Summer 2018

The Impact of Local Advocates: An Evaluation of the Community Food Advocate Pilot Project for Double Up Food Bucks Colorado

Eva Coringrato
Eva.Coringrato@Colorado.EDU

Follow this and additional works at: https://scholar.colorado.edu/honr_theses
Part of the Food Studies Commons, and the Health Policy Commons

Recommended Citation
https://scholar.colorado.edu/honr_theses/1750

This Thesis is brought to you for free and open access by Honors Program at CU Scholar. It has been accepted for inclusion in Undergraduate Honors Theses by an authorized administrator of CU Scholar. For more information, please contact cuscholaradmin@colorado.edu.
The Impact of Local Advocates: An Evaluation of the Community Food Advocate Pilot Project for Double Up Food Bucks Colorado

By

Eva Coringrato

University of Colorado Boulder

A thesis submitted to the University of Colorado at Boulder in partial fulfillment of the requirements to receive Honors designation in Environmental Studies

May 20, 2018

Thesis Advisors

Dr. Jill Litt, Environmental Studies, Committee Chair

Dr. Veronica House, Program for Writing and Rhetoric

Dale Miller, Environmental Studies
Abstract

Double Up Food Bucks (DUFB) is an incentive program that encourages Supplemental Nutrition Assistance Program (SNAP) recipients to consume more fruits and vegetables by matching SNAP benefits spent on fruits and vegetables up to a certain amount of money to be used on fresh food sold at DUFB markets. LiveWell Colorado, the non-profit organization that oversees DUFB in Colorado, developed a Community Food Advocate (CFA) project that recruited local advocates to conduct outreach in their communities, with the goal of increasing participation in DUFB. Exit interviews were conducted with all advocates at the conclusion of the 2017 pilot season of the CFA project. Results of the exit interviews (n=8) suggest that the pilot season for the CFA project was largely a success, as advocates perceived positive outcomes in their outreach activities, partnered with community organizations and intuitions to augment outreach capacity, and identified barriers to participation in DUFB that can be addressed in subsequent iteration of the CFA project. Our analysis indicates that advocates can maximize participation in DUFB by further bridging the gap between the policy environment and individual process of decision making and behavior change and leveraging institutional networks to further extend the reach of DUFB into Colorado communities.
Table of Contents

Abstract .............................................................................................................................................. 2
Acknowledgements .......................................................................................................................... 4
Preface ................................................................................................................................................ 5
Introduction ....................................................................................................................................... 6
Background ........................................................................................................................................ 7
  Supplemental Nutrition Assistance Program .............................................................................. 8
  Matching Programs and Incentives ......................................................................................... 10
  Farmers’ Markets .................................................................................................................. 12
  Double Up Food Bucks ......................................................................................................... 13
  Advocate Programs ............................................................................................................... 14
  Theoretical Approaches to Behavior Change ..................................................................... 15
  Evaluation Themes ............................................................................................................... 19
Research Questions ..................................................................................................................... 25
Methods .......................................................................................................................................... 25
Results ............................................................................................................................................ 30
Discussion ....................................................................................................................................... 42
Conclusion ......................................................................................................................................... 56
Bibliography ..................................................................................................................................... 57
Appendix .......................................................................................................................................... 65
Acknowledgements

I wish to thank my committee members for their guidance and support through this process: to Dr. Jill Litt, for introducing me to this project and the world of academic research; to Dale Miller, for your unwavering support of undergraduates and your conviction that I could finish this project; and to Dr. Veronica House for your kindness and willingness to jump into this project. I wish to thank LiveWell for welcoming me into their community and for their willingness to allow a student to take on this project. Importantly, I wish to thank the advocates who generously gave their time and honest feedback. I also wish to thank my parents, Lyn Canter and Vince Coringrato, for making my college education possible.
Preface

This thesis grew out of my involvement in another project spearheaded by Dr. Jill Litt, the Community Activation for Prevention Study (CAPS). While this project focused on the effects of community gardening on fruit and vegetable intake, stress levels and anxiety, and physical activity, it was an introduction to the field of environmental health, by way of food systems. I had always held strong personal conviction for the importance of a healthy diet and lifestyle; however, for most of my academic career, I did not integrate this personal interest into my studies. This changed when I became involved in Dr. Litt’s research in the Summer of 2017, when I began working as a research assistant on CAPS. The CAPS project exposed me to the wide world of health and food systems research. I quickly realized the complexity in addressing community and individual nutrition and in trying to resolve the shortcomings of modern food systems. Rather than feeling overwhelmed or discouraged by the seeming enormity and complexity of these problems, I was inspired to learn more about these systems and attempt to improve health outcomes for real people. One aspect of the CAPS research that I found particularly interesting was the social connections that often occur from involvement in community gardens. I became increasingly interested in how these community level interventions can not only improve fruit and vegetable consumption, physical activity, mental health, and overall health outcomes, but also how these interventions and community resources can improve social cohesion and connection between groups that may not otherwise occur. When I expressed this interest to Dr. Litt, she informed me about Double Up Food Bucks and LiveWell’s Community Food Advocate Project. She thought that this project would offer a great context to explore the intersection of health outcomes research, community-based interventions, and the role of social connections in shaping health status.
Introduction

Healthy and adequate food consumption is a point of concern for every person. There are many challenges that prevent people from accessing and consuming healthy foods. These barriers can include knowledge, access, cost, and availability. A variety of intervention strategies have been developed to address one or many of these barriers, in hopes of improving food access, food security, and nutritious food consumption for many populations. However, countless interventions have shown that there is no silver bullet for addressing the adequate consumption of healthy foods, particularly in low-income and minority communities. Nonetheless, a variety of intervention designs, aimed at different goals and distinct populations, have been successful in improving both access to healthy food and quality food consumption. A central issue in food security and nutrition, particularly in the United States, has been addressing access to and quality of nutrition of those receiving government benefits and subsidies for food. Several incentive programs have been developed to address food access and consumption for those who use food assistance programs, with varying levels of efficacy.

