Chapter 2
How Families Cope with Food Insecurity in the Rural South

Sarah Bowen, Annie Hardison-Moody, and Sinikka Elliott

Abstract The counties with the highest rates of food insecurity are disproportionately rural and located in the South. However, few studies have examined why food insecurity rates are higher in rural areas or looked at the lived experiences of food-insecure rural residents. In this chapter, drawing on a mixed-methods study of poor and working-class families in two rural North Carolina counties, we offer a qualitative analysis of the ways poor rural families access food and their experiences coping with and preventing food shortages. We find that place shapes people's access to food and the resources they draw on during food shortages. Rural residents confront specific barriers, including higher travel costs and fewer emergency food resources, but they also draw on place-specific resources, including gardens and farms and strong social support networks. Latino/a/x immigrants in rural areas experience distinct challenges related to accessing culturally appropriate food, especially in contexts of intensifying anti-immigrant rhetoric and surveillance.

Keywords Food insecurity · Rural food insecurity · Food access · Food environments · Local food · Social support · Culturally relevant food · Immigrants in rural areas · Rural residents

In 2018, 11.1% of American households experienced food insecurity, meaning they did not have adequate resources to provide sufficient food for everyone in the household (Coleman-Jensen, Rabbitt, Gregory, & Singh, 2019). Since the U.S. Department of Agriculture (USDA) began tracking rates of food insecurity in the USA in 1995, a large body of research has examined the household (and, to a smaller degree, community) characteristics that predict food insecurity. For the most part, however, this research has not considered how place influences experiences of food insecurity,

S. Bowen (✉) · A. Hardison-Moody
North Carolina State University, Raleigh, NC, USA
e-mail: sarah_bowen@ncsu.edu

S. Elliott
University of British Columbia, Vancouver, BC, Canada

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even though there are large and well-documented spatial variations in the prevalence of food insecurity.

The counties with the highest rates of food insecurity are disproportionately rural and located in the South (Feeding America, 2019). However, few studies have examined why food insecurity rates are higher in rural areas or looked at the lived experiences of food-insecure rural residents. In this chapter, drawing on a mixed-methods study of poor and working-class families in North Carolina, we offer a qualitative analysis of the ways poor rural families access food and their experiences coping with and preventing food shortages.

Spatial Variation in Rates of Food Insecurity

In general, rates of food insecurity are higher in rural (nonmetropolitan) areas and city cores than in suburban areas; 12.7% of households in nonmetropolitan counties and 13.2% in city cores are classified as food insecure, compared to 8.9% in suburbs (Coleman-Jensen et al., 2019). However, these designations are relatively coarse. When counties are categorized according to nine Rural-Urban Continuum codes, relatively similar rates of food insecurity are found across urban and rural areas, but there is also considerable regional variation (Gundersen, Dewey, Hake, Engelhard, & Crumbaugh, 2017). Across the USA, county-level food insecurity rates range from a low of 3% (in Steele County, North Dakota) to a high of almost 36% (in Jefferson County, Mississippi; Feeding America, 2019). Rates of food insecurity are higher in the South, followed by the West, compared to the Midwest and Northeast (Gundersen et al., 2017), and a majority of the most food-insecure counties (the top 10%) are in the rural (nonmetropolitan) South (Feeding America, 2019). While rural counties make up 63% of all counties, they represent 78% of counties with the highest rates of food insecurity. Nearly nine out of ten (87%) of the most food-insecure counties are in the South. When the more precise Rural-Urban Continuum codes are used, the highest rates of food insecurity are still found in counties in the South, but in those in the middle of the continuum (i.e., in counties with relatively small towns and that are not adjacent to major cities, rather than counties in the most isolated rural areas; Gundersen et al., 2017).

Although only a few studies have explicitly investigated why rates of food insecurity are high in the rural USA, existing research offers insight into the processes that likely contribute to rural food insecurity. First, geography shapes access to food retail outlets. Compared to people in urban areas, people who live in rural areas travel farther to get to supermarkets and spend more time traveling to go food shopping (U.S. Department of Agriculture (USDA), Economic Research Service (ERS), 2009). “Rural food deserts” or counties where residents have to travel more than 10 miles to access a large supermarket are found throughout the USA. There is a high concentration of food desert counties stretching from the Rocky Mountains east into the Great Plains, along with concentrated areas of food deserts in persistently poor parts of the southeastern USA (Morton & Blanchard, 2007). Food desert

residents in Iowa and Minnesota perceive that they have lower access to food, higher food costs, and lower food quality because of the lack of supermarkets in their communities (Smith & Morton, 2009). As large food retailers have consolidated, the number of grocery stores has declined (Bailey, 2010; Piontak & Schulman, 2014). As supermarkets close in rural areas, dollar stores have moved in; between 2011 and 2018, the number of dollar stores nationwide increased from about 20,000 to nearly 30,000 (Donahue & Mitchell, 2018). Researchers find that dollar stores intentionally target low-income rural areas with low food access; they provide rural residents with needed food staples, but also disrupt rural economies and generally offer no fresh produce (Wolfrath, Ryan, & Nehring, 2018).

