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Incorporating Farmers' Market Tours into the Expanded Food and Nutrition Education Program: Best Practices and Lessons Learned

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Research indicates that low-income consumers are less likely to shop at farmers' markets and that these individuals are often those with the lowest intake of fresh fruits and vegetables. This project aimed to improve familiarity with farmers' markets among low-income consumers through guided tours of farmers' markets, implemented as part of the Expanded Food and Nutrition Education Program (EFNEP). EFNEP Program Assistants (PAs) in five counties in North Carolina received training and partnered with a local Cooperative Extension agent to deliver a farmers' market tour at the mid-point of a nine-lesson series on healthy eating. Forty-eight participants completed the series, completing a pre-and post-class series behavior change assessment and dietary recall. At entry, 54% of participants said they ate food that came from a local farm, compared to 94% at exit. Interviews with all PAs found that participants: plan to visit the farmers' market again in the future, tried new recipes with foods purchased at the market, and learned how to talk with and ask questions of farmers' market vendors. We argue that farmers' market tours are a promising strategy for increasing familiarity with local foods, when carried out as part of a series of nutrition education classes.

Keywords: local foods, farmers' markets, EFNEP, nutrition education

Introduction

Research shows that individuals who shop at farmers' markets have a higher intake of fruits and vegetables than those who do not, which may lead to lower levels of diet-related disease (Pitts et al., 2013; Salois, 2012). However, research also indicates that low-income consumers are less likely to shop at farmers' markets, and that these individuals are often those with the lowest intake of fresh fruits and vegetables (Evans et al., 2012; Kropf, Holben, Holcomb Jr., & Anderson, 2007). A variety of initiatives have relied on using local food systems to increase

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access to healthy and affordable foods for low-income consumers (Evans et al., 2012; McCormack, Laska, Larson, & Story, 2010; Pitts et al., 2016). However, critics suggest that these initiatives should pay more attention to diverse populations' interactions with the food environment, including cultural, social, structural and religious barriers and assets to obtaining food (Alkon & McCullen, 2011; Kato, 2013). In particular, research has shown that farmers' markets can be inconvenient for lower-income consumers to access and that they are often perceived to be spaces of affluence where lower-income consumers may feel less comfortable shopping (Alkon & McCullen, 2011; Guthman, Morris, & Allen, 2006; Hinrichs & Allen, 2008; Kato, 2013; Wetherill & Gray, 2015).

Several studies have noted barriers to accessing farmers' markets among low-income consumers, including perceptions that farmers' markets are more expensive (Pitts et al., 2015; Wetherill & Gray, 2015), lack of knowledge and time to prepare fresh fruits and vegetables, or a lack of knowledge about whether Supplemental Nutrition Assistance Program (SNAP) benefits are accepted at markets and how to use them when they are (Wetherill & Gray, 2015). A lack of financial resources also impedes some groups' participation in farmers' markets. Kato (2013) found that lack of adequate transportation is a common complaint, particularly among elderly residents for whom even one city block is too far to walk. Low-income residents are less likely to have access to a car, and public transportation routes may not serve areas where farmers' markets are located. Furthermore, the limited hours of many local markets make access problematic for people with uncertain transportation options. Given these barriers, it is important that farmers' markets choose locations and hours of operations with the needs of low-income community members in mind in order to enhance community accessibility.

However, Pitts et al. (2016) studied three counties where access to farmers' markets had been enhanced through offering transportation, SNAP benefits, and creating new farmers' markets. They found that residents of these counties did not report changes in awareness or usage of the farmers' markets. This suggests a need for educational programming that works in concert with improvements to farmers' market accessibility. To address this need, Wetherill and Gray (2015) argued for the development of interventions that could help low-income families increase usage of farmers' markets by providing education and training around how to access markets, how to prepare foods purchased there, and how to utilize SNAP benefits at the market. Several studies have implemented strategies to increase participation at farmers' markets, particularly among low-income consumers. These include providing vouchers to purchase fruits and vegetables (Lieff, Bangia, Baronberg, Burlett, & Chiasson, 2016; Racine, Smith Vaughn, & Laditka, 2010), nutrition classes at the market (Dannefer et al., 2015), and offering farmers' market tours (Lieff et al., 2016). The research on this topic demonstrates that strategies that enhance the accessibility of farmers' markets can support low-income consumers' participation, including increasing SNAP redemption, thereby increasing access to healthy foods. However, in a review of the effectiveness of farmers' market promotion programs, McCormack et al. (2010) noted that

many of the studies of farmers' market interventions only used post-workshop data, making it difficult to determine whether there was a causal relationship between the farmers' market intervention and the nutrition outcomes. They recommended that future studies use validated dietary measures, pre-post surveys, and avoid using a convenience sample of individuals who are at the farmers' market, since they are likely already invested in shopping there. Recognizing this crucial gap in research, the current study set out to increase familiarity with farmers' markets through guided tours implemented through the Expanded Food and Nutrition Education Program (EFNEP).

