

Evaluation White Paper: Lessons Learned from Implementing DUFEB in Bernalillo County

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EXECUTIVE SUMMARY

This white paper presents findings from evaluation research conducted to identify barriers to fresh food access and understand the impacts of the Double Up Food Bucks (DUFB) program on low-income shoppers' purchase and consumption of fruits and vegetables. The findings reflected here are ethnographic and exploratory representing lessons learned from the implementation of DUFB in Bernalillo County, New Mexico.

The study was designed to gain insight into the complex particulars of food navigation among SNAP recipients and DUFB users; as such, it engaged a small number of participants residing in Bernalillo County over an extended period of time. Research activities were both structured and open-ended providing opportunity for participants to be co-creators of knowledge.

Interview questions focused on understanding household food choices as well as evaluating the extent to which the DUFB program contributed to reducing barriers to healthy food purchasing and consumption. Through a participatory photo blog participants posted photos and comments about their experiences buying and preparing foods. Taken together, these data shed light on the similarities and differences participants' experienced in terms of accessing fresh fruits and vegetables.

Our findings indicate that participants value and appreciate the DUFB program. A number of factors – including challenges associated with shopping at farmers' markets, food choice, family preferences, and the implications of a monthly food cycle – constrain DUFB impacts on participants. These issues point toward opportunities for growth for DUFB, and local food system advocacy more generally.

Context

Double Up Food Bucks is an innovative food systems intervention that seeks to increase low-income families' access to produce while supporting family farmers and bolstering local economies (Fair Food Network). It operates as a healthy food incentive program that provides Supplemental Nutrition Assistance Program (SNAP) recipients with a 2-for-1 deal on locally grown fresh fruits and vegetables. SNAP recipients are automatically eligible to utilize the program, which currently operates in nineteen U.S. states. Although piloted at farmers' markets, in some sites DUFB can now be used at select farm stands, community-supported agriculture (CSA) programs, grocery stores, and neighborhood retail stores (doubleupfoodbucks.org).

The DUFB model was developed and scaled by Michigan-based non-profit Fair Food Network. It was piloted in Detroit as a way of addressing food insecurity and diet-related health disparities through cultivating a healthier and more sustainable food environment. Inspired by small-scale healthy food incentive programs in Maryland, New York, Boston, and San Diego, Fair Food Network conceived of DUFB as a “catalyst for public policy change” (Hesterman 280). The policy strategy was to build a scalable model to shift federal food assistance dollars toward addressing hunger and healthy food access disparities through supporting local family farmers (Fair Food Network). DUFB can primarily be used to purchase only locally grown fruits and vegetables whether at farmers' markets or in grocery stores. According to Fair Food Network the model is such that “every dollar spent does at least double duty, providing a dollar in new sales for American family farmers and a dollar in real nutrition assistance, improving community health and keeping food dollars circulating in local economies” (Fair Food Network 3).

Although DUFB programs across the country are primarily funded by federal and state dollars, they are not government programs. Fair Food Network partners with a network of non-profit organizations to implement the program in different states. Every program has a uniform design and is centrally administrated, however there are differences in how DUFB works in each state or site. For instance, whereas in Michigan DUFB can be used in participating grocery stores to purchase any produce¹, they can only be used to purchase New Mexico-grown produce at participating grocery stores in New Mexico (doubleupfoodbucks.org and doubleupnm.org). Some sites use tokens and others electronic payment systems. The kinds of participating outlets also vary by site, as does the seasonality of the

¹ At participating grocery stores in Michigan shoppers receive DUFB when they purchase Michigan-grown produce. They can then use their incentive to purchase any fruits or vegetables. This means that half of the 2-for-1 deal has to be Michigan-grown and half can be from anywhere (doubleupfoodbucks.org/faq).

program. In Michigan, DUFEB can only be used during the farmers' market season (between June and October) in all participating food outlets. Select outlets in New Mexico offer DUFEB year-round. Finally, some sites limit how many DUFEB can be redeemed at one time. At Michigan farmers' markets there is a cap of \$20 per market day; each outlet determines whether or not there is a limit in New Mexico.

The New Mexico Farmers' Marketing Association (NMFMA) runs the DUFEB program in New Mexico. NMFMA first implemented a fresh food incentive program in 2010. In 2015 the organization received state and federal funding to shift to the DUFEB model² and expand from seventeen to over thirty farmers' markets across New Mexico. In 2016, the program expanded to select grocery stores, farm stands, mobile markets, and CSAs. It can now be used in ninety outlets throughout the state (doubleupnm.org).

There is certainly a need for healthy food subsidies, such as DUFEB, in Bernalillo County. One of the most populous counties in New Mexico, Bernalillo County has a population of just over 670,000 people. In 2015, 15.8% of households received SNAP benefits (U.S. Census) and just over 105,800 people experienced food insecurity (feedingamerica.org)³. Approximately 21% of Bernalillo County residents live in food deserts, which means they live more than one mile from a supermarket or grocery store (food-access.healthgrove.com).

Some discussion of food insecurity is necessary to establish an analytical framework for interpreting our findings and assessments. In much of the literature, food "access" is defined in both economic and geographic terms (see Wright et al, Antin and Hunt, Hough). Finances are one barrier and distances families must travel to buy fresh produce are another. Transportation is a barrier that is related to but generally classified as separate from access. Some food system scholars argue that transportation is a bigger barrier for many low-income people than distance (Wright et al.). Other commonly cited barriers specific to accessing produce at farmers' markets include time, seasonality and limited hours of markets, prices, and even perceptions of belonging (Lambert-Pennington and Hicks, Karakus et al, Freedman et al.).

Access is only one dimension of food insecurity. Food availability or scarcity, stability, and preferences are also recognized as contributors to the extent to which a household or family is food secure (Hough). Given the interaction of factors contributing to food insecurity, interventions tend to more successful when they address multiple (Andreatta). As Antin and Hunt write, "providing access, including

² In partnership with Fair Food Network, as all DUFEB programs operate.

³ This calculation is based on the definition of food insecurity used by the USDA: "lack of access, at times, to enough food for an active, healthy life for all household members and limited or uncertain availability of nutritionally adequate foods" (<http://map.feedingamerica.org/county/2014/overall/new-mexico/county/bernalillo>).

political, physical, and financial access to healthy foods, will not, in and of itself, change peoples' food choices because of competing social and cultural meanings of foods that also have a strong influence on what people eat" (862). The critical point here is that addressing food insecurity (which is one aim of DUFB) requires developing an understanding of the intersection of food choice and access. Both of these dimensions, and how they influence participants' utilization of the DUFB program, are examined throughout the rest of this paper.

