-saving airport screening technology (Fetherstonhaugh and Slovic 1997) and how much people would pay for a dictionary with 20,000 entries and a torn cover versus a like-new dictionary with half the entries (Hsee 1996). These scenarios are not necessarily divorced from situations that could occur outside the laboratory, but by focusing on comparisons created for the purpose of a study, researchers may not observe the relational evaluations that people make in everyday life.

This paper furthers the effort to understand people's everyday evaluations by showing what points of comparison people draw on when making relational judgments. More specifically, I find that some reference points are environmental: the foods and food outlets around people define the set of options that they might consider. Other referents are defined by the practices

and skills of people themselves. In particular, respondents assess the cost and value of food relative to similar foods that they are in the habit of making and, relatedly, that they know how to make. More generally, this paper highlights that cognitive biases heuristics such as proportion dominance may be general tendencies, but they are based on socially defined reference points. An inductive qualitative approach that taps how people themselves understand their world is essential for uncovering such social underpinnings of general cognitive biases.

Based on the finding that people evaluate food costs relative to other options available to them, I argue for an expanded conceptualization of the food environment and how it affects food choice. Typically, scholars think of the food environment as the built environment of outlets and advertisements, and whether it contains healthy or unhealthy options. These scholars argue that when the food environment surrounds people with numerous vendors offering tasty foods, bright signage, and enticing smells, people face limited choices and even insufficient willpower to resist.

I have found that the food environment affects people in another way: it not only limits options and stokes appetites, but it also provides referents that people draw on when making food choices. Consumers may not ultimately eat these foods or visit these outlets, as the food environment hypothesis posits. Instead, these referents stand as points of comparison against which other choices seem reasonable—or at least acceptable. When Coldstone Creamery, for example, is an option, buying two quarts of ice cream and two jars of sundae toppings seems affordable. Thus, the food environment can be conceptualized not only as physical locations on a geographic map, but also as a cognitive “map” of culturally salient referents.

I also show that while low-income parents attend closely to food prices, cost is not the only determinant of these families’ food choices. Economically constrained respondents also buy

foods for social and emotional reasons—to make their children happy, to buffer them from feeling deprived, and to maintain a sense of parental adequacy. The foods that accomplish these symbolic goals often cost more than less meaningful alternatives, but when low-income respondents can muster the funds, they often find that this expense is worth it. Because these families' food budgets are often quite tight, this expenditure is not budget-neutral. Buying food for social and symbolic reasons may require falling back on food-coping strategies such as visiting a food pantry or cutting back on quality and quantity later in the month. These findings echo British studies from the 1980s and 1990s that find that low-income mothers strive to provide socially meaningful foods, but the extra expense of these items requires reducing the amount and healthfulness of other foods.

These findings have implications for food-related programming aimed at low-income populations. First, they have implications for the relationship between cooking skills and food choice. Cooking classes have been proposed as a way to counteract North Americans' increasing reliance on processed, ready-to-eat products, especially in low-income communities facing the highest risk of diet-related disease. Proponents of cooking education argue that by learning to cook nourishing, economical dishes, low-income people can replace less salubrious options with equally affordable healthier offerings. Cooking skills may have an additional and unanticipated effect on food choice. The skill set of individuals helps to define the set of referents against which they evaluate the affordability of alternatives. When people know how to make a given dish, prepared, value-added versions may seem unreasonably pricey because people can produce those items themselves. It is worth noting that it is unclear whether this shift in referents leads people to eat healthier food. A mother may eschew shepherd's pie on economic grounds but embrace deep-fried breaded chicken chunks in a sweet sauce, hardly a nutritional upgrade. But

these findings do suggest that when people gain cooking skills, the way that they evaluate the affordability of food may shift in tandem, with potential consequences for food choice and dietary health.

These findings also have implications for the framing and messaging involved in attempts to improve the diets of economically disadvantaged households. Interventions and health messaging are likely to be more resonant if practitioners frame their claims according to how people themselves understand what makes a food affordable (Berezin and Lamont 2016). Practitioners might, for example, identify the referents against which target foods seem affordable to underscore how economical the healthier target foods are in comparison. Conversely, interventions might aim to frame less healthy choices as expensive by positioning them in relation to healthy affordable options. Similarly, these findings highlight how some ways of framing healthy and affordable food may fail to resonate with low-income people. Some educators and food justice advocates may argue, for example, that whole grains such as millet, barley, and bulgur are healthy, low-cost options to embrace. If families who hear this message think instead of the waste that such unfamiliar foods may create, the pitch to adopt a novel budget-friendly food may fail to resonate.

In calling for more culturally savvy health messaging, it is vital not to lose sight of the deeper issues involved in the food choices of low-income families. The fact that economically disadvantaged respondents sometimes spend extra money on food to neutralize the sting of scarcity indicates that breaching the diet gap requires that we address the experience of poverty. This goal may entail expanding the definition of dietary needs. Some researchers have already taken a step in this direction. As early as 1986, sociologists Nickie Charles and Marion Kerr argued that "...cultural standards of proper eating are as important as nutritional standards when

assessing the food needs of families” (427). From this perspective, eating socially non-standard food can compromise one’s social wellbeing, even if the food is nutritionally adequate. As a result, programs designed to help struggling families put food on the table must acknowledge that food alone is not enough. In order to uphold their dignity and social wellbeing, people need food that adheres to cultural norms.

I argue for an even broader conception of dietary needs. We must consider not only whether the food itself meets cultural norms. Additionally, we must attend to the broader social and symbolic uses to which people put food. People not only strive to eat items that resemble what other people consume. As this chapter shows, people also use food to maintain social bonds, to create experiences for themselves and for others, and to preserve a positive self-concept. To make food decisions with health and nutrition in mind, people will need other ways to fulfill the social, symbolic, and emotional goals that they pursue through food. Low-income parents use food to offset the toll of poverty. For these caregivers to give up the sweets and treats that make them and their children feel less vulnerable, less deprived, these families will need material conditions that preserve their integrity. This goal requires redressing poverty itself.

In documenting the criteria that low-income respondents use to evaluate the affordability of a given food, this paper complements existing work on food cost and health that typically uses standardized, objective metrics of food cost. As one of the few systematic examinations of how low-income consumers construct food cost, this paper has several limitations. First, I sampled from two ethnoracial groups in one urban area in one part of the United States. Subjective constructions of food cost may differ in other places and ethnoracial groups. Second, this study has a relatively small sample, at least compared to large survey studies. By seeking detailed qualitative information on parents’ evaluations of food and food cost, I gained depth at the

expense of breadth. While I uncovered understudied criteria of evaluation, I cannot estimate these how prevalent these criteria are in the population. Third, I do not quantify the association between respondents' food-cost evaluations and their food choices. In some cases, respondents avoided purchasing items that they found expensive; in other cases, respondents bought them nonetheless. Respondents also bought foods that they found affordable, not because the food was cheap, but rather because they liked its taste. Similarly, I do not establish which of the various criteria I discuss is most strongly associated with respondents' purchases. As a result, I cannot say definitively whether subjective evaluations of cost predict actual purchases better than standardized objective measures do. These are fruitful areas for future research.

Chapter 4

Economic Constraints on Taste Formation and the True Cost of Healthy Eating

Diet-related diseases have attracted considerable attention from scholars, governments, and the public. Concern centers both on increases in health problems such as obesity and diabetes and on social disparities in these conditions, including socioeconomic disparities. Some scholars argue that social class inequities in diet quality and dietary health stem from the prohibitive cost of healthy eating (Darmon and Drewnowski 2008). Other analysts contend that a more salubrious diet is affordable, depending on how food cost is measured (Carlson and Frazão 2012). But scholars and advocates in both camps overlook a hidden cost of providing children with healthy foods: the waste associated with children's aversion to and frequent rejection of new foods.

Using 80 interviews and 41 grocery-shopping observations with 73 primary caregivers,¹⁰ I find that many low-income respondents base food decisions on their children's preferences in order to minimize the waste that results when children reject unfamiliar items. High-income respondents with greater economic resources are more likely to provide foods that their children initially may not like. Economically constrained families' risk aversion may shape children's taste acquisition in ways that contribute to socioeconomic disparities in diet quality.

I propose that accounting for food waste that children create when acquiring new tastes may yield more accurate estimates of the cost of healthy eating. While some researchers allege that food-cost analyses based on price per calorie may overstate the expense of a healthy diet (Carlson and Frazão 2012), claims that the poor can make more salubrious choices may underestimate this cost because they do not account for waste. These findings can inform

¹⁰ This chapter is an expanded version of a published paper, Daniel (2016), which uses a smaller sample than the full dissertation study sample. I conducted additional interviews since the paper's publication. These additional interviews are consistent with this chapter's findings.

policies designed to improve the diets of low-income children.

Background

Socioeconomic Disparities in Diet Quality and Health

Diet quality is consistently linked to health, including obesity, type II diabetes, cardiovascular disease, and several cancers. Obesity and diabetes have become more prevalent across the socioeconomic spectrum since the 1970s (Chou et al 2004, Kanjilal et al 2006), but rates are typically higher among low-income individuals (Kanjilal et al 2006), with some variations by race and gender in the case of obesity (Ogden et al 2010a).

Socioeconomic disparities in diet-related health stem in part from differences in diet quality (Darmon and Drewnowski 2008). Although Americans on average do not meet dietary guidelines (Wang et al 2014), poverty is consistently associated with lower fruit and vegetable consumption, less healthy food purchases (Turrell et al 2002), and worse overall diet quality (Darmon and Drewnowski 2008). American adults' diets improved modestly between 1999-2000 and 2009-2010, but low-income individuals saw no improvement, and initial socioeconomic disparities grew (Wang et al 2014).

Scholars trace socioeconomic disparities in diet quality to sources ranging from biological mechanisms (Bjorntorp 2000) to structural constraints (Caspi et al 2012b). This chapter addresses economic explanations. On average, a healthy diet costs \$1.48 more per day than an unhealthy one (Rao et al 2013). Energy-dense foods, which contain many calories per gram and often have added fat and sugar, typically cost less per calorie than nutrient-dense foods such as produce, whole grains, and lean proteins (Darmon and Drewnowski 2008). For example, Romaine lettuce provides 72 calories for \$1, whereas Doritos supply 385 calories for \$1. I calculated these values based on prices of an 11-ounce bag of Doritos (\$4.29) and a head of

lettuce (\$1.50) at Market Basket supermarket in Somerville, Massachusetts in June 2013. Some scholars posit that poor people extend scarce resources by selecting foods with cheap dietary energy, but these foods can lead to overeating and are linked to diet-related disease (Drewnowski and Specter 2004).

But some researchers and advocates disagree about how much healthy food costs and whether low-income households can improve their diets. Debate centers largely on how food cost is measured. United States Department of Agriculture (USDA) analysts find that when measured by price per calorie, fruits and vegetables do cost more than less healthy options. When price is measured by serving or by edible weight, however, many healthy items cost less than foods containing added sugar, saturated fat, and/or salt (Carlson and Frazão 2012). For example, a serving of lettuce (25-30 cents) costs less than a serving of Doritos (39 cents). USDA analysts consequently suggest that the price-per-calorie metric overstates the cost of many healthy foods (Carlson and Frazão 2012). Additionally, within certain categories of food and drink, healthy and unhealthy items have comparable costs (Bernstein et al 2010, Rao et al 2013). Some researchers find that switching to more nutritious, less energy-dense foods need not entail additional costs (Raynor et al 2002, Wilson et al 2013) and that with careful budgeting, Supplemental Nutritional Assistance Program (SNAP) recipients can satisfy dietary guidelines for fruits and vegetables (Stewart et al 2011). Similarly, some food justice advocates contend that “junk food” and fast food seem cheap, but actually cost more per meal than simple home-cooked dishes (Bittman 2011).

Children’s Neophobia and Taste Formation

Despite attempts to specify the economic burden of healthy eating, researchers on both sides of the debate have overlooked how children’s rejection of unfamiliar foods contributes to

the cost of providing them a healthy diet. Searches in Google Scholar and PubMed combining the terms [child*], [food OR diet], and [cost OR price] yielded no studies on this question. Children tend to be neophobic, or wary of novel foods, which they often reject. Psychologists posit that children's neophobia is an evolutionary adaptation to humans' condition as omnivores who need a range of nutrients but lack inborn knowledge of which potential edibles contain toxins (Rozin 1976). For children, all food is initially new and possibly dangerous, making their aversion to unfamiliar items especially pronounced (Birch 1999).

Although humans innately prefer sweet and salt, while disliking bitter and sour, most tastes are learned (Beauchamp and Mennella 2011). Children acquire food preferences in various ways. Through associative learning, children link the sensory characteristics of food—such as taste, smell, and texture—with the physiological effects of eating (Birch 1999). Thus, children quickly come to prefer calorie-dense foods that produce pleasing feelings of satiety (Johnson et al 1991). Through repeated exposure, however, infants and children learn to like foods that are not inherently palatable or calorific (Birch 1999, Wardle et al 2003). Typically, children must try foods eight to fifteen times before their acceptance increases (Sullivan and Birch 1990). Additionally, children with greater dietary variety accept novel foods more readily than do children with less exposure (Mennella et al 2008).

Repeated and varied exposure can affect children's present and future eating habits. Children acquire tastes more quickly than adults do (Beauchamp and Mennella 2011). Food intake often tracks from infancy to middle childhood (Grimm et al 2014), and preferences formed in childhood persist into late adolescence, if not longer (Kelder et al 1994). Consequently, it is important to foster healthy eating habits early in life. Researchers and

governments recommend repeatedly exposing children to disliked foods in order to increase their acceptance of healthier items (Wardle et al 2003, USDA 2014).

Family Influences on Children's Intake and Preferences

Parents' diet also influences children's intake and preferences. Amniotic fluid and breast milk contain flavors from the mother's diet, which fetuses and infants sense. Exposure to these flavors is associated with infants' subsequent acceptance of foods that their mothers ate regularly (Beauchamp and Mennella 2011). Social learning, including observing esteemed others select and consume a given food, also shapes children's preferences. Scholars posit that children infer from others' actions which foods are safe and even desirable (Wertz and Wynn 2014). Additionally, when caregivers purchase foods they like, their tastes can influence children's intake and opportunities for taste formation because these items become available at home (Skinner et al 2002). This paper builds on these studies by highlighting how material conditions influence children's taste acquisition in interaction with parents' tastes.