This thesis focuses on the implementation of one such intervention, which aimed to increase the fruit and vegetable consumption among Supplemental Nutrition Assistance Program (SNAP) recipients. The Double Up Food Bucks (DUFB) program allows SNAP recipients to double their money that can be spent on fruits and vegetables at farmers’ markets. As with any incentive or benefit program, it is only effective if those eligible participate in the program. Thus, outreach and advocacy about these incentive programs are important for reaching target populations and making them aware of the program. In 2017, LiveWell Colorado, a non-profit organization that seeks to improve access to healthy food, consumption of healthy food, and sustainable food systems deployed an advocate team to conduct outreach about DUFB. This
team of advocates, as part of the Community Food Advocate (CFA) project, conducted outreach in the Denver Metro Area and Southwestern Colorado, with the goal of increasing participation in DUFB. In an effort to understand the efficacy of the CFA program, this thesis seeks to understand the role that advocates play in increasing DUFB participation. In addition, this thesis aims to capture how advocates increase participation in DUFB. Finally, through the evaluation process and analysis of the findings, this thesis will provide recommendations for how the CFA Program can be more effective at increasing participation in DUFB.

Background

Over the last few decades, there has been increasing concern for the declining quality of Americans’ diets. This decline in consumption of high-nutrient foods has been observed in food choice and preference and in the prevalence and popularization of fast food and other convenient, affordable, and often quite unhealthy food options (French et al., 2001; Larson et al., 2009). This decline in the quality of diet has spurred an overwhelming health crisis where the majority of Americans are consuming too many calories, do not get enough physical activity, and under-consume nutritious foods like fruits and vegetables (French et al., 2001; Story et al., 2008). These lifestyle changes are negatively impacting health, where the prevalence of obesity, heart disease, cancers, and diabetes are increasing across the population (French et al., 2001; Story et al., 2008). Many of these diseases and illnesses can be moderated or even completely eliminated through proper diet and exercise (French et al., 2001). However, considerable research has shown that it is incredibly challenging to change behaviors that are deeply ingrained in individuals, communities, markets, and policies (McLeroy et al., 1988). In this way, changing eating behavior is very challenging as it attempts to alter a habit that has been established through daily repetition over a lifetime. Thus, much research has focused on how to change
eating behavior and how to reduce or eliminate many of the barriers people face to consuming a healthy diet (French et al. 2001; Zachary et al., 2013).

**Supplemental Nutrition Assistance Program**

The Supplemental Nutrition Assistance Program (SNAP), formerly known as Food Stamps, is the central federal program in the United States aimed at improving food security and decreasing hunger in low-income populations. The original Food Stamp Program began in 1939. It sought to improve the diets of low-income Americans, while also offering economic opportunity to farmers (Blondin, 2014). The original program, and the trajectory of the program through the 1990s, was focused on providing low-income individuals and families with enough food, as the main nutrition problem for low-income people during this period was a lack of food (Blondin, 2014). Consequently, the program sought to provide adequate amounts of food to Americans and to reduce hunger. Currently, households with an income of 130 percent of the Federal poverty guidelines are eligible for SNAP, although most (88 percent) households that participate in SNAP fall below the poverty line (Ver Ploeg & Ralston, 2008). In 2017, 42,205,000 Americans, approximately 14 percent of the population, received SNAP benefits (USDA Food and Nutrition Service, 2018). In 2017, the total cost of implementing SNAP, including benefits and administrative costs, amounted to 68 billion US dollars (USDA Food and Nutrition Service, 2018). The average SNAP benefit per recipient in 2017 was 125.80 US dollars per month (USDA Food and Nutrition Service, 2018).

The focus of food subsidy programs, such as SNAP, has changed as the dietary concerns for low-income Americans have changed in recent decades. Specifically, the goal of this program has shifted from providing an adequate amount of food to improving nutrition and access to health-promoting foods for low-income Americans (Blondin, 2014; Guthrie et al.,
This shift reflects a change in the primary nutrition-related concerns for low-income Americans. Modern nutrition-related health concerns for low-income Americans, and for many Americans generally, now focus on preventing or reducing obesity and associated diseases such as heart disease and diabetes, as well as promoting maintenance of a healthy weight and improving fruit and vegetable consumption (Blondin, 2014; Guthrie et al., 2007). Thus, the goal of SNAP has changed from providing adequate food to “provide[ing] for improved levels of nutrition among low-income Americans” (Blondin, 2014; Pomeranz & Chriqui, 2015). SNAP now seeks to implement this goal across the recipient population (Guthrie et al., 2007; USDA Food and Nutrition Service, 2007).

Americans enrolled in SNAP receive a monthly deposit, called a benefit, on to an electronic benefit transfer card, which functions like a debit card, that allows them to purchase “any food or food product intended for home consumption” at designated stores and markets (Blondin, 2014; Pomeranz & Chriqui, 2015). SNAP benefits cannot be used to purchase tobacco, alcohol, vitamins, supplements, or non-food household items (Blondin, 2014; Pomeranz & Chriqui, 2015). The United States Department of Agriculture (USDA), the department of the federal government that oversees and funds SNAP, has largely pursued two avenues to implementing this new SNAP goal of reducing obesity and its related diseases among SNAP recipients. Namely, there have been many proposed initiatives to restrict the items that can be purchased with SNAP benefits; other initiatives propose providing incentives for SNAP participants to use their benefit to purchase more health-promoting foods (Blondin, 2014; Guthrie et al. 2007; Long et al., 2014; Pomeranz & Chriqui, 2015). Some of the proposed initiatives aimed at restricting allowable SNAP purchases claim that the government should not be “funding” unhealthy diets that eventually contribute to chronic disease and increased
healthcare costs, which are ultimately subsidized by general taxpayers (Blondin, 2014). Other critics note that some research has suggested that SNAP participants have lower diet quality than SNAP eligible people not enrolled in the program (Pomeranz & Chriqui, 2015), suggesting that there may be something about SNAP that specifically leads to poorer diets among participants; however, BMI differences between SNAP participants and non-participants vary significantly between demographic groups, between long and short-term participation in the program, and are typically not significantly different from income-eligible non-participants (Ver Ploeg & Ralston, 2008). Proponents of greater restrictions in SNAP-eligible purchases, such as a pilot project proposed by the City of New York, recommend restricting SNAP purchases of sugar-sweetened beverages (SSBs), including sodas, as these are thought to have little nutritional benefit and contribute to weight gain (Blondin, 2014). Other programs have proposed restricting SNAP purchases of candy and fried potato chips (Blondin, 2014). Most of these proposed initiatives have been struck down by the USDA, claiming that these kinds of restrictions would be costly to implement, would produce confusion among SNAP recipients, and would unfairly target the diets of low-income Americans (Blondin, 2014; Pomeranz & Chriqui, 2015; USDA Food and Nutrition Service; 2007). Instead, the USDA has been more supportive of programs that incentivize SNAP recipients to purchase more health-promoting foods with their benefit (Blondin, 2014).