Methods

To implement this project, we partnered with the North Carolina Expanded Food and Nutrition Education Program (NC EFNEP) in five North Carolina counties: Union, Pitt, Forsyth, Buncombe, and Lenoir. All participants reported incomes that were at or below 185% of the Federal Poverty Guidelines and all had children between the ages of 0-18. EFNEP Program Assistants (PAs) (one per county) recruited participants from various community organizations, including a food pantry, substance abuse residential treatment center, faith communities, and community recreation classes. Tours were conducted in the Fall (September – November) of 2015.

To begin the project, the NC EFNEP Coordinator offered one-on-one training for all PAs on how to deliver a farmers' market tour as part of their regular nutrition education lessons. The tours were carried out as part of the nine weeks of EFNEP's standard *Families Eating Smart and Moving More* curriculum. Tours were conducted at one market per county in the mid-point of the lessons, so that PAs were able to talk about local food and the market before the tour and reinforce messages and experiences at the market in the remaining four lessons. Working closely with the PAs, the researchers adapted the NC EFNEP curriculum to incorporate local foods messaging into lessons designed to help participants shop for, prepare, and consume healthier foods. PAs tailored the farmers' market tour content based on the interests and needs of the participants, but included strategies for engaging vendors at the market, tips and recipes for incorporating seasonal foods into weekly meals, information on the benefits of local foods, and food resource management strategies related to local foods and farmers' markets. PAs worked with county partners, including farmers' market managers, FCS agents, Local Foods agents, to plan and implement the tours, focusing on the barriers to farmers' market usage identified through our literature review. These barriers included the availability of transportation to and from the market, the availability of SNAP/EBT at the market, the variety of products available at the market, and the market times and locations. In one county, the EFNEP PA provided transportation to the market using a county van. In another county, the residential facility provided transportation.

We evaluated the effects of these strategies on participants' diets by using the data that EFNEP collects for all nutrition education class series. EFNEP's standard evaluation includes collecting self-reported 24-hour dietary recalls before and after the series of nine EFNEP classes and behavior change responses, using validated questions from the national EFNEP program. We added a pre-and post-survey for participants in the farmers' market tours in the five counties listed above that included questions about fruit and vegetable consumption, use of farmer's markets, and purchasing practices related to healthy foods like fruits and vegetables. Participants received an insulated cooler bag to use at the farmers' market, in addition to the standard skill builders (measuring cups and spoons, cookbook) provided by EFNEP. Additionally, we conducted interviews with all PAs who completed the farmer's market tours, in which we asked them to describe the recruitment process, discuss the topics that generated the most discussion, talk about partnerships involved in delivering the tours, and elaborate upon challenges and lessons learned during the process. We did not conduct interviews with participants, because we focused our funding on resources for the PAs (food demonstration supplies), participants (cooler bags), and programming (development and printing of recipe cards and guides). This research was approved by the Institutional Review Board at North Carolina State University.

Results

Fifty-three individuals started the nine-lesson EFNEP series that included farmers' market tours. Forty-eight individuals completed the entire program. Table 1 shows participant demographics.

Table 1. Demographics of Participants at Class Entry (n = 53)

Demographic	Frequency	Percent
Gender		
Male	3	5.7%
Female	50	94.3%
Race		
White	21	39.6%
Black or African American	31	58.5%
American Indian or Alaska Native	1	1.9%
Ethnicity		
Not Hispanic	41	77.4%
Hispanic or Latino	12	22.6%
Highest Grade		
High School or Less	34	64.15%
Some College	8	15.1%
Graduated 2-year College	3	5.7%
Graduated College	5	9.4%
Residence		
Towns under 10,000 and rural nonfarms	8	15.1%
Towns and cities (10000 to 50000)	7	13.2%
Suburbs of cities over 50,000	25	47.2%
Central cities over 50,000	13	24.5%