Waste Avoidance

Previous qualitative research has noted briefly that economically disadvantaged individuals avoid waste in food purchasing (DeVault 1991, Wiig and Smith 2009) and that low-income mothers see children's food waste as a concern (Reed, 1996), which some address by providing foods that their children prefer (Dobson et al 1994, Dowler 1997, Bowen et al 2014). I extend this research by examining these tendencies in greater depth and comparing how low-income and high-income parents think about the cost of food waste. Most fundamentally, I examine the interaction between risk aversion and respondents' own preferences, while

extending the implications of economically disadvantaged parents' risk aversion to children's taste formation and to debates about the cost of healthy eating.

Data and Methods

Data collection is described in Chapter 2. I analyzed the data for this chapter using an abductive approach. Abduction involves turning unexpected findings into a theoretical hunch that is pursued by analyzing variation across a study to develop an emergent theory (Timmermans and Tavory 2012). I turned an unanticipated observation into a new guiding question: under what conditions do parents defer to their children's preferences to reduce food expenditures? With background knowledge about taste formation and diet cost, I deduced the implications of this theoretical hunch for food cost calculations and diet-quality disparities. Through focused coding (Charmaz 2006: 57-60), a research assistant and I identified transcript passages about children's tastes, waste, and experimentation. I used constant comparison (Charmaz 2006: 54) to characterize how and for whom children's food rejections encourage caregivers' risk aversion. I collected and analyzed the data iteratively in order to refine the components and conditions of risk aversion (Timmermans and Tavory 2012: 171). Finally, I categorized respondents based on whether they see children's food rejection as too costly for their food budget. I categorized respondents who do not see children's food rejection as too costly according to the reason they do not find rejected food economically burdensome. These categorizations form the basis of Table 2.

Results

Prioritizing Children's Preferences to Avoid Waste

Often spontaneously, many low-income respondents report choosing foods that their children prefer in order to minimize waste. When I asked Colleen, a low-income white mother, about her grocery-shopping routine, she brought up waste immediately:

I get my food stamps on the 5th and I try to make them last for a month, but that's really difficult, because toddlers waste a lot of food [...] Tryin' to get him to eat vegetables or anything like that is really hard. I just get stuff that he likes, which isn't always the best stuff.

Brittany, a low-income white mother of a six-year-old, responded almost identically when I asked how she “make[s] it all happen with the money part of it [feeding her son].” After explaining that she spends her own money once the monthly SNAP benefits run out, Brittany immediately focused on waste:

I do the best I can. [I get] the things I know that my son will eat and like. I try to mix it up a little bit [...], but I try not to buy things that I don't know if he'll like because it's just, it's a waste.

For many low-income respondents like Colleen and Brittany, children's preferences and economic loss are conceptually linked near-opposites: when children like a food, they will consume it and therefore not generate waste.

In any family, uneaten food costs money, but this concern is pronounced among many low-income respondents. Sometimes, these parents associated disliked food with wasted money spontaneously and in response to questions that had little to do with finances. When prompted to react to a hypothetical child's diet, which included a snack of cottage cheese and banana,

Chellise immediately thought of the economic loss it would entail for her:

I just wouldn't do that at all. [laughs] I feel like it would just, it would be a waste of money. Cottage cheese with banana, I just couldn't think about eating that myself, so I just feel like it would be a waste of money

For parents like Chellise who have tight food budgets, uneaten food often raises concerns about wasted money.

Food-insecure study participants in particular worry that when children turn down items they do not like, other household members may have to eat less. Tracey, a white mother of

children ages 8, 12, and 16, makes her food budget “stretch to the penny.” Pre-diabetic, Tracey cannot eat the rice and pasta that she feeds her family. Instead, she consumes beans, vegetables, nuts, and chicken, but can afford only 800-1000 calories of these items per day. Frustrated and incredulous, Tracey recounts throwing away food that her children reject under the pretext that they are not hungry:

I feel like [cooking] is my job, so I go in there, and for them to be like, "I'm not really hungry, I'm gonna put this away now"—and this is the magic trick: it goes to the container, goes to the back of the refrigerator, never gets touched again, even if they say, "We'll eat it tomorrow." And then it goes in the trash. And then my head explodes, 'cause I'm like, "Do you know what I have to do to get this food up in here?" I go without a lot for myself to make sure they have [enough], and when they're throwin' away food, I'm like, [I] coulda went and bought myself this and that.

Because she cannot eat the foods her children turn down and because she already restricts her intake to ensure her family has enough, Tracey equates the food her children waste with food she goes without. Although not all caregivers have such little leeway, many low-income respondents agree that when children reject food, they erode a scarce household resource.

Reducing Risk by Avoiding Experimentation and Reintroduction

Unable to afford food their children will not consume, most low-income respondents avoid introducing their children to foods that they may not like. After Trisha, a low-income African-American mother, discussed her seven-year-old's “pickiness” at length, I asked how to deal with a finicky child.

Trisha: Well, you can't force 'em.

CD: Not force 'em. I've heard this advice: try to just let them experiment.

Trisha: That's the couscous with my daughter [which Trisha bought at her insistence]. She tried it, didn't like it—let her experiment on a budget, you know what I'm saying? "Mummy, I want that!" [...] "You're not gonna try that 'cause we can't afford it, and you don't know if you gonna like it. We get that, we're not gonna be eating' for a couple days, so if you want an empty stomach, you go ahead and try that.”

For Trisha, money is so scarce that she equates failed food experimentation with going hungry. Her prior experience purchasing couscous, which her daughter swore she would like, only reinforces the sense that novelty presents a financial risk.

Most low-income respondents see the advice to introduce children repeatedly to rejected items as economically unfeasible, even if they want their children to consume a wider range of foods. Brittany worries that her “picky” son eats too few vegetables. Yet when asked what she thought of feeding her son a disliked food ten times to increase his acceptance, Brittany hesitated:

Brittany: Well, yeah and no, because you know those whole ten times that they say, "No, no, no," you're wasting that food. So that's a big thing for me.

CD: So if you knew that after eleven cauliflowers he would finally like cauliflower, would it be worth it?

Brittany: No. No. That's a lot of wasted food. No. Not for me, not for me.

Similarly, other participants immediately equated the food that children go through in the process of taste acquisition with a financial loss they cannot bear.

Even when they want their children to eat more varied and healthier foods, and recognize that children may accept them after repeated exposure, many low-income respondents minimize economic risk by purchasing what their children like—often calorie-dense, nutrient-poor foods. After seeing her children repeatedly throw out leftovers, Tracey resorted to buying Hot Pockets, frozen chicken nuggets, and microwavable beef-and-bean burritos. Pained and embarrassed, Tracey feels she reneged on her commitment to serve “real” food. Yet unable to afford groceries that go uneaten, she began buying the processed items her children do not waste. Alice, a low-income African-American woman who recently adopted teenage boys, loves collard greens. She stopped cooking them altogether after her sons repeatedly turned them down. Natalee, a low-income African-American mother, wants her four-year-old to eat more vegetables. But, she says,

“I don't ever just come and make something. [...] I'd rather him say what he wants than me make something and waste it.” Although low-income respondents provide foods their children like for various reasons—to avoid conflict, to save time, out of habit, and to make their children happy—amidst these motivations, economic concerns loom large.

Structured Experimentation

To some extent, low-income caregivers do vary their food purchases. They note that children sometimes grow tired of eating the same thing, even losing their taste for foods they consume too frequently. But when low-income respondents branch out, they typically select different items from a preferred *category* of food. For example, Sharonda, an African-American mother of three who has a “bad habit of picking things that they eat a lot,” says, “The only thing different that I might try is cereal. Because they love different kinds of cereal.” By seeking variety within a class of food that their children like, low-income respondents minimize the risk that novelty will generate waste. But this structured, constrained experimentation is unlikely to expose children to varied types of food that would encourage them to acquire new and healthier tastes.

Moderating Influence of Household Members' Tastes

Risk aversion operates in interaction with other household members' tastes. Economically constrained respondents are especially reluctant to provide new foods that they themselves dislike. Kaylee, a low-income white mother who consumes few healthy foods, wants her six-year-old son to eat things that she does not enjoy. When asked what keeps her from offering him more vegetables, Kaylee responded, “I don't want to waste it and I feel like he's not gonna eat it. I know I ain't gonna eat it.” For parents like Kaylee who would like to offer a larger

range of healthier options, trying something new is especially risky. If neither caregiver nor child likes the food, it may go to waste entirely. Consequently, the tastes of other household members define the set of foods that could entail an economic loss.

Economically constrained respondents are more likely to introduce their children to novel or disliked items when another household member eats those foods. Rebecca, a middle-income but food-insecure white mother of three, loves fruits and vegetables. During the grocery-shopping observation, as Rebecca approached her budget, she put back a bag of apples, but hesitated. “I can’t put back the apples.” Rebecca returned a loaf of bread instead, explaining that apples are her “sweet.” When asked if she thinks that repeatedly feeding her children a disliked vegetable would generate waste, Rebecca responded:

For me it would never be thrown away. I would end up eating it, so that wouldn't be too much of an issue. Whatever they don't eat, we never try to throw it away, just try to save it either for another time or I'll eat it.

When another household member likes the food in question, families can avoid waste by sharing small portions with the child or by consuming what the child turns down. In these cases, household members’ preferences moderate the relationship between children’s tastes and economic risk by attenuating respondents’ concern that food rejection results in waste.

Moderating Conceptions of Adult Authority and Children’s Autonomy

Low-income caregivers could conceivably reduce food waste by requiring children to eat what is served instead of acquiescing to their preferences. Several respondents take this approach. Pauline, a white grandmother, ritually admonishes her grandchildren: “You take what you get and you can’t get upset—or *you get nothing.*” Pauline explains:

I’m not puttin’ 48 packs of [ramen] noodles in my [shopping] cart because that’s all my grandson will eat. [...] You can’t give ‘em options, honey. At seven years old, you don’t look at a kid and say, “Do you want spaghetti, or do you want—?” Some parents do that shit: “Oh, little Johnny, I’m your best friend...” I’m like, “Michael, eat it.”

Pauline frames generalized deference to children's tastes as an abdication of authority. From this perspective, adults know what growing bodies need and consequently should decide what children consume. Other respondents simply take for granted that children eat what they are served. Terri, an older African-American mother, states matter-of-factly, "[My four-year-old daughter] eats whatever I eat. I cook, and she eats what I cook. That's what she eats. That's it." In these cases, the link between children's preferences and waste is attenuated because children have little latitude to reject their food.

Although they may cajole their children to consume less preferred foods, most low-income respondents see expecting or requiring them to do so as unreasonable. Natalee says:

I hate for a person to make a choice for me, versus me making that choice for myself 'cause that's basically giving all your willpower to that person.

Like Natalee, many low-income respondents see children's desires as worthy of consideration. These caregivers often equate making children eat something with "forcing," implying that this approach involves excessive power and denies children autonomy they should enjoy. LaToya illustrates this clearly. Stating vehemently that she refused to expect that her 1.5-year-old daughter eat what she does not like, LaToya said almost defensively, "I wouldn't force it on her. I'm not gonna do that. I'm not gonna. I'm just not gonna do that." I asked her, "What about that makes you feel uncomfortable?" LaToya responded tersely, as if I failed to understand something self-evident: "Force."

Some low-income respondents also see their ability to consider their children's preferences as a point of parental pride. As Natalee says, "I never just leave him with not an option, 'cause that's my son, that's my baby. I don't want him to ever feel like he can't be comfortable in his own food." Not only does Natalee see her son's comfort as warranting concern, but in invoking her relationship to the boy—"that's my son, that's my baby"—she also

implicitly frames her ability to buffer him from discomfort as something that a good mother does. Against the implausible alternatives of requiring children to eat a disliked food, most low-income respondents see deferring to children's tastes as a more feasible way to avoid waste.

Hunger and the Threat of State Intervention

Respondents could also avoid the economic loss of food rejection in two other ways: by requiring that children eat whatever is served or by refusing to provide a more appealing alternative when children eschew the initial offering. After publishing a *New York Times* op-ed on parents' tendency to avoid waste by deferring to their families' preferences, I received multiple emails from irritated readers arguing that parents should give children no choice but to eat what they are given. One reader wrote:

Bottom line, if a kid is hungry enough he will eat whatever you give him. The problem is parents don't push hard enough. Yes a child will eat nothing rather than vegetables—for one night. No child will keep this up beyond three nights. Millions of people all over the world can confirm this.

Another reader suggested that present-day poor families emulate people who lived through wartime deprivation:

Get the award-winning videos produced by Armin Maiwald, creator of "Die Sendung mit der Maus" that he made about growing up in post-war Germany. He says in one of them that he was grown before he ever heard someone say he didn't feel like eating something, that you simply ate what was on the plate, grateful you had something and a plate to put it on.

These mothers should do what mine did, give them for cold breakfast what the child refuses to eat for dinner. A child learns very early who is boss and they really do prefer the parent not abdicate his responsibility.

These readers and others contended that respondents' deference to their children's preferences was a problem of parenting, not a problem of poverty. The solution lay in reasserting adult authority, as done in previous generations and in poor countries across the globe.

Withholding more popular alternatives proved easier said than done for respondents across the socioeconomic spectrum, who had neither time nor patience for whining hungry

children. But several low-income respondents found especially dubious the prospect of leaving a child without food, not only because they granted importance to their children's desires or because they felt that good parents do not leave a child hungry, but also because they feared state intervention. Low-income households often find themselves subject to the scrutiny of state agencies.

I don't want to force him. See, I was forced to do this when I was a kid. It's either you ate it or you didn't eat, and that was it. Now, forget about it. If you do that, they're like, "I'm calling the police, I'm calling Child [Protective] Services.

These mothers may overestimate the probability of a Child Protective Services investigation, but given the crushing cost that an investigation could entail, they prefer to feed their children rather than sending them to bed hungry and offering cold leftovers for breakfast until they finally cave.

Moderating Influence of Children's Food Experiences Outside the Home

When their children try and like foods outside the home, low-income parents are more likely to buy that item because they know that it poses no risk of waste. For example, Vicky, a low-income African-American mother of two young boys, recounts discovering that her son likes things that she had never given him:

My 5-year-old, he likes carrots, raw carrots. [...] He's the one that introduced me to putting peanut butter on the celeries. And blue cheese [dressing] 'cause they teach him that in school.

Knowing that her son will eat this healthier snack, Vicky now purchases it. Similarly, Brittany bought pomegranates and another mother purchased Asian pears after learning that their children tried them at school. Tricia, who now refuses to buy her daughter couscous, concluded our second interview by saying that she wanted to purchase asparagus, which her daughter liked after eating it at a friend's house. Dotty, a low-income white mother, got frozen Trader Joe's cauliflower Parmesan from a food pantry. Because her sons enjoyed it, she wanted to find a recipe to make it herself, something she would not have done without knowing that her family

would eat this new dish. Although these mothers could not afford large quantities of relatively expensive foods such as pomegranates, Asian pears, and asparagus, they show that economically disadvantaged parents may purchase novel items if they know that their children have developed a taste for them.