**Matching Programs and Incentives**

The USDA has come to favor programs that incentivize healthy food purchases for SNAP recipients (USDA Food and Nutrition Service, 2007). These incentive programs are seen as generally more favorable because they do not restrict SNAP purchases and do not increase administrative costs, yet they still address the revised goals of SNAP in that incentives have the
potential to improve nutrition for low-income Americans (Blondin, 2014; Guthrie et al., 2007; USDA Food and Nutrition Service, 2007). The task of creating these incentive programs have largely been left to state and local governments and non-profit organizations (Blondin, 2014). Many of these actors have focused their efforts on farmers’ markets, as a White House task force established in 2010 to reduce childhood obesity (children represented 44 of SNAP beneficiaries in 2015, USDA Food and Nutrition Service, 2016) recommended farmers’ markets as a way to encourage increased fruit and vegetable consumption (Blondin, 2014). In 2012, 82 percent of SNAP benefits were redeemed in supermarkets and large grocery stores, while 18 percent were redeemed in small grocery stores, convenience stores, and farmers’ markets (Plaus, 2013).

Several other federal programs use matching and incentives to increase fruit and vegetable consumption within low-income populations. Specifically, the Women Infant and Children’s Farmers’ Market Nutrition Program (WIC FMNP) provides WIC participants with an annual stipend, which can be used to purchase unprepared fruits and vegetables at authorized farmers markets (Markowitz, 2010). Similarly, the Senior Farmers’ Market Nutrition Program provides low-income (185 percent of the federal poverty level) seniors with vouchers that can be used at authorized farmers’ markets to purchase fruits and vegetables (Markowitz, 2010).

Experimental research also suggests that incentive programs can increase fruit and vegetable consumption at farmers’ markets. A farmers’ market intervention conducted by Bowling et al. (2016) employed financial incentives to encourage increased fruit and vegetable consumption among low income populations. SNAP recipients participating in the study had access to additional funds via 40% matched funds that can only be used to purchase fruits and vegetables at the farmers’ market. In addition, participants received $20 of “bonus” cash for fruits and vegetables at the market, up to $120 for every three markets attended over the study
period. Bowling et al. (2016) found an increased amount of fruit and vegetable consumption among participants and decreased consumption of soda. Analysis of this study revealed that participants used the financial incentives included in the study as a supplement to finances available from SNAP or WIC (Bowling et al., 2016). This study also showed that participants did not spend an additional proportion SNAP or WIC finances on fruits and vegetables; however, most participants reported an increased fruit and vegetable consumption in exit surveys, suggesting that the requirement that the funds be spent on fruits and vegetables influenced participants’ purchasing decisions (Bowling et al., 2016). This finding suggests that the additional financial resources provided to participants was used to increase consumption of fruits and vegetables.

**Farmers’ Markets**

Individuals who shop at farmers’ markets have been shown to have better fruit and vegetable consumption compared to other shoppers (Savoie-Roskos et al., 2016). Particularly, low-income individuals who shop at farmers’ markets have been shown to have better fruit and vegetable consumption compared to low-income individuals who rely on other kinds of markets (Savoie-Roskos et al., 2016). Given this, many interventions have begun to focus on farmers’ markets as a possible context for improving food security status and fruit and vegetable consumption. However, many SNAP recipients remain unaware that their benefits are redeemable at many farmers markets. A recent study revealed that 73 percent of SNAP recipients in the study sample were not aware that they could use their SNAP benefits at farmers’ markets (Skizim et al., 2017). Furthermore, 63 percent of low-income study subjects had never attended a farmers’ market, compared to 27 percent of middle or high-income study subjects (Skizim et al., 2017).
Several studies have suggested that one of the central barriers to SNAP usage in farmers’ markets is the perception that these markets are unwelcoming to SNAP recipients (Skizim et al., 2017). Specifically, this research revealed that SNAP recipients conceived of farmers’ markets as not accepting benefits, having limited food variety, having limited transportation access to markets, and having a lack of racial and ethnic diversity. The authors suggest that these perceptions and beliefs may partially explain the low level of participation of SNAP recipients in farmers’ markets (Skizim et al., 2017).

**Double Up Food Bucks**

Many state and federal programs exist to combat food insecurity for low-income and other vulnerable populations; however, these programs are not always accessible or known to the very populations who could most benefit from these services. LiveWell, a non-profit organization based in Colorado, aims to decrease obesity rates and promote healthy eating habits through environmental and policy change at the state and local levels. In addressing hunger and food insecurity, it received funding from the USDA to launch the Double Up Food Bucks Colorado (DUFB) program as a way to incentivize and enable low-income Supplemental Nutrition Assistance Program (SNAP) customers to make an affordable food choice a healthy choice, as well. Specifically, the DUFB program increases access to fresh and local sources of fruits and vegetables through financial incentives. DUFB accomplishes this by matching every dollar in benefits that a SNAP recipient spends in an eligible farmers’ market, up to 20 dollars per market visit. For example, if a SNAP recipient spends 15 dollars in SNAP benefits at an eligible market, DUFB will match each dollar, effectively giving that SNAP recipient an additional 15 dollars to use at the farmers’ market, totaling 30 dollars per shopping experience. DUFB is restrictive in that matched dollars can only be spent on Colorado-grown fruits and
vegetables. In this way, DUFB has three major goals: increase participation in DUFB, improve food economies for Colorado farmers, and increase partners’ professional skills.

To increase the effectiveness of the incentive program, LiveWell implemented a Community Food Advocate (CFA) project to increase the reach of DUFB. LiveWell recruited advocates to conduct outreach in their communities (n=6) and regional coordinators (n=2) to liaise between advocates and LiveWell staff and providing programmatic support to the advocates. The coordinators were based in the Denver Metro Area and Southwestern Colorado, respectively. The project began its pilot season during the 2017 market season. LiveWell identified two short-term goals that would be used to evaluate the efficacy of the CFA project. The first goal was to increase participation in DUFB in each of the communities in which advocates worked in the 2017 market season. The second goal was to increase advocates’ core competency skills, including communication, interpersonal advocacy, service coordination, organization, capacity building, and teaching.

**Advocate Programs**

Community advocates are individuals tasked with bridging the gap between health programs and resources and the people these programs and resources intend to serve (Rodney et al., 1998). Typically, these advocates are trusted and respected community leaders, who often share language, socioeconomic status, and similar life experiences with the community (Ingram et al., 2008; Rodney et al., 1998). Community advocates have historically been mobilized to improve access to health resources, to improve collaboration between the community and health care programs and providers, and to increase the power and agency of communities in their health (Ingram et al., 2008; Rodney et al., 1998). These programs have often proven to be successful, and the work of advocates is often viewed positively by the target population,
particularly when advocates are well trained by health care entities and when they possess strong leadership skills (Rodney et al., 1998). A recent integrative literature review suggests that advocate programs are particularly effective for health interventions and prevention programs aimed at increasing access to health care services, improving community health status, and encouraging behavior change (Swider, 2002).