Secondly, spatial patterns of food insecurity track closely with the spatial distribution of poverty. Existing research demonstrates strong correlations between food insecurity and poverty (Coleman-Jensen et al., 2019). Poverty rates in rural (nonmetropolitan) counties are higher than in urban (metropolitan) counties, and the gap is highest in the South (U.S. Department of Agriculture (USDA), Economic Research Service (ERS), 2019a). Although the rural poor comprise about 17% of America's poor population, they remain largely invisible to many researchers and policymakers (Burton, Lichter, Baker, & Eason, 2013). Unemployment and underemployment, key predictors of household food insecurity, are also higher in rural counties (Piontak & Schulman, 2014). Moreover, although the employment index in urban areas had bounced back to pre-recession levels by 2013, a recent report suggested that the rural employment index still had not recovered by 2017 (U.S. Department of Agriculture (USDA), Economic Research Service (ERS), 2019b).

An important dimension of poverty is its persistence over time, and 85% of persistently poor counties are in rural areas (U.S. Department of Agriculture (USDA), Economic Research Service (ERS), 2019a, b). Two-thirds of high food-insecurity counties are characterized by persistent poverty (Feeding America, 2019). Moreover, since 2000, there has been an uptick in the number of poor communities (places with concentrated poverty or poverty rates exceeding 20% or 30%). In addition, the share of poor people living in areas of concentrated poverty has increased in rural areas in the last three decades, while staying the same in urban areas (Lichter, Parisi, & Taquino, 2012). As a report by Feeding America concludes (Feeding America, 2019), "[The] confluence of long-standing poverty and heightened food insecurity underscores [how] low-income people in these areas [face] a number of interrelated problems that require complex, long-term solutions" (p. 17).

Finally, rural food insecurity and rural poverty are tied to racial inequality. Although the rural USA is often viewed as comprised largely of industrious working-class white farmers and laborers descended from northern European immigrant families, rural America is in fact far more diverse (Burton et al., 2013). Racial and ethnic minorities make up 22% of the population in rural areas, and rural areas have become more diverse in recent decades. Given that people of color are much more likely to live in areas of concentrated poverty and with high food insecurity rates (Feeding America, 2019; Lichter et al., 2012), we cannot address food insecurity without acknowledging and confronting systemic racism and racial inequality.

Given these gaps in understanding rural food insecurity, there is a need for research exploring lived experiences of food-insecure families in diverse rural communities. In this chapter, drawing on a mixed-methods study of a group of Black, white, and Latino/a/x households in North Carolina, we offer a qualitative analysis of the ways poor rural families access food and their experiences coping with and preventing food shortages. The study took place in three North Carolina counties: one urban and two rural, according to the metropolitan-nonmetropolitan dichotomy set by the federal government. This chapter focuses on the narratives of people in the two rural counties. In line with our expectations, we find that place shapes people's access to food and the resources they draw on during food shortages. Rural residents confront specific barriers, including higher travel costs and fewer emergency food resources, but they also draw on place-specific resources, including gardens, farms, and strong social support networks. "Latino/a/x immigrants in rural areas experience distinct challenges related to accessing culturally appropriate food, especially in contexts of intensifying anti-immigrant rhetoric and surveillance.

Methods for Studying Low-Income Women's Feeding Practices

The data come from a longitudinal, mixed-methods research project on family feeding practices among low-income women (see Bowen, Brenton, & Elliott, 2019; Elliott & Bowen, 2018). In 2012 and early 2013, we conducted semi-structured interviews, a survey, and 24-h dietary recalls with mothers and grandmothers of young children in three North Carolina counties. In total, 124 women completed all research components. Of these, 39 participants lived in an urban county (Wake County, home of Raleigh, the state capital) and 85 were in one of the two rural counties (Harnett and Lee). In this chapter, we focus on the 85 women living in the rural counties.

We recruited participants from a range of community settings, including churches, community events, daycares, and schools. In order to be included in the study, participants had to be the primary caretaker of at least one child between the ages of two and nine. Only those grandmothers who were primary caretakers were included; the sample in the rural counties included 8 grandmothers and 77 mothers. We restricted our sample to female caregivers because women are still disproportionately responsible for preparing meals in American households (Taillie, 2018) and play key roles in mitigating food insecurity (Martin & Lippert, 2012). Screening questions were used to exclude participants with household incomes in the previous year that were over 200% of the poverty line ($44,700 for a family of four in 2011). In each household, a focal child was randomly selected at the beginning of the project; all focal children were 2 to 9 years old at baseline.

Data Collection

The project involved three waves of interview, food recall, and survey data collection in Years 1, 3, and 5. The study discussed here focuses on the interviews and surveys conducted in Year 1 in the two rural counties. (We also conducted interviews with the caregivers in Years 3 and 5 and with the focal children in Year 5. We conducted two waves of intensive ethnographic observations with 12 families from the larger study in Years 2 and 4. These are not analyzed here, but they inform our analysis).