Risk Tolerance among High-Income Respondents

Most high-income respondents value introducing their children to varied foods and aspire to raise adventurous eaters. Consistent with other studies of upper-middle class family food practice (Backett-Milburn et al 2010), they frame exposure to diverse foods as a source of pleasure, a moral marker, and a cultural competence for future social settings. While high-income parents have a more elaborated food discourse than many low-income respondents, they also have the financial latitude to expose their children to a range of new foods and to repeatedly introduce items that their children initially disliked.

Like lower-income study participants, most high-income respondents dislike throwing away food. Unlike economically disadvantaged families, they have greater resources to withstand children's food rejection. Claudia, a white mother of a four-year-old, had recently spent \$5 to try a dragon fruit with her son, without knowing what it was or if he—or she—would like it. Asked whether she sees trying new foods as potentially costly, Claudia replies:

There is a little bit of that for me. I'm lucky. I can take a chance on food that he might not like. He wanted [a peach-poppyseed salad], and I was like, "Okay, I'll buy it, but I'm not sure you're going to like it." And then he didn't like it. [Raises her hands in resignation] Ehh. It's okay. But again, because we're lucky...

For Claudia, buying food that goes uneaten is disappointing, and the cost of rejected food does cross her mind, but she can shoulder this expense.

Similarly, many high-income respondents can afford to reintroduce previously rejected foods. Brenda, a white mother of two, repeatedly gives her three-year-old a fruit he initially

disliked. Brenda sends her son to preschool with grapes—which return untouched. “I'm hoping because he's there with all the other kids, he will eventually eat [them],” Brenda explained. When asked about waste, she replied, “I do feel bad about the waste, but I feel worse about my son not eating well.” Unlike most low-income respondents, Brenda repeatedly gives her son something he will reject in order to shape his taste for healthy food.

In contrast with low-income participants, many high-income respondents found the idea of reintroducing foods eight to fifteen times financially feasible. For example, Wendy, a biracial mother, wants her four-year-old daughter to eat more protein-rich snacks. Twice, Wendy gave almonds to her daughter, who disliked them. Asked if she could imagine providing her with almonds ten to fourteen times, Wendy replied affirmatively without hesitation. Probed about whether the cost of repeated rejections would deter her, Wendy replied, “No, I don't know if money would be a reason for me not to buy it.” While acknowledging the high price of almonds, Wendy did not emphasize cost and waste, as low-income respondents often do.

High-income respondents also expose their children to food by sharing what they themselves eat. “As soon as she could eat,” Leslie, a white mother, recounts, “we were like, ‘We’re having Brussels sprouts, you’re having Brussels sprouts.’” If her seven-year-old daughter declines, Leslie says, “We would eat what she doesn’t eat.” Respondents who already consume what they want their children to eat have ongoing opportunities to reintroduce these items. Furthermore, they face less potential food waste because other household members can share small portions of their food or consume what the child rejects.

Sometimes, high-income respondents provide repeated exposure to foods they already consume while also tolerating waste. Leslie enjoys vegetables and whole grains, but has a life-long fruit aversion. Determined not to let it pass on, she has introduced her daughter to a variety of

fruits. Probed about her thoughts on offering these foods, Leslie said, “I just wanted her to like them.” When asked about the potential cost of uneaten food—which Leslie did not allude to—she replied, “Honestly, it never crossed my mind.” Unlike low-income respondents like Kaylee, who find it costly to provide foods that they themselves dislike, Leslie had few financial concerns about fostering her daughter’s taste for foods that she herself eschews.

To be clear, higher-income respondents do not offer their children an unending array of new foods on a daily basis. Like their lower-income counterparts, they also see value in falling back on favorite foods. Lorraine, a higher-income white mother of two boys, was one of the most adventurous eaters I met. In the shopping observation, she purchased a tin of Goya smoked mussels, which she had discovered through a Spanish friend. Although she wasn’t sure that they’d like them, Lorraine wanted to have her family try this novelty. After shopping, I asked, “What are you most looking forward to giving [your sons]?” Pausing to think, Lorraine replied:

I'm always happy when I have certain easy, go-to items in the house. That always makes me feel complete. Like I'm well stocked and I can get things done quickly and I'm ready for the lunchboxes. I don't have to think too much about lunch.

For Lorraine, having a constant store of foods that her sons will consume saves time and mental energy while also providing a sense of competence and security. Even for those with the money to risk food rejection, favorite foods have their place. Not every meal is a moment for smoked mussels.

High-income parents also face challenges in encouraging their children to eat new foods and retry disliked ones. Liz, who comes home from work at 7 PM, has little time at dinner to cajole her daughters to try new foods—or to cook a second meal if they reject a novel preparation. Chrissie, who introduces new items at dinner, does not experiment with bagged lunches for school because she suspects that her daughters will leave new foods untouched if no one is there to encourage them. Chrissie worries more that her daughters will not have enough

energy for the school day than she does that the food represents a financial loss, but she nonetheless highlights the importance of providing lunches that her children will eat. For Lucy, repeatedly introducing foods to her 9-year-old son, who is “fairly set in his ways,” proves more difficult than with her toddler daughter. Sally sometimes resorts to offering unpopular foods at bath time, when her four-year-old daughter, distracted, will take a bite. Denise has stopped cooking new dishes because she finds it emotionally exhausting to prepare meals that her 6-year-old twins meet with disgust.

Challenges like these can frustrate and tire parents across the socioeconomic spectrum. Yet high-income respondents have two advantages over their low-income counterparts. They have greater economic resources to withstand waste generated by food rejections, and to the extent that high-income parents eat healthier foods than their low-income peers (Wang et al 2014), they can expose their children to what they already consume. Table 3 shows that, compared to low-income respondents, a greater proportion of high-income parents report that they can afford food waste and that someone else would eat what their child rejects. The responses of moderate-income respondents fell between those of their low- and high-income peers.

Table 3. Respondents’ Perceptions of the Cost of Children’s Food Rejection

PIR (%)	Costly	Not Costly			Other
		Someone Eats It	Can Afford	Child Has Little Choice	
<130	51%	20%	4.4%	13%	24%
130-350	30%	58%	17%	8%	42%
≥350	0%	87.5%	81.3%	0%	13%

Note: “Other” includes child’s openness, confidence in one’s cooking ability, child being “too old” to change habits, buying new foods in small quantities, and willingness to seek new foods for child with allergies. Rows do not total 100% because categories are not mutually exclusive.

Scope Conditions and Caveats

Low-income parents' desire to avoid losing money on rejected food is not always the most immediate barrier to developing children's taste for healthy food. In some cases, other beliefs and attitudes take precedence. LaToya illustrates this possibility. On the first of two shopping observations, she bought chips, Teddy Graham cookies, and Twinkies for her one-and-a-half year-old daughter who weighed so much—37 pounds—that a doctor wrote a note that it was “medically necessary” that LaToya live somewhere where she could cook her own food. At the time, LaToya was living in a motel-cum-family homeless shelter equipped only with a mini-fridge (although that did not prevent her from purchasing fish to cook at her mother's house). But LaToya cited other reasons than storage for eschewing healthier snacks.

CD: What about, like, celery sticks [R43: No] with peanut butter?

LaToya: No. I don't eat celery.

CD: When you think of eating celery what comes to mind?

LaToya: Nasty.

CD: And what do you think of giving her celery as a snack? [silence] What comes to mind?

LaToya: Don't do that.

CD: Don't do it. How come?

LaToya: Cause it's nasty.

LaToya simply finds celery intolerable and assumes that her daughter would come to the same conclusion. Because LaToya feels uncomfortable “forcing” her daughter to endure the unpleasant experience of something “nasty” in her mouth, LaToya avoids introducing her daughter to celery for this reason first and foremost. In cases like this one, the cost of food waste is not the primary barrier. However, if parents could be convinced that celery is not disgusting and that children can emerge from an unpleasant taste experience unscathed, financial obstacles to repeated exposure would nonetheless remain.

Additionally, falling back on a child's preferred food may not entail settling for a less healthy option. The item that the child dislikes may be as insalubrious as the one they enjoy. The case of Keith, an African-American father of a seven- and four-year-old, illustrates this possibility. Occasionally, Keith takes his son and daughter to the corner store for a treat. Keith recounts:

Sometimes they pick up stuff, "Oh, you don't really want that, that'd be a waste of my money." 'Cause they're grabbin' like a bag of salt 'n' vinegar potato chips. I know I don't like 'em, you know? [If] they taste it, I know they're not—well, I don't know what their taste buds are—but I believe they're not gonna like it. To me that's a horrible taste, salt n' vinegar, so I say, "No, you can't have that."

Like other low-income respondents, Keith avoids purchasing foods that his children may not like in order to prevent an economic loss. Swapping salt-and-vinegar potato chips that might go to waste for plain ones that will get eaten hardly constitutes a nutrition downgrade.

Discussion and Conclusion

Children's taste aversion is one important influence on low-income respondents' food decisions. Many of these economically constrained parents minimize financial loss in the form of food waste by purchasing what their children will eat, while avoiding experimenting with new items or reintroducing foods that their children initially turned down. Often, low-income respondents report that their children prefer energy-dense, nutrient-poor items. Even when these economically constrained parents may not want to supply such foods, many feel that they cannot afford to risk providing something that their family may not eat.

I build on previous research that notes this tendency in low-income families (Dobson et al 1994, Dowler 1997, Bowen et al 2014) by examining this mechanism of food choice in greater depth and by showing how it varies across income levels. High-income respondents experience various challenges in feeding their families, but concerns about economic risk are less salient for

them than for their low-income peers. Some high-income respondents even reintroduce their children to initially rejected foods in order to develop their taste for healthy items. This study highlights the material conditions under which an important proximate process of children's taste acquisition—repeated exposure—is likely to occur (Link and Phelan 1995). To the extent that high-income caregivers have greater economic resources to withstand waste, risk aversion among low-income parents may shape children's taste acquisition in ways that contribute to socioeconomic disparities in diet quality and dietary health.

Risk aversion is not the only influence on parents' food choice. Rather, it operates in addition to and in interaction with other influences. This article extends previous studies by highlighting how several conditions moderate low-income respondents' reluctance to provide children with new foods, including household-level food preferences, parents' conceptions of children's desires and adult authority, and children's eating experiences outside of the home.

Existing research shows that family-level food preferences also shape proximate mechanisms of taste acquisition. Risk aversion in food purchasing interacts with the composition of household-level tastes in especially important ways. Some parents may select foods that they like—even when the food is for the child—with little consideration of waste. In other cases, low-income parents purchase foods that their children like partly to minimize waste. The tastes of parents and other household members define which foods present the greatest risk: items that no one will eat may go to waste entirely. Thus, economically constrained respondents with restricted preferences face the greatest economic pressure to provide foods that their children will consume. As a result, a concordance between parents' and children's tastes that appears to result from intergenerational transmission may reflect both transmission and economic constraint.

Previous studies have not focused on the cost of children's taste formation. I hypothesize that food-cost calculations would be more accurate if they accounted for the possible expense of children's taste acquisition. Existing estimates often use data on individuals' food intake. By definition, food-intake data take reflect what is eaten, not the portions that are left untouched. Available data thus impose a correspondence between the amount of food that is purchased and the amount of food that is eaten. Given such data, analysts multiply the amount of food consumed by the retail price for that quantity, with adjustments for inedible portions such as melon rinds, chicken bones, and apricot pits. For example, if an apple costs 60 cents, and a child eats half, the calculated cost of half an apple is 30 cents. In these analyses, waste is unobserved. For parents for whom waste is salient, however, providing half an apple costs 60 cents, not 30 cents, if the other half goes uneaten. Thus, two similarly priced foods may have different perceived costs if a child rejects one item but not the other.

When food goes uneaten, the out-of-pocket cost incorporates both what is ingested and what is wasted. If food-cost estimates included waste, the price per unit of food *consumed* would exceed the price per unit of food *purchased*. Consequently, providing food that goes uneaten costs more than current calculations suggest. Adjusting estimates to reflect children's food waste would parallel the existing practice of adjusting food-cost calculations for inedible portions, which individuals must purchase in order to consume the edible parts. The global cost of taste acquisition would include waste from the multiple exposures that children need to accept each unfamiliar food that does not taste good at first. This expense would likely increase as children grow because younger children acquire tastes more readily than their somewhat older peers (Ahern et al 2014).

It is important to note that whether low-income parents view a food as expensive is not

merely a function of how much goes to waste. Economically constrained respondents found numerous foods expensive, even when their children liked them. Often, they mentioned fresh seafood, cherries, berries, organic food, sushi, nuts, and, more generally, eating out. Sometimes, respondent found these foods too expensive to buy. For example, Pamela, a low-income white mother, attempted to effectively steal cherries on the shopping observation. At the self-weighing station in the produce aisle, she weighed and printed a price tag for a small amount of cherries. Pamela would pay for only this quantity. She then filled the bag with considerably more. At check out, the self-check out cash register detected a discrepancy between the weight on the tag and the weight in the bag, an employee came over to see what was amiss. He spotted a problem with the cherries and reweighed them: \$10. Playing it cool, Pamela said, “I don’t think I need them after all.” During the post-shopping interview, Pamela repeatedly mentioned the cherries that she had hoped to bring to her daughter. She just couldn’t afford them. More generally, some foods are price no matter how little waste there is. Waste is one of several parameters that low-income parents consider when evaluating the affordability of a given food.

This paper has implications for programs and policies designed to improve children’s diets. Researchers have called for greater feeding guidance to help families foster healthy eating habits in young children (Grimm et al 2014). If recommendations entail potential waste, such as repeatedly offering healthy foods, economically constrained parents may not provide healthier options. Pediatricians and nutrition professionals consequently should offer guidance that minimizes waste. Suggestions might include purchasing easily divisible foods with a generous shelf life, such as frozen vegetables, so that caregivers can provide small portions repeatedly without throwing away a larger unit of food. Further research is necessary to establish what specific recommendations would appeal to parents.

A wide range of actors recognizes that schools, daycares, and other organizations have the potential to foster healthy eating habits. This study echoes this view, suggesting specifically that organizations can share the potential economic risk involved in developing children's food preferences. Because simply supplying salubrious options may not entice children to try unfamiliar offerings, organizations must structure children's engagement with food in ways that foster young people's taste formation. It is vital that organizations receive the resources to do so.

