



The Privilege of Healthy Eating: A Qualitative Study Exploring the Local Food Choices of Low-Income Families from Appalachia

## Journal of Health Disparities Research and Practice

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Volume 11 | Issue 3

Article 10

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2018

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#### Recommended Citation

Sharaievska, Iryna Dr.; West, Stephanie Dr.; and Weddell, Melissa Dr. (2018) "The Privilege of Healthy Eating: A Qualitative Study Exploring the Local Food Choices of Low-Income Families from Appalachia," *Journal of Health Disparities Research and Practice*. Vol. 11: Iss. 3, Article 10.

Available at: <https://digitalscholarship.unlv.edu/jhdrp/vol11/iss3/10>

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## Abstract

Using qualitative semi-structured interviews, 15 low-income women of different ages were asked to discuss their perceptions of healthy eating, local farmers' markets, as well as their visitation of farmers' markets. The participants were also asked to share what features of farmers' markets they found appealing. The results showed that most of the participants had either a deep or moderate understanding of what it means to eat healthy. However, many of them also believed they could improve their own patterns of eating. The data also showed that the low-income women who took part in the study had positive attitudes overall toward local farmers' markets, despite rather low levels of visitation (only 5 participants had visited farmers' market at least once and only one of them visited farmers' market on a regular basis). Lastly, participants discussed constraints that prevented them from visiting farmers' markets more often and provided suggestions for possible facilitators to increase the frequency of their use of farmers' markets.

## Keywords

Privilege; healthy eating; low-income families; Appalachia; local food

## Cover Page Footnote

Acknowledgments: Assistance for participants' recruitment was provided by local District Health Department. Financial Support: Financial support was provided by the Department of Recreation Management and Physical Education, Appalachian State University.



**Journal of Health Disparities Research and Practice**  
**Volume 11, Issue 3, Fall 2018, pp. 137-148**

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School of Community Health Sciences  
University of Nevada, Las Vegas

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### **ABSTRACT**

Using qualitative semi-structured interviews, 15 low-income women of different ages were asked to discuss their perceptions of healthy eating, local farmers' markets, as well as their visitation of farmers' markets. The participants were also asked to share what features of farmers' markets they found appealing. The results showed that most of the participants had either a deep or moderate understanding of what it means to eat healthy. However, many of them also believed they could improve their own patterns of eating. The data also showed that the low-income women who took part in the study had positive attitudes overall toward local farmers' markets, despite rather low levels of visitation (only 5 participants had visited farmers' market at least once and only one of them visited farmers' market on a regular basis). Lastly, participants discussed constraints that prevented them from visiting farmers' markets more often and provided suggestions for possible facilitators to increase the frequency of their use of farmers' markets.

**Key words:** healthy eating, farmers' market, low-income families, Appalachia

### **INTRODUCTION**

Healthy eating is one of two factors (along with active lifestyle) that influence one's ability to maintain healthy weight and decrease the probability of obesity-related illnesses. According to the Dietary Guidelines for Americans 2015-2020 (CDC, 2016), healthy eating "emphasizes fruits, vegetables, whole grains, and fat-free or low-fat milk and milk products; includes lean meats, poultry, fish, beans, eggs, and nuts; is low in saturated fats, trans fats, cholesterol, salt (sodium), and added sugars; and stays within your calorie needs" (CDC, 2016). In order to achieve healthy

Journal of Health Disparities Research and Practice Volume 11, Issue 3, Fall 2018

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eating, CDC recommends to develop a balanced diet plan, substitute high-calorie for lower-calorie ingredients while cooking, and replace unhealthy eating habits for healthier ones (CDC, 2016).

In an effort to combat the obesity epidemic and decrease obesity-related illnesses among population of the United States, an abundant research and numerous social programs have focused on the promotion of healthy eating (Ahluwalia et al., 2015; King, Mainous III, Carnemolla, & Everett, 2009). However, considering the complexity of the issue and multiple factors influencing healthy eating, it remains a privilege of a few, with college-educated higher socioeconomic status women across most of the racial and ethnic groups being among those who eat the healthiest (CDC, 2015). Considering that among men no significant relationships has been found between education level, SES and obesity prevalence (CDC, 2015), this study will focus on females only.