Interviews were conducted by a research team of Black, white, Latina, and Asian American women from diverse class backgrounds. Interviews were conducted in English or Spanish, according to participant preference; a bicultural, native-Spanish speaker conducted interviews with Spanish-speaking participants. Interviews generally lasted between 1.5 and 2 h, and almost all took place in participants' homes. The interviews focused on beliefs, decisions, and practices related to food and feeding. We also asked questions about broader experiences related to food, including memories and traditions, and beliefs about health and nutrition. Interviews were audio recorded and transcribed verbatim.

Prior to the first interview, participants completed a survey. The survey was administered orally in English or Spanish and focused on basic demographic and household characteristics with some brief questions about food and health practices. The survey included questions about participants' access to a car or another source of reliable transportation, perceptions of their neighborhood, and gardening practices, all of which are analyzed in this chapter.

Data Analysis

All interviews were professionally transcribed and pseudonyms applied to conceal participants' identities. Spanish-language interviews were first transcribed in Spanish and then translated into English and quality-controlled by a native-Spanish speaker. Transcripts were uploaded into NVivo software and analyzed by a team of researchers including all of the authors. We used a grounded theory approach to develop the codebook, focusing on understanding women's experiences and how their food and eating beliefs and practices were influenced by their food environments and by social, cultural, and economic factors (Charmaz, 2014). The research team held a series of workshops to discuss thematic codes, following an iterative process of coding, memoing, and discussing until the codebook was established. There were a total of 75 codes which were coded in two separate rounds. We purposefully kept the codes broad so that we could conduct focused coding of the more general concepts. During coding, we reviewed 10% of the transcripts, recoding or adjusting coding categories as necessary.

Description of Sample

Table 2.1 highlights select descriptive characteristics of participants analyzed for this chapter, all of whom lived in the two rural counties. Participants' race and

Table 2.1 Sample characteristics (for rural households)

Race/ethnicity	*n*	%
White	41	48.2
Black	24	28.2
Latina	20	23.5
Birthplace		
USA	67	78.8
Outside the USA[a]	18	21.2
Education		
Less than 8th grade	7	8.2
Some high school	11	12.9
High school degree/GED	25	29.4
Trade/vocational or some college	37	43.5
Bachelor's degree[b]	5	5.9
Employment status		
Full-time	17	20.0
Part-time	12	14.1
Homemaker	25	29.4
Unemployed	21	24.7
Disabled	7	8.2
Other[c]	3	3.6
Married or living with partner		
No	33	38.8
Yes	52	61.2
Food security status[d]		
High food security	42	50.0
Low food security	24	28.6
Very low food security	18	21.4

All variables refer to caregiver unless otherwise specified
[a]This category includes U.S. territories such as Puerto Rico
[b]No participants had higher than a bachelor's degree
[c]Category included retired person or student
[d]Food security status is defined according to the USDA definition. People experiencing "high food security" are considered food secure; the category of "food insecure" includes both low and very low food security. One participant had missing data for this question

ethnicity roughly corresponded with the race and ethnicity of the low-income population in our study sites. The sample was comprised of 48.2% Black, 28.2% white, and 23.5% Latina participants. Almost one-quarter (21.2%) of participants had immigrated to the USA from another country or a U.S. territory, with a majority coming from Mexico. Slightly more than one-fifth (21.3%) of participants had less than a high school education, while 29.4% had a high school degree or GED. Approximately half of participants had an associate's degree or some college. Slightly more than one-third of participants were working at the time of the interview either full- or part-time. The majority (71.8%) of households had incomes under 100% of the poverty line. About 22% had incomes between 100% and 200% of the poverty line, and, due to a screening error, 5.9% had incomes between 200% and 252% of the poverty line. Half of the households in the study were classified as food insecure, according to the USDA's definition. The USDA defines food security as having "access at all times to enough food for an active, healthy life for all household members" (Coleman-Jensen et al., 2019). Households that do not meet this definition are considered food insecure. Within the category of food insecure, the USDA distinguishes between low and very low food insecurity. Of households in our sample, 28.6% experienced "low food insecurity," while 21.4% experienced "very low food insecurity."

Rural Food Access: Barriers and Supports

The two rural counties in the study, Harnett and Lee, are adjacent to Wake County, home of the North Carolina state capital. Food insecurity rates in Harnett and Lee counties are 15% and 13.5%, respectively, close to the state average (14.6%; Feeding America, 2019). Poverty rates are also close to the state average; 14.4% of Harnett County households and 15.7% of Lee County households are under the poverty line (United States Census Bureau, 2018). Like North Carolina as a whole, the counties are diverse in terms of race and ethnicity. In Harnett County, 61% of the population is white, 22% Black, and 13% Hispanic or Latino. In Lee County, 58% of the population is white, 20% Black, and 20% Hispanic or Latino (United States Census Bureau, 2018).[1]

In this chapter, we discuss four place-specific factors that shaped how families in these two rural counties accessed foods. Importantly, these factors included both barriers and supports. For example, rural residents traveled farther to get to supermarkets, but were more likely to have access to produce from their own garden or from some else's garden or farm. Rural residents had fewer emergency food resources (e.g., food pantries), but many had longstanding support networks that

[1] Categories come from the Census, which distinguishes between race and ethnicity. Percentages for the white population are for white, non-Hispanic.

served as informal supports. Latina immigrant mothers faced distinct challenges accessing culturally relevant foods.