METHODS

This evaluation was conducted using qualitative methods and community-based participatory research principles. According to this approach, the New Mexico Farmers Marketing Association (NMFMA) was a partner in all stages of the research. Christina Keibler, NMFMA Community Outreach Manager, represented the organization as a co-researcher. Dr. Claudia Isaac was the principal investigator and Master's student Tara Kane Prendergast was the research assistant. All research team members were involved in the study design and interpretation. NMFMA was responsible for participant recruitment and screening. Tara Kane Prendergast coordinated and conducted all research activities, coded and analyzed data, and drafted the white paper.

The study consisted of multiple research activities conducted with five participants over the course of five months. There was no attrition over the course of the project. Christina Keibler recruited participants by distributing fliers to three social service agencies that work with NMFMA. The flier specified inclusion criteria and directed potential participants to contact Ms. Keibler by phone or email. Ms. Keibler screened participants over the phone. To be eligible potential participants had to: receive SNAP benefits, use Facebook, be older than eighteen, and be willing to make use of the Double Up Food Bucks program if they did not already.

The following research activities were conducted by Tara Kane Prendergast:

- Review of relevant food systems literature;
- Three semi-structured interviews with each participant. These were conducted in participants' homes at the beginning, middle, and end of the study. The timing was designed to assess participants' access to, as well as behaviors around, healthy food during and just after the farmers' market season;
- Kitchen inventories that used a standard template to inventory food items in each participant's kitchen including whether or not items were purchased with DUFB. Kitchen inventories were conducted at the end of each interview (thus three were conducted with each participant);

- Participant observation in which participants were accompanied as they shopped at either a farmers' market or grocery store;
- Participants were asked to contribute 2-3 posts per week on a private Facebook page set up to serve as a photo blog. Instructions were to post pictures and commentary on food and food shopping experiences. Participants were encouraged to respond to the posts of other participants. All research team members interacted with participants through commenting and "liking" posts on the blog; and
- Iterative compilation, coding, and triangulation of interview data using Atlas.ti software.

Different questions were asked in each set of semi-structured interviews allowing for exploration of issues brought up in earlier rounds. Questions focused on probing participants' experience using DUFb, food choice and values, shopping patterns and decision-making, understanding of healthy food, and the barriers as well as positive factors impacting food access. All interviews were conducted by the same researcher, Tara Kane Prendergast, which contributed to the development of rapport with participants and deepened participant responses over the course of the study.

Interviews produced rich, quality data. The photo blog and kitchen inventory were less useful, but were helpful in triangulating interview findings. This stems in part from methodological oversight. Instructions for the photo blog were not specific enough to enable comparisons between posts. The kitchen inventory did not include adequate controls for time differences in terms of when participants' went shopping in relation to when the kitchen inventories were conducted. Moreover, owing to participants' confusion between DUFb and the subsidy offered by a mobile grocery (MoGro), some MoGro purchases were incorrectly recorded as DUFb purchases.

Participants chose where to utilize DUFb. Over the course of the study they used DUFb at the Downtown Growers Market, Rail Yards Market, and La Montanita Coop in Nob Hill. Two participants also utilized a MoGro that advertised a 2-for-1 cost savings program for fruits and vegetables. Given the similarity to DUFb represented by this cost structure participants thought the MoGro was a DUFb outlet and spoke of it as such. Because of this our analysis treats participants' experiences with MoGro as experiences with subsidized healthy food purchase. These experiences are included in the findings presented although a distinction is made between MoGro and farmers' market shopping. The confusion here is a limitation of the study.

One weakness of the study is that participants had some confusion about the relationship between the research and DUFb program. Even though the relationship was stated during recruitment and informed consent process, in the first set of interviews it was clear that several participants thought the research project was a

promotion of DUFB. This misperception may have colored responses as participants seemed to think the researchers were evaluating how much “healthy” food they purchased and consumed rather than how well DUFB was helping them to meet their food needs. To address this perception of the research as a promotion rather than evaluation of the DUFB program, the aim of the study was stated at the beginning of each interview.

A further potential limitation is that participants were likely not representative of consistent DUFB users in Bernalillo County. Only one participant was a regular DUFB shopper before the start of the study; the majority had not known about the program prior to learning about this study. It is important to study new users as a means of gaining insight into how DUFB can reach more people. However, doing so may have skewed results. This skew could be addressed in future studies through changing recruitment strategies to recruit at farmers’ markets or other DUFB outlets. The perspectives of dedicated DUFB shoppers may be significantly different from those who are new to the program.

Research Participants and DUFB Outlets

All five research participants were women. They were all English speakers and ranged in age from 25 to 50 years old; ethnicity was not asked although two participants self-identified as Mexican when discussing the food traditions that had influenced them. While household compositions and family structure varied significantly, every participant had children living with them. Food shopping and preparation responsibilities were shared with others in two households; in the other three the research participant was the primary or sole shopper, cook, as well as child-care provider. The SNAP benefits received by or available to participants ranged from \$75 to \$800 per month. All but one participant experienced some change in the amount of SNAP received by household members over the course of the study. The impact of these changes in SNAP is addressed in later sections of this white paper.

All participants reside in the Albuquerque metro area. Specifically, they lived in the South Valley, City of Albuquerque, or Rio Rancho. Location was significant in that the participant living in Rio Rancho experienced greater difficulties accessing farmers’ markets because she was not able to find one near her home.

Two of the research participants had not shopped at a farmers’ market before, one had never been to one in New Mexico, another had been only a handful of times, and only one was an experienced farmers’ market shopper. Participants visited farmers’ markets anywhere from one to five times over the course of the study. Some shopped at both the Rail Yards and Downtown Growers Market; others only at the Downtown Growers Market. The Downtown Growers Market is open on Saturdays

from 8am until noon mid-April through early November. The Rail Yards Market opens Sundays from 10am to 2pm between May and October.

The one participant who had been a regular farmers' market shopper prior to enrolling in the study became a more infrequent shopper as the study progressed. This participant had moved to Albuquerque from Española at the start of the study. She explained her decreased reliance on farmers' markets by saying that the markets in Albuquerque are more expensive and offer less variety than Española markets. These factors made it no longer worth it for her to use DUFB. She determined that she could get comparable and yet cheaper goods at Costco. Moreover, during harvest season other food supports – such as her own garden, game from family hunting trips, and produce gifted by friends — became available, making her have less need for the kinds of produce available at farmers' markets in Albuquerque.

Every participant had her own story and presented unique perspectives in relation to food values, purchasing, and consumption. Commonalities as well as differences were evident among all participants. However, one participant seemed to be something of an outlier. She demonstrated a level of knowledge about, as well as preference for vegetables that was significantly greater than any of the participants. In many ways she represents the subset of SNAP recipients who may be the easiest target population for DUFB.