This paper has several limitations. First, I study two ethnoracial groups in one metropolitan area. Caregivers' approaches to children's food rejection may differ in other regions and ethnoracial groups, as well as across urban, suburban, and rural areas. Second, I do not analyze moderate-income participants separately because their responses fell predictably between those of low- and high-income respondents. Future research should examine moderate-income parents in greater detail. Third, this study has a relatively small sample. By seeking detailed qualitative information on parents' food decisions, I traded depth for breadth. This approach yielded evidence of an understudied mechanism of food choice, but I cannot estimate the mechanism's population-level prevalence. Fourth, I hypothesize that risk aversion among economically constrained caregivers may shape children's taste acquisition in ways that exacerbate socioeconomic disparities in diet quality, but I cannot demonstrate or quantify these possible effects. Fifth, this study does not measure waste and consequently cannot specify how adjusting for children's food rejections would improve diet-cost estimates. Further research is needed to address these questions.

Despite these limitations, I highlight the role of waste in parents' food choices, with possible implications for children's health and policies designed to improve children's diets. This paper also suggests that accounting for the cost of children's taste acquisition helps to bridge

competing claims about the affordability of healthy eating. Analyses based on energy cost may overestimate the expense of some items, but they posit correctly, albeit for an unanticipated reason, that healthy eating can burden economically disadvantaged families. Assertions that low-income households can afford healthy diets may overestimate families' ability to provide wholesome food because they do not consider the potential cost of waste accrued from repeatedly exposing children to new foods. Going forward, debates and policies must account for this possibility.

Chapter 5:

Why Poor People Buy Bottled Water

In the United States, bottled water consumption has increased exponentially, from 1.5 gallons per capita in 1976 (Gleick 2010) to 36.5 gallons per capita in 2015, for a total of \$14.2 billion in sales revenues (Rodwan 2016). No longer the province of status-conscious yuppies, bottled water today has now extended to low-income people as well. Although the bottled water industry frames it as a healthy choice (Rodwan 2016), some medical and public health researchers worry that drinking bottled water compromises the poor's health and budgets. They note that bottled water typically lacks fluoride to prevent tooth decay (Hobson et al 2007, Scherzer et al 2010) and may be linked to bacterial infection (Gorelick et al 2011), while most plumbed water matches or surpasses bottled water in safety and taste (Gleick 2010, Gorelick et al 2011). Some researchers claim further that by diverting scarce dollars away from health-enhancing items and directing them toward a nearly costless good, purchasing bottled water may contribute to socioeconomic disparities in health (Gorelick et al 2011). From this perspective, foregoing tap water in favor of the bottle is economically irrational and nutritionally detrimental. Why, then, do poor people buy a bottled version of what they can get for free?

Explaining water consumption requires probing people's beliefs about tap and bottled water (Gorelick et al 2011). However, studies of these beliefs often rely on closed-ended questionnaires that may miss important explanations of why people use one option or the other. Using in-depth, semi-structured interviews, I examine inductively how people think and feel about bottled and tap water in order to understand why economically constrained individuals make a seemingly irrational food choice.

I find that low-income respondents purchase water for several different reasons, some of which echo previous research and some of which have not been documented. Although most respondents do not report concerns about tap water safety, some respondents do buy bottled water because they find it better tasting and more convenient than tap water, as previous research has shown. Additionally, I find that some low-income parents purchase bottled water because the bottle itself encourages their children to drink water that they otherwise would not consume. I also find that a surprising number of low-income respondents find bottled water cheap. This evaluation runs contrary not only to claims by researchers and environmental groups that bottled water is expensive, but also to the assessments of higher-income study participants, who find bottled water expensive. I argue that this inverted evaluation arises because respondents do not evaluate the affordability of bottled water in absolute terms. Instead, they evaluate it in relation to other beverages that they habitually consume, and these beverages vary across income groupings.

These findings contribute to the sociology of food and consumption, which often focuses on the food-related understandings and practices of cultural elites, but overlooks the role of culture and cognition in the poor's foodways. In focusing on cultural frameworks (Frye 2012; Lamont et al 2010; Tavory and Swidler 2009; Edin and Kefalas 2005) that people bring to water consumption, this study also contributes to public health examinations of the poor's eating habits by highlighting the role of culture and cognition in food decisions.

Bottled Water Consumption in the United States

Few foods and beverages that Americans commonly purchase are practically free and available for immediate, on-demand delivery to one's own home—except water. Despite this fact, bottled water consumption in the United States has skyrocketed since the late 1970s, from

an average of 1.5 gallons per capita (Gleick 2010) to 36.5 gallons per capita in 2015 (Rodwan 2016). Prior to the 1970s, bottled water did exist. Hundreds of small regional bottled water manufacturers supplied offices with large bottles for the proverbial water cooler (Gleick 2010, Royte 2011). Since then, the market for bottled water has expanded dramatically in size and scope. Now, large national and international companies dominate the market, the use of individual bottles has exploded, and bottled water has become ubiquitous (Royte 2011). Per capita consumption of bottled water in the United States remains below that of countries with a longer-standing custom of drinking bottled water, such as France and Italy, but the United States is now the second-largest bottled water market in the world (Rodwan 2014).

People purchase drink bottle water for several reasons. Topping the list are dissatisfaction with the taste, smell, color, and/or turbidity of tap water (Saylor et al 2011, Abrahams et al 2000, Doria 2006, Huerta-Saenz et al 2012); concerns about tap water safety (van Erp et al 2014, Saylor et al 2011, Abrahams et al 2000, Onufrak et al 2010, Dupont et al 2010, Scherzer et al 2010, Huerta-Saenz 2012); and perceived convenience (Abrahams et al 2000, Doria 2006, Saylor et al 2011). Other motivations include a lack of trust in public water companies after specific cases of contamination (Parag and Roberts 2009) and the belief that, beyond being safer, bottled water confers distinct health benefits (Doria 2006, Gleick 2010). Journalist Elizabeth Royte posits that, additionally, North Americans have turned to bottled water as part of a broader cultural trend of “hyperindividualism” (Royte 2011: 45).

Studies typically do not verify whether people’s perceptions of tap water are accurate (e.g., Abrahams et al 2000, Saylor et al 2011, Dupont et al 2010), but evidence suggests that most plumbed water differs little in flavor and safety from its bottled counterpart. Blind taste tests show repeatedly that people cannot distinguish between bottled and tap water (Friday 2011,

Shermer 2003, Monroe-Lord and James-Holly n/d, Wells 2005, Standage 2005). Additionally, bottled water faces no more regulation than tap water does. Because many standards for bottled water are actually laxer, including standards for testing, reporting, and labeling (Gleick 2010), this product does not guarantee safety or cleanliness. In fact, synthetic chemicals and elevated bacteria levels have been found in bottled water (Royte 2011). Tap water is not free of risk either. In 2015, publically provisioned water that violated EPA health-based standards reached 8.8% of the U.S. population living in communities with community water systems¹¹ (EPA 2016). Additionally, water that leaves from the treatment plant clean can pick up contaminants from water pipes and from soldered pipe fixtures (Foltz 1999). While recognizing the need to improve the public water system's infrastructure, numerous researchers assert that most plumbed water in the United States generally is safe—or at least no riskier than bottled water (Gorelick et al 2011, Gleick 2010, Hobson et al 2007).

Critics contend that North Americans' affinity for bottled water results largely from private water companies' attempts to fabricate fear of the faucet (Gleick 2010). As a result, these critics, researchers among them, frame bottled water as environmentally degrading, injurious to public support for governmental water services, and more expensive than tap or filtered water (Saylor et al 2011, Royte 2011, Gleick 2010, Standage 2005). At stake, to some extent, is not only the health of bottled water drinkers, but also their providence.

Water Consumption and Food Choice Among the Poor

Although bottled water in the United States began as a status symbol among young professionals (Foltz 1999), its consumption has spread across the socioeconomic spectrum.

According to the nationally representative National Health and Nutrition Examination Survey

¹¹ About 94% of the total population lives in areas with community water systems (CWS), which receive publically provisioned water. The remaining 6% of the population has private water sources such as wells.

(NHANES), adults at or below the poverty level drink, on average, slightly over one cup of bottled water a day (Sebastian et al 2011). Although the NHANES data show that higher-income individuals drink more bottled water—two cups a day—several regional studies find widespread bottled water consumption among low-income populations. In a Milwaukee study, poor and less educated parents were more likely than their higher-income and more educated counterparts to give their children primarily bottled water (Gorelick et al 2011). In Salt Lake City, a study of predominantly Latino parents, most of them low-income, found that 64.9% of families earning under \$14,999 annually always gave their children either bottled (32.9%) or filtered (32.0%) water (Hobson et al 2007). A Canadian study found that more educated respondents were less likely to drink primarily bottled water than their less educated counterparts (Dupont et al 2010). Children and teenagers with poor parents are less likely to drink tap water than peers with higher-income caregivers (Patel et al 2013). An interview study of SNAP recipients notes that respondents rarely drank tap water, opting instead for bottled water or a sweet flavored beverage (Edin et al 2013).

Of note, other studies have found no income differences in who uses tap water (van Erp et al 2014) or bottled water (Abrahams et al 2000); a Canadian study found that higher-income respondents consumed more bottled water (Dupont et al 2010). These discrepancies may stem from the use of convenience samples, regional or national variation, and inconsistent or somewhat arbitrary income measures.¹²

Even if lower income and less educated people do not drink *more* bottled water than their higher-earning, more educated peers, their purchase of a free beverage that comes directly to one's home contradicts two dominant explanations of food choice in low-income households.

¹² For example, van Erp et al (2014) classify respondents earning less than \$50,000 per year as “lower-income.” It is unclear whether \$50,000 is a valid measure of low-income status, considering that in 2014, the poverty threshold for a four-person family was 24,091. The poverty threshold for large nine-person household was \$52,430, slightly over van Erp et al's low-income cutoff.

One strand of research traces poor people's food decisions to economic constraints. According to this perspective, low-income people buy cheap, filling foods high in calories in order to stretch scarce resources (Drewnowski and Darmon 2005, Drewnowski and Specter 2004, Bourdieu 1984). As a result, these consumers tend to eat calorie-dense, nutrient-poor foods and drinks, often processed goods with added sugar and fat. These products typically cost less per calorie than calorie-dilute, nutrient-rich alternatives such as fruits and vegetables, lean meats and seafood, and nuts. This explanation of food choice cannot account for why poor people buy bottled water. Purchasing bottled water requires spending finite funds on something that is practically free when drawn from the faucet. Furthermore, buying bottled water, a calorie-free product, hardly constitutes a strategy for maximizing energy intake per dollar. The dietary energy of bottled water is infinitely expensive because this drink provides no calories at all.

Another strand of public health research posits that low-income people tend to have poorer diets because disadvantaged neighborhoods offer inadequate physical access to healthy foods. According to this perspective, many poor people often live too far from full-service grocery stores but are surrounded by fast food outlets and convenience stores that carry countless unhealthy options and few wholesome ones (Walker et al 2010, Caspi et al 2012b). Advocates of this explanation assert that residents of many low-income areas have little choice but to consume the unhealthy foods and drinks around them (Caspi et al 2012b). This explanation implies a theory of food choice--that people consume the foods and drinks in their immediate vicinity because they cannot consume what they cannot obtain, and they cannot easily obtain what is not close.

This theory of food choice cannot explain bottled water consumption, however. If anything, bottled water entails the inverse of the food desert scenario. It is neither the closest

option nor the easiest to procure. Buying bottled water requires going at least some distance beyond the home; even the corner store is farther than one's own tap. Additionally, water is heavy. Bringing it home from the store and possibly carrying it up the stairs can require considerable effort. As authors of a report on water contamination write, "Using water that comes out of the household tap is arguably more convenient and certainly less expensive than using water from alternative sources" (Moore et al 2011: 36). Consequently, access-based explanations of food choice shed little light on bottled water consumption among low-income households.

There is another plausible explanation for bottled water consumption in lower SES groups: they may doubt the safety of tap water. Several studies have found that respondents with less education were more likely to believe that bottled water is safer than the tap (Onufrak et al 2010, van Erp et al 2013). In Milwaukee, a survey found that compared to non-Hispanic whites, who tended to have higher incomes, Latino and African American parents were more likely to believe that bottled water is safer than the tap (Gorelick et al 2011). This belief is not necessarily unfounded, given that 8.8% of Americans who receive water from community water systems received water in violation of EPA standards at some point during 2015 (EPA 2016). Although many violations are short-lived and likely of little danger, hundreds of communities have received contaminated water for years (Duhigg 2009, Michigan Civil Rights Commission 2017).

Additionally, evidence suggests that low-income and minority populations are more likely to live in areas with unsafe tap water (Balazs et al 2012). Community studies have highlighted the risk of tap water in poor rural areas with agricultural runoff (Balazs et al 2012, Moore et al 2011, Ciesielski et al 1991) and in unincorporated "*colonia*" communities on the US/Mexico border (Evans and Kantrowitz 2002). The prolonged crisis of lead-contaminated

water in Flint, Michigan has become emblematic of the ravages of structural racism (Michigan Civil Rights Commission 2017). Even when municipal water systems are improved, concerns about contamination can linger for years (Scherzer et al 2010).

Where tap water poses health risks, buying bottled water on a budget is a rational risk-avoidance measure. Having no choice but to buy bottled water is also an injustice. All people deserve safe, high-quality publically provisioned water. Despite the importance of safety concerns motivating people to drink bottled water, mistrust of tap water does not entirely explain bottled water use. According to several studies, taste and convenience independently motivate consumers, including low-income parents, to purchase bottled water (Gorelick et al 2011, Doria 2006, Abrahams et al 2000). In my study, most respondents who purchased bottled water did not cite safety as a motivation, allowing me to examine other, less obvious motivations for this purchase.

Finally, low-income consumers might purchase bottled water in order to distance themselves from poverty or to project a healthy-conscious identity. Initially, bottled water was marketed to North Americans as an affordable status marker that invoked notions of health and European refinement (Royte 2011, Foltz 1999). The link between some more highly priced brands of bottled water and status remains today (Lenzer 2009). Additionally, in 2013, the *New York Times* reported on a homeless girl named Dasani, PepsiCo's line of bottled water. Her parents saw bottles of this water at corner stores and associated this product with a better life (Elliott 2013). Given the plausible link between bottled water and status, low-income consumers may turn to bottled water for status-related reasons. This explanation is plausible given that a broad cultural emphasis on health and diet implicitly casts people who do not value health as deviant, even irresponsible (Crawford 2006). Bottled water provides a conspicuous way to

consume something that most people consider unambiguously healthy. Additionally, bottled water might also convey that a low-income person has the financial security to spend money on something that they could otherwise get for free.