Among the groups of population who typically have less access to healthy food and struggle with obesity and obesity related illnesses at a higher level are low income rural residents. Rural Americans are at higher risk of death from five leading causes (heart disease, cancer, unintentional injuries, chronic lower respiratory disease, and stroke) than their urban counterparts (CDC, 2017). Such higher risk is associated with multiple social, economic and environmental factors, including limited access to preventative healthcare, lack of education, lower access to physical activity and healthy eating opportunities (CDC, 2017). One of the main recommendations for improving health in rural communities provided by CDC was encouragement of physical activities and healthy eating. Unfortunately, previous studies showed that rural adults were less likely than non-rural residents to meet the Dietary Guidelines for Americans (Lutfiyya, Chang, & Lipsky, 2012; Pullen & Walker, 2002). For example, the study by Pullen and Walker (2002) revealed that only 5.9% of surveyed older women in rural communities adhered to all levels of the Food Pyramid. Along with rural location, one's socio-economic status is another factor predicting one's access to healthy eating, along with one's "social support and modelling, availability and accessibility of healthy and less healthy foods" (Burg, 2008, p. 50).

Among some of the techniques that were found to be effective in behavioral change when it comes to healthy eating were self-monitoring and meal replacements and/or structured meal plans, along with goal setting, problem solving, and social support (Spahn et al., 2010). Financial reward strategies were found to be ineffective as a strategy to change one's eating behavior (Spahn et al., 2010). Other studies showed that family, structured support, translation of knowledge into behavior modifications, barriers to physical activity, and religion are among other influential factors changing eating behavior (Barnett & Praetorius, 2015). Thus, multiple factors, including intrapersonal, interpersonal and environmental, need to be addressed to ensure a change in eating behaviors.

One environmental factor prevalent in many rural and inner-city communities in the United States has been defined by the USDA as Food Deserts, or "parts of the country that are impoverished and lack access to fresh fruit and vegetable, and other healthful foods due to limited access to grocery stores, farmers' markets, and healthy food providers". While there are multiple communities in the Appalachian region that could be defined as food deserts, the community where this research was conducted has a strong sustainable local food system, with delivery to local residents through farmers' markets, food stands, and community supported agriculture. In fact, only 3.3% of total households did not have access to vehicles and were more than one-half mile from a supermarket (USDA, 2017). Despite such a well-developed food system in the community, the results of a study by Farmer, Chancellor, Robinson, West and Weddell (2014) indicated that

the use of farmers' markets and local food systems may vary among people of different background (gender, education, income, and social connectedness). The authors also suggested that "various segments of population may not be driven by the same value motivations (and levels)" (p. 322) to use farmers' markets. As a subsequent step following previous quantitative research, there is a need to solicit more detailed feedback from low-income shoppers using food assistance programs in order to gain a better understanding of their attitudes toward healthy eating, as well as local food system.

Farmers' markets as a part of the local food system, often bring multiple benefits to the communities and thus, will be a primary focus of this study. According to the USDA's National Directory of Farmers Markets, the number of farmers' markets in the U.S. increased from 1,755 to 8,144 between 1994 and 2013. While increase in the number of farmers markets alone does not indicate healthier eating among the population, increased access to farmers' markets was found to be associated with healthier communities. For example, according to the Farmers Market Coalition, proximity to farmers markets was associated with lower body mass index (BMI) among North Carolina youth. Moreover, those who visited farmers markets expressed preference for organic food and food free from genetic modification (La Trobe, 2001). In a study by Kunkel, Luccia and Moore (2003) when low income older adults were offered an opportunity to use vouchers at farmers markets, 44% of them used this chance, with overwhelming majority of them reporting the intention to eat fruit and vegetables year-round as a result of this program. In another study by Ferdinand, Torres, Scott, Saeed, and Scribner (2017), African-American women with children participated in the Fresh Market program incentivizing fruit and vegetable purchase. As a result of the program, participants reported purchasing more fresh produce and increasing consumption of fresh fruits and vegetables. In another study, the introduction of a farmers' market into a community with limited access to grocery shopping led to a decrease in price and an increase in the availability of healthy foods (Larsen & Gilliland, 2009).

In addition to serving as a space that promotes healthy eating, farmers' markets often become more than a place to purchase local food, also serving as a recreational space and community hub where visitors develop strong sense of sentimental place attachment (Johnson, 2013). Social interaction and the ability to meet the farmers involved in food production were named by previous studies among reasons to attend farmers' markets (Johnson, 2014; Szmigin, Maddock, & Carrigan, 2003). Moreover, farmers' markets are often located in public places, such as parking lots and streets, public parks and churches, and community spaces (Ostrom & Donovan, 2013), and as a result, may contribute to the development of a sense of community. These spaces may be even more important in rural spaces where both access to healthy food and recreation opportunities are often limited (USDA Food Desert Locator, 2015).