Table 2 displays results from EFNEP entry and exit forms, which measured changes in fruit and vegetable consumption, as well as how often participants bought local foods. According to self-reported dietary recalls, 72.9% of participants who completed the program increased their consumption of fruits at exit and 58.3% of those participants increased their consumption of vegetables at exit. Analysis of the data using EFNEP's WebNEERS reporting system (US Department of Agriculture, n.d.) revealed that 36% of participants moved toward MyPlate recommendations for fruit consumption and 57% of participants moved toward MyPlate recommendations for vegetable consumption. The movement toward MyPlate recommendations of consumption of vegetables is similar to state averages for non-farmers' market tour EFNEP classes (54% in 2016) but lower than the state average for fruit consumption (55% in 2016). Fifty percent of the participants (24 of 48) reported improvements in terms of how often they shop for locally grown foods.

Table 2. Changes in Fruit and Vegetable Consumption and Local Food Shopping

Dietary/Shopping Change	# of Respondents	Improved	Unchanged	Decreased
Vegetable consumption*	48	28 (58.3)	4 (8.3%)	16 (33.3%)
Fruit consumption*	48	35 (72.9%)	0 (0%)	13 (27.1%)
When shopping for food for your household, how often do you buy locally grown foods?***	48	24 (50%)	17 (35%)	7 (15%)

*Response choices to this question included: 0, 1/2, 1, 1 1/2, 2, 2 1/2, 3, 3 1/2, 4+. Rather than report on each response at entry/exit, we report on improvement over baseline.

** Response choices to this question included: Weekly, Monthly, A Few Times a Year, and Never. Rather than report on each response at entry/exit, we report on improvement over baseline.

Table 3 shows changes in local food procurement practices and perceptions among participants. While the dietary changes were not dramatic, we found it compelling that participants reported higher engagement with local foods after the nine-lesson series. For example, 94% of participants (44 of 47) reported that they ate food that came from a local farm at exit, indicating that 45% of the participants improved in that practice.

At the outset of classes, 69% of participants (33 of 48) reported that they felt comfortable shopping at a farmers' market or farm stand, compared with 98% (47 of 48) at exit, with 31% of the respondents reporting improvement in their comfort level shopping at these locations.

Similarly, a fairly high percentage of participants, 65%, believed that shopping for local fruits and vegetables could help them save money at entry (31 of 47), with an increase to 85% (41 of

48) reporting this at exit. Twenty-six percent of the respondents reported improvement in this belief.

Table 3. Changes in Local Food Shopping Practices and Perceptions

Practice/ Perception Change	# of Respondents	Entry		Exit		Improved	Unchanged	Decreased
		Yes	No	Yes	No			
Do you ever eat food that you know comes from a local farm?*	48 at Entry/ 47 at Exit	26 (54%)	22 (46%)	44 (94%)	3 (6%)	21 (45%)	24 (51%)	2 (4%)
I feel comfortable shopping at farmers' markets, farm stands, or farms where you can pick your own fruits and vegetables.	48	33 (69%)	15 (31%)	47 (98%)	1 (2%)	15 (31%)	32 (67%)	1 (2%)
I think buying fruits and vegetables from local farmers' markets, farm stands, or farms where I can pick my own food can help to save me money.*	47 at Entry/ 48 at Exit	31 (66%)	16 (34%)	41 (85%)	7 (15%)	12 (26%)	32 (68%)	3 (6%)

*One participant did not complete the entry or exit form, so the total number of participants at entry is different from the total number at exit.

These findings resonate with what we heard during interviews with PAs, who also reported learning about new foods and the local food system, and a new desire to incorporate local produce into their EFNEP teaching experiences.

Interviews with the EFNEP PAs revealed several important themes, starting with the fact that this was the first time many of the PAs themselves had been to a farmers' market. This led the PAs to work closely with market managers to plan the tours, visit the markets ahead of time to talk with vendors, and plan recipes to accommodate the food offered at the market depending on the season. These early visits helped them to form relationships with vendors, which in turn allowed them to model the types of conversations that they hoped participants would have with vendors about the produce they offered and ways to prepare it. Additionally, because Cooperative Extension staff were involved in some way with most of the markets where the tours were offered, these tours expanded and solidified relationships with Extension staff, including horticulture, agriculture, and local foods Extension agents, many of whom the PAs had not worked with previously.