**Theoretical Approaches to Behavior Change**

Most interventions aimed at improving health behaviors rely on some kind of theoretical underpinning. As most health-focused interventions seek to instigate behavior change on the individual or community level, understanding theoretical models of behavior change is critical both to the development of these intervention designs and to the eventual outcomes of the intervention. Two widely-referenced theories of behavior change, the ecological framework and the transtheoretical model, are described below.

*Ecological Framework*

Many traditional approaches to intervention design base their programs on the goal of producing individual behavioral change. Many of these approaches frame the individual behavior as an explicit, conscious choice on the part to the individual. Thus, the fundamental assumption in this approach is that an individual is solely responsible for all of their behaviors and health choices, and that, similarly, the responsibility of changing behavior lies completely with that individual. Several scholars have challenged this understanding; instead, they propose that many interrelated layers of the environmental context influence behavior, otherwise known as the ecological framework of behavior change (French et al., 2001; McLeary et al., 1998; Story et al., 2008). In the context of eating behavior, there are likely many influences across multiple
contexts that influence a person’s eating behavior (Story et al., 2008); thus, an individual’s decision does not exist in a vacuum, but instead exists within a wider contextual landscape.

Scholars advocating for the ecological framework claim that there are five layers of environmental context that influence individual behavior: intrapersonal, interpersonal, institutional or organizational, community, and public policy (McLeroy et al., 1998; Story et al., 2008). The intrapersonal context includes a person’s private thoughts and ideas, in this case, the internal dialogue and belief systems related to health behaviors, as well as their motivations, self-efficacy, and behavioral capability (Story et al., 2008). The interpersonal describes relationships and connections between individuals, and how these links act as points of transfer for ideas, beliefs, and knowledge (McLeroy et al., 1998; Story et al., 2008). The institutional or organizational context describes formal environments that include many people, tied by a common goal, objective, trade, or belief. Institutions and organizations can include companies, schools, religious institutions, non-profit groups, and volunteer groups. The highest level of the ecological model is the policy context. Local, regional, state, and federal policies influence communities, institutions, and individuals through establishing regulations, allocating resources, and providing incentives and restrictions (McLeroy et al., 1998; Story et al., 2008). All of these paths of policy action can influence individual behavior, as is often the case with restriction and incentives, or through intermediaries such as institutions and communities, as is often the case with regulation and allocation of resources. Thus, individual behaviors can, and should, be considered within the greater policy context, and interventions that seek to change individual behavior may consider interventions that address health policies.

*Transtheoretical Model of Behavior Change*
The transtheoretical model of behavior change operates more on the individual level, whereas the social ecological systems model situates an individual within a greater context. The transtheoretical model describes behavior change as it occurs through time (Prochaska & Velicer, 1997; Schwarzer, 2008). The model divides the process of behavior change into six steps: precontemplation, contemplation, preparation, action, maintenance, and termination (Marshall & Biddle, 2001; Prochaska & Velicer, 1997; Schwarzer, 2008). Precontemplation describes the stage at which an individual does not intend to take any action towards behavior change; the individual may be aware that the behavior can be changed, but is not actively planning to do so (Marshall & Biddle, 2001; Prochaska & Velicer, 1997). In the contemplation stage, an individual moves from inaction to consideration of possible action; that person will then typically consider the pros and cons of a certain behavior change (Marshall & Biddle, 2001; Prochaska & Velicer, 1997). Individuals in the preparation stage will formulate a plan of action for behavior change, intend to execute the plan in the near future, and have likely educated themselves on ways to accomplish the desired behavior change (Marshall & Biddle, 2001; Prochaska & Velicer, 1997). In the action stage, individuals will take specific steps to change their behavior (Marshall & Biddle, 2001; Prochaska & Velicer, 1997). In the maintenance stage, individuals engage in maintenance behavior; at this point, the described behavioral outcome is largely achieved, but individuals will act to guard against relapse (Marshall & Biddle, 2001; Prochaska & Velicer, 1997). Finally, in the termination stage, individuals have no desire or temptation to return to their previous behavioral patterns and feel confident in their ability to maintain the new behavior indefinitely (Marshall & Biddle, 2001; Prochaska & Velicer, 1997).

The model suggests that behavior change can occur through several processes including: consciousness raising, dramatic relief, self-reevaluation, environmental reevaluation, self-
liberation, social liberation, counterconditioning, stimulus control, contingency management, and helping relationships (Marshall, 2001; Prochaska & Velicer, 1997; Schwarzer, 2008). The processes most relevant in the context of changing shopping behavior include: consciousness raising, where individuals become aware or receive education about a behavior; self-liberation, where individuals believe in their one capacity to effect behavior change; social liberation, where social opportunities, policy change, or advocacy increase in the individuals’ environment; counterconditioning, where one behavior can be substituted for another; and helping relationships, where supportive relationships can encourage the desired behavior change (Marshall & Biddle, 2001; Prochaska & Velicer, 1997; Schwarzer, 2008).

The transtheoretical model of behavior change is relevant in understanding how the CFA program will improve the effectiveness of the DUFB program. While DUFB is designed to offer participants incentives that can help them increase their fruit and vegetable consumption, there still exists the challenge of behavior change, beginning with one’s desire or ability to attend farmers’ markets. SNAP benefit redemption data suggest that the majority of SNAP recipients do not shop at farmers’ markets. In 2012, only 18 percent of SNAP benefits were redeemed in small stores, convenience stores, and farmers’ markets (Plaus, 2013), suggesting that most SNAP participants do not frequent farmers’ markets. Thus, while DUFB offers generous and enticing incentives, potential DUFB participants must clear the hurdle of knowing about the markets and feeling confident about attending the market. Here in lies the work of the CFAs to engage, educate, encourage potential customers to enroll in the DUFB program and subsequently purchase and consume produce from these markets.
Evaluation Themes

In evaluating the effectiveness and impact of the DUFB Colorado Advocate Program, we used theory to inform the development of our questionnaire (for copies of the interview instruments, see the Appendix). Specifically, the concepts of community readiness, meaning making, and institutional strengthening incorporated into the Advocate interviews are described below.