Although bottled water has the potential to convey a health-focused identity and to communicate distance from grinding poverty, bottled water is not uniquely poised to provide these symbolic benefits. Public health scholars bemoan the heavy advertising of fast food, snacks, and soda in low-income minority neighborhoods, which promotes these goods as markers of cultural membership (Grier and Kumanyika 2006). If low-income consumers aimed to signal their status, it is not clear that they would opt for bottled water over heavily advertised soda promoted by sports stars and celebrities. Additionally, in this particular study, many (but not all) low-income respondents bought generic water from discount supermarkets that operate exclusively in low-income neighborhoods. While capable of conveying a commitment to health and a distance from true deprivation, these off-brand versions of bottled water nonetheless announce a lingering connection to life in a low-income community. Finally, studies of bottled water consumption in economically disadvantaged communities do not identify status as a central motivation for buying bottled water. Instead, low-income respondents emphasize safety, taste, and convenience (Gorelick et al 2011, Scherzer 2010). Yet seemingly “objective” aspects of food choice such as access, information, and convenience can have subjective, symbolic underpinnings related to identity (Fong et al 2016, Young 2016), suggesting that status may nonetheless influence low-income families’ decision to buy bottled water. These symbolic motivations for buying bottled water clearly warrant further investigation.

Bottled Water as a Public Health Issue

Despite the health benefits of drinking water over sugar-sweetened beverages and fruit juice¹³ (Wang et al 2009, Institute of Medicine 2009), some researchers implicate bottled water in individual health outcomes and health disparities. Unlike plumbed water, bottled water typically lacks fluoride to prevent tooth decay (Scherzer et al 2010, Hobson et al 2007, Gorelick et al 2011, Patel 2013), which is especially important for children. Bacteria in bottled water have also been linked to gastrointestinal infection (Gorelick et al 2011, Patel 2013). Some researchers note that the cost of bottled water may burden economically disadvantaged families (Hobson et al 2007). Researchers in Milwaukee, Wisconsin find that 10.5% parents surveyed sacrifice “other things” in order to afford bottled water (Ibid). These researchers suggest that buying bottled water contributes to social disparities in health by diverting scarce resources away from health-enhancing goods (Gorelick et al 2011). This assertion implies that it is both nutritionally unsound and economically irrational to for people—especially the poor—to purchase bottled water.

Despite these concerns, bottled water consumption among low-income individuals is not well understood. Although some studies on water consumption use an inductive approach (e.g., Scherzer et al 2010), many others rely on closed-ended surveys (e.g., Gorelick et al 2011, Patel et al 2013, Abrahams 2000, Dupont et al 2010, van Erp et al 2014; also Saylor et al 2011, Merkel 2012). By predefining possible responses, these questionnaires preclude a fuller understanding of why people select one type of water over another, as some water consumption researchers have noted (Patel et al 2013: 80). Discovering motivations other than those anticipated by the researcher requires an open-ended format that elicits the reasoning of respondents themselves. Furthermore, closed-ended surveys limit scholars’ insight into logics of consumption (Johnston

¹³ Increases in children’s consumption of sugar-sweetened beverages (SSBs) and juice are linked to rising rates of childhood obesity; replacing children’s intake of SSBs with plain water would, on average, reduce children’s daily caloric intake by 235 kilocalories (Wang et al 2009).

and Baumann 2007, 2009). Logics of consumption include not only one's reasons for consuming a product—reasons such as taste, convenience, and health—but also why people find these reasons important and defensible (Johnston and Baumann 2007). Understanding the value that people attribute to bottled water requires a cultural and cognitive approach that foregrounds the conceptual categories that people use to think about the bottled water, its value, and its place in their lives. To do so, I integrate insights from cultural sociology and behavioral economics.

Relational Thinking in Economic Evaluation

Sociologists and behavioral economists underscore that consumers do not evaluate economic goods rationally, according to its objective quantity and the utility that it this quantity affords them. People think and feel about money in other ways, as well, and these cognitions and emotions shape economic behavior. Sometimes, people think about the value of money or a good *relative* to something external to the exchange in question. In doing so, people “anchor” their judgments on this referent, which can bias, or shift, judgment and behavior in predictable ways.

For example, the random number on a roulette wheel anchors study participants' judgment of the percentage of countries in the United Nations that are African: those who got the higher roulette number made higher estimates, and those who got the lower roulette number made lower estimates (Tversky and Kahneman 1974). Most evidence of anchoring comes from laboratory settings, but behavioral economists have gleaned insights from observing economic behavior in “natural” settings. Richard Thaler developed hypotheses about risk taking from patterns of betting that he observed at poker games with colleagues (Thaler 2015). The pool of naturalistic observations that such findings are drawn from is limited, though, and may therefore overlook dynamics among unobserved populations—especially if it is the local social setting of this group that provides the referents that affect judgment and behavior.

The concept of anchoring sheds light on how people may evaluate food cost in relation to an anchor that is not among the items they are choosing from. Specifically, I propose the concept of *cultural anchoring*, showing that when consumption patterns differ across sociocultural communities, anchors, too, can vary. Sociocultural variation in anchors can lead to variation in how people evaluate the cost of a given food.

Examining bottled water consumption among the poor also contributes to a growing sociology of food. Until recently, North American sociologists have been relatively silent on the question of why low-income people eat what they eat. Often, sociological inquiry into food focuses on the historical development of culinary fields (Ferguson 1998) and cuisines (Mennell 1996). Other studies examine the consumption logics of contemporary cultural sophisticates (Johnston and Bauman 2009, Weber et al 2008, Warde 1997). Motivated by socioeconomic disparities in diet-related health outcomes, public health scholars have done comparatively more work on the determinants of low-income people's food choice. These perspectives focus heavily on structural and material conditions, while attending less to how people operate under these constraints, how they use the resources they have, and how symbolic frameworks guide their decisions. Bottled water purchasing patterns provide an ideal test case to examine how culture and cognition influence food decisions when dominant structural and material explanations do not apply.

Findings

A small number of low-income respondents buy bottled water out of concern about tap water, as discussed below, but I find that even those who find tap water safe purchase bottled water. Echoing existing research, I find that some respondents buy bottled water because they find it better tasting and/or more convenient than tap water. I also find two undocumented

rationales for purchasing bottled water on a tight budget. First, some parents use bottled water to nudge their children to drink water instead of sugary beverages. From their perspective, bottled water is worth the expense because it helps them to improve their children's diet quality and to foster healthy habits. Second, respondents who buy bottled water find it affordable, if not downright cheap. In contrast, higher-income respondents find it expensive. These evaluations diverge because respondents implicitly compare bottled water to their default drink: bottled water costs less than the sugar-sweetened beverages that low-income families often consume, but it costs more than the tap water that higher-income respondents favor. These different referents parallel general socioeconomic differences in beverage consumption. Finally, I find little support for the possible explanation that low-income consumers purchase bottled water because they view it as an affordable high-status item.

Safety and Mistrust

A small number of respondents reported buying bottled water because they doubt the safety of their tap water. These respondents fall into two categories: those who detect off flavors and odors in tap water and those who mistrust the water's safety generally, independently of any particular negative experience with tap water.

Denise, a soft-spoken African American mother, falls in the first category. Several months after moving into her current apartment, the plumbed water started tasting unusual. "Something wasn't right," Denise recounts, "so that's when I said, 'We need to get a filter. We're gonna be givin' this water [to our two sons]?' I was like, 'I cannot give this to the kids.'" Initially, Denise purchased a BRITA filter, but found the replacement filters—which can cost \$10 a piece—too expensive. Denise switched to gallons of bottled water. Ongoing skepticism of the water's safety keeps Denise away from her tap.

LaToya, a poor African-American mother who lives with her toddler daughter, purchases bottled water instead of using tap water because she doubts the safety of her apartment's plumbed water. LaToya takes cues not from the water itself, but rather from the condition of her housing.

You just don't know what the fuck is running in these pipes. [The landlord] is a fuckin' slumlord, so there's no telling what the fuck is going on in the pipes, and he wouldn't even know 'cause he don't give a fuck. As long as he's getting his punk-ass money every month, he don't care. He's getting \$1200 a month for this raggedy-ass apartment.

LaToya had recently transitioned from a shelter to a scatter site, an independent apartment that the government rents for homeless families awaiting permanent housing. I arrived at this new residence feeling relieved that LaToya had left the roach-filled shelter that so repulsed her. But no sooner than she greeted me, LaToya cursed the new apartment. When she moved in during late winter, the unit had no heat. Mice had taken up residence in the building long before LaToya did. With dramatic flourish, LaToya displayed the water-damaged, feces-sprinkled wood beneath her kitchen sink—evidently a favorite spot for mice. Before cooking lunch with me, she bleached her stovetop and washed out her pots and pans to remove any traces left by rodents. She banged on the oven to scare off any mice before turning on the heat. Despite LaToya's repeated complaints to the housing office and Inspectional Services, the infestation remained unaddressed. She contemplated getting a cat but would have risked eviction for violating the "no pets" rule. "This is sad how he got me living." Because the landlord neglects his property and because the housing office rented from him nonetheless, LaToya doubted that the entities providing her housing have her well-being in mind. Disgusted and distrustful, LaToya avoids drinking tap water, opting instead for its bottled counterpart.

LaToya's aversion to tap water was temporary. Six months later, when LaToya moved to her own apartment through a Section 8 voucher, her concerns about water safety subsided.

LaToya trusted her city's tap water and felt comfortable drinking it, provided that it flow through a building she trusted. "I'm good with tap. Boston has good water." Contrasting Boston's water with that of Flint, Michigan, where plumbed water was severely contaminated with lead, LaToya quipped, "I don't live in Michigan." LaToya illustrates how skepticism of tap water can stem from one's particular living conditions rather than from a generalized mistrust of municipal water.

Pamela, a low-income white mother of a six-year-old girl, illustrates how mistrust of tap water can result from a global mistrust of government institutions. Pamela doubts that municipal water facilities and their employees actually ensure citizen's safety. "I don't really think it's sanitary in terms of drinking and consuming it," Pamela asserted. When I mentioned that Boston water passes safety tests by a wide margin, Pamela retorted:

Pamela: Yeah, but how do you know the people are actually testing that water everyday and not testing, like, bottled water, saying that it's the water?

CD: 'Cos they'd get in a lot of fucking trouble.¹⁴

Pamela: Yeah, but I know people do things that they would get in a lot of trouble for, but they do it anyway. You hear about shit all the time.

Pamela has observed plenty of illicit activities. She reports that as a young woman, she worked in a prostitution group whose clients included businessmen and local government officials. She recounts that a district attorney was a client. Laughing at his dishonesty, she described seeing him on a date with his fiancée and watching him pretended not to notice her. Similarly, Pamela believes that the police are corrupt and cannot be trusted to protect or serve. Besides sex work, Pamela has been involved in shoplifting high-end clothing to resell. She even served prison time for these dealings. Having firsthand experience with how "people do things that they would get in a lot of trouble for,"—in personal endeavors and in government institutions meant to

¹⁴ My claim is not necessarily true. Between 2004 and 2009, under 6% of public water systems that violated laws regarding allowable levels of chemicals and bacteria were ultimately fined or otherwise punished by government agencies (Duhigg 2009).

administer justice— Pamela doubts that publicly provisioned water is any different. Underlying these concerns about safety is general mistrust of those charged with providing public goods.

Most low-income respondents, in contrast, do not cite buying bottled water out of concerns for health and safety. Some faithful bottled water drinkers defend their faucet, stating that their city provides safe tap water. Monica, an African-American mother who buys gallon jugs of water, does so for reasons other than health risks.

CD: Do you have any health concerns about the [tap] water?

Monica: No.

CD: Like maybe it has lead, or--

Monica: --No, I think our water system is pretty good. Even when they had that scare, I'm like, well they didn't tell Cambridge.

Although Monica recognizes that *other* towns may have poor plumbed water, she trusts her city's service. Terry has the same views about Boston water. She buys bottled water but finds tap water entirely acceptable. "You know, we've lived on tap water all our lives. We cook with tap water, we do whatever with water. We're still here." Pauline, a white grandmother, both purchases bottled water and defends tap water vociferously. After shopping with her, I asked, "Pretend you had five bucks less for the grocery shopping. What would you change about it?" She pointed at the gallons of spring water she had just bought, signaling that she would put them back if she had to cut costs. Pauline's adult daughter, Kiki, protested, "The most healthiest [sic] thing?!" They disputed whether to give up juice or water if faced with a food-budget shortfall. Kiki insisted, "Water's good for you." "I know, but you got it *here*." Pauline stood up from the kitchen table, walked to the sink, and turned on the faucet full force. "You got it—look, look, look—you got it here." Pauline passed her hand back and forth through the stream of water, as if to provide material testament to its safety. "That's safe to drink," Pauline insisted. Kiki looked on, her nose scrunched in incredulity. "Why you got your face frowned up?!", Pauline cried. "It

don't got lead! Why, everybody'd have lead poisoning!" Kiki disagreed. While safety concerns motivate some low-income bottled water consumers like Kiki, others buy bottled water despite finding tap water safe. Most respondents who buy bottled water belong to this latter category. If they do not worry about safety, a commonly cited reason that poor people buy bottled water, why do study respondents spend scarce food dollars on something that is effectively free?

Taste

Consistent with research on consumers' motivations for buying bottled water, some low-income respondents report eschewing tap water because they dislike its taste. Loretta, a straight-shooting Black woman with custody of her two nieces, buys bottled water in part to avoid sharing her drink with children who might leave "backwash." But Loretta also underscores taste. When I asked, "What do you dislike about the tap water?"

I'll use [tap water] to do the dishes and stuff. I may use it to cook because you're boiling it. But to drink it? No. Even though they say water doesn't have a taste. Yeah it does. Yeah it does. You can tell. People can tell you water does not have a taste. Water does, too.

In some cases, respondents' children balk at the taste of the tap. Melissa, a low-income white mother, with a pre-teenage daughter and a six-year-old son at home, says, "They've been doing great on the water. If they have the bottles, they'll drink it more than if it's the sink water. [...] [My pre-teen daughter] won't take the cup [from the tap], because I think she thinks it taste different. 'Oh, it's nasty. It's sink water.'"

Some respondents suggest that their taste preference for bottled water may be psychological. Sarena, an increasingly health-conscious African American mother, drinks both bottled and plumbed water. She relishes the cold water from her faucet during the icy winter months, but turns to bottled water during warmer weather. Alluding to the possibility that the bottle itself makes the water satisfying, she says, "It is like you're thinkin' it's fresher, kinda in

your mind—maybe it's just a brain thing—but sometimes it just tastes refreshing to drink it out of a bottle.”