Longer Distances to Supermarkets

First, geography shaped rural residents' interactions with their food environments. Although many women liked living in their rural communities because of the beautiful natural scenery and close-knit communities, the physical distance between food outlets introduced additional transportation costs that limited their access to food. As noted above, rural residents generally travel farther and spend more time shopping for food (U.S. Department of Agriculture (USDA), Economic Research Service (ERS), 2009). This was also true of the households in our study. Women living in rural counties spent more time and more money driving to supermarkets. In a separate analysis of the data, the shopping patterns of all of the women were traced (MacNell, 2018). Across the sample, very few women shopped at the store closest to their house. Instead, most traveled regularly to another preferred store, mainly because of the perceived lower prices at other stores. Women in the two rural counties lived farther from their closest stores and traveled farther to their preferred stores (2.7 and 2.9 miles to the nearest store in the rural counties compared to 1.1 miles in the urban county; 5.8 and 7.3 miles to the preferred store, compared to 2.9 in the urban county).

High gas prices made shopping trips costly and sometimes inaccessible for many rural residents. Gas prices consistently averaged over $3.50 a gallon during the period in which we conducted our first round of interviews (between February 2012 and March 2013). Rural residents discussed how they limited their shopping trips or avoided certain stores because of the costs. Jenny, a white mother of four, explained, "With the gas situation, we have to really tightly keep it so there's not a lot of running [around in the car]. So, we mainly do our grocery shopping for the whole month in one to two days. And hopefully we have everything, and then the only thing we have to run out for the rest of the month is basic, like milk, bread, eggs, you know."

Jenny seemed satisfied with her shopping arrangement, but other women talked about how long distances or high gas prices prevented them from shopping the way they wanted to. Maria, a white mother of three, said that she preferred to shop at Walmart because it was cheaper, but sometimes they went to Food Lion, which was "just down the street," because Walmart was in another town, 15 miles away. "It all just depends on what the funds look like for the gas," she explained.

Latina immigrants and women from Puerto Rico said they relied on very specific ingredients to make dishes that they remembered from their childhoods or home countries. For them, the lack of food retail stores in rural areas made it difficult to obtain culturally relevant foods, considered an important dimension of food security (see also MacNell, Elliott, Hardison-Moody, & Bowen, 2017). (Non-Latina women also talked about the importance of culturally relevant foods, but these foods were

more readily accessible). Larisa, a Latina mother of three, lived in a very rural area with few grocery stores nearby. She had previously shopped at a Latin American grocery store because it had the ingredients she and her husband needed to make the Puerto Rican dishes they liked. Eventually, though, she stopped because it was a 30-min drive. "We used to go, because they had a lot of Spanish stuff, but it really wasn't that humongous, so we just [go to] the Piggly Wiggly, or Food Lion [now]," she said. Although these stores were closer, they did not have all the ingredients she needed. "They just need more Spanish things in there," she explained. "Like vegetables, [Puerto Rican] vegetables that they have in New Jersey….We usually do something called *verduras con bacalao* [vegetables with salt cod, a Puerto Rican dish] and it has a lot of different vegetables in it. We do it with fish, with bacalao. And sometimes you can't really find the exact vegetables you need….We always have to drive to [the town 30 miles away] to get it."

Finally, families without access to reliable transportation found it particularly difficult to get to the store because the two rural counties had virtually no public transportation. The majority of rural residents in our sample had their own cars. Only 15.5% of women in the two rural counties reported *not* having their own car, compared to nearly half (48.7%) of women in the urban county. For those who did not have a car, living in rural areas could be extremely challenging. Kyla, a Black mother of three, had been without a car for 6 months when we met her. "I had [a car], and the motor went, so I just junked it," she said. "Now I'm trying to work on getting another car. I would like to have a job, but I can't depend on anybody to watch my children. I can't depend on a constant ride back and forth to work." Kyla felt lucky because she had a friend who would give her a ride to the grocery store whenever she needed to go, even though her friend lived "a good 15-20 minutes away." In contrast to many of the women in our study, who said they did one main shopping trip per month (MacNell et al., 2017), Kyla preferred to shop once a week. She allocated a certain portion of her food budget to each week because she felt that helped her stretch her SNAP benefits. "Before, when I get my food stamps, I would go and just like spend them all up," she explained. "So lately, I'm trying to go and spend like a week at a time, because it seems like at the end of the month I get so low, and so I've been trying to stretch it out. I've been thinking like if I just go and buy as I need, maybe I can stretch it a little bit farther." However, Kyla was not always able to shop this way because she could not plan in advance when she would be able to get to the store. Moreover, she hated having to depend on others. "I'm a set schedule type of person," she said. "I like knowing how my days are to go. I like to plan things out. And right now, everything is just like jumbled up and… I hate it."