Findings

The principle task for this white paper was to identify the primary barriers participants face in accessing healthy food and gain insight into the ways in which DUFB impacted study participants' food purchasing and consumption. Our investigation did not focus on structural forces but rather the micro-level strategies employed and choices made by participants. Our key findings are as follows:

I. Consumer Food Access & Selection

- Multiple barriers and challenges limit participants' access to fresh produce.
- Families may not choose to prioritize purchasing vegetables as a means of stretching limited resources.

- Familiarity matters. DUFB may be most useful for consumers who are already committed to eating a variety of produce.
- Mobile Groceries (MoGro) are a convenient and appreciated food source for participants grappling with anxiety.
- While local and high quality food may be appreciated, buying local and high quality is a lower priority than cost and efficiency for most participants.

II. Double Up Food Bucks Visibility, Vulnerability & Efficacy

- The DUFB program is conceptually appreciated regardless of the extent to which it is actually utilized.
- The DUFB program is not very visible to study participants.
- DUFB at farmers' markets do not necessarily make produce cheaper than other outlets, diminishing the program's utilization by participants trying to stretch their dollars as much as they can.
- The way DUFB currently work in grocery outlets in New Mexico is confusing.
- The DUFB program is vulnerable to the instability of SNAP benefits.

III. Farmers' Market Challenges

- A number of challenges – including cost, crowdedness, selection and convenience — stand in the way of farmers' markets becoming a regular and preferred food source for SNAP recipients.
- Perceptions about farmers' markets and health food groceries may function as a barrier to utilizing them.

I. Consumer Food Access & Selection

Multiple barriers and challenges limit participants' access to fresh produce.

Time, transportation, finances and convenience are the most commonly cited barriers to fresh food access for low-income shoppers (Andreatta et al.). Limited hours are an additional barrier presented specifically by farmers' markets (Fair Food Network). In this study, cost was the only barrier experienced by all

participants. Surprisingly, most participants did not identify time and transportation as consistent or particularly challenging considerations.

All of our research participants faced financial challenges. Three out of five expressly stated that they did not get enough SNAP to provide healthy foods for their households. One participant spoke to the impact of this saying, “We used to only get organic milk although poverty has eventually crushed that out of me and now I just get the cheapest milk. When I had more SNAP benefits what it really enabled me to do is to shop for my family the way I would if money was not an issue. And I don’t mean that in a frivolous way but like, sweet, we don’t have to check and see what fruit is on sale.” Each of these participants’ SNAP benefits were limited by different factors. One participant’s income was just enough to penalize her in terms of losing SNAP benefits but not enough to enable her to purchase healthy food for her family. Another saw a decrease in her SNAP benefits as a result of taking on student loans. The third was trying to feed a large household of mostly people who did not themselves receive SNAP. This latter situation points to a challenge presented by SNAP, in that “non-traditional” families in which relationships are functional rather than legal (in terms of partnership and child custody) may have a harder time recouping SNAP benefits for all members of the household. One participant spoke about the challenge of feeding a household consisting of herself, her three-year-old son, her boyfriend, and part-time, his two children when only she and her son received SNAP. Without being married, she was not able to claim her boyfriend or his children as members of the household.

The second most commonly experienced barrier had to do with mental or emotional health. This presented challenges in planning, purchasing, or preparing fresh foods for four participants. Two participants identified the time it takes to plan for and prepare vegetables as a challenge and two stated that transportation was occasionally a limiting factor in their food purchasing. Speaking about the challenge of cooking, the participant who is a single mom said, “that thing that makes it the most hard is being the only adult in the house. I cannot make dinner and help someone with their homework.” Finally, two participants spoke about buying less fresh produce than they would like as a result of catering to household preferences for meat or processed foods. After explaining that if it were up to them her household members would eat pizza and burgers all day one participant said, “When I go shopping I have everybody in mind. If not, I would have nothing but fruits and vegetables.”

A number of these challenges intersect with or in part result from a monthly food cycle that revolves around receipt of SNAP benefits. The term “monthly food cycle” describes a cycle that is characterized by a short period of relative food abundance followed by food scarcity. Food is purchased when assistance is received such that supplies dwindle over the course of the month (Kaufman and Karpati). This experience was significant for two of our participants. Another shared that a monthly cycle determines her food purchasing and consumption when her SNAP benefits were the primary source of her food budget. The other two participants

seemed to be buffered against this cycle because of the existence of other forms of food support (including SNAP or WIC benefits received by other family members and homegrown food). While this cycle is important to consider as an indicator of food insecurity, it is also significant in shaping shopping patterns (see below).

Families may choose not to prioritize purchasing vegetables as a means of stretching limited resources.

For families contending with food insecurity and a benefits-driven monthly food cycle, food-purchasing decisions are often rooted in strategies aimed at stretching resources as much as possible. Our participants shopped in bulk and prioritized food that could last for two weeks to a month as one means of doing this. When asked what she prioritized in shopping one participant stated, “I get whatever will last me the whole month.” Some also stretched their food budget by prioritizing filling and protein-rich food, which further limited their utilization of vegetables. One participant explained her monthly purchasing habits saying she buys “the main things: milk, eggs, butter, sugar” and adding “I try to get \$100 worth of meat because meat is really necessary and then whatever is left over I try to do the fruits and vegetables. A lot of times I don’t get that far with the fruits and vegetables because they are really expensive.”

Strategies aimed at making food money last contributed to several participants’ relatively minimal vegetable purchases. All participants expressed valuing fruits and vegetables as healthy foods that they would like to provide to their families, while also stating that tough decisions had to be made in their actual purchasing decisions. When asked about what they prioritize in food shopping, three participants focused on long-lasting food and staples (including eggs, milk, sugar, and meat). Fruits and vegetables were described as a secondary purchase made if there was money left over. Other ethnographic studies on food choice have presented similar findings about these constraints, and the particular prioritization of cost savings strategies over nutritional quality (Antin and Hunt).

One participant explained her purchasing choices as a balance between health and price. For another, vegetables were the first priority and meat described as the “first to go.” This participant seemed to experience the least number of challenges in both accessing as well as utilizing fresh produce; she was the only one to mention having knowledge of home preserving methods such as canning. Notably, neither of the participants who were able to prioritize purchase of fresh fruits and vegetables experienced a food cycle characterized by monthly cycles of abundance and scarcity.

Familiarity matters. DUFB may be most useful for consumers who are already committed to eating a variety of produce.

Multiple factors contribute to the extent to which DUFB benefits individual households. Lack of familiarity is one important factor that can operate as a barrier to DUFB utilization and thus the benefits the program stands to offer.