To say that people buy what tastes better is, to some extent, unremarkable. Taste is a primary determinant of food selection (Glanz et al 1998), and bottled-water drinkers in this study and others cite taste as a motivation for their choice. Yet how people frame water—as mere hydration or as an enjoyable sensory experience—may influence how much they emphasize the taste of water. Journalist Elizabeth Royte, who has investigated bottled water, remarks that spring water may taste better than tap water, “But so what? Foie gras tastes better than chopped liver. That doesn’t mean I’m going to buy it” (2011: 44). If low-income respondents think that drinks should taste good rather than merely providing hydration, they may have higher taste standards for water than their higher income peers do—or, at least, low-income respondents may attend to the taste of water more closely and therefore be primed to find objectionable flavors in plumbed water. They may turn to bottled water as a result. This orientation may stem from the high intake of sugar-sweetened beverages in low-income populations. My interviews and observations provide some evidence for this hypothesis.

Low-income respondents sometimes imply or say outright that beverages should have flavor. Cassie, an African-American mother of one, explains that her go-to drink is Kool-Aid because she likes the flavor and can sweeten it to taste. Discussing her preference for Kool-Aid over soda, Cassie says:

Cassie: I try to stay away from [soda], especially if I’m, like, you know, trying to do a little weight loss type thing. I’d rather the Kool-Aid. It’s my type of flavoring: sweet! [laughs].

CD: <echoing> Sweet, sweet. But that’s not gonna be so easy on the weight-loss plan either, right?

Cassie: Nope! <laughs> Nope, and then there’s times where I won’t buy sugar. Because if I won’t buy sugar, then I can’t make my Kool-Aid. And then I’m definitely gonna need a bottle of soda because I need that flavor. Then I’ll be like, I have definitely done and tired of water.

Cassie has contradictory views of soda and Kool-Aid: she periodically avoids soda to lose weight but when she keeps sugar out of the house in order to prevent herself from making Kool-Aid, she caves and turns to soda. Not contradictory, however, is Cassie’s fundamental desire to drink beverages with “flavor.”

LaToya echos Cassie’s thoughts. On a sweltering summer day, I accompanied LaToya to pick her daughter up from day care. Having walked just three blocks from the subway stop, we arrived hot and sweaty. After settling her daughter in the stroller and giving her some water, LaToya gulped down the better part of a bottle herself. “Oh, that was so good. And I don’t even like water like that. It don’t have no flavor.” Like Cassie, LaToya drinks primarily soda and Kool-Aid, and highlights that a drink should taste like something. For these respondents, beverages do not serve only—or even primarily—to hydrate, but to provide a flavor experience as well. These consumers are unlikely to give up sweetened drinks for water, but the data also suggest that when they do drink water, they will be especially attuned to how it tastes.

In contrast, higher-income respondents seem to frame water as mere hydration, not as a pleasing sensory experience. Discussing why she does not buy juice boxes, Lillian, a white mother, says,

Kids drink way too much juice. They need to learn to hydrate with water. And a juice is a treat. Put it in the cocktail category. That's what it should be in. And if it is, great. Go ahead. Enjoy that glass of juice. But just as with cocktails, you don't have those to hydrate.

For parents like Lillian, beverages serve primarily to hydrate and secondarily to provide flavor. I posit that because parents like Lillian do not expect their default drink to provide any specific flavor, they are less apt to emphasize the taste of water and are less receptive to claims that bottled water tastes better than tap.

Convenience

Many low-income respondents who buy bottled water do so because they find it convenient. The broad term “convenience” encompasses several different criteria and scenarios. One aspect of convenience is portability, the ability to carry water one one’s person while outside the home. Tychell, an African-American mother of three teens, likes her children to “have it in their bag if they need it.” Another aspect of convenience is accessibility, the ability to quickly get ones hands on a bottle and leave the house. Chellise, an African-American mother of three young children, highlights the importance of both portability and accessibility. She says, “I pay for the convenience, so I wanna be able to go and just carry water with me and have it with me, you know? That's the most important to me, is to be able to just grab it and go.” Similarly, when I asked Alice what she thought about saving money by using tap water instead of buying bottled water, she replied:

Alice: Yeah, but you can’t always just get up and go out your door with a cup of water.

CD: That is a very good point. That is a very good point.

Alice: So I buy the bottled water so you can get up and go.

For low-income respondents, the prospect of using a reusable water bottle instead of purchasing bottle water was either not salient or not affordable. Some parents noted that reusable bottles cost more money than they are willing or able to spend, especially if they have more than one child, each of whom would require a bottled. Some respondents do wash purchased bottled water bottles and refill them with tap water. Over time, however, these containers wear down because they have fairly thin, flimsy sides, and parents must purchase bottled water anew. In other cases, low-income respondents found refilling a bottle before leaving the house inconvenient, defeating the purchasing of having a drink to “grab and go.” Several parents highlighted that especially if

they want cold water, they must have the foresight to fill a reusable bottle with enough time to for it to chill in the refrigerator.

Status

I find some evidence that economically disadvantaged people drink bottled water for status-related reasons, but this motivation is less prevalent than those discussed above. One respondent in particular, Pauline, associated bottled water with not settling for second-rate products, and she associated “cheap” second-rate products with poverty. More than other respondents, she highlighted her commitment to higher-quality name-brand goods. For example, Pauline notes her love of pineapple juice and quickly transitions to her refusal to “compromise”:

I love pineapple juice. So expensive, but there are just some things that I noticed over the years, I will not compromise. I don't care if it goes up three bucks more than it was last week, like *Dole* pineapple, I have to buy *Dole* pineapple juice, I can't but just *any* kind of apple juice, I mean pineapple juice, it gotta be *Dole*. [...] I will spend that \$4 even though I know, *come on Pauline, you ain't balling like that, you ain't got it like that*. But you know what? I will because that's something that I want, and if I want it bad enough I'll pay for it, knowing that I'm eating something that's better for my body.

For Pauline, not “compromising” involves granting herself the freedom to enjoy the foods that taste better to her and that she believes are healthier. Fundamentally, not compromising also means maintaining a modicum of self-respect by avoiding the low-quality, cheap foods that Pauline associates with low-income parents who lack proper values. In consumption, Pauline accords herself self-respect, even though it comes with a higher price tag.

Pauline also uses this language of compromise in explaining why she always has gallons of Poland Springs water. When I asked why having bottled water in her refrigerator was important, she was confused. Pauline clarified that she doesn't see it as important; it's just “automatic”:

Pauline: There's some things you look in your fridge, and say those are always there, so when I open my fridge and I see them automatic things, that's something that's always there. So I don't

look at that as important, I look at that as a part of living, like how you get up and brush your teeth every morning, that's going to be there.

CD: So yeah, but why, why does that in particular have to be there?

Pauline: Because that's all I know. And, yes, there is room for change, Caitlin, there's always room for change, but you know what? Some things I'm not going to—I'm going to be honest—some things I just don't compromise on.

For Pauline, bottled water is a fixture of daily life that buffers her from feeling like someone who will let poverty jeopardize their self-respect.

Two low-income respondents, Pauline and Dana, reported that bottled water displays proper respect to a guest and, in doing so, establishes the respectability of the host. Dana buys bottled water for several reasons, in part because she prefers its taste and in part because, she says, “I don't have one of those good [reusable] bottles. I won't part with \$16.” Dana conjectures that if she had a BPA-free refillable water bottle, she would drink less bottled water but would still buy it for guests. She explains:

Dana: If someone comes over, I'd serve them a bottled water before I'd give them a faucet.

CD: What do you like about that?

Dana: I just think they can have their own and it's cold already from the fridge and they're my company and that's how I grew up.

CD: [surprised because individual bottled water bottles were not widely available during Dana's youth] Oh, really? Bottled water?

Dana: No, no, no, when company comes over you always have something, you know? Whatever it is, I don't care if I make you, if I boil up some green beans with butter on it, you're getting something to eat.

In saying “they're my company,” Dana indicates that she sees in bottled water a way to comply with norms of how to treat a guest. Food exchanges encode meaning about the relationship between provider and recipient (Douglas 1972), and offering something with little value, such as tap water, might, from Dana's perspective, convey a lack of esteem for one's guest. In saying “that's how I grew up,” Dana suggests further that offering bottled water communicates

something about her as a host: that she was raised with the right values, now so internalized that she cannot help but to act accordingly. Dana does not see bottled water as uniquely capable of according esteem; boiled green beans with butter would accomplish the same goal. Additionally, Dana expresses no concern about what her own consumption of bottled water would communicate, indicating that she does not turn to bottled water as a way to elevate her own status through conspicuous consumption. (What was conspicuous the three times I saw Dana was a large Dunkin' Donuts cup filled with iced coffee and either milk or cream.) In the particular case of relations between guest and host, however, Dana sees bottled water as a higher-status option than tap water and would buy it for this reason.

Most respondents did not associate bottled water with respectability to the same extent as Pauline and Dana. Respondents were more likely to see a meaningful difference between whether someone drinks sugar-sweetened beverages or water, not between whether they drink bottled water or tap water. Natasha, who has a black Honduran father and a white non-Hispanic mother, sees a clear link between what one drinks and their character. She recounts how her aunt, exhausted from chemotherapy, balked at the suggestion to cool off with water.

“Aunt Clara, put a jug of water in your freezer, and then drink it real fast. Don’t let this cancer beat you.” She’s like, “Water has no taste.” I’m like, “You just said you can’t taste anything anyway [as a result of chemotherapy], so try it.” “But I’m not a water person, I don’t drink water. [...] I can’t tell you the last time I drank water, and I’m 53 years old. [...] The most water I get is the water that they make when they makin’ the Pepsi.” And I was just like, alright, alright. [Tone of resignation] It was just a reality. <Laughs> This is my family. She couldn’t remember the last time she drunk water. And you read everywhere, “Water, hydrate yourself.” It’s not just for a certain type of people. You know, some people think only a certain type of people drink water. And it’s not a race thing. I’m biracial. It’s a human being thing.

Natasha frames her aunt’s opposition to water as evidence of distorted priorities. First, Natasha finds her aunt irrational and irksome because, having lost her taste perception, this sick woman nonetheless refused to drink water on the grounds that it “has no taste.” But Aunt Clara’s claim that she simply isn’t a “water person” is the crux of Natasha’s complaint. Natasha suggests that

by viewing beverage preferences as an immutable trait that trumps the exigencies of illness, her aunt may be failing to combat cancer. Moreover, Natasha frames her aunt's resistance to water as evidence that she has fallen victim to a racial stereotype that minorities drink sugar-sweetened beverages while whites drink water. Natasha views this stereotype as small-minded, self-destructive, and absurd, an active contradiction of information "everywhere" that encourages human beings, regardless of race, to drink water.

Immediately, Natasha draws a broader inference from this exchange with her aunt:

This ties in to why I have to get the hell out of this [low-income] neighborhood. Like I can't deal [with the people], I can't. You know? And my kids, they're looking at me like, "Hmmm, out of a group of 20, Mama's the only one who feels this way. I think we're gonna lean towards the majority." It's just like, "No!"

Natasha clearly associates what one consumes with one's character. She feels surrounded by people with few aspirations and meager values. In contrast, Natasha sees herself as committed to education, concerned with health, and focused on the right things--her children and finding a job instead of romantic interests and parties. From her peer's food choices—Little Debbie snack cakes, ramen noodles, frozen dinners, and Pepsi—Natasha infers an apparent lack of priorities. In whether people drink water, Natasha sees why she wants to move elsewhere.

For Natasha, the meaningful distinction lies not between bottled water and its plumbed cousin, but in whether one drinks water at all. Between when I first interviewed her and when we went shopping, she did a blind taste test of tap versus bottled water and preferred the taste of tap water. She was impressed and excited about the prospect of saving money on tap water, although she figured that she would continue buying bottles for her children. For Natasha, the virtue of water lay not in its vessel but in its opposition to sugar-sweetened beverages.

Nudging Through Commodification

I also find an undocumented reason that low-income parents buy bottled water on a budget. Some respondents use bottled water to address a problem of agency characteristic of childrearing: how to influence the actions and preferences of young people with desires of their own. These caregivers find that while their children resist drinking tap water from a cup, they readily consume bottled water. For example, Natasha's 10-year-old twins find fruit-flavored drinks too sweet, but her four- and eight-year-old girls "can't adapt" to giving them up. Natasha explains:

So I'll get the little Aquapods and have the little sports bottles on me. Even though it's water, it's something about those little bottles and the little tiny pods that they're more apt to picking it up and drinking the whole thing instead of I'm giving 'em water and putting it in a cup and they're like, 'I took a sip already.' Something about those little pods... it's in their hand and they're like, 'Gulp, gulp, gulp,' and the throwing them away.

According to Natasha, her young ones find the bottle itself appealing. Converted from a substance of basic human survival into a commodity, bottled water acquires a thinglike nature that allures Natasha's girls: it is an object to hold, to play with, to carry, and to throw away, an object elevated above the mundane simplicity of water in a cup. Like the fruit-flavored beverages that the girls enjoy, bottled water has a label and a brand. Alice, whose three year-old granddaughter and her friend also like handling the bottle, adds that these girl see in this container a reflection of themselves. "When they want water, they think they're big kids, so they don't want the cup. They want the bottle like me." From Alice's perspective, the maturity that the girls associate with bottled water encourages them to drink the water itself.

For parents like Natasha and Alice, an alluring vessel marks the difference between their children drinking water and not. Respondents consistently see water as healthy and many want their children to consume it, especially when it can replace fruit juice or other sweet beverages. Recognizing their children's preference for bottled water over tap water, these caregivers

implicitly see themselves as “choice architects,” who structure the options available to other people (Thaler and Sunstein 2008). With bottled water, they build into their children’s food choice architecture a “nudge,” an element designed to sway behavior without restricting options overtly. Bottled water thus provides a tool to shunt children away from sweet drinks and toward a healthier option. Given these health gains, low-income respondents like Natasha and Alice who want their children to drink more water see money spent on bottled water as money well spent.

Affordability and Anchoring

Low-Income Respondents Find Bottled Water Cheap

Despite the fact that public health and environmental researchers frame bottled water as pricey (e.g., Saylor et al 2011, Moore et al 2011, Hobson et al 2007), most low-income respondents report finding it affordable, even cheap. In some cases, parents commented spontaneously on its low price. Dana, a low-income white mother, brought several individual bottles of Poland Springs water to the grocery-shopping observation. As Dana and I passed the deli counter, she asked, “Do you want a drink? Do you want a water?”

CD: I'm good. I just downed a tea before I came here, so I'm good.

Dana: I get so thirsty.

CD: Yeah. Yeah, I try to keep hydrated too but...

Dana: I need to get water anyways, but please take it, too, because they have, like, a 36 pack for \$3.99. So cheap.