As Kyla's narrative demonstrates, a lack of reliable transportation also influenced women's ability to get to work and medical appointments. For example, Tara, a white mother of two, did not have a car and relied on her mother and friends for rides. She drew a direct connection between the fact that she did not have a car, her difficulties getting a job, and her feelings of inadequacy as a mother. "I wish I could get a job, have a stable job, and then save up so I know I can—I wish I had a car, so I could get back and forth to help my children out," she said wistfully. "I gotta wish to be back on my feet for my children from where I am. 'Cause that's the main thing."

Overall, geographic distance and high gas prices prevented women in rural communities from shopping at the food stores with the lowest prices and best offerings. Those circumstances, coupled with higher food costs, made it difficult for the families to obtain affordable and culturally relevant food. These challenges were especially stark for families who did not have access to reliable transportation and for Latina immigrant mothers, who struggled to find specific ingredients in their rural communities.

Greater Access to Gardens

Despite persistent barriers to accessing healthy, affordable food, rural residents were also able to draw on rural-specific resources, including gardens and farms offering fresh produce, to fill food gaps. Across our sample, many of the women who had grown up in rural areas had positive memories of eating produce from their own gardens or local farms. For example, Sherry, a Black grandmother raising her two grandchildren, lived in a small city in a rural county, but said she had grown up "in the country." She recalled, "Back then, the neighbors, they shared… And it was totally different because they had the [vegetables] that had to come out of the fields." Her husband interjected, "My grandma would call my mama and tell her, 'Sugar, I'm getting ready to put down some collards…I've got some string beans that I've put in my deep freezer and I have plenty—come over here and get you some… And Mama would put them in canning jars and can them throughout the summer." Sherry and her husband still had a garden in their yard, although it was not nearly as big as her grandmother's had been. They grew turnip greens, tomatoes, cucumbers, cantaloupes, peppers, squash, and okra. Even when women did not have access to land for a garden, they often still shared fond memories of farms or gardens from their childhood.

Rural residents reported greater access to produce from their own or someone else's garden, as compared to urban mothers. One-quarter of the women in the two rural counties (25.0%) said they grew their own produce (in their own garden, a friend or relative's garden, or a community garden), compared to just 7.7% of women in the urban county. Our findings support those from previous studies that find that compared to people living in urban areas, rural residents are more likely to share or receive produce from gardens and to hunt or fish (Morton, Bitto, Oakland, & Sand, 2008). Families in our study used gardens to obtain foods they could not otherwise afford or would not have access to. For example, Stephanie, a white mother of two, said they almost exclusively ate canned fruits and vegetables during most of the year. During the summer, however, they harvested produce from their garden. "Whatever fresh [produce] you see me eat, will be from a little 4 x 4-foot garden out there," she said, pointing outside. When asked why she never bought fresh produce, she said, "One, it's expensive and two—I wanted watermelon so bad, and I broke down and I bought one and it was not any good. But I've got watermelon and cantaloupe out there. I'm hoping it'll grow."

Stephanie's garden supplemented her families' food supply; it was not a central part of it. Other families, however, depended on gardening, raising chickens, or hunting as essential aspects of their food provisioning strategies. Annabelle, a white mother of three, reported an annual household income of less than $11,000. To get by, Annabelle and her husband hunted, raised chickens for eggs, grew vegetables in their own garden, and took donations from a farmer they knew. Annabelle described herself as a "scavenger for my family;" she did what it took to ensure her family had enough to eat. Of the farmer, she said, "He takes care of me, and whatever he doesn't sell that's been picked, that can go bad, he brings to our family so that we can feed [the kids] …. But it's been hard if we don't have meat. Like we don't have meat this week. So, we're eating vegetables, which is hard for the kids. But we do a lot of breakfast. Breakfast for supper; we do a lot of that because [of] the protein from the eggs."

Annabelle had access to larger quantities of produce and eggs than most people in our study. Still, many rural residents cited "reciprocal food practices" (see Morton et al., 2008), such as sharing garden produce or receiving occasional produce deliveries from neighbors or friends, as part of how they fed their families. Some families supplemented their diets with game that they or others had hunted. When we met Kitty, a white mother of three, her family was getting by on SNAP benefits and Kitty's $700 monthly disability check. Her husband had been a cook in a restaurant but was out of work. Hunting helped ensure they had enough meat, and Kitty felt that it was healthier than the meat she could buy in the store. "Until recently…my father was hunting every year and I also hunt every year, so we had plenty of deer meat," said Kitty. "All of our friends hunt. We had quite a few friends that hunted and didn't want the deer; they only wanted the antlers. So, they would give us the deer and we would clean them out and cut the meat up …. We grew up with that type of meat and we know for a fact that there's no chemicals in it that's going to kill us."