None of our participants had grown up eating fresh fruits and vegetables. One had deliberately changed her diet and learned how to center meals on produce as an adult. Her motivations for doing so had to do with wanting to improve her own health. The others recognized the value of fruits and vegetables from a health perspective expressing enthusiasm at the prospect of being able to purchase more of them with DUFB. One participant reported DUFB enabled healthier eating because it allowed her to buy fresh rather than canned vegetables. However, there were mixed responses in terms of the extent to which DUFB were actually utilized and thus fresh produce consistently purchased and consumed. The kitchen inventories as well as interviews revealed no pattern of either consistent or increasing fresh food purchases over the course of the study. Nor did participants indicate consistent or increasing use of DUFB over the course of the study.

Some of this has to do with the availability of familiar goods at farmers' markets. For two participants' households, vegetables were primarily consumed as salads. They reported liking lettuce and baby spinach; at the farmers' market neither were able to find such familiar greens. In terms of fruit, these participants preferred berries and did not find the kind of variety of fruit they wanted at the farmers' market. The variety as well as seasonal rotation of produce at farmers' markets did not necessarily appeal to shoppers looking for specific and known goods.

The participant who showed the greatest consistency in her use of subsidized fresh food (in the form of DUFB and MoGro) spoke about how the experience required being open to unfamiliar produce and learning new methods of preparation. Commenting on her experience using MoGro she said, "at the beginning there was stuff I didn't know like the spaghetti squash, artichoke, and brussel sprouts. But I just learn to cook them because I am good at making stuff." She was able to incorporate more vegetables into her family's diet because she had the time as well as willingness to search for recipes and try things. Chronic health problems including obesity and fatigue motivated her incorporation of more fresh foods. This participant specifically stated that her openness to learning how to cook new things was critical to her sustained use of incentives and the subsequent benefits her family experienced. These benefits included eating less fried food and carbohydrates as well as noticing an increased sense of energy.

Mobile Groceries (MoGro) are a convenient and appreciated food source for participants grappling with anxiety.

Two participants utilized a MoGro program various times during the study. Receiving \$20 boxes of produce for \$10, participants related to it as a DUFB type

program and accessed it as a 2-for-1 subsidy to their food bill.⁴ The most consistent user of a 2 for 1 program throughout the study was a participant who received a weekly MoGro box. The participants who purchased from MoGro boxes were the ones who expressed a need to manage anxiety in food shopping. One participant explained why she liked purchasing from MoGro saying “with my anxiety I don’t like to go to the store. You just go and pick up your box because it’s already made. It’s easy.” Both of these participants found farmers’ markets provoked their anxiety. They were satisfied with the convenience of the MoGro as it enabled them to order produce online or over the phone and then be able to “get in and out quick” when picking it up. It required no wading through crowds or waiting in lines. This relative satisfaction with MoGro suggests that it is a promising alternative for shoppers interested in DUFB but uncomfortable with the experiences offered by farmers’ markets.

While local and high quality food may be appreciated, buying local and high quality is not a priority for most participants.

While DUFB at farmers’ markets certainly make local produce more accessible to low-income shoppers, it is still more expensive than produce that can be found at some grocery stores and bodegas. Findings indicate that pure cost-savings thus cannot be the primary appeal of the program for DUFB participants. The value proposition of farmers’ market produce is that it is both local and generally high quality, which may be experienced as enhancing taste. DUFB make this value proposition more accessible to low-income shoppers.

There is thus an important question about who this value proposition appeals to. Among our participants there were a) those willing to pay a bit more for higher quality produce, b) those who may value local and/or higher quality produce but decide it is not worth the higher cost, and c) those for whom this value proposition does not resonate at all. One participant’s food choices centered on quality and perceived health-value. Her family prioritizes local and organic food. They have a broad food support network that helps them do this as well as substantial knowledge about how to prepare vegetable-rich meals. Three participants stated that they like to buy local but that their ability to do so is limited by resources. When there is not enough money, or SNAP benefits, to minimize the potential of food scarcity, local origin and quality are something of a luxury. Participants consistently noted that cost has to be prioritized. Finally, one participant did not consider local or quality in her purchasing. This same participant suggested that farmers’ markets

⁴ As previously stated, MoGro is not a DUFB program. However, the cost-savings offered (2-for-1) are equivalent to DUFB and thus the participants who used MoGro thought it was a DUFB program. They utilized MoGro in the same way, to access fruits and vegetables on a limited budget.

should have signage explaining the value of their produce as a means of clarifying why prices are what they are.

These findings can be taken to suggest that a subset of SNAP recipients may be a target market for DUFB: those who prioritize healthy eating and are looking for ways to increase their healthy food consumption. Alternatively, they suggest an opportunity for increased community education and outreach to raise awareness about the benefits of healthy and local produce. This work could be done through partnering with clinics and community organizations already working with families invested in accessing better health outcomes.

II. Double Up Food Bucks Visibility, Vulnerability & Efficacy

The DUFB program is conceptually appreciated regardless of the extent to which it is actually utilized.

There was a gap between participants' expressed appreciation for and actual use of DUFB. One participant had this to say about the program, "I think it surpassed what I thought. When you first hear of DUFB you think it's just for fruits and vegetables but then you get more into it and you realize that it is to support the community. I think it went past my expectations in a way." Despite this strong enthusiasm, the participant only used DUFB at a farmers' market twice over the duration of the study. She attempted to use them a third time at a grocery store but was confused about what DUFB could be used for and left the store with nothing. Halfway through the study she began to utilize MoGro saying it was convenient and provided an equivalent cost savings to DUFB at farmers' markets.

Participants' utilization of DUFB over the course of the study was relatively minimal. This had to do in part with the fact that most participants shopped monthly or bi-monthly, rather than weekly, which is more appropriate timing to purchase fresh produce. It also had to do with barriers and challenges faced by participants, presented in the findings below. However, even when participants did not consistently utilize DUFB they appreciated the concept of it and stated that it could help a lot of people. One participant explained, "I know a lot of single mothers and even fathers and that helps stretch a lot." When she tells them about the DUFB program "they're like 'dang, that could really spread our money.'"

All participants expressed a sense of gratitude for the program's existence saying that they were spreading the word and encouraging friends and family to use it. Everyone stated that DUFB either could or did help them provide more fresh fruits and vegetables for their households. One participant said, "now that this double up food bucks program has come along I can actually afford to get some real vegetables. I still have fruit from the farmers' market in the freezer that I'll take out and use for

baking.” Another described the program as a tool that she just needed to figure out how to use better.

The DUFB program is not very visible to study participants.