Community Readiness

Community readiness is a concept that evaluates the readiness, or the level of preparedness and receptivity in a community to tackling a problem (Donnermeyer et al., 1997; Edwards et al., 2000; Oetting et al., 2001). Edwards et al. (2000) offers a simplistic and useful definition of community, where “a community is where residents experience their society and culture.” In the context of DUFB, this definition of community can be based on geographical or spatial area, ethnicity, language, socioeconomic status, or many other factors. The model of community readiness is typically used as an assessment tool for policy designers and implementers or community organizations to better understand the interface and dynamic between a program or intervention and the community it intends to serve (Oetting et al., 2001). The rationale behind community readiness is that a community must be ready and willing to adopt a new program, lest an otherwise well-designed and effective intervention or prevention program be ultimately unsuccessful, not for the fault of the program, but for a miss-match the current state of the community (Donnermeyer et al., 1997; Edwards et al., 2000). Consequently, understanding and assessing the readiness of a community and the ways in which a program may interact with community dynamics is important for program implementation and ultimately for the success of the program. The model of community readiness includes nine stages: tolerance,
denial, vague awareness, preplanning, preparation, initiation, institutionalization, confirmations/expansion, and professionalization (Donnermeyer et al., 1997; Edwards et al., 2000; Oetting et al., 2001).

**Table 1:** The nine stages of community readiness, as defined in Oetting et al. (2001).

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No awareness</td>
<td>This is the normal state of affairs in the community. There is no concern about the issue.</td>
</tr>
<tr>
<td>Denial/resistance</td>
<td>Community members believe there is no problem in the community.</td>
</tr>
<tr>
<td>Vague awareness</td>
<td>There are small levels or inclinations of a problem in the community among community members.</td>
</tr>
<tr>
<td>Preplanning</td>
<td>Community members realize they can act to address the problem.</td>
</tr>
<tr>
<td>Preparation</td>
<td>First steps are made to address the problem within the community.</td>
</tr>
<tr>
<td>Initiation</td>
<td>A program is implemented to address the problem within the community.</td>
</tr>
<tr>
<td>Stabilization</td>
<td>Community members begin to take responsibility for program implementation.</td>
</tr>
<tr>
<td>Confirmation/expansion</td>
<td>The program is evaluated, altered if necessary, and potential expanded.</td>
</tr>
<tr>
<td>High level of community ownership</td>
<td>The community shows long-term investment in addressing the problem in the community and supporting programs that tackle the problem.</td>
</tr>
</tbody>
</table>

The nine stages of the community readiness are illustrated in Donnermeyer et al. (1997), Edwards et al. (2000), and Oetting et al. (2001) and are summarized here for clarity (see Table 1 above). The first stage, tolerance, exists when a community does not recognize the problem and sees it as “just the way things are” (Donnermeyer et al., 1997; Oetting et al., 2001). The second stage, denial, occurs when there is “some idea” about a local problem, but locals feel that nothing needs to be done about the problem in the community (Donnermeyer et al., 1997; Oetting et al., 2001).
2001). The third stage, vague awareness, describes a state when the community begins to recognize the existence of the problem within the community and thinks that something should be done to address it, but no concrete plans are in place. More concrete plans, including necessary leadership and resources, are developed during the fourth stage, preplanning. Specific details of the plan are the focus of the fifth stage, preparation, where preparation is actively underway. The sixth stage, initiation, begins when program implementation is underway and specific actions of program implementation are active. The seventh stage, institutionalization, occurs when a program is running and is supported by other community organizers and institutions. The eighth stage, confirmation/expansion, occurs when the program becomes relatively standardized and involves evaluation of the program in the community context and relevant changes to the program that reflect the insights of the evaluation. The final stage, professionalization, occurs when the program is highly specified, through regular evaluation and revision, to the community and is implemented by knowledgeable and experienced staff.

The concept of community readiness is relevant to this evaluation and the evaluation methodology in several ways. First, the evaluation seeks to understand the level of readiness in the community, such that the next steps of program implementation can be tailored to the specific status and needs of the various communities in which DUFB is active. Community readiness is heavily influenced by communal norms and values, so these must be understood to assess readiness and support for a program (Donnermeyer et al., 1997). Second, it will be important to uncover any elements of community readiness that have been overlooked in the implementation of DUFB so that these elements can be addressed, thereby strengthening the program’s appropriateness for each community. Finally, this evaluation can reveal ways in which
advocates and other implementers of DUFB can prepare and develop strategies for future stages of community readiness in the implementation of DUFB.

Institutional Partnerships

Existing research on community organizing and development suggests that programs and interventions targeted at the community level should engage many different community organizations and institutions (Edwards et al., 2000). Programs and interventions that engage with other community leaders and community-focused organizations are likely to be more successful, as there will be more widespread support for the program, the program can reach more individuals, and synergies can be developed between organizations to more effectively implement the program or intervention (Fisher, 1999). Edwards et al. (2000) notes that “prevention efforts should emphasize collaboration and cooperation among community agencies and generally be part of a broader community health and wellness vision.” Some scholars, like Renting and Wiskerke (2010), argue that civil society organizations should become increasingly involved in food systems governance, in an effort to return to local food production and consumption and to give greater advocacy to local communities. Renting and Wiskerke (2010) claim that a greater diversity of actors involved in the governance of local food systems, including farmers’ markets, will be central to a shift away from industrialized models of food production and consumption and towards more sustainable, local systems that promote a community’s physical and economic health. McLeroy et al. (1998) suggest that interventions should consider the multiple capacities of organizations, as well as the projects they are tasked with, in order to effectively leverage their resources and community influence. French et al. (2001) offer that “public health agencies, health organizations, the media, the food and health industry, and advocacy organizations must form alliances and have sustained commitment to
create a more health-promoting social, economic, and physical environment in order to stop the increased trend of obesity.”

Experience from other farmers’ market contexts also suggests the importance of institutional and community support in the success of these markets. Markowitz (2010) noted that “local government can provide both legitimation and material support to farmers’ markets,” and that this kind of support was instrumental in the success of a farmers’ market in Louisville, Kentucky. Likewise, institutional relationships and partnerships provided “strategic resources, as well as opportunities to experiment and learn from others’ experiments” in building a network of local food resources in Toronto (Friedmann, 2006). In creating this system in Toronto, Friedmann (2006) notes that partner institutions “are unique in their linking a variety of bottom-up and top-down initiatives that emerge and evolve within and across a range of ‘sectors’-public, voluntary (NGO), and market.” Fisher (1999), in a report on the successes and failures of several farmers’ markets notes, “the importance of political connection and the ability to navigate City Hall cannot be underestimated.” Thus, experience from similar contexts would suggest the importance and usefulness of strengthening relationships between institutions and organizations in efforts to implement policy or interventions. In the case of DUFB and advocate activity, this kind of engagement would be significant in its potential to increase local knowledge of and participation in DUFB, as well as offering opportunities for sharing resources.