As noted above, immigrant families in rural areas had difficulty in obtaining culturally relevant foods. However, local food resources in rural communities often gave these families access to ingredients that they would not be able to get otherwise. Across the sample, immigrant women were more likely to garden; more than 40% (40.7%) of women born in Puerto Rico[2] or another country grew their own food, compared to 13.5% of the other women in our study. Latina immigrants talked about saving seeds or exchanging seeds with friends or relatives in order to grow particular herbs or chiles. Armonía, a Latina mother of three who had moved to the USA from Mexico 18 years earlier, said that even though she cooked the same dishes she had grown up eating in Mexico, they did not taste the same as her mom's had. In an attempt to reproduce some of the tastes she remembered, Armonía grew her own vegetables and raised about 16 chickens, for eggs and poultry. "The chickens [in the store in the United States] are small; they put them in the incubator. That's why food doesn't taste the same [here]," she said. "[My mom's food] was

[2] Although Puerto Rico is part of the USA and subjects born in Puerto Rico are not immigrants, they faced similar challenges in terms of accessing specific herbs, fruits, vegetables, and meats to make dishes from their childhood and so we include them here.

natural. Natural chicken…Over there, I have [chickens now] but it's hard to catch them…These are tastier than the chickens from [the store]—oh no!" Armonía also had a garden. "I love to have plants…My brother gave me seeds…and they're growing…tomatoes, chiles," she said, referring to a dish of brightly colored chile peppers drying on the roof of her car.

Importantly, when rural residents had access to local produce, fish, or game, it largely came from non-market channels. Few said they relied on alternative food market initiatives such as farmers' markets or Community Supported Agriculture programs. Although these initiatives tend to be more concentrated in urban areas or near the urban-rural fringe (Singleton, Sen, & Affuso, 2015), there were farmers' markets in both rural counties in our study. Some women said they were not aware of them, while others said farmers' markets were too inconvenient, far from their homes, or expensive. Melanie, a white mother of two, wished she could buy "things that were organic, with less hormones." She said that if they had more money, they would "definitely have more fresh food, more home-grown [food] where we knew where it came from." However, they could not afford to shop this way. Melanie explained, "We even went to the farmers' market. I spent $10, and you know what we got? I got [a] pound of red potatoes, a squash, and one other thing… maybe like two tomatoes. I mean, $10 for that? I thought, 'Well geez, I could shop at Walmart much cheaper than I can shop here." Consistent with other studies (e.g., Martin, Mycek, Elliott, & Bowen, 2019; McEntee, 2011; Morton et al., 2008), Melanie and other rural women in our study rejected the contemporary alternative food movement as expensive and elitist, while drawing on local food resources (e.g., gardens, farms, hunting) espoused by these movements to supplement their diets and obtain fresh and affordable foods.

Limited Emergency Food Resources

As was the case with food retail outlets, compared to urban residents in our study, rural residents had fewer emergency food resources (e.g., soup kitchens, food pantries) from which to draw during food shortages.[3] Both rural counties did have some food pantries and soup kitchens, primarily tied to churches, although they had fewer than in the urban county. However, people's proximity to and awareness of these resources varied widely. Opal, a white mother of two who lived in an isolated rural area, said she was not aware of any food pantries in her county. "There is one in [a town 30 miles away]," she said. "You can go to it six times a year. But you have to be a resident of that town, to be able to go. And then they have one in [another] county, I think, but you have to go only on Saturdays and you had to go through the

[3] In contrast, rural counties were found to have more emergency food providers per capita in a 2017 study, but these county-level measures likely mask significant spatial variation within counties (Gundersen et al., 2017).

church. If you weren't a member of the church, then you can't get anything. That's crazy. So, I don't know."

Opal's information was not accurate; there are several food pantries in her county, and they do not require recipients to be members of a particular church. (The guidelines for Feeding America, a network of 200 food banks and 60,000 food pantries, specify that food pantries cannot discriminate on the basis of race, age, or religion (Echevarría, Santos, Waxman, Engelhard, & Del Vecchio, 2012). Regardless of the accuracy of her information, however, Opal's narrative shows how access is linked both to the physical presence of resources and to reliable information about where resources are and when they are open. Opal could not go to the food pantries in her county because she did not know they were there. Her narrative also illustrates how access is linked to explicit and implicit rules about who is and who is not welcome to use food pantries. Nearly every food pantry in the rural counties, and most in the urban county, are associated with a Christian church. Faith-based food pantries provide vital services, particularly in rural communities, where access to emergency food is often lacking (Johnson et al., 2018). However, these organizations are often at capacity in terms of their ability to meet persistent needs, and their faith-based mission can alienate or discourage clients who do not adhere to their beliefs from seeking out services (Coleman-Jensen, 2018; Johnson et al., 2018; Wuthnow, 2004).

In addition, with only a handful of food pantries or soup kitchens available in rural counties, even when rural residents were aware of existing resources, they had few options and had to "juggle" food pantries to meet eligibility requirements (which might allow people to come only once a month, for example). Becky, a white mother who supported her father and two children on her monthly disability checks and SNAP benefits, explained that when she came close to running out of food, she would "try to look for different food banks, to see if there's one that I missed. Count days and see if there's one maybe that I missed again that I didn't make it to and things like that." Access to emergency food resources was further limited by the fact that for many rural residents, the closest food pantry was in another county. This made some residents ineligible to use the food pantry closest to their home, since many required clients to prove they were residents of that county.