Participants learned about DUFB from a number of sources and mediums. Two knew about the program from shopping at farmers’ markets in the past. Another learned about it from a bus advertisement seen in a news clip on TV. The other two found out about the DUFB program through recruitment materials distributed for this study at partner organizations. One had had seen a flier in a medical clinic and another heard about it through word of mouth, from a friend. Only one of our research participants had used DUFB prior to enrolling in the study; one other thought she had heard of the program but had not used it.

Participants indicated that perhaps the greatest current limitation of DUFB for potential users is that many simply do not know it exists. As one participant said, “I think you guys should advertise more about [DUFB] because I didn’t even know about it. I’ve told all my friends about it.” All participants reported that their friends and family who could use DUFB had never heard about it. This visibility problem has been identified by other studies as a limitation of farmers’ market incentive programs generally (Karakus).

Whatever current advertising exists, our participants did not find it sufficient and wished for it to be bolstered. Specifically, they suggested that information about the program should be distributed to homeless shelters, ISD offices and websites, grocery stores, laundromats, food pantries, churches, and social service agencies. Participants requested that information be distributed both digitally and in printed form. Given that all participants were native English speakers, no specifications were made in terms of language.

DUFB at farmers’ markets do not necessarily make produce cheaper than other outlets, diminishing the program’s utilization by participants trying to stretch their dollars as much as they can.

Participants recognized and appreciated the benefit of doubling their money through utilizing DUFB. Nonetheless, several found Albuquerque farmers’ market prices still to be prohibitively expensive. Even with the cost savings provided by DUFB, farmers’ market prices could not compete with those offered by other food outlets (including Smith’s, Price Rite, fruterías, and the farmers’ market in Española). Multiple participants pointed out that they liked the food at farmers’ markets but had to elect to buy the cheaper options available elsewhere. As one participant stated, “I’ve only gone there [to the farmers’ market] once. It was just kind of over pricey. I could buy two or three times as much going to a frutería.”

Although most would prefer higher-quality produce, all but one of our participants determined that purchasing such produce at a slightly higher cost would not be feasible or wise. As one participant stated, “I do the cheapest of everything.” This reflects on the existence of broader structural conditions such as income inequality and the relative costs of healthy diets that contribute to food insecurity (Wright). However, it also speaks to the extent to which our participants actively manage resources to stretch tight budgets and provide for their families. Prioritizing cost savings is one critical management strategy.

Prioritization and affordability are of course relational. One participant stated that her ability to prioritize other considerations above cost “completely depends” on the amount of SNAP she receives. When she receives enough to provide what she likes, she buys local and organic food. When she does not receive enough to shop according to preference, she buys the cheapest option she can find. This rules out relying on farmers’ markets as a regular food source.

The way DUFB currently works in grocery outlets in New Mexico is confusing.

Participants with experience shopping at grocery store outlets with DUFB were unequivocal that the utilization of DUFB at participating grocery outlets is limited by a number of challenges. Over the course of the study two participants attempted to use DUFB at a grocery store that accepts DUFB for certain items. One was familiar with the store and had shopped there multiple times before. The other had never been to it before and went expressly to use DUFB. This participant expressed wanting to try it out so she could continue using DUFB to purchase produce through the winter.

Both participants reported having negative experiences; one of them was so confused she ended up leaving the store without having actually bought anything. One participant explained her experience saying, “it was spread out everywhere and it gave me a crazy anxiety attack and I just left and went to Walmart and got the fruit and vegetables. It was like a big old mission to find out which ones were ok for Double Up and which ones weren’t. It’s kind of embarrassing when you have to go up to someone and ask.” It was not clear to either participant how DUFB worked at the store, and what produce could be purchased with it. They reported seeing no signage or explanation, which gave them the assumption that DUFB could be used for all produce. Upon reaching the register they were told that DUFB could not be used for what they had selected. Both participants were confused by the experience and dissuaded from shopping at the store in the future.

The DUFB program is vulnerable to the instability of SNAP benefits.

The Double Up Program's dependence on SNAP is a strength and weakness, both of which make it difficult for administrators of the DUBF to ensure maximum impact on the program for participants at the State level. SNAP benefits can be quite unstable as living and work situations fluctuate. Three participants experienced changes in the SNAP amount available to them over the course of the study. Reasons for this included changes in income or loans and shifts in household composition. Households' fluctuation of SNAP benefits may significantly impact their utilization of DUBF. Further research must be done to ascertain what the specific impacts on households' engagement with DUBF may be.

Two participants experienced significant increases (from \$75 to \$500 and \$300 to \$800 respectively) in the amount of SNAP available to their households at the very end of the study. One increase was a result of income changes reflected in submitted paystubs. The other was a result of another family member moving into the house and bringing her SNAP benefits with her. Participants in both of these households stated that the increase was a great relief that would enable them to buy their preferred foods and brands, not merely the cheapest. Since the increases occurred at the very end of the study we do not have data on the ways in which they did or did not impact food purchasing and consumption. It is also important to note that both of these participants qualified their excitement about the SNAP increases by saying they were not counting on them lasting. There is a fragility to the support both readily recognized.

On the other end, one participant experienced a \$100 decrease in SNAP benefits at the beginning of the study. This participant had used DUBF consistently prior to enrolling in the study. Her household purchased and consumed more vegetables than any of the others. The decrease in SNAP was a result of her receiving loans to enroll in school; those loans count as income. While she identified the decrease as a stressor, she said it did not change her family's food consumption habits. This was mostly because the participant and her household had a strong and deep food support system that included WIC, a garden, game, and homegrown food gifted by friends and family. The persistence of other forms of support minimized the impact of the decrease in SNAP. Thus the decrease did not result in an overall decline in the consumption of produce by the household. However, the participant reported using DUBF less over the course of the study. The decrease in SNAP may have contributed to this pattern.

III. Farmers' Market Challenges

A number of challenges stand in the way of farmers' markets becoming a regular and preferred food source for SNAP recipients.

Despite consistently expressing enthusiasm about the DUBF program, none of our research participants consistently shopped at farmers' markets for the duration of

the study. Four participants shopped at a farmers' market within the first two months of the study and then either stopped using incentive programs, began to get their produce from a MoGro, or attempted to use DUFEB at a participating grocery store. One participant made her first trip to the Rail Yards Market in the fourth month of the study and her second to the Downtown Growers Market on its last day of the season (in early November). When the last interview and kitchen inventory were conducted with her, the last of her DUFEB purchases had been consumed just a few days earlier.

Participants identified a number of reasons for why they did not elect to make farmers' markets a regular food outlet for their produce purchases. Some of these reasons reflect barriers, and some choice or values. While four out of the five participants indicated that they enjoyed the experience of going to the market, all of them also expressed some form of discomfort or disappointment in these places as shopping outlets. One participant said she and her family were going to farmers' markets as "family time" even though they were purchasing less and less at them. Another said that what she liked about the market was that it "had me go out somewhere."