Institutional partnerships also serve a critical role in outreach and advocacy due to the centralized and well-connected space they occupy in social networks. Network theorist Nan Lin (1999) suggests that “access to and use of social resources (resources and embedded in social networks) can lead to better socioeconomic statuses.” This can occur in several ways; typically, relationships within networks are characterized in two ways: bonding and bridging. Bonding
occurs when two similar (with respect to some demographic characteristic) entities or individuals connect, whereas bridging occurs when two relatively unlike entities or individuals connect (Szreter & Woolcock, 2004). Some have argued that modern networks tend to be characterized by bonding, which concentrates resources around similar entities, ultimately contributing to phenomena like income inequality (Szreter & Woolcock, 2004). Recently, a third kind of connection has been proposed—linking—which is described as “norms of respect and networks of trusting relationships between people who are interacting across explicit, formal, or institutionalized power or authority gradients in society” (Szreter & Woolcock, 2004). This kind of linking can prove considerably powerful in accessing public and private services (Szreter & Woolcock, 2004), suggesting that individuals who occupy these kinds of positions within networks, such as those who work in intuitions, should be sought by advocates in their outreach strategies.

Meaning Making: A Proximal Determinant of Health and Wellbeing

Meaning-making is a psychological concept that describes the process of reflecting on personal experiences and integrating personal experience into one’s understanding of life events and explanation for why events happen (Sonenshein & Dholakia, 2012; van den Heuvel et al., 2009). This concept is relevant to the CFA program and to this evaluation as meaning-making has been shown to have significant impact on worker and employee performance and satisfaction in workplace situations (van den Heuvel et al., 2009). Thus, this concept relates to one of the short-term goals of the CFA program: increasing advocate core competencies. Similarly, an advocate that finds meaning in her work is more likely to be engaged and motivated in her work (May et al., 2004; Spreitzer et al., 1997), which for the CFA program, could lead to greater advocate efficacy and capacity to conduct effective DUFB outreach in the community. Meaning-
making is correlated to psychological well-being (Shek, 1992) and physical health (Taylor et al., 2000). A lack of meaning in employment can lead to disengagement from the work activities and the job in general (Aktouf, 1992). Conversely, employees that can make meaning out of their work are more likely to be intrinsically motivated (Thomas & Velthouse, 1990) and can positively influence an employee’s personal growth and motivation and professional engagement (May et al., 2004; Spreitzer et al., 1997).

Research Questions

Our research is guided by the following questions:

What role do Advocates play in increasing DUFB participation?

How do Advocates increase participation in DUFB?

How does the implementation of the CFA program align with LiveWell’s stated goals for the program?

How does the CFA model of outreach fit into models of behavior change?

How can the CFA program improve in the future?

Methods

Process

We developed a semi-structured interview guide to elicit information from local advocates and regional coordinators. The instrument was created in collaboration with LiveWell’s evaluation team. This team is comprised of Dr. Jill Litt, student research assistants, and LiveWell staff. The goal in creating this evaluation team is to partner academic researchers with experienced community organizers to facilitate a community-based evaluation process. This interview approach fits within a broader evaluation framework developed by Dr. Litt and
LiveWell staff to monitor the implementation and sustainability of the DUFB program. The structured interviews with community advocates provide insights into the effectiveness of the pilot Community Food Advocate intervention. I undertook this aspect of the evaluation for this research. First, I created several iterations of themes to be addressed in the interviews and interview questions. Each iteration was guided by the evaluation team. Ultimately, five themes guided the creation of the interview questions: preparedness, social organization, perceptions of community readiness, outcomes, and advice for the next cohort. Separate interview instruments were developed for the local advocates and regional coordinators, as each group had slightly different roles, processes, and activities (see Appendix for interview instruments). However, an effort was made to match questions between the two instruments in order to be able to analyze the interview data collectively.

**Development of Interview Objectives**

In preparation for developing the interview instrument, the Evaluation Team first established several objectives for the interviews. These objectives were based both on what LiveWell hoped to learn through the evaluation of the CFA, as well additions that I included for the purposes of understanding how advocates built and used social networks in their advocacy. These objectives are outlined below.

1. Evaluate the effectiveness of onboarding training provided to Community Food Advocates (CFA) to accomplish the goals of the project and to increase advocates’ skill-based core competencies: communication, interpersonal, advocacy, service coordination, organization, capacity building, and teaching.

2. Understand the current and desired level of communication between Advocates
3. Understand the strategies used by Advocates to reach Supplemental Nutrition Assistance Program (SNAP) customers, local organizations, institutions, and community groups, and local markets to raise awareness about Double Up Food Bucks (DUFB)

4. Understand CFAs perceptions about barriers to participation in DUFB and how to overcome these barriers

5. Provide recommendations for LiveWell in the design and implementation of the CFA program and its impact in increasing participation in DUFB

Description of Themes

The interview instruments, following the goals outlined above, addressed five key themes described below. These themes align both with LiveWell’s stated goals for the Advocate Program and for the evaluation. These themes prioritize learning from advocate experience and revealing insights into DUFB learned by advocates from engaging with DUFB recipients.

Preparedness

Advocates’ perceptions of onboarding training in preparing them to carry out the goals of the Community Food Advocate Project; the efficacy of onboarding training in increasing core competencies including communication, interpersonal, advocacy, service coordination, organization, capacity building, and teaching.

Social Organization

Communication among advocates; building effective social networks of community groups, markets, and SNAP users to promote DUFB; identifying the most engaged groups in these networks.

Perception of Community Readiness
The receptivity and openness of community organizations to spreading the message of DUFB; any barriers that may exist to spreading the message about DUFB in communities.

Outcomes

Advocates’ perceptions of the successes and shortcoming of the project in their communities; advocates’ ideas for how to increase participation in DUFB.

Advice for the Next Cohort

Advocates provide recommendations or words of caution for next year’s advocates.