Dana may have underscored the affordability of bottled water in order to put me at ease, lest I think I was taking from a poor person, or in order to highlight that she is not so poor that she cannot share. But other respondents also invoked the cost of bottled water without prompting. When asked why she routinely purchases bottled water, Pauline, a food-insecure white grandmother living with two grandchildren says, “I've always made sure that there was spring

water in my fridge. It's cheap, it's inexpensive, it's good for your body, it quenches your thirst.” Lauren, an African-American mother, consumes bottled water with almost as much enthusiasm as she does Pepsi. When asked about the suggestion to replace bottled water with tap water because the latter costs nothing, Lauren rejected the very premise that bottled water represents an unnecessary expense. “I buy the [bottled] water because I know it’s good for you and plus it’s a cheap price. You can’t beat it. I know it’s good for you and it’s cheap. That’s why I buy water.”

I observed low-income respondents purchase water even when their funds ran low. As the cashier rang up LaToya’s groceries during the shopping observation, LaToya watched the total grow while items remained in on the conveyor belt and in the shopping cart. The register’s tally confirmed LaToya’s suspicion. “Oh yeah. I’m about to bust my budget.” LaToya surveyed what she could forego. As the cashier began scanning two cylinders of pizza dough, LaToya said, “You can just give me one of those.” The cashier scanned one cylinder and moved on to the next item, a case of 24 individual store-brand water bottles. “You want the water?” the cashier asked.

LaToya: How much is the water?

Cashier: \$2.69.

LaToya: Yeah, I want the water.

LaToya found the water affordable, even as other items did not make the cut: two 2-liter bottles of soda, two boxes of Little Debbie snack cakes, one cylinder of biscuit dough, one cylinder of pizza dough, two cylinders of dough for cinnamon rolls, curry powder, and a four-pack drinkable yogurt. LaToya did not choose the water because \$2.69 was a trivial amount. At two separate stores, including on this occasion, she stole—or tried to steal—items at or below this price, including sponges, two packs of incense priced at 99 cents each, and plastic bags, also priced at 99 cents. Additionally, LaToya bypassed bread at the supermarket, where two loaves cost \$5,

because two loaves cost \$3 at another store. \$2 was too much to waste. For LaToya, \$2.69 was not negligible, but bottled water at this price was affordable, even as funds ran low.

Of course, not all low-income respondents found bottled water to be affordable. When asked what she did for water, Terri, a taciturn African-American mother, responded:

Terri: We drink water everyday.

CD: Do you do bottled or tap?

Terri: We do tap.

CD: What's your take on bottled water?

Terri: We can't afford no bottled water.

In total, four low-income respondents found bottled water to be expensive. The majority, however, saw it as affordable, if not economical.

High-Income Respondents Find Bottled Water Expensive

In contrast, most higher-income respondents find bottled expensive. Like their low-income peers, some higher-income respondents noted its cost spontaneously. For example, Lynn, a higher-income white mother, replied to my question, “Why do you tap, tap versus bottled?” by saying, “Well, one, because bottled water is just expensive and two, because there's nothing wrong with our tap water.” Although Lynn also mentions her trust in tap water, she cites cost first, suggesting that cost is especially salient, despite the fact that she could easily afford bottled water.

When evaluating the price of bottled water, higher-income respondents used emotionally charged language such as “outrageous,” “crazy,” and “ridiculous.” For example, David, an upper-middle class white father, spends \$1200 per month on premium groceries for his family of two adults, a four-year-old, and a one-year-old. When asked, “How affordable to do you find [bottled water]?” he replied, “We only get it in situations where we're, like, can't get to a water

fountain or a tap, but we find it to be, in general, outrageous.” Similarly, Emma, a higher-income white mother drinks tap water but had to purchase beverages for a school even. She recounts, “As soon as I went to Target to buy a 12-pack of bottled water, I’d be like, ‘This is ridiculous.’” In using emotionally charged language, such as “outrageous” and “ridiculous,” these respondents indicate that they not only find bottled water pricey, but that they also experience its price as a violation of the way things should be.

Just as not all low-income respondents found bottled water to be cheap, not everyone with a higher income found bottled water to be expensive. Carly, an upper-middle class white mother who drinks primarily carbonated water from a can, toggles between tap and bottled water when she drinks still water and gives water her family. Diverging somewhat from the modal response of her socioeconomic peers, Carly says of the cost of bottled water, “I don’t think it’s exorbitantly high, but I know it’s one thing we could totally save money on.” For Denise, who trusts governmental water testing and doubts the safety of bottled water, the cost of bottled water simply was not salient. Denise explains, “I don’t really buy it, so I don’t really think about [the price].”

In general, however, low-income and higher-income respondents evaluate the cost of bottled water inversely: those with the most money for food find it expensive, whereas those facing economic constraints find it not only affordable, if not downright cheap.

Anchoring on Other Beverages

This seeming paradox becomes less puzzling when we appreciate that people sometimes evaluate the cost of food not on the basis of absolute price, but in relation to other items. Chapter 3 discusses this heuristic of comparative evaluation more generally. In the following section, I

show how points of comparison can vary across income groupings and how this variation in referents can consequently lead to different evaluations of cost across groups.

When I interviewed Lauren for a second time, her twelve-year-old daughter had recently seen the doctor to address her pre-diabetes. The doctor had recommended substituting sugar-sweetened beverages with plain water infused with lemon and lime. Lauren commented:

Yeah, it's good. And it's cheaper. And it's more healthier. You know why it's cheaper? All you have to do is buy lemon and lime, and they're usually four for a dollar. And I bought the pitcher at Stop n' Shop, it was \$3.99, and it was cheaper. *Do you know how much juice costs?*

Despite having to invest in a pitcher, Lauren finds the lemon-lime water, which she makes with bottled water, affordable. In using the comparative adjective *cheaper*, Lauren reveals that she finds bottled water affordable because it costs less *than* something else, juice. This other beverage anchors her evaluation of bottled water's cost.

Viewed in relation to other bottled drinks, bottled water does seem economical. The gallon jug of generic 100% orange juice that Lauren bought on the shopping observation cost \$3.49, which comes to 22 cents for an 8-ounce serving. Lauren also bought five 2-liter bottles of Pepsi and five 2-liter bottles of ginger ale for \$1.25 each, both of which come to 16 cents per serving. The generic 24-pack of bottled water that Lauren buys costs less than any of these drinks: 10 cents per 16.9-ounce individual bottle, or 5 cents per eight-ounce serving. Table 4 presents the prices of these beverages per container, per eight-ounce serving, and per 100 calories.¹⁵ As Table 4 illustrates, bottled water costs more than tap water, but less than both orange juice and soda.

¹⁵ Given that bottled water provides infinitely expensive calories, Lauren evidently is not assessing the cost of beverages on the basis of their dietary energy.

Table 4: Price of Tap Water, Bottled Water, and Other Bottled Drinks

Beverage	Price	Price per 8 oz	Per 100 cal
Tap water (gallon)	\$0.007	0.000056 cents	∞
Bottled water (24 ct)	\$2.49	5 cents	∞
Orange juice (1 gal)	\$3.49	22 cents	20 cents
Soda (2 liters)	\$1.25	16 cents	14 cents

Sources: Lauren’s shopping receipt, July 2013 (bottled water, Pepsi, and orange juice); Boston Water and Sewer Commission, May 2017 <http://www.bwsc.org/services/rates/rates.asp> (tap water)

Many low-income participants in this study who bought bottled water consumed a large amount of bottled drinks, often sugary beverages purchased from a store.¹⁶ For example, Pauline, who finds bottled water inexpensive, drinks considerable amounts of Pepsi on a daily basis. When I first interviewed Pauline, she had just woken up and still had not eaten breakfast. She asked if we could stop at the corner store to buy a 20-ounce bottle of Pepsi before starting the interview. This choice felt natural and taken-for-granted, well within the range of plausible options, not like a conflicted decision made grudgingly.

Rachelle calls herself a “caffeine addict” and “never” drinks water. Besides the instant coffee she makes at home, most of the liquids she consumes come in a bottle or can. When I went grocery shopping with Rachelle, she filled her cart with two six-packs of cola, two two-liter bottles of cream soda, and two two-liter bottles of lemon iced tea for herself, as well as thirteen bottles of Vitaminwater for her husband. Nearing the checkout, we passed a large cube stacked high with cases of bottled water. Rachelle grabbed a 24-pack, saying somewhat grudgingly, “I gotta start drinking water.” For her, drinking water meant drinking bottled water.

¹⁶ This tendency is consistent with findings from studies using nationally representative data. These studies find that low-income SNAP recipients drink more sugar-sweetened beverages (SSBs) than income-eligible individuals who do not receive SNAP. This latter group, in turn, drinks more SSBs than individuals who are not low-income (Bleich 2013, Nguyen and Powell 2015).

These observations indicate that low-income respondents consume sweet, flavored beverages in a bottle or can as the default, and that because these are the taken-for-granted baseline, the prospect of drinking water that comes in a bottle is unsurprising and unproblematic. This assertion echoes a large interview study of primary caregivers on SNAP. These parents also tended to drink sweetened flavored beverages and when they drank water, they chose bottled water over the tap (Edin et al 2013). The authors suggest that “the choice might actually be not between free water and expensive juice, but between expensive water and expensive juice” (Edin et al 2013: 41). My findings that low-income respondents think of bottled in relation to other beverages, not in relation to tap water, echoes this observation. I note further that when compared to juice, soda, and other sweetened drinks, choosing bottled water not only seems a natural, but also affordable.

Figure 2: Anchoring Bottled Water on Other Bottled Beverages



People who see the prototypical beverage as one that comes in a bottle tend to view bottled water relation to other bottled beverages

Anchoring on Tap Water

Like low-income respondents, higher income parents think about the cost of bottled water in relation to another beverage. But the beverage that they compare it to differs, as illustrated by

Claudia:

CD: And what's your take on the cost of bottled water?

Claudia: My father is so funny, he's like, "I will never buy a bottle of water," because he's like, "it costs so much." So I think it's kind of crazy, I think it's marketing. Because [bottled water] is mostly tap water. My understanding is that it's mostly water. So.

CD: The existence is crazy or the price is crazy?

Claudia: Price. The existence I understand: people want it. I'm not against it; it's good to have a healthy option there, but *the cost is like, just go fill up a water bottle.*

Lillian echoes this thinking, saying, "I hate buying bottled water because *I can get it for free from my own fridge* and carry it with me in a water bottle." Whereas many low-income respondents compare bottled water to other purchased beverages, higher-income respondents like Claudia and Lillian compare bottled water to tap water. In fact, they think so much in terms of the tap that when they refer to "a water bottle," they mean not bottled water, but rather a reusable bottle that one fills at the sink.

Figure 3: Anchoring Bottled Water on Tap Water



People who do not see the prototypical beverage as one that comes in a bottle tend to view bottled water in relation to tap water.

Even though the absolute cost of bottled water may not be great for higher-income families, relative to something free, bottled water seems expensive. Consequently, these respondents experience this cost as a *loss*. These respondents find bottled water’s cost “crazy,” “outrageous,” and “ridiculous” because this perceived loss also seems unfair.

Unstable Referents Generate Unstable Evaluations of Affordability

Not all low-income respondents held stable, unambiguous views about the affordability of bottled water. Rose, an energetic low-income African-American mother who has bought bottled water for years, seemed conflicted about the relative affordability of tap water, filtered water, and bottled water.

I do want a Pur filter on the faucet because I think it’s gonna be cheaper than me getting the bottled water. ‘Cause we usually have three stacks of [bottled] water in the house because that’s what we drink! [...] So, you know, who knows? What happens if—I don’t know why I’m sayin this, but I’m sayin it—what happens if the Poland Springs water factory closes and I can’t get it? I’m gonna have to drink tap water anyways, so... And it’s gettin pricey.

When I interviewed Rose again over a year later, she was considering an offer for an in-home Poland Springs water cooler with home-delivered refills for \$35 per month. Rose found the offer compelling. Despite having imagined what would happen if the Poland Spring factory shut down, Rose was leaning back in the direction of bottled water, albeit a much bigger bottle than the individual ones she had been purchasing. But as Rose discussed the various options—the in-home dispenser, a filter, and individual bottles of water—she talked herself out of the dispenser.

Rose illustrates how a person can be unsure about which type of water is most financially prudent when their referent is unstable. Unlike many low-income respondents, Rose sees sweet drinks more as a treat than as a default. She prohibits soda in her house and does not buy juice, instead making pitchers of lightly sweetened limeade from fresh limes. She drinks hot green tea and sometimes indulges in jugs of sweet tea from the supermarket, which she wants to cut back on because of its sugar content. She also buys large cans of Arizona green tea, a heavily sweetened beverage, for her autistic adult son, but wants to nudge him toward water instead. Given that Rose has a range of referents to anchor her evaluation of bottled water, this comparison is not entirely straightforward, and her assessment of bottled water vacillates as a result.

Discussion

This chapter examines why low-income parents buy bottled water. This fact is puzzling from the perspective of two prominent threads of public health research, which posit that low-income consumers buy filling foods in attempt to stretch scarce food dollars or that they procure foods from their immediate physical environment. Bottled water neither provides satiety nor lies closer to consumers than the than tap water from their own home. Even more puzzling is my

observation that whereas low-income respondents tend to find bottled water inexpensive, even cheap, higher-income study participants see it as expensive.

In accordance with previous research, I find some low-income respondents spend scarce food dollars on bottled water because they find it more convenient and tastier than tap water (Gorelick et al 2011). In this particular sample, only three economically disadvantaged respondents turn to bottled water because they believe that it is safer. Although several respondents held this view, the majority found their city's water safe and opted for bottled water for other reasons. Additionally, I find that few respondents buy bottled water because it conveys status and respectability. The majority of respondents highlighted practical or gustatory reasons for buying bottled water.

I also identify two underexplored reasons that poor people purchase bottled water. First, several respondents use this product to nudge their children to drink water instead of sweet beverages. These parents observe that their children find the vessel engaging and will drink water from a bottle but not from a cup. For parents seeking to steer their children from sugar and to develop healthy habits in the long run, the expense of bottled water is warranted.

Second, many low-income respondents actually find bottled water cheap. Strikingly, their higher-income peers find it expensive, even "outrageous" or "ridiculous." These inverted evaluations arise because respondents implicitly compare bottled water to the other beverages that they drink routinely. Many low-income respondents habitually consume sweetened beverages such as soda or fruit-flavored drinks. Bottled water costs no more than these drinks, and it often costs less, making it seem cheap. For higher-income respondents, in contrast, the default beverage is often tap water, which is virtually free. Relative to paying nothing, spending money on bottled water represents a superfluous expense, making it expensive. This case thus

illustrates how people evaluate the affordability of a good not only by considering its objective price, but also by “anchoring” the evaluation of this price on the price of another good.