This project explores the attitudes held by low-income families in a rural community of the Appalachian Region about healthy eating, local foods and farmers' markets. According to the economic overview of Appalachia, the area consists of great contrasts and "still does not enjoy the same economic vitality and living conditions as the rest of the nation" (U.S. Census, 2011). In 2009, per capita personal income in this area was 18% lower than the national level; and the rates of cancer, heart disease, and diabetes were higher than the national rate (U.S. Census). Considering that almost 30% of the population in the Appalachian region is obese (CDC, 2010), the issue of healthy eating should not be underestimated.

This study aims to explore: a) perceptions of low-income families in rural Appalachia about healthy eating and local farmers' markets, as well as their visitation of farmers' markets; and b) what factors could facilitate visitation of farmers markets by low-income families in rural Appalachia on a more frequent or regular basis. Results of this study provide data that can help guide community health practitioners and managers associated with sustainable local food distribution systems as they make decisions that impact low-income residents.

## **METHODS**

The principles of social constructionism and interpretivism, in which, "truth is not absolute but is decided by human judgment" (Bernard, 2000, p. 18), were employed as the base methodologies for this study (Crotty, 1998). As a result, experience that could be meaningful for an individual or group of certain background (culture, income level, education, etc.) might be completely irrelevant for an individual or group of different background.

The project took place during the spring of 2014 in a small rural town in the Appalachian mountains. Participants were recruited with assistance from the local District Health Department by using a purposive sampling technique with specific focus on low-income mothers (Bernard, 2000). Semi-structured individual interviews were conducted with low-income residents of the area who were using WIC (Women, Infants, and Children) benefits and agreed to participate in the study. Participants were compensated for their time with a \$25 gift card. "The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides Federal grants to States for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk" (USDA, 2014). Participants of this study consisted of fifteen low-income women of various ages (19-45) who had families of diverse structures, including single-parent, cohabitating partners and married couples with one to three children.

Interviews lasted for 20-30 minutes and were conducted in a vacant office of the local District Health Department. Prior to participation, all participants were assured that the research team was not associated with the District Health Department and that their agreement or refusal to participate would not influence their relationship with that organization. The interviews involved a series of questions related to healthy eating, local food purchase decisions, and use of farmers' markets. Among questions asked were: "How do you define healthy eating?", "Can you think of any reasons why you might want to eat fresh produce versus canned or frozen from the supermarket?", "Have you visited the local farmers' market?", "What do you like and dislike about the farmers' market?" Interviews were recorded with a digital recording device with the consent of the participants and transcribed verbatim. Additionally, notes were taken during the interview.

Data analysis began as soon as the first few interviews were conducted and continued during data collection, until the point of data saturation was reached (Charmaz, 2006). Data analysis followed the open, axial, selective coding technique (Strauss, 1987). The trustworthiness of the study was evaluated based on four main criteria suggested by Charmaz: credibility, originality, resonance, and usefulness. To insure trustworthiness of the study, the researchers developed a deep understanding of the topic prior to data collection, ensured the point of saturation was reached, and discussed results with an independent researcher in the field.

## RESULTS

The following themes were developed as a result of data analysis: a) the perception of healthy eating by low-income families of rural Appalachia; b) the attitudes of low-income families in rural Appalachia toward their local farmers' market; and d) facilitators to increased use of farmers' market among low-income families in rural Appalachia. Each of the four themes had several subcategories.

### The Perception of Healthy Eating

To understand the perception of healthy eating among low-income families in rural community, participants were asked to share their definition of healthy eating. They were also asked whether they believed they were eating healthy.

*Views on healthy eating.* Out of 15 participants, 8 had a rather *deep* understanding of what it means to eat healthy. For instance, many of them mentioned having a balanced approach to eating, rather than simply identifying specific products one should or should not consume. As Respondent 1 explained her definition of healthy eating was related to "Balanced meals with protein, a carb, a vegetable, a fruit, a dairy." In addition, the participants demonstrated an understanding of the importance of nutritional value, freshness, portion control, and the way food was produced and preserved. Several participants described healthy and fresh food as having "more nutrients," "less extra ingredients and preservatives," and "better flavor and texture." Similarly, they were able to name a variety of healthy foods besides fruits and vegetables, such as whole grains, legumes, and meat. As Respondent 7 explained,

Healthy to me means pesticide, hormone, or antibiotic free, [...] organic as much as possible, fruit and vegetables on a regular basis, not a lot of fatty stuff, not a lot of processed foods. I mean we don't have soda or potato chips in our house. Healthy eating is consuming things that have nutritional value. That means avoiding empty calories and being filled with toxins. That's a big deal to me.