Data Collection

Interviews were conducted with Food Advocates (n=8) who conducted outreach during the 2017 market season. Interviews were conducted in December 2017 and January 2018. The web-based application Zoom was used for seven of the interviews, while one interview was conducted over the telephone. All interview subjects went through a consent process that involved an explanation of subjects that would be addressed in the interview and the purpose of the interview. All interview subjects were given the option of refusing to participate in the interview, refusing to answer single questions, or refusing to have the interview recorded. All interview subjects consented to the interview and to being recorded. Throughout the course of the interviews, no interview questions were refused by any advocate. During the interview, either the Local Advocate interview instrument was implemented or the Regional Advocate interview was implemented, depending on the role of the interview subject. An effort was made to stick as strictly as possible to the wording of the questions in the instruments, though sometimes for clarification or to keep a conversational tone, some wording was slightly changed, although the meaning of the questions was retained. Follow-up questions were asked when responses were unclear or did not address an aspect of the question. Follow-up questions were also asked when
interview subjects did not provide much detail in the response. All interview subjects were provided the opportunity to give any additional comments or feedback at the conclusion of the interview.

**Interview Analysis**

After interviews were recorded, they were stored in a secure file and anonymized. The recordings were then transcribed, and the transcriptions were kept in a secure file. Interviews were analyzed using an *a priori* framework based on interview themes developed in collaboration with the Evaluation Team (see Description of Themes section for more detail). Interviews were first read for content, without the use of codes. Interviews were then coded based on the interview themes. The five themes acted as an overarching, higher-level guide to the coding. Multiple iterations of coding revealed sub-themes and concepts that were grouped under the relevant higher-level theme. A few themes and concepts not outlined in the five guiding interview themes emerged in the coding process and were included as sub-themes in the coding scheme (see Appendix for a copy of the coding scheme). In this way, interview coding was structured in a hierarchical fashion, with overarching themes and sub-themes and concepts therein, as described in Rubin and Rubin (2011).

**Analysis of Likert Scale Questions**

Two questions were included in both Regional Coordinator and Local Advocate interviews. The first question asked advocates to rate the degree to which they agreed that the on-boarding training prepared them for their Advocacy work throughout the season.

*How much do you agree with the following statement: The training prepared me to accomplish the goals of the Community Food Advocate Project?*

The responses were scaled as strongly agree, agree, disagree, and strongly disagree.
The second Likert question asked Advocates to rate their degree of satisfaction with the on-boarding training in addressing skill-based core competencies.

The training addressed the following professional skills, including the following: communication, advocacy, service coordination, organization, capacity building, teaching; please indicate your level of satisfaction with the training in addressing these skills.

The responses were scaled as highly satisfied, satisfied, neutral, dissatisfied, and highly dissatisfied.

These questions were analyzed by assigning numeric values to each response category. For the preparedness question, a response of “strongly agree” was recorded as 4 and the response of “strongly disagree” was recorded as 1, with corresponding intermediate values for the other responses. For the skills question, a response of “highly satisfied” was coded as 5, a response of “neutral” was coded as 3, and a response of “highly dissatisfied” was coded as 1. Once the responses were coded, we calculated item-level and constructed averages for these responses.

**Results**

*Short Term Goal #1: Increasing Participation in Double Up Food Bucks*

Respondents perceived the CFA program to be effective in increasing participation in DUFB. All advocates reported bringing new, first-time DUFB participants to local markets. Advocates used different outreach strategies to engage SNAP recipients. For example, advocates consistently mentioned the importance of personalized and face-to-face communication with potential DUFB participants. Table 1 outlines the different strategies used and the number of Advocates using each strategy.
Table 1: The different outreach targets identified by advocates and the number of advocates (n=8) orienting their outreach strategy at that target.

<table>
<thead>
<tr>
<th>Outreach Strategy</th>
<th>Number of Advocates (n=8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarkets</td>
<td>5</td>
</tr>
<tr>
<td>Flyers</td>
<td>4</td>
</tr>
<tr>
<td>Churches</td>
<td>3</td>
</tr>
<tr>
<td>Community Organizations</td>
<td>3</td>
</tr>
<tr>
<td>Newspaper and Radio</td>
<td>2</td>
</tr>
<tr>
<td>Social Media</td>
<td>2</td>
</tr>
<tr>
<td>Institutions</td>
<td>2</td>
</tr>
<tr>
<td>One-On-One Communication</td>
<td>2</td>
</tr>
<tr>
<td>Presentations</td>
<td>1</td>
</tr>
<tr>
<td>Direct Calling and Emailing</td>
<td>1</td>
</tr>
</tbody>
</table>

Several advocates relied on prior experience or existing relationships within the community to conduct outreach. For example, one Advocate mentioned that “knowing the community fairly well, I knew who to do the outreach to, the community-based organizations, the health department, social services, and other agencies.” Two advocates conducted outreach at local churches, where they were able to present DUFB to congregations. One advocate mentioned using existing food distribution services to spread the word about DUFB. This advocate worked with distribution programs like the USDA Commodities and noted that “anywhere that was passing out food we asked them to put the flyers [DUFB flyers] in every
box, and so a flyer went home with every allocation of food.” Several advocates mentioned intentionally targeting certain sub-communities within their area or county. Specifically, several focused their outreach in Hispanic communities, either because the advocate had prior connections to the community, had Spanish language proficiency, or felt that this community had many SNAP recipients who may be interested in DUFB. One of the advocates who used one-on-one communication in outreach activities described the benefit of this strategy: “one-on-one's work very well…there's a trust right there, you're building trust with those participants so the information is not only reliable but it comes from a very trustful source.”

Challenges in Implementation

Advocates brought up several challenges to implementing DUFB including: explaining the program, engaging with different social groups, technical problems, and the mobility of SNAP recipients. Three advocates identified specific challenges in implementing DUFB, which included difficulties explaining the DUFB program to potential customers in a way that was understandable to potential participants. Advocates as well as some potential DUFB users referred to the program as “complex” and “confusing.” In addition, some advocates faced challenges engaging with different ethnic, cultural, and linguistic communities and communicating with these communities. One advocate also mentioned technical problems with the electronic benefit transfer (EBT) machine, the device that electronically transfers government benefits, such as SNAP, to a magnetically coded payment card. These machines are the main way that SNAP recipients redeem their benefits at farmers’ markets. Without a fully functional EBT machine, the market could not support SNAP or DUFB recipients. This advocate noted that doing outreach about DUFB was challenging when she could not immediately refer people to the market, as technical problems prohibited recipients’ use of DUFB at the market. Finally, one
advocate described low-income communities as a “moving target,” as financial insecurity often leaves individuals and families vulnerable to displacement. This advocate noticed that over the course of the season many potential DUFB users would move into and leave the area, making it more difficult to do outreach and form relationships in the community.