Still, three out of the five identified the high cost of goods (even with DUFEB) as a barrier. Two reported that the crowdedness of the downtown market made them anxious, which discouraged them from wanting to shop there. One remarked on her farmers' market experience saying, "the only thing that bugged me out was my anxiety because there were so many people." This participant also compared the downtown market to her preferred flea markets stating that people at the farmers' market were serious and thus the experience of being there was intimidating. Three spoke about being disappointed in the variety of produce, especially fruit. This was particularly experienced as a problem at the Rail Yards Market: "I didn't like the rail yard. They said they had all kinds of stuff but I went and they only had a little bit of apples." One participant said she didn't like going to the downtown market because of it being outside in the elements, which meant it was usually either too hot or too cold for her to be comfortable. Finally, convenience came up as participants spoke about the challenge of making it to a farmers' market given the limited hours they are open. As one participant remarked, "markets are just one day. So if you work, or if one of the kids has a softball game, if you only have small windows of time, it's hard." Moreover, when not all desired products can be purchased at farmers' markets, they cannot function as one stop shopping outlets. All of these concerns have been identified in the literature on farmers' markets and low-income shoppers as being common disincentives (USDA & Freedman et al.).

Two additional factors may have played into the relatively limited adoption of farmers' markets as go-to food outlets. First, farmers' markets seem to cater to weekly shoppers who can buy fresh food because they intend to use up what they buy more or less within a week. Most of our participants tended to shop monthly or bi-monthly. For some, experiencing a monthly food cycle revolving around SNAP shaped this pattern. Making infrequent large shopping trips was a strategy used to

stretch food budgets, reduce waste, and minimize pressure from family members for ad-hoc purchases. As one participant explained, “I do all my grocery shopping right when I get the food stamps because if I spread it out everyone asks me to bring them something specific. They're like bring me some candy or bring me some chocolate and I can't afford that. So I make one big trip.” Secondly, several participants were confused about how to navigate the market and use DUFB as first or second-time shoppers. This suggests that farmers’ market shopping involves a kind of learning curve that may further deter some potential shoppers.

Perceptions about farmers’ markets and health food groceries may function as a barrier to utilizing them.

The literature suggests that there is often a gap between the perceptions low-income shoppers hold about farmers’ markets and the way many actually experience them (Dimitri et al.). Experience has the potential to make farmers’ markets feel more accessible and welcoming than expected. Nonetheless, our participants’ experiences suggest that perceptions – about cultural or racial alienation, cost, and convenience – may function as a barrier to accessing and utilizing DUFB at farmers’ markets.

One participant spoke about being hesitant to try out the Downtown Growers’ Market because it seemed affluent and white. She did not think it would be a welcoming environment for poor, brown skinned people. Commenting on the nearby presence of a Java Joe’s she said the market looked upscale, which gave her reason to assume the products offered would not be affordable for her. She said, “It’s like for families with money. I am not on that level right now.” Once she had gone to a market this participant said going made her feel like it was not just “full of rich white people.” Still, she did not return to after her first trip saying that even with the DUFB she could find much cheaper produce elsewhere. Similarly reflecting a perception of cultural misalignment, another participant spoke about the Rail Yards Market as being full of “weird hippy stuff.”

In terms of convenience, after one participant shopped at the Rail Yards Market she reported being surprised that cards (both EBT and credit) were accepted. She had thought that only cash could be used at farmers’ markets. Saying that getting cash required an extra stage of planning, she expressed that this had acted as another deterrent to her. While this issue is arguably not as problematic or significant as perceptions of alienation, it represents the extent to which logistical considerations impact SNAP recipients’ shopping habits.

Perceptions also impact shoppers’ interest in health food stores or cooperatives. When prompted to share what they associated with coops, the majority of participants said “expensive.” Three participants expressed having had negative shopping experiences at a coop due to price or confusing labeling.

Further Research and Next Steps

Our study resulted in a number of findings and questions that are beyond the scope of this white paper; they will be explored in further research. Collected data suggest that a number of intersecting factors – including but not limited to structural barriers, household food preferences, and strategic decision-making – determine the impact of DUFB on low-income families. Building on the insight gained from this exploratory study requires investigating these intersections. Further research could include:

- Examining the potential intersections of mental and emotional health with the food access barriers identified in the literature on food insecurity;
- Assessing if there are specific sectors of SNAP recipients poised to benefit the most from the DUFB program;
- Understanding the extent to which the amount of households' SNAP benefits determines their ability to utilize DUFB;
- Gaining insight into the particular considerations and strategies that shape food purchasing and consumption, and how households make decisions around competing priorities;
- Exploring the extent to which cultural and social meanings of food influence food choice and DUFB utilization;
- Assessing the extent to which household preferences and family pressures impact decisions specifically related to fruit and vegetable purchasing;
- Identifying whether there is any correlation between DUFB utilization and knowledge of fresh food preparation as well as preservation practices (including freezing, home canning, and drying);
- Exploring the similarities and differences of utilizing DUFB for first or second time users compared to experienced DUFB shoppers.

If adjustments are made, the data collection instruments used in this study may be useful tools for further research. Refining the photo blog could be done by narrowing its scope such that participants are asked to document specific things over a set amount of time. For example, participants could be asked to document their dinners for one week. One challenge with the photo blog as used in this study is that participants were asked to make weekly posts documenting their food shopping experiences; over the course of the study it became clear that this did not

match participants' shopping patterns as most shopped monthly or bi-monthly. Finally, a more robust coding rubric needs to be developed to extract meaning from these data sets. The kitchen inventory tool could be similarly standardized so that the inventory is conducted at consistent intervals in research participants' food shopping cycle.

One of the most significant decisions to make in advancing this research is determining who should be recruited as participants in new studies. As previously mentioned, the majority of the participants in this study were new to the DUFB program. Our findings may have been different if our participants were seasoned, consistent, DUFB shoppers. The perspectives of both groups are important in enhancing understanding of DUFB' impacts on low-income shoppers. To reach seasoned shoppers, recruitment should be done at farmers' markets or other DUFB outlets.

Discussion and Conclusions

Study participants readily recognize the Double Up program's potential to increase access to fresh food. The value for them is two-fold: it is one means of stretching (doubling) limited resources, and an incentive to specifically purchase more fresh fruits and vegetables. Nonetheless, a number of challenges stand in the way of participants taking full advantage of the potential benefits of the program.