Six of the seven remaining participants provided a rather *general* definition of healthy eating. That is, they understood the value of eating fruits and vegetables and the disadvantage of eating a lot of heavy food, salt and sugar. For example, Respondent 8 explained, "Cut back on sweets, lower salt. Probably just eating things you know you should eat, traditionally, fruits and vegetables, skim milk...things with less fat. I always heard to eat at the outside of the grocery store rather than inside, like more packaged food is inside." Respondent 4 also listed several foods she perceived as unhealthy, "I would cut out all that cheese and a lot of greasy stuff and fried stuff that they all like.". However, while most of these participants had a general understanding of what represents healthy or unhealthy food, their knowledge of healthy eating behavior was rather limited. Moreover, healthy eating was perceived as an addition to current less-than-favorable behaviors, rather than the substitution of negative behaviors with a healthier lifestyle. For example, Respondent 10 said, "Probably like eating fruits and vegetables and stuff WITH your meal."

Responses from the fifteenth participant, on the other hand, suggest she had a very *limited* understanding of what it means to eat healthy. When asked to define healthy eating, she did not name specific foods or eating behaviors that could be considered healthy. Moreover, she did not seem to believe in the importance of healthy eating. When asked to define healthy eating Respondent 2 said,

It depends on your body type. I always think, it just depends on what your needs are. I

mean you have the nutrition guides and things like that but, then again, some people are required to have more meat, some people are required to have more sugar, in some cases, it's weird. To me it just depends on your body type and whatever is healthiest for you. In addition, Respondent 2 believed she did not have a way to store produce, "I mean I think one of our main problems with not being able to get the produce is we're not able to keep it as long so just because, it goes bad really quickly."

*Perceptions of their own eating.* When asked whether they believed their own patterns of eating were healthy, six participants reported with confidence that they were eating healthy, while nine were not as confident. Those who were not positive, reported they were trying to eat healthy but thought they could do a better job. They named such constraints to eating healthy as being tight on money, not having enough time to cook healthy meals, having a sweet tooth or preference for junk food, and the needs and preferences of their children. For example, Respondent 6 shared, "I don't always eat the healthiest. Sometimes especially when you're tight on money, it's hard to eat healthy, but we try especially since I have a 2 year old daughter, I try to feed her as healthy as I can. I myself tend to eat junk food too much and drink too much soda." Respondent 2 expressed similar concern,

We try but it's mainly because of our schedules like some of the opportunities aren't there, like we can't sit down and make a decent meal before we go to work cause we both work third shift so we're normally asleep right up until. We have to get out of the shower and go. And then when we get back it's normally you like eat something small and go to bed and then repeat the process the next day.

Besides being limited in time or money and just having a preference for less healthy food, one of the participants mentioned gender and the preferences of her children as a constraint to healthy eating. As Respondent 3 stated, "I have a toddler and all he wants to eat is peanut butter-jelly and pizza." Respondent 4 had similar view, "I try not to eat a lot of red meat but I have 3 guys in the family that are over 6 feet tall and they are meat and potatoes. But we could do a lot better." It is not clear whether Respondent 4 believed that healthier food could not provide enough calories to satisfy the appetites of four grown men (her husband and 3 sons) or whether she did not think she could afford to feed them healthier foods.

#### Attitudes toward Local Farmers' Markets

The attitudes of low-income families in rural communities toward local farmers' markets were also explored. In this case, interviewees were asked to describe their visitation patterns to farmers' markets, as well as their views on what they liked and disliked about farmers' markets.

*Visitation pattern.* Out of 15 participants, only five had visited a farmers' market at least once. The frequency of visitation varied between the participants, with only one of the interviewees reporting regular visitation (6-8 times per season) and the rest of them visiting occasionally (1-3 times per season). Half of the participants who had never visited a farmers' market (5 out of 10) reported that they did not know one was available in the community. Among those who had never visited the farmers' market in the area but were aware of its existence, one interviewee said she "didn't have a chance," whereas the rest named several constraints that had stopped them from visiting a farmers' market, including inconvenient work schedules and farmers' market hours of operation, weather, and issues related to childcare. For example, Respondent 4 explained that it was hard for her to go to a farmers' market because she is raising her grandson. She said,



It's just hard, I am raising my grandson and getting him out of car-seat and watching him while I pick out fruits that might be near the road. He is typical 3 years old and gets on everything. It's a little harder. If I were alone I'd probably stop more than with my grandson. Although it's fun to shop with him for fruits and vegetables because he loves them!