For some of the undocumented Latina immigrants in our study, access to emergency food resources was severely curtailed by their fear of deportation. Immigrant families in our study were less likely than non-immigrant families to receive SNAP. Some immigrant mothers reported being afraid to apply for SNAP and other forms of government assistance out of fear that this would expose their families to surveillance or deportation. Some Latina women said they also avoided certain food pantries because they had heard that the police targeted pantries as a means of finding undocumented immigrants. For example, Armonía, introduced above, said she went to one of the two food pantries in her community when they came close to running out of food. "They give me rice, beans, canned goods, little boxes of cookies, sometimes juice. Things like that." However, Armonía said she had recently stopped going. "I don't go, except once in a while, because over there they have checkpoints from the police. They might give us a ticket," she said. "There is one way to go to get to [the food pantry], and that's where they sit, to check people out –

to check their licenses." Although we were not able to verify whether the police set up checkpoints on the way to this food pantry, other women also mentioned their concern about checkpoints (on the route to this food pantry and others), suggesting that, whether true or not, the notion that police were monitoring roads to food pantries formed an important community belief that shaped rural families' access to food. Moreover, although the food pantries are private charities that are not connected to the government, many require clients to provide documentation of residence and/or photo identification, and previous research similarly finds that Latino/a/x immigrants avoid emergency food pantries because of fears of deportation (Mellon, 2011).

Strong Social Support Networks

Finally, although rural residents had fewer emergency food resources than urban residents did, as discussed in the previous section, rural residents drew on informal social support networks, rooted in their long histories in their communities, when they needed food. Rural and urban residents responded similarly to survey questions about whether people in their neighborhood "helped each other out" and whether there were people they "could count on in this neighborhood." Compared to urban residents, the women in rural areas had lived in their homes for much longer: an average of almost 5 years (59 months), compared to just over 2 years (27 months). Many of the women in rural counties had grown up nearby and lived close to friends and relatives that they had known since childhood. Rural residents expressed a deep sense of attachment to place. In contrast, few of the women in the urban county had grown up in their neighborhood. Most talked about it as a temporary stop and said they planned to leave as soon as things got better. "It's not a neighborhood [where] I would say that I'd [be] here for 15 or 30 years," said Chaniqua, a Black mother of one in the urban county, "but it's an all right neighborhood until I can get on my feet and see myself do better."

Rural residents' strong attachment to place contributed to a sense of security. Ilana, a Black mother of two, lived with her mother in the same small rural town where she was born. "Everybody [around here] is family—everybody is close, everybody knows everybody. They're like, 'Oh, I know your grandma.' Like, 'Oh really?'" Ilana said. "But yes, everybody is good, everything is straight." She pointed to the houses down the road from her trailer. "My uncle lives there…over here is my aunt…And then my cousin, she owns this trailer park right here." Living so close to her family gave Ilana a sense of security. "I feel safe, very safe. Ain't nobody coming up in here; they know better," she laughed.

Attachment to place and the resulting social networks also provided a cushion during tough times. Ilana had recently gotten a relatively well-paying job in a factory. With the increased income, her SNAP benefits were cut to the minimum of $16 per month, but she would not receive a paycheck for a few weeks. "The state did not give you no time to get on your feet," Ilana said. "It was two weeks before

I got a paycheck, and it was not even a 40-hour paycheck. And I still had to have gas to go to work…. By the time I buy my boots [and] clothes to wear for work, and socks… I'm not going to have nothing left. And that's how it was. But the food was the hardest part." Ilana and her family struggled with food shortages for several months after she started working. "There were times when we didn't have nothing but bread and a piece of meat," she recalled. Once, they had their electricity turned off for an entire week, because they could not pay the bill. They got through it largely with the help of their friends and relatives. "Luckily, on Sundays, we'll go down [to my uncle's house] and eat Sunday dinner, or somebody might invite us to their house in the middle of the week. They go, 'Hey, do you want something to eat, I'm cooking this, and you're welcome to it—boom, there it is. So physically [we might] not have food here, but there were times when we would still have been able to eat," she said. "It just works out." Ilana's strong social network—in particular, the relatives who lived nearby—allowed her to sustain her sense of faith that things would "just work out." Similarly, a Robert Wood Johnson Foundation (RWJF) (2018) on economic and health issues in the rural USA finds that most rural Americans (81%) say they feel attached to their local communities, and a majority (67%) say they have received help from other community members.[4]

Other women in the rural counties emphasized how their social networks offered support during crises. Jenny, introduced above, said she never ran out of food because she lived close to her mother and brother. "The good thing about having my mom and my brother there is I don't never have to worry about [running out of food], you know, because they're always there," she said. "So, if I get low, I just go over there, you know. Or if they're low, they can come over here. We just all take care of each other so that helps out a lot. If we were by ourselves and didn't have that I'm pretty sure we probably would run out." Bridgette, a white grandmother raising one grandchild, similarly said that when she did not have enough food, she went to her brother's house. "That's happened quite a few times in the past," she said. "I just call my brother up and I say, 'Hey, what are you having for dinner?' And, you know, he says to come on over. And he'll—one time, he said, 'You got no food in your house?' And I might have had like a couple of cans of something, but I literally had no food, maybe a bag of rice but there was literally no food." Previous studies find that stronger social ties reduce people's chances of becoming food insecure (De Marco, Thorburn, & Kue, 2009; Martin, Rogers, Cook, & Joseph, 2004; Morton, Bitto, Oakland, & Sand, 2005).