Our findings provide support for NMFMA's interest in expanding the DUFB outreach and subsidy program. Taken together, participants' experiences vis a vis farmers' markets indicate that such food outlets are not necessarily the most convenient or accessible places for them to shop. The particular cost savings offered by DUFB in farmers' markets does not in fact make fruits and vegetables more accessible. They increase the affordability of higher quality, more expensive, fruits and vegetables. When SNAP recipients are in a position of needing to stretch their dollars as much as possible the DUFB incentive at farmers' markets may not be enough to maximize their access to fresh produce.

From a food security standpoint, participant responses point to a potential tension between goals of increasing the purchase and consumption of fresh produce by low-income families and increasing the sales of locally grown produce for New Mexican farmers. If the consumer-related goal of DUFB in New Mexico is to increase the purchase and consumption specifically of locally grown produce, the program is minimizing its potential to address food insecurity. Resolving the potential tension between DUFB and consumer goals could involve programmatic changes, expansion to grocery stores serving low-income families, or identifying a more specific consumer target for DUFB in New Mexico. Our findings suggest that as the program

currently operates its target population are those who have already determined that they would like to increase their consumption of fresh, locally grown, produce and are willing to pay a bit more for it. There is some support for this assessment. For example, in a study on farmers' market incentives Dimitri and colleagues concluded that such incentives are most effective in reaching people who are already interested in healthy foods (Dimitri et al.).

One critical finding of this study is that participants are strategic decision-makers who exercise their own agency in making tough choices to provide for their families. They make careful calculations to negotiate highly constrained budgets, food consumption needs and family preferences. Rather than being victims of poverty, participants are active players responding strategically to their circumstances in the most efficient and effective way available to them. Their insights into how DUFB could be more accessible and convenient for them are shaped by such strategic thinking.

While this study was exploratory and thus not undertaken to provide comprehensive recommendations, participants made several suggestions. The one unanimous request our participants made about the DUFB program was for it to be more widely advertised. They suggested increasing the visibility of DUFB through providing accessible information using visual symbols, signs, and brochures in a variety of places. One participant made these suggestions saying, "If you are going to apply for food stamps or even online, it doesn't say nothing about double up bucks, nothing about the farmers markets. When you apply for any type of benefits, they should advertise. Maybe more little signs too. At the food pantries too - put a big old sign there. That will get somebody's attention. Go to the welfare offices, have flyers." More specifically recommended locations for such advertising were mentioned in the findings section of this paper.

Similarly, some participants suggested providing information explaining the value and costs of farmers' market produce to help new shoppers understand how it works. To address inconveniences several experienced in accessing farmers' markets, participants suggested extending the hours of markets (specifically the Downtown Growers Market) and considering how crowdedness could be addressed. The participant living in Rio Rancho wanted to see a brochure that included farmers' market options closer to her home. In terms of expansion, all participants' would like to see DUFB available at "regular grocery stores." Several spoke about the extent to which they and others they know like to be able to do one stop shopping. The convenience of being able to buy all needed goods in one store was in fact a significant factor in several participants' choice of food outlets. Specifically, participants hope to see DUFB expand to Smiths first, and then Walmart or neighborhood stores and bodegas.

The findings presented in this white paper are evidence that a number of barriers continue to limit participants' access to fresh foods and indicate that DUFB efficacy in reducing these barriers could be improved. However, they do not negate the contribution the DUFB program makes to alleviating food insecurity in Bernalillo

County. Rather, they point toward opportunities for programmatic changes as well as broader food system policy engagement and advocacy.



References

Andreatta, Susan, Misty Rhyne, and Nicole Dery. "Lessons learned from advocating CSAs for low-income and food insecure households." *Southern Rural Sociology* 23.1 (2008): 116.

Antin, Tamar MJ, and Geoffrey Hunt. "Food choice as a multidimensional experience. A qualitative study with young African American women." *Appetite* 58.3 (2012): 856-863.

"Bernalillo County, New Mexico: Food Access Statistics." Food-access.healthgrove.com, <http://food-access.healthgrove.com/1/5794/Bernalillo-County-New-Mexico>. Accessed 27 December 2016.

Dimitri, Carolyn, et al. "Enhancing food security of low-income consumers: An investigation of financial incentives for use at farmers markets." *Food Policy* 52 (2015): 64-70.

Fair Food Network. *Double Up Food Bucks*. <http://www.doubleupfoodbucks.org/>. Accessed 27 December 2016.

Fair Food Network. *Double Up New Mexico*. <http://www.doubleupnm.org/>. Accessed 27 December 2016.

Fair Food Network. "Double Up Food Bucks: A Five-Year Success Story." (2013).

Freedman, Darcy A., et al. "Systematic Review of Factors Influencing Farmers' Market Use Overall and among Low-Income Populations." *Journal of the Academy of Nutrition and Dietetics* (2016).

"Food Insecurity in Bernalillo County." Feedingamerica.org, <http://map.feedingamerica.org/county/2014/overall/new-mexico/county/bernalillo>. Accessed 26 December 2016.

Hesterman, Oran B. "Double Up Food Bucks: How Advocates Can Help Grow a Healthy, Sustainable Food System." *Clearinghouse Rev.* 46 (2012): 276.

Hough, G., and M. Sosa. "Food choice in low income populations—A review." *Food Quality and Preference* 40 (2015): 334-342.

Karakus, Mustafa, et al. "Nutrition Assistance in Farmers Markets: Understanding the Shopping Patterns of SNAP Participants." *Prepared by Westat for the U.S Department of Agriculture, Food and Nutrition Service* (2014).

Kaufman, Leslie, and Adam Karpati. "Understanding the sociocultural roots of childhood obesity: food practices among Latino families of Bushwick, Brooklyn." *Social Science & Medicine* 64.11 (2007): 2177-2188.

United States Census Bureau; *Bernalillo County, New Mexico 2015 Population Estimate (as of July 1, 2015)*; 2015 Population Estimates.

United States Census Bureau; *Public Assistance Income or Food Stamps/SNAP in the Past 12 Months for Households; 2011-2015 American Community Survey 5-year Estimates*; table B19058.

Wright, James D., et al. "Food Deserts: What is the Problem? What is the Solution?." *Society* 53.2 (2016): 171-181.