Other constraints, those associated with work schedules and the inconvenient operating hours and location of the farmers' market, were discussed by Respondent 7, "My schedule honestly is crazy. It's time. Our grocery shopping is like let's run to do that because we're here right now. It's usually kind of a rushed thing. I'm not sure." Rainy weather and uncertainty whether the farmers' market would be open were other reasons given as to why some people did not visit a local farmers' market.

*Advantages and disadvantages of farmers' markets.* Besides describing their patterns of visitation to the farmers' markets, interviewees were also asked about their impressions about farmers' markets, as well as what they liked and disliked about them. The majority of participants had a very positive image of farmers' market. They enjoyed supporting the local economy, appreciated healthy food, enjoyed the atmosphere and a sense of community at the farmers' markets, and found the outdoor setting of the farmers' market to be appealing setting. In addition, they recognized that they enjoyed an element of suspense provided by farmers' markets.

Most of the interviewees who reported having visited a farmers' market at least once during the previous season indicated that the reasons they attended were because they wanted to support local farmers and buy good quality food that was "fresh, local, good, home-grown, and healthy" (multiple participants). In addition to the opportunities to purchase fresher, better food and to support the local economy, people reported that they enjoyed visiting farmers' markets because they felt a sense of community. For example, Respondent 1 said, "I like that it's the local people and I like that it's normally a better mix of people than there is at Walmart or the supermarket. People are a little more friendly; a little more apt to inspire you to buy their products." Another participant, Respondent 15, discussed how the shared values about eating healthy and local food helped to create sense of community, "Everybody who is there eating healthy too and most of them have something in common about trying to buy locally grown food."

The interviewees also enjoyed the atmosphere at the farmers' markets. Many of them described the atmosphere as "not rushed and stressful, fun, lively and entertaining, jovial, friendly, nice, laid back, welcoming" (multiple participants). Live music, face painting for the kids, and the general attitude of people at the farmers' market were among those components identified as helping to create such a relaxed, leisurely atmosphere. As Respondent 1 described, "It's a happier place to be than the supermarket really. People are just in a better mood and they are more community oriented and you feel better contributing to the community so it's just a better feeling."

The fact that the local farmers' markets are located outside supported an additional factor that encouraged people to visit them. For example, Respondent 15 described the atmosphere at the farmers' market as follows, "There are a lot of kids with their parents so when you bring your kids to the farmers' market too, you get to shop for a good food while your kids get to play outside a little bit and hang out with other people." Lastly, an element of suspense appeared to be a facet of farmers' markets that was appreciated by interviewees. As Respondent 5 shared, "[I like to] just going and not knowing what's going to be there." Another interviewee – Respondent 13 – found it exciting to try new foods and explore other products that are offered at the farmers' market along

with food, “They have like tasters of bread that we could try and that was fun. [...] Looking at all the cool things that people have made, I think there were like hats and jewelry and little girls dresses there that people had made locally.”

While the majority of interviewees’ opinions about farmers’ markets were positive, there were also several people who shared things they disliked about farmers’ markets. Among the most often mentioned disadvantages were the farmers’ markets prices and inconvenience as a result of location and operational hours. Four participants indicated they felt that farmers’ markets were too expensive. As Respondent 5 explained, “I would buy everything local if I could, but I can’t afford it unfortunately, particularly like meat. Meat and dairy seem to be a lot more expensive when you try to buy local.” Respondent 2 also expressed her frustration, “I would like to be able to go to the farmers’ market and not have to break the bank for it.”

Five interviewees also mentioned inconvenient work hours as a constraint to why they did not shop at farmers’ markets. Because farmers’ markets in the area only operate seasonally, on Saturday mornings, respondents indicated they were unable to shop there on a regular basis. For example, Respondent 8 said, “It’s only open on Saturday so I can’t get there as often with my work schedule.” Along with work responsibilities, interviewees mentioned that they wished it was open more often than once a week and that they often just did not want to wake up early on Saturday morning. Lastly, two participants indicated that they believed the local farmers’ markets were too crowded and “could definitely be bigger” (Respondent 4).