**Contextual Differences in Program Implementation**

Some advocates noted differences in DUFB implementation and outreach between the Denver Metro Area and the largely rural Southwestern portion Colorado. Two advocates noted specific contextual differences between the Denver Metro Area and Southwestern Colorado that influenced their implementation strategies. One advocate located in Denver noted that outreach is likely easier in this area as because “there's already so much happening and a lot of communication, and geographically it’s so much smaller than the Southwest, we're just one city.” A comment from an advocate in the Southwest notes how modes and patterns of communication differ between the Southwest and the Denver area: “I think you have to have local representation in order for a program to take off, especially a program like Double Up Food Bucks that's aimed at a really specific demographic of folks and we have, you know, modes of getting the word out here [in the Southwest] in a rural area are mostly word of mouth.”

**Institutional Partnerships**

In total, six of the eight advocates mentioned conducting outreach with institutions and community organizations. All six reported to having positive interactions with these institutions while one of the six had a mixed experience reaching out to other organizations, where one institution was largely unresponsive and over capacity with their current work load and other institutions were responsive and helpful. Several advocates found it most productive to arrange meetings with professionals within these institutions and organizations to explain DUFB,
program eligibility, and referral procedures for the program. One advocate mentioned the augmented effects of communicating with other organizations about DUFB noting that “going to some of those different coalition meetings where a lot of different organizations and agency representatives are all in the same room at the same time and presenting on Double Up at those types of meetings, that felt effective because you get so many people in the room at once, instead of each of those organizations, you’ve got like 20 people present at the same time.” Some advocates specifically highlighted instances where other institutions or organizations were particularly helpful. One advocate found a fruitful connection with local representatives for the Women, Infants, and Children (WIC) program observing, “the WIC folks were amazing about publicizing the program.” Several advocates sought to form a relationship with the local Human/Social Services offices. One advocate described the benefit of having Human/Social Services distributing DUFB flyers as “…key because they have direct contact with the [SNAP] recipients.” While many advocates recognized the importance of the contact with Human/Social Services, there was mixed responsiveness from local representatives in these offices, as one advocate noted, “our relationships with social services in some places are really super positive and in other places are pretty non-existent.”

Community Readiness

Three Advocates made comments relating to the concept of community readiness. Generally, community members showed vague awareness of efforts to improve access to healthy foods at farmers’ markets, as advocates recounted that some potential DUFB recipients had heard of the program, while others had not. Readiness was higher in terms of resources and leadership in that most institutions and community organizations were excited about the program and were eager to promote it. Most partner institutions and organizations expressed support for
the DUFB mission and were eager to support advocates in their outreach efforts. Finally, community readiness was also somewhat low in that many advocates revealed that some potential DUFB participants viewed farmers’ markets as unwelcoming, expensive, and elitist. One advocate shared this sentiment saying, “the prices being high at the farmers' market deters people even with the opportunity to double their SNAP money, I think still sometimes the prices are a little bit shocking for people.” All together, these findings suggest that there is moderate community readiness for DUFB.

Barriers to Participation

Five of the eight advocates mentioned specific barriers that they felt prevented or hindered people from participating in DUFB. These included: language barriers, market schedules, inexperience cooking their own food, and intimidation of navigating a new shopping experience for the first time. In particular, several advocates emphasized that the timing of markets may be inconvenient, particularly for low-income individuals. They noted that markets held on Saturday morning, as most are, are not ideal for those who work long hours and multiple jobs during the week and only have Saturdays to spend resting or with family. One advocate shared the difference in convenience of shopping at farmers’ markets compared to SNAP recipients’ typical grocery shopping habits noting, “People are used to going to Walmart open 24-hours a day… at their convenience, whenever they can. It’s always there, it’s always available, it’s always got the same stuff, and so to come to say ‘ok, I'm going to come to market on Saturday between 8 and noon’ is a major barrier.” Similarly, another advocate noted that while the timing of farmers’ markets may be convenient for middle and upper-class families, she shared that the experience may be different for low-income families: “if you are already low-income… you will not get up at 7:30 am or 7:00 am in order to go to the farmers' market, have
music and vegetables and socialize. You will probably be working until really late on Friday and going to bed very, very late because you work in a restaurant or in a cleaning business.”

The location of the farmers’ markets may be an additional barrier for those in the Southwest, as people in this region may have to drive into town on Saturday morning to do their shopping, instead of having the convenience of shopping in town after work on a weekday. In addition, Advocates noted that there are cultural differences in food preferences and shopping norms, and traditional cultural foods may not be available or may not be available consistently at farmers’ markets, which can discourage some individuals from shopping at these markets. One Advocate relayed a sentiment from a potential DUFB recipient: "the woman I previously mentioned [potential DUFB participant] … said ‘they [SNAP recipients] don't want to get up on Saturday morning and go to the market,’ and she said, ‘I can't change the way my husband eats, it's a cultural thing, you're not going to be able to change.’”

Finally, two advocates mentioned that, particularly among Hispanic communities, there is considerable distrust in federal and other government programs in the current political climate. Advocates mentioned that some potential participants were hesitant to reveal that they are SNAP recipients, as they were wary of identifying themselves in unnecessary ways and worried about sharing too much personal information. One advocate relayed what she perceived as fear or intimidation on the part of potential DUFB recipients saying, “Well right now I think it is the intimidation that is happening, you know, at a nation[al level], across the nation… they [SNAP recipients] are so afraid to do something that will put them at risk, and so I think it's the fear, fear of the government, you know, some people think that by using the SNAP program they are a target, and so I think it's fear of the government.” Another advocate echoed this sentiment saying, “they [SNAP recipients] don't know who you [advocates] are, they don't want to provide
you [advocates] information because they don't know if you work for the government or if you [advocates] work for ICE [Immigration and Customs Enforcement] or if you [advocates] work for LiveWell, they don't care, they just want you to leave them alone.”

*Motivation and Meaning Making*

Advocates were directly asked about their motivation or reasoning behind wanting to be a DUFB Advocate. Six advocates mentioned motivations that were rooted in their personal values or stemmed from a vision to improve their communities. Most commonly, advocates mentioned the importance of access to and consumption of fresh and healthy foods as critical for health, and that these foods should be widely available. One advocate described her motivations as follows: “it was always important to me to do more of the social justice side [of advocacy], helping them [families] to save money and also avoid hospital bills because in the end, like, our poor choices can lead us to the hospital. That was my goal, from my perspective.” Another advocate described her motivation for being an advocate as follows: “I believe and teach that fresh food is our birthright, when I say ‘our’ I'm speaking of people of color specifically, even though I know all of us as a people are affected, but I just