Appendix: Data Collection Instruments

I: First Meeting/Interview Instrument

Intro Script

**Participant has read and signed informed consent form before this conversation happens.*

Thank you for participating in this study, and meeting with me today. My name is ... (research team member introduces herself). I'd like to do three things with you today:

- 1) Go over how to do the photo blog and answer any more questions you might have about this research project.
- 2) Do a short interview with you
- 3) Conduct a kitchen inventory (this involves us going over what you have in your kitchen)
- 4) Confirm the next time we will meet with you

1) Photo Blog Review

Part of this research project will involve a participant-created photo blog. Through this, we are looking to better understand how families interact with food. The idea is for people participating in this study to post pictures and writing (captions or stand alone text) of food experiences. This could look like posts about cooking, a homemade meal, take-out, restaurant food, gardens, harvesting, eating ice cream (you name it)! We want to make sure it is easy for you to make these posts and are therefore going to use a platform that most people already use: Facebook. We will have a private group so your posts will only be visible to our research team and the other participants in the study (you will of course be able to see their posts too).

Show a demo of the Facebook group and do a post with participant.

2) Interview Questions

- What is one of your favorite meals?
- If you do, what do you like to cook?
- What did you grow up eating?
- Is there any food you don't like or don't eat?
- Tell me a bit about how you think about food. (Probe: Do you love it, what matters to you – taste, healthiness, is it a big part of your family life, not very important ...?)
- Where do you get your food (probe for all the places)?
- Is it easy or challenging to get the food you like? Tell me more ...

- What's been your experience with finding and being able to buy fresh food/produce?
- What's your experience with SNAP/EBT been like so far? (Probe: what's been good, what's been challenging?)
- What about your experience with the double up bucks program? (Probe: What, if anything, have you found to be difficult using DUFEB? What has been beneficial?)
- How many DUFEB outlets have you shopped at?

II: Second Interview Instrument

- What has this last month (since our last interview) been like for you – what has happened, good and bad?
- Has anything happened in the last month that has changed or influenced your relationship to food?
- Anything been stressful in relation to food? Been helpful, made things easier?
- Has anything changed with your SNAP?
- Have you had any new food or food shopping experiences?
- Have you tried any kind of new fruit or vegetable? If yes, where did you get it, did you use DUFEB, will you get it again?

DUFEB

- In what ways and how many times have you used DUFEB since our last interview?
- What were those experiences like? (esp. what was it like to go to the farmers market?)
- How many DUFEB outlets have you shopped at? Which is your favorite? For what reasons?
- How easy is it to use your SNAP card at those DUFEB outlets? Are there differences in SNAP usage at different outlets that you've visited? In what ways?
- What types of things do you find difficult using the DUFEB program?
- What types of things do you find beneficial using the DUFEB program?
- Do you feel comfortable using the DUFEB program?
- From your experiences so far, is there anything you wish were different about how the DUFEB program works?

Food Outlets/Shopping Patterns

- **Exercise 1:** Tell me all the places you buy groceries/list (write these down). Add farmers market, CSA, co-op to that list. Then: three adjectives that come to mind for you when you think of each of these places.

- What makes each place easier or more difficult to shop at; what makes each more or less intimidating or welcoming
- When and how do you shop. Amount of time you have, how much you plan around it, how consistent or different your shopping is. Does it vary based on time of month? i.e. do you shop differently at end vs. beginning of month?
- What, if anything, do you have to plan around to go shopping (i.e. transportation, childcare, etc)?
- Food choice when shopping
 - o What are you thinking about when you go shopping? What are you looking for in terms of food (price, health value, taste, etc) – what are your priorities?
 - o What do you always buy, what do you sometimes buy?

Food Choice

- What does “affordable” mean to you?
- What does “healthy” mean to you? How have you learned what that means, from whom or from where?
- Where are you able to find foods that are healthy (in the way you have described)?
- In your opinion, how are health and food related (in what ways does food impact health, in what ways is health not related to food – what other factors impact your health)?
- What things help you access healthy foods?
- What things stand in your way/make it challenging to access these foods?

- There is this concept of food culture – which basically refers to how a certain group (may be ethnic or family or religion) defines what is tasty, healthy, acceptable to eat, how foods should be prepared. What kind of food culture(s) have influenced your relationship to food? How would you describe that food culture?
- What values do you have when it comes to food – what matters to you in terms of your food choice, preparation, and general relationship?
- **Exercise 2:** Please rank the following things in terms of how much they matter to you/impact your food choice. 1 = most significant, 7 = least significant
 - o Options: familiarity, taste, health, body image, what my family likes, cost, convenience, other (please write in)

*How’s it going with the blog? Any questions? Then, talk about next steps and dates.

III: Third Interview Instrument

- How many times have you used DUFEB since our last interview? What have those experiences been like?
 - Have you had any new food experience (eaten or cooked something new)?
 - Be real with me. Has using the DUFEB impacted your diet or food choices? In what ways? Why or why not?
 - Let's talk a bit about how the DUFEB could be even better.
 - o How would you recommend the DUFEB expand? What places would you like to see it in? What is important for it to be easy and accessible for you?
 - o What would make shopping at Farmer's Markets be easy for you and something you would do regularly?
 - o Are there foods you are willing to pay a little more for? Why or why not?
 - Last interview we talked a bit about what healthy means to you. I want to return to that and ask you to tell me more about where you get information and who or what has influenced your beliefs about food and health.
 - o How much do friends and family influence how you think about health?
 - o What about advertising?
 - o Doctors or medical stuff?
 - o Other places or people?
 - o How do you know how to prepare "healthy foods?" Do you use recipes? If so, where do you get them?
 - o Would you eat more vegetables if you could? If so, what is standing in your way
 - How do you find out about deals and know where to get cheap food?
 - What food support systems do you have? Does this change by season at all?
- This may be too personal, and you don't have to answer it ... part of our research is about the impact of food insecurity or stress on peoples' lives. If you feel comfortable, do you want to tell me a bit about how food stress – like that it is expensive and you have a tight budget – impacts your emotional state and life?

IV: Kitchen Inventory

Food	Units (#)	Accessibility (1-3)	DUFEB Purchase? (Y/N)
FRUIT, canned			
FRUIT, Frozen			

Food	Units (#)	Accessibility (1-3)	DUFB Purchase? (Y/N)
FRUIT, fresh (list)			
VEGETABLES, canned			
VEGETABLES, frozen			
VEGETABLES, fresh (list)			
BEANS			
Dried			
Canned			
BEVERAGES			
Soda			

Food	Units (#)	Accessibility (1-3)	DUFB Purchase? (Y/N)
Juice			
BREAD			
Whole Grain/Wheat			
White			
CEREALS/GRAINS			
Processed (breakfast)			
Whole			
DAIRY			
Cheese			
Milk/other dairy beverages			
Yogurt, Plain			
Yogurt, Fruit			
Other Dairy			
DESSERTS/SWEETS			
MEATS			
Fresh (Beef, chicken, pork)			
Fresh Fish			
Canned			
Processed meat/fish			
MICROWAVE/QUICK FOOD			
NUTS			
Butters			
Fresh/dried			
SNACKS (chips, etc.)			