The PAs reported that participants asked many questions of the vendors about the produce they were selling, including information about unfamiliar products and varieties, and how to prepare them. Vendors allowed participants to try the foods on site, something that a Spanish-speaking PA, who led a tour with Latina mothers and grandmothers, said was very important because they were able to try foods that were different from "what they grew up with" in their home countries. By situating the tour in the mid-point of a nine-lesson series, PAs reported that class participants had more opportunities to ask questions about the farmers' market, tried many new recipes to help them prepare farmers' market produce on a limited budget, and were able to interact with market managers and local Extension staff who provided a broader context for local foods production and preparation that built on the well-tested nutrition content provided through EFNEP's educational program.

Partnerships with other Extension and farmers' market staff led to the program's success and increased the PAs' comfort with delivering local foods messaging. By partnering with these local staff to deliver the farmers' market tours, PAs reported that they were able to build a "friendlier" rapport with vendors at the market, helping them to model market usage for participants by encouraging them to talk with vendors, ask questions, and brainstorm together about ways to prepare fresh produce. Additionally, PAs reported that their food preparation skills expanded through these tours, because they demonstrated new recipes to participants with fruits and vegetables they had also never tried before, like spaghetti and butternut squash.

The seasonality of the study also affected the PAs' comfort levels with the foods prepared. For example, one PA noted that because the tours were conducted in late summer/early fall, she didn't think there would be enough produce to purchase and prepare. However, she was excited to learn how to prepare foods like squash and greens that she had not included in her EFNEP programming before. As another PA indicated, people often think that families in poverty do not care about where their food comes from; however, these tours revealed that participants care deeply about where their food comes from, in addition to concerns about price and taste.

Discussion

As noted by Pitts et al. (2016), increasing the accessibility of farmers' markets does not, on its own, increase awareness or usage of farmers' markets. However, our research demonstrates that combining an awareness of these barriers to nutrition education programs, like EFNEP, that introduce farmers' markets, could have an effect on participants' knowledge of local food procurement and preparation and can have a positive impact on whether participants feel that shopping at a farmers' market could save them money on grocery bills. While a small study, this pilot project provides promising data that federally funded nutrition education programs like EFNEP and SNAP-Ed can build upon to increase knowledge among their low-income clients of how to purchase and prepare local foods.

Contrary to other studies (Alkon & Norgaard, 2009; Guthman et al., 2006; Hinrichs & Allen, 2008; Kato, 2013; Wetherill & Gray, 2015), most participants in this project reported at the outset of classes that they felt comfortable shopping at a farmers' market, farm stand, or a farm (33 of 48, 69%). At exit, almost all participants reported feeling comfortable buying foods from local farmers at these locations. Because we did not interview participants, we do not know why these participants felt comfortable shopping for foods at the outset, but given that only 24.5% of participants lived in urban cities, we posit that there is a need for additional research on whether rural residents are more likely to feel connected to local farms, farmers, and farmers' markets than urban residents (see also Racine et al., 2010).

Several studies have identified financial barriers to shopping at farmers' markets (Pitts et al., 2015), despite the fact that research indicates that, on average, local fresh fruits and vegetables that are sold in direct markets are less expensive than fresh fruits and vegetables sold in grocery stores, regardless of the season (McGuirt, Jilcott, Liu, & Ammerman, 2011; Millichamp & Gallegos, 2013; Valpiani, Wilde, Rogers, & Stewart, 2015). Partnering with EFNEP provided us an opportunity to address price perceptions of local food through intensive food resource management education, which was tailored with local foods messaging in each of the nine classes and during the farmers' market tours. Additionally, PAs were encouraged to partner with a market that took SNAP benefits. They also worked with a market manager who could provide information about how to utilize EBT at the market. Financial barriers still exist for many low-income families, who often cite price as the most important factor in food shopping, and shop once a month (using SNAP benefits), which can make fresh produce difficult to prepare and store (MacNell, Elliott, Hardison-Moody, & Bowen, 2017). Additionally, transportation may still be a barrier for many families. However, leadership at the two residential facilities included in this project have since committed to providing regular transportation to the market as a result of these tours.

Interviews with the PAs highlight the importance of providing training about farmers' markets to nutrition educators who may be as unfamiliar with the markets as class participants. Education and training was necessary to provide them with enough confidence to be able to teach class participants about local food and farmers' markets, which in this case came from both the statewide EFNEP Coordinator and through partnerships with Cooperative Extension agriculture and local food agents, as well as market managers.