Rural residents also expressed a sense of reciprocity, emphasizing their duty to help others when they had enough food to share. Beatrice, a Black grandmother caring for her granddaughter, explained, "My freezer is always blessed, and I always wonder how in the world I make it good, but God helps me with that, because I don't know how that much meat and things come out of that deep freezer, but I feed a lot

[4]The study found that 67% of rural adults said they had "ever received help from a neighbor or people in their local community, including help handling an emergency situation, finding a temporary place to live, or getting important work done" (Robert Wood Johnson Foundation (RWJF), 2018).

of people. A lot of people. They know where to come." Like Beatrice, most women in our study framed sharing food with others as a crucial resource and even a source of joy. Lisa, a white mother of two, said that it was a "joy to just watch [other people eat] … Just the joy of slapping the table full of food and then five minutes later it's like, 'Where did everything go?' That I enjoy." Being tightly embedded in a community came with costs, though. Although women felt that helping friends and relatives was part of their reciprocal duty, it sometimes caused stress and financial hardship. Tara, introduced above, depended on friends and relatives for rides and other favors. Cooking was one way she could express her appreciation, and she enjoyed having people over for dinner. "I always cook for an army," she told us proudly, but feeding extra people strained Tara's limited resources. After helping host Thanksgiving dinner, she wondered how she would have enough money to get through the next month.

While women almost always expressed a sense of deep gratitude that others were willing to share food with them, relying on food from others sometimes meant receiving unfamiliar or unappetizing foods. Elsa, a Latina mother of four and a Mexican immigrant, remembered going to one of her neighbors for help when her family was out of work. "I thank God, she filled my table with groceries, but only canned food," she said. "I said, 'I thank you for your gesture but…I don't know what to do with so many cans, canned soup and all that…' I don't buy them. If there's a hurricane or something…"

In short, as others have found (Alkon et al., 2013; Morton et al., 2008), mothers treated food as a social act. They shared food with others when they had enough and relied on friends and family during food shortages. This was not unique to rural communities; women in the urban county also talked about sharing food as a form of social support and a reciprocal relationship. However, women in rural communities had lived there longer, giving them time to establish longstanding networks that helped mitigate the impacts of food shortages.

Conclusions

Rates of food insecurity are higher in rural areas, and the most food-insecure counties are disproportionately located in the South. However, few studies have looked at how people in rural areas experience and cope with food insecurity.

Analyzing semi-structured interviews with women in two rural counties in North Carolina, we show how rural residents cope with location-specific barriers and draw on resources tied to their rural communities to access food. Rural residents traveled farther to get to the store, which made it more difficult and more costly to get the foods they needed. At the same time, although rural residents had lower access to food retail outlets, they had greater access to local foods from non-market channels. Rural residents were also likely to grow their own food or regularly receive produce, meat, or fish from friends or neighbors.

When it came to access to emergency food resources, rural residents similarly experienced place-specific constraints and drew on specific resources. Rural residents had fewer formal emergency food resources (e.g., food pantries and soup kitchens). On average, however, they had lived in their neighborhoods for longer than urban residents had, and many rural residents described a longstanding network of friends and family members who helped each other out during tough times.

Latino/a/x immigrants in rural areas faced distinct challenges in obtaining food and responding to and preventing food shortages. The lack of food retail outlets in rural areas made it difficult for immigrant women in these areas to get culturally relevant foods. At the same time, immigrant women were more likely to grow some of their own food, and many grew herbs and chiles needed to make specific dishes. Latina immigrant families had fewer emergency food resources to draw on during shortages. They were less likely to receive SNAP, and some avoided food pantries because they were afraid that the police targeted them as a way of finding undocumented immigrants. Many Latina immigrant mothers also expressed a general fear of driving, likely because many were undocumented, which made it more difficult to shop for food in general.

In addition to the fact that the most food-insecure counties are disproportionately rural and located in the South, they also have larger shares of people of color. The prevalence of food insecurity for Black and Latinx populations in the USA is twice as high as the prevalence for white people (Coleman-Jensen et al., 2019). Our analysis identified particular challenges for Latino/a/x immigrants in rural communities. Future research should further examine how racial inequality and systemic racism influence experiences of food insecurity for diverse populations and how these processes differ between rural and urban areas. In addition, given previous research findings that rates of food insecurity (and poverty) vary widely between regions, future research should look at how rural residents' experiences vary across place.

Finally, although this chapter focuses on interviews conducted at one point on time, these interviews were part of a longitudinal research project conducted over 5 years. We observed households moving in and out of food insecurity over the course of the study as they experienced changes in employment, housing, health, family structure, and access to social assistance programs. Future research should trace and compare families' trajectories over time, in order to better understand how food insecurity is linked to other processes, how these vary across place, and how they are linked to inequalities tied to race, class, gender, and immigrant status.

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