This chapter bridges cultural sociology and behavioral economics by proposing the concept of “cultural anchoring.” Anchoring is often studied in laboratory experiments, where the anchors are completely arbitrary—a randomly assigned number or the last two digits of participants’ Social Security number, for example. To some extent, this arbitrariness is precisely the point: these studies shed light on how irrelevant information can systematically bias judgment and behavior. But because this research occurs outside participants’ daily lives, it provides less insight into how people’s everyday environments and experiences provide anchors that influence decisions, including food choices. I show how anchors have sociocultural bases, such as common patterns of consumption in a given population. When consumption patterns vary across sociodemographic groups, anchors may vary, too, and judgments that are anchored on these referents will be socioculturally patterned as well. Anchors can vary across groups in ways that lead to divergent, even paradoxical, evaluations of food cost. Thus, behavioral economics can offer cultural sociology an understanding of the cognitive biases underlying judgment and decision-making, while cultural sociology can offer behavioral economics an understanding of how sociocultural contexts supply referents outside experimental settings.

These findings offer insight into whether bottled water consumption compromises the health of low-income families. Gorelick and colleagues (2011) have suggested that because 10.5% of parents had to “give up other things” to buy bottled water, low-income parents may inadvertently compound socioeconomic disparities in health by allocating limited funds to a cost-less good instead of channeling funds toward health-enhancing items. This chapter does not aim to verify whether bottled water consumption exacerbates population-level social disparities in

health through this mechanism of budget depletion. It does show, however, that answering this question requires addressing several additional questions.

I show that people make food decisions in relation to other foods. If families must “give up something else” in order to buy bottled water, we must also know what that “something” is and what someone would drink if they did not have bottled water. If families buy bottled water but would otherwise drink tap water, and if the money spent on bottled water otherwise would have gone to nourishing foods, buying bottled water would indeed result in less healthful purchases. If, however, the family would have consumed sugary beverages instead of bottled water and if money spent on bottled water would have gone to insalubrious foods, buying bottled water would not entail a nutritional loss. As with cost evaluations, whether bottled water represents a dietary loss depends on what it is chosen in relation to. If, for example, a mother such Natasha uses bottled water to get her children to drink water instead of sugar-sweetened beverages, using bottled water may actually improve her daughters’ health.

These findings have policy implications for public health education efforts. Public health departments in my research site have mounted outreach initiatives to demonstrate the benefits of tap water over bottled water. They highlight tap water’s low cost, health benefits, and low environmental impact. Often, public health departments conduct “tap or bottle” taste challenges in which residents try unlabeled samples of each type of water. In addition to informing people that city water is safe, these efforts frame the choice between tap and bottled water as one of taste. For consumers who prefer bottled water for its perceived taste or safety, such initiatives may succeed. For those who buy bottled water for other reasons, however, taste and safety framings may flop. For example, efforts that highlight the taste or safety of tap *water* may fail to

sway consumers who buy bottled water for reasons associated with the vessel itself, such as parents who believe that the container nudges their children to drink the water in it.

Similarly, education efforts that highlight tap water's low cost relative to bottled water may not resonate with those who do not think about the cost of bottled water in relation to its plumbed cousin. Parents who see bottled water as a source of savings compared to the drinks they would purchase otherwise, or who think about the cost of bottled water in relation to bottled beverages may find this argument unpersuasive. My findings suggest that claims about bottled water's affordability resonate depending on people's consumption of bottled beverages other than water. Increasing tap water consumption and decreasing bottled water intake may actually require lowering communities' consumption of sugar-sweetened beverages that reinforce the notion that bottled water is affordable. This is not to say that some low-income bottled water consumers do not find bottled water financially burdensome. But not all do. Interventions to reduce bottled water consumption must recognize the heterogeneity of reasons that low-income parents purchase this product and tailor efforts to resonate with parents' reasoning about water use.

Limitations and Future Directions

Low-income respondents purchase bottled water in part because they think that it tastes better than tap water, but I cannot establish with confidence the origins or accuracy of this belief. Low-income parents may prefer the taste of bottled water because their tap water does indeed taste off. Like most studies of bottled water consumption, I do not verify whether their assessment about the inferior taste of bottled water is accurate. Doing so would require eliciting respondents' evaluations of blinded samples of their own tap water and of bottled water or,

alternately, analyzing respondents' tap water for bacteria, chemicals, and other substances that affect flavor. Both tasks lay beyond the scope of this study.

If low-income respondents are incorrect that bottled water tastes better than tap water, this could be for several reasons. Low-income respondents may be more receptive to claims bottled water tastes better due to 1) a greater focus on the flavor of a beverage, as I hypothesize in the findings section, 2) the lack of an anti-corporate ideology that portrays companies as manipulating people into purchasing something that the state should provide for free; and/or 3) historical concerns about lead and water quality that may implicitly bias people's sensory perception even when they have no explicit safety concerns.

A taste tests paired with questionnaires would help to address these questions. First, a taste test comparing bottled water and tap water from people's own homes would address whether those who find that tap water tastes better are correct. Additional taste tests could address how much the meanings associated with each type of water bias individuals' ratings of their taste—and for whom. In these tests, individuals would rate both blinded and unblinded samples tap water and bottled water. The degree to which the meaning of tap water and bottled water biases individuals' taste perception would be reflected in the discrepancy between their blinded and unblinded ratings of the same water. A questionnaire would elicit beliefs and attitudes about issues regarding water, including environmental attitudes, attitudes toward public goods and services, attitudes toward corporations, beliefs about what kinds of people drink what kinds of water, and beliefs about what a beverage should provide, such as hydration, flavor, and an expression of one's values. For example, a pro-environmental, anti-corporate taster might rate blinded samples of water equally but might rate bottled water's taste negatively because it "tastes like plastic," as some higher-income respondents in this study assert. A taster who looks for

flavor in a beverage might rate the water in a bottle more highly, even if it is the same water as in the tap water sample. Thus, by measuring the discrepancy in taste ratings between blinded and unblinded water samples and correlating them with beliefs and attitudes toward water, it would be possible to investigate why people think that bottled water tastes better or worse than its plumbed counterpart. To the extent that taste ratings correlate with fundamental dispositions to the environment, the economy, and the state—all highly political and moral issues—it may be possible to study in a rigorous fashion how something resembling a *habitus* generates actual judgments of taste.

Finally, a larger survey could establish whether the socioeconomic differences in evaluations of the affordability of bottled water that I observe are present in a broader population. Most of the higher-income parents I talked with emphasize environmentalism, health, and the public provisioning of goods. It may be that the income-inverted evaluations of cost that I observe hold for this subset of the middle and upper-middle class, but not for class factions that do not share these commitments. Certainly not everyone in the middle class eschews soda and trusts municipal services. I would not expect higher-earning individuals who regularly drink sugar-sweetened beverages and who do not trust tap water to see tap water reference point for bottled water. As a result, I would not expect this group to find bottled water expensive. Observing these relationships between socioeconomic status, evaluations of affordability, and habitual beverage consumption in a larger sample with greater cultural and political diversity among higher-income respondents would help to refine the scope conditions of cultural anchoring.

Chapter 6:

Conclusion

Multiple Determinants of Food Choice: Economic Resources and Culture

This dissertation shows how parents' food decisions are structured by the interplay between shared schemas and economic resources. A large body of research underscores that food decisions result from multiple influences at multiple levels (Sobal and Bisogni 2009). Much of scholarship on low-income communities has described how economically disadvantaged people secure food and cope with scarcity (e.g., Kempson et al 2003, Radimer et al 1992, Maxwell 1996, Dobson et al 1994, Hamelin et al 2002). More recently, researchers have documented how, amidst considerable material and structural constraints, low-income people also select foods for social and symbolic reasons (e.g., Antin and Hunt 2012, Alkon et al 2013, Chen 2016). Sometimes, however, the specific ways that different types of influences work together—and with what consequences—remains unelaborated. I find that material resources and schemas shape low-income parents' food choices in both additively and interactively. I highlight three forms of interactive influence: 1) the *cultural constitution* of economic judgments, 2) interdependence through *budgetary depletion*, and 3) the *cultural delimitation* of economically constrained options.

Additive Influences

Economic and symbolic concerns can inform food choice more or less independently. In this case, one priority is more salient than the other for a given item, and the salience of economic versus sociocultural concerns can vary across items. In the same shopping trip, some purchases can reflect the desire to reduce expenditures, whereas others stem from the desire to make one's child happy, for example. These respective concerns may trump one another, as

purchases with symbolic value often cost more than the more mundane alternative. This independent influence of material and cultural criteria echoes recent studies showing that people select foods on the bases of multiple considerations from the individual to the structural level (e.g., Chen 2016, Antin and Hunt, Alkon et al 2013, Dobson et al 1994).

Interactive Influences: Cultural Constitution of Economic Judgments

As discussed in Chapter 3, cultural criteria can shape parents' economic judgments of a food. When respondents feel that a given food upholds cultural commitments, purchasing it can seem financially defensible, provided that the food is consumed. More specifically, when parents purchase somewhat pricey foods that their children like, that decision seems prudent compared to buying a cheaper food that the child will reject. Conversely, when respondents feel that a food choice falls short of cultural standards, purchasing it can seem like a misuse of scarce resources. For example, a food purchase that deviates from the cultural dictates of intensive mothering can seem financially dubious.

Similarly, common consumption practices can set the referent against which people evaluate the cost of related foods. Depending on the referent, a related item can appear either cheap or expensive. I discuss this form of comparative cost evaluation in Chapter 3, and I expand on it in Chapter 5 with the case of bottled water. Chapter 5 shows not only that people evaluate food cost partly in relation to other foods, but that different groups can come to different conclusions about the cost and value of food if the referent varies across groups. Chapter 5 examines how many low-income respondents find bottled water affordable, if not cheap, because it costs less than the sugar-sweetened beverages that they typically consume. In contrast, higher-income respondents find bottled water expensive because they see it in relation to tap water, which is virtually free.

Thus, I show several ways in which culturally based judgments of food can bias judgments of its cost and value. Of note, there are limits to how much cultural criteria can shape economic evaluations. For example, families cannot continuously spend extra money on culturally resonant foods for their children and still think that doing so is fiscally prudent.

Interactive Influences: Interdependent Consequences through Budgetary Depletion

Symbolic and economic influences can operate somewhat independently for a given purchase, but they are interdependent in their consequences for other purchases. Because low-income families have limited funds for food, every item affects how much money remains in the household food budget for subsequent purchases. A food chosen primarily to conserve economic resources may enable a symbolically motivated purchase, as in the case of Natasha, who might “splurge” on a treat if she hits enough sales the previous month. Similarly, spending more on a socially meaningful food may require families to economize on other purchases. If families have enough resources to cover other immediate needs, the extra expense of a symbolic purchase may not require an immediate tradeoff, but it may nonetheless lead to greater economizing later on.

When forced to stretch their last food dollars, low-income families in this study and others tend to eat low-cost refined carbohydrates such as ramen noodles, canned spaghetti and raviolis, and pasta (Edin et al 2013). Thus, food purchases aimed at enhancing one’s social wellbeing may inadvertently occasion a reduction in diet quality. Higher-income respondents did not face such a stark trade-off. Surely, they were not free of financial concerns. Many spoke of wanting to eat more organic food but holding back because of cost, and they sometimes adjust their food spending after an unusually large purchase. Yet because these better-resourced households have greater financial leeway, they generally do not have to compromise the nutritional quality of their diet to offset the expense of symbolically valuable foods.

Interactive Influences: Culture Delimits Affordable Options

Economic resources and culture interact in a second way: cultural definitions of what is reasonable delimit the set of foods that are affordable. Respondents' approaches to child feeding and food waste, discussed in Chapter 4, illustrate this point. Faced with the prospect of children's food rejection, parents have three main options: 1) require the child to eat the disliked food; 2) decline to offer a more appealing option, expecting instead that the child eat the disliked food once sufficiently hungry; 3) offer something that the child will eat from to begin with. All three options would minimize food waste, and all three options would be equally likely if parents had only economic concerns in mind.

Parents do not, however, have only economic concerns in mind. Most respondents reject "forcing" a child to eat something they do not like and of letting the child get so hungry that they eat what they turned down at first. Discomfort with these options stems from respondents' subscription to cultural constructions of modern childhood, of consumer choice, and of children as consumers. For parents who subscribe to these notions, offering food that one's child will like and eat is the remaining option. Thus, culture narrows the range of economically comparable alternatives.

A parallel interaction between economic resources and cultural schemas appears in British studies of family food choice in the 1980's and 1990's. According to this scholarship, "money defined the boundaries" of food choice (Dobson et al 1994: 5), but within these boundaries, families bought food on the bases of household food preferences, cultural acceptability, and health concerns. Mothers felt especially bound to the widely held notion that "proper" family meals helped to constitute a proper family (Charles and Kerr 1986, 1988). This ideology guided families' food choices directly, by prescribing the items to procure, and

indirectly, by forcing families to reduce the quality and quantity of food in order allocate greater resources to the proper meal. For those who were willing to reject the ideology of the proper family meal, affordable and nutritious alternatives existed. Thus, Charles and Kerr (1986) observe a culturally contingent relationship between income and diet: “Within this framework [of the proper meal] income bears a clear relation to what families consume,” but “a low income does not have the same impact on diet as when the dominant food ideology is accepted and is used as the basis for the ‘proper’ way to feed a family” (241). What foods people choose within economic constraints depends in large part on the cultural orientations that they bring to eating and feeding a family.

More broadly, then, when several economically comparable alternatives exist, economic explanations of food choice are underdetermined. A cultural explanation provides further explanatory power and is necessary for a full account of the food decisions of low-income families. On a practical level, understanding how low-income consumers choose among economically comparable alternatives may help to resolve the seeming discrepancy between low-income people’s assertion that they cannot afford to eat healthily and analysts’ conclusion that even economically strained households have the funds for a nourishing diet (e.g., Inglis et al 2005: 341). People may be thinking not of the universe of foods within their budget. They may be thinking instead of the set of foods that is defined by taken-for-granted assumptions about what food practices are reasonable.

Attending not only to the multiple influences on food choice but also to the types of relationships among influences may be a fruitful way to systematize existing research findings and to orient future studies. I have proposed a typology based on the relationship between economic resources and shared schemas, but this typology should lend itself to other resources,

including time, access to transportation, cooking skills, and cognitive resources. Existing research has noted instances where different resources interact along the lines I have proposed. For example, Alkon and colleagues (2013) find that although low-income residents of Oakland, California do not cite access as a major barrier to food choice, getting to an affordable supermarket can require extra money for gas or a taxi. Access may not affect food choice directly, but transportation expenses may affect food choice indirectly, through the mechanism of budget depletion. In identifying common types of relationships between different resources, this framework can highlight theoretical similarities across different substantive areas.

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