Limitations

Limitations of this study include its small sample size, which prevented us from running significance tests on the data, and lack of a control group. Although they described delivering the farmers' market tours as a positive experience, PAs reported some barriers to delivering farmers' market tours that included concerns about whether participants would have continued transportation to visit the market and lack of vendor participation in smaller markets in several counties. Another limitation to the study was the season in which the tours were conducted. Many tours were conducted late summer into the fall and winter, meaning that there were not many fruits available for purchase at the markets. This perhaps helps to explain the lower than average increases among participants for fruit consumption at exit.

Implications for Future Research and Practice

This project, while small in size, allowed us to better understand the effects of various methods of changing individual behavior and the market environment in order to understand the combined impact on the diets of low-income families with children. We drew on interviews with PAs as well as the dietary and behavior change data collected to develop a *Guide to Carrying out Farmers' Market Tours* as a resource for nutrition education programs like EFNEP, as well as a set of recipe cards that can be distributed as part of the tours. The PAs suggested the recipe cards and requested that we help them to find EFNEP-appropriate recipes that highlight local foods in North Carolina. The recipe cards were developed by surveying North Carolina Family and Consumer Science (FCS) Extension agents to identify the fruits and vegetables about which they receive the most questions regarding preparation. We then used EFNEP and USDA Mixing Bowl recipes to create recipe cards that can be used to promote local foods at farmers' markets in North Carolina.

We also partnered with the North Carolina Division of Public Health to consolidate resources for promoting farmers' markets on two websites within our organizations, one a consumer site hosted by our statewide *Eat Smart Move More NC* movement (which is staffed by the Division of Public Health), and the second, a web portal about local foods hosted by North Carolina Cooperative Extension. We plan to continue to evaluate the use of farmer's market tours beyond this pilot study as NC Cooperative Extension agents and PAs incorporate them into their classes,

using the developed resources. Based on this work, we recommend farmers' market tours as an effective strategy for increasing familiarity with local foods, when carried out as part of a series of nutrition education classes.

References

- Alkon, A. H., & McCullen, C. G. (2011). Whiteness and farmers markets: Performances, perpetuations . . . contestations? *Antipode*, 43(4), 937–959. doi:10.1111/j.1467-8330.2010.00818.x
- Alkon, A. H., & Norgaard, K. M. (2009). Breaking the food chains: An investigation of food justice activism. *Sociological Inquiry*, 79(3), 289–305. doi:10.1111/j.1475-682X.2009.00291.x
- Dannefer, R., Abrami, A., Rapoport, R., Sriphanlop, P., Sacks, R., & Johns, M. (2015). A mixed-methods evaluation of a SNAP-Ed farmers' market-based nutrition education program. *Journal of Nutrition Education and Behavior*, 47(6), 516–525.e1. doi:10.1016/j.jneb.2015.08.021
- Evans, A. E., Jennings, R., Smiley, A. W., Medina, J. L., Sharma, S. V., Rutledge, R., . . . Hoelscher, D. M. (2012). Introduction of farm stands in low-income communities increases fruit and vegetable among community residents. *Health & Place*, 18(5), 1137–1143. doi:10.1016/j.healthplace.2012.04.007
- Guthman, J., Morris, A. W., & Allen, P. (2006). Squaring farm security and food security in two types of alternative food institutions. *Rural Sociology*, 71(4), 662–684. doi:10.1526/003601106781262034
- Hinrichs, C. C., & Allen, P. (2008). Selective patronage and social justice: Local food consumer campaigns in historical context. *Journal of Agricultural and Environmental Ethics*, 21(4), 329–352. doi:10.1007/s10806-008-9089-6
- Kato, Y. (2013). Not just the price of food: Challenges of an urban agriculture organization in engaging local residents. *Sociological Inquiry*, 83(3), 369–391. doi:10.1111/soin.12008
- Kropf, M. L., Holben, D. H., Holcomb, J. P., Jr., & Anderson, H. (2007). Food security status and produce intake and behaviors of Special Supplemental Nutrition Program for Women, Infants, and Children and Farmers' Market Nutrition Program participants. *Journal of the American Dietetic Association*, 107(11), 1903–1908. doi:10.1016/j.jada.2007.08.014
- Lieff, S. A., Bangia, D., Baronberg, S., Burlett, A., & Chiasson, M. A. (2016). Evaluation of an educational initiative to promote shopping at farmers' markets among the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) participants in New York City. *Journal of Community Health*, 42(4), 701–706. doi:10.1007/s10900-016-0306-3