#### Facilitators to the Increased Use of Farmers’ Markets

The interviewees provided several suggestions for improving their experiences at farmers’ markets and increasing their visitation. Among these changes were the addition of multiple locations (potentially close to supermarkets and in more “children friendly” locations far from the roads), an adjustment of the schedule to a more convenient one, better promotion (particularly in local businesses and newspapers), lower prices and the provision of cost-saving opportunities, an ability to use debit cards at the markets, the installment of tents or roofs to protect the farmers’ markets from rain so they could be open more regularly, and the promotion of farmers’ market to additional target markets, including low-income families and people who do not typically visit farmers’ markets.

## **CONCLUSION**

The results of this study support previous research (Farmer et al., 2014) suggesting that socio-economic status might be a factor influencing visitation of farmers’ markets on a regular basis. Five out of 15 participants of this study said they visited farmers’ market at least once but only 1 participant visited farmers’ market on a regular basis. While this finding should be taken critically due to a small sample of this project, the main goal of the study was to explore the reasons behind low visitation among low-income families in rural Appalachia and factors that could facilitate their visitation.

In order to explore potential differences in understanding the importance or value of healthy and fresh food, participants were asked several questions about their knowledge and attitude toward healthy eating. Results showed that most of the participants from this study had either “general” (6 participants) or “deep” understanding (8 participants) of what represents healthy eating and wanted to improve their own pattern of eating. Similarly, according to a report by the Share Our Strength and APCO Insight (2012), low-income families were interested in

learning more tips and strategies to plan and prepare healthy meals that are easy to cook, affordable and tasty. Interestingly, while the pervasive belief may be that low-income families often eat fast-food, both participants from this study and the report by the Share Our Strength and APCO Insight (2012) claimed to cook dinners from scratch on a regular basis. Thus, we can conclude that, for our participants, a negative attitude towards healthy eating was not among the major constraints to farmers' market visitation. Moreover, the participants of this study reported that healthy food tasted better, which shows an advanced attitude beyond the necessity and importance of healthy food to its desirability and the enjoyment of eating healthy. This finding suggests a more intrinsically motivated behavior with more chances to establish long term patterns of behavior than extrinsically motivated behavior (Ryan & Deci, 2000).

Unfortunately, despite a rather clear understanding of the benefits of eating healthy, many of the participants mentioned multiple constraints, including high prices, lack of time to buy and cook healthy meals, having a sweet tooth or preference for junk food, and the needs and preferences of their children. Although multiple studies reported that time and money are among the most important constraints for healthy eating (Farmer et al., 2014; Pelletier & Laska, 2012), it is important to continue to exploring these and other constraints towards healthy eating and behavioral change. While in many rural areas and inner-city communities, often defined as food deserts, access to healthy food is limited (USDA, 2010; Weinberg, 2000), this study showed that even in communities not identified as food deserts, multiple environmental constraints may prevent low-income residents from accessing healthy food and farmers' markets. Potentially, the simple proximity to the food source and the availability of a car in the household are not the best indicators of a food desert. The same characteristics of the physical environment (location, hours of work, prices, etc.) may be experienced differently by people from different SES. Inflexible schedules, unreliable transportation and lack of social support systems may significantly limit one's ability to visit farmers' market and benefit from its multiple resources.

This study aimed not only to understand reasons behind low visitation of farmers' markets by low-income residents of rural communities but also to find potential solutions to this issue. The participants in this study reported generally positive attitudes toward local farmers' markets. Participants mentioned multiple factors that made farmers' market visitation an enjoyable experience for them, including enjoyment from supporting local economy, appreciation of healthy food, enjoyment of atmosphere and sense of community at farmers' market, as well as outdoors setting and surprise factor offered by farmers' market. Using the findings from this study, administrators of farmers' markets can create enjoyable and utilitarian environments that could serve as locations for buying healthy food and serve as local community centers that bring residents of different backgrounds together (Johnson, 2013). Similar to how community gardens can be used in cities to integrate people of different racial backgrounds (Shinew, Glover, & Parry, 2004), community farmers' markets can serve as spaces for sharing meaningful experiences by members of different social classes. Moreover, as the participants of this and previous studies claimed (Farmers Market Coalition (2017); Kunkel, Luccia, & Moore, 2003; Ferdinand, Torres, Scott, Saeed, & Scribner, 2017), farmers' markets may encourage people to eat healthier and to lead healthier lifestyle overall. Being surrounded by people who have similar views on healthy eating, spending time outside while shopping, trying new produce and learning about the origins of healthy food may create a sense of community and even empowerment among those whose environment might be less supportive of healthy eating. Moreover, learning about opportunities

to save money by purchasing discounted produce and learning new ways to cook it, can help to change attitude toward healthy eating from pricy and time-consuming to economic and enjoyable (Larsen & Gilliland, 2009).

Based on facilitating factors reported by the participants of this study, there are several recommendations to increase visitation of farmers' markets by low-income families in rural communities. First, moving the farmers' market to a location with a roof and even some indoor space, as well as providing multiple convenient locations, might allow for a more consistent schedule and longer hours. Second, adding activities and entertainment, such as live music and activities for children, as well as ensuring a child-friendly environment, could attract more families with children. Third, inviting more farmers would ensure more visibility in the community and higher competition that could encourage lower prices and special deals. Fourth, active promotion of the farmers' market as a community hub by using various media and different target groups could strengthen community and increase visitation and, as a result, encourage a healthier lifestyle. Lastly, the acceptance of debit cards and multiple ways of payment could facilitate the use of farmers' market, by those with low-incomes, on a more regular basis.

While this study has provided some interesting findings, it also had several limitations. First, while self-reporting may provide useful information, in cases when participants are asked to report behaviors that might be considered socially-undesirable (i.e., unhealthy lifestyle/ eating), the observation of actual behaviors could be a more reliable source of information. Unfortunately, observation was not possible due to the specific focus of this study, which required participants to identify themselves as low-income residents of a rural community.

The second limitation was associated with establishing rapport between researcher and study participants. Cultural, education and class differences between the interviewer and interviewees could have potentially led to a social desirability effect (Bernard, 2000) resulting in participants reporting what, in their opinion, the researcher wanted to hear. To avoid the social desirability effect, study participants were reminded at the beginning of each interview that there were no right or wrong answers and that the researcher was only interested in the participants' experiences.

The third limitation is related to the notion that participants were a part of the Special Supplemental Nutrition Program for Women, Infants, and Children that was meant to educate them about healthy eating. Thus, participants might have been more knowledgeable about the issues of healthy eating than the population they represent. While this could create misleading results, participants were asked not only about their knowledge but also about their attitudes, and, as results showed, they had no issues reporting their own less than healthy eating patterns.

Among some recommendations for future research would be comparative studies on low-income and middle class residents from both rural and urban areas view farmers' markets and healthy and local food choices. We also recommend broadening this research to include perceptions from the entire family and not just the mothers. Lastly, we think it would be important to explore the differences between perceived and actual constraints so as to ensure they can be addressed appropriately. While there is more to be done, this research provides valuable insight into how low-income residents from a rural setting view healthy eating and farmers' markets. It is only from gaining such insights that we can make strides in improving healthy eating behaviors among all residents.