- MacNell, L., Elliot, S., Hardison-Moody, A., & Bowen, S. (2017). Black and Latino urban food desert residents' perceptions of their food environment and factors that influence food shopping decisions. *Journal of Hunger and Environmental Nutrition, 12*(3), 375–393. doi:10.1080/19320248.2017.1284025
- McCormack, L. A., Laska, M. N., Larson, N. I., & Story, M. (2010). Review of the nutritional implications of farmers' markets and community gardens: A call for evaluation and research efforts. *Journal of the American Dietetic Association, 110*(3), 399–408. doi:10.1016/j.jada.2009.11.023
- McGuirt, J. T., Jilcott, S. B., Liu, H., & Ammerman, A. S. (2011). Produce price savings for consumers at farmers' markets compared to supermarkets in North Carolina. *Journal of Hunger & Environmental Nutrition, 6*(1), 86–98. doi:10.1080/19320248.2010.551031
- Millichamp, A., & Gallegos, D. (2013). Comparing the availability, price, variety and quality of fruits and vegetables across retail outlets and by area-level socio-economic position. *Public Health Nutrition, 16*(1), 171–178. doi:10.1017/S1368980012000766
- Pitts, S. B. J., Acheson, M. L. M., Ward, R. K., Wu, Q., McGuirt, J. T., Bullock, S. L., . . . Ammerman, A. S. (2015). Disparities in healthy food zoning, farmers' market availability, and fruit and vegetable consumption among North Carolina residents. *Archives of Public Health, 73*(1), 35. doi:10.1186/s13690-015-0085-9
- Pitts, S. B., McGuirt, J. T., Wu, Q., Rushing, J., Uslan, D., Stanley, K. K., . . . Ammerman, A. S. (2016). Assessing preliminary impact of the North Carolina community transformation grant project farmers' market initiatives among rural residents. *Journal of Nutrition Education and Behavior, 48*(5), 343–349.e1. doi:10.1016/j.jneb.2016.03.001
- Pitts, S. B., Wu, Q., Demarest, C. L., Dixon, C. E., Dortche, C. J., Bullock, S. L., . . . Ammerman, A. S. (2015). Farmers' market shopping and dietary behaviours among Supplemental Nutrition Assistance Program participants. *Public Health Nutrition, 18*(13), 2407–2414. doi:10.1017/S1368980015001111
- Pitts, S. B., Wu, Q., McGuirt, J. T., Crawford, T. W., Keyserling, T. C., & Ammerman, A. S. (2013). Associations between access to farmers' markets and supermarkets, shopping patterns, fruit and vegetable consumption and health indicators among women of reproductive age in eastern North Carolina, U.S.A. *Public Health Nutrition, 16*(11), 1944–1952. doi:10.1017/S1368980013001389
- Racine, E. F., Smith Vaughn, A., & Laditka, S. B. (2010). Farmers' market use among African-American women participating in the Special Supplemental Nutrition Program for Women, Infants, and Children. *Journal of the American Dietetic Association, 110*(3), 441–446. doi:10.1016/j.jada.2009.11.019
- Salois, M. J. (2012). Obesity and diabetes, the built environment, and the “local” food economy in the United States, 2007. *Economics and Human Biology, 10*(1), 35–42. doi:10.1016/j.ehb.2011.04.001
- U.S. Department of Agriculture. (n.d.) WebNEERS. Retrieved from <https://nifa.usda.gov/tool/webneers>

Valpiani, N., Wilde, P., Rogers, B., & Stewart, H. (2015). Patterns of fruit and vegetable availability and price competitiveness across four seasons are different in local food outlets and supermarkets. *Public Health Nutrition*, 18(15), 2846–2854.

doi:10.1017/S1368980015000981

Wetherill, M. S., & Gray, K. A. (2015). Farmers' markets and the local food environment: identifying perceived accessibility barriers for SNAP consumers receiving temporary assistance for needy families (TANF) in an urban Oklahoma community. *Journal of Nutrition Education and Behavior*, 47(2), 127–133.e1. doi:10.1016/j.jneb.2014.12.008

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