## REFERENCES

- Ahluwalia, N., Dalmasso, P., Rasmussen, M., et al. (2015). Trends in overweight prevalence among 11-, 13- and 15-year-olds in 25 countries in Europe, Canada and USA from 2002 to 2010. *The European Journal of Public Health*, 25 (2), 28-32.
- Bernard, H. R. (2000). *Social research methods: Qualitative and quantitative approaches*. London: Sage Publication Inc.
- Burg, J. (2008). Determinants of healthy eating: Motivation, abilities and environmental opportunities. *Family Practice*, 25, 50-55.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. London: Sage Publication Inc.
- Crotty, M. (1998). *The Foundations of Social Research: Meaning and Perspective in the Research Process*. London: Sage Publication Inc.
- Dietary Guidelines for Americans 2015-2020 (2016). U.S. Department of Agriculture & U.S. Department of Health and Human Services. Retrieved from [https://www.cdc.gov/healthyweight/healthy\\_eating/index.html](https://www.cdc.gov/healthyweight/healthy_eating/index.html)
- Economic Overview of Appalachia (2011). U.S. Census, Appalachian Regional Commission. Retrieved from <http://www.arc.gov/images/appregion/Sept2011/EconomicOverviewSept2011.pdf>
- Farmer, J. R., Chancellor, C., Robinson, J. M., West, S., & Weddell, M. (2014). Agrileisure: Farmers' markets, CSAs, and the privilege in eating local. *Journal of Leisure Research*, 46(3), 313-328.
- Ferdinand, R., Torres, R., Scott, J., Saeed, I., & Scribner, R. (2017). Incentivizing Fruit and Vegetable Purchasers at Fresh Markets in Lower 9th Ward, New Orleans. *Ethnicity & Disease*, 27287. doi:10.18865/ed.27.S1.287
- Food Desert Locator (2015). U.S. Department of Agriculture, Nutrition Digest. Retrieved from <http://americannutritionassociation.org/newsletter/usda-defines-food-deserts>
- It's Dinnertime: A Report on Low income Families' Efforts to Plan, Shop for and Cook Healthy Meals. (2012). Share Our Strength and APCO Insight. Retrieved from <http://www.nokidhungry.org/images/cm-study/report-full.pdf>
- Johnson, A. J. (2014). Farmers' markets as consumption communities. Paper was presented at NRPA Congress in Charlotte, NC.
- Johnson, A. J. (2013). "It's more than a shopping trip": Leisure and consumption in a farmers' market. *Annals of Leisure Research*, 16(4), 1-17.
- King, D. E., Mainous III, A. G., Carnemolla, M., & Everett, C. J. (2009). Adherence to healthy lifestyle habits in US adults, 1988-2006. *The American Journal of Medicine*, 122(6), 528-534.
- Kunkel, M. E., Luccia, B., & Moore, A. C. (2003). Evaluation of the South Carolina Seniors Farmers' Market Nutrition Education Program. *Journal of American Diet Association*, 103(7), 880-883.
- La Trobe, H., (2001). Farmers' markets: consuming local rural produce. *International Journal of Consumer Studies*, 25 (3), 181 – 192.
- Lutfiyya, M. N., Chang, L. F., & Lipsky, M. S. (2012). A cross-sectional study of US rural adults' consumption of fruits and vegetables: do they consume at least five servings daily? *BMC Public Health*, 12.

- National Directory of Farmers Markets list (2013). U.S. Department of Agriculture. Retrieved from <http://www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateS&leftNav=WholesaleandFarmersMarkets&page=WFMFarmersMarketGrowth&description=Farmers+Market+Growth>
- Obesity Trends (2015). CDC. Retrieved from <https://www.cdc.gov/nchs/products/databriefs/db50.htm>
- Obesity Level by State (2010). CDC. Retrieved from <http://www.cdc.gov/obesity/data/adult.html>
- Ostrom, M. & Donovan, C. (2013). Summary Report: Farmers Markets and the Experiences of Market Managers in Washington State. Washington State University Small Farms Program. Retrieved from <http://csanr.cahnrs.wsu.edu/wp-content/uploads/2013/11/WSU-FMMS-report-Nov-2013.pdf>
- Pelletier, J.E. & Laska, M.N. (2012). Balancing healthy meals and busy lives: Associations between work, school, and family responsibilities and perceived time constraints among young adults. *Journal of Nutrition Education and Behavior*, 44(6).
- Proximity to farmers markets (2017). Farmers Markets Support Healthy Communities. Farmers Market Coalition. Retrieved from <https://farmersmarketcoalition.org/education/support-healthy-communities/>
- Pullen, C., & Walker, S. N. (2002). Midlife and older rural women's adherence to U.S. dietary guidelines across stages of change in healthy eating, *Public Health Nursing*, 19(3), 10-178.
- Rural Health (2017). U.S. Department of Agriculture & U.S. Department of Health and Human Services. Retrieved from <https://www.cdc.gov/ruralhealth/about.html>
- Ryan, R. M, & Deci, E .L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78.
- Shinew, K. J., Glover, T. D., & Parry, D. C. (2004). Leisure spaces as potential sites for interracial interaction: Community gardens in a segregated urban area. *Journal of Leisure Research*, 36(3) 336-355.
- Spahn, J. M. et al. (2010). State of the evidence regarding behavior change theories and strategies in nutrition counseling to facilitate health and food behavior change. *Journal of the American Dietetic Association*, 110(6), 879 – 891.
- Strauss, A. L. (1987). *Qualitative Analysis for Social Scientists*. San Francisco, CA: Cambridge University Press.
- Szmigin, I, Maddock, S., & Carrigan, M. (2003). Conceptualizing community consumption: Farmers' markets and the older consumer. *British Food Journal*, 105(8), 542-550.
- Weinberg, Y. (2000). No place to shop: Food access lacking in the inner city. *Race, Poverty and the Environment*, 22-24.
- Women, Infants, and Children, WIC (2014). U.S. Department of Agriculture. Food and Nutrition Service. Retrieved from <http://www.fns.usda.gov/wic/women-infants-and-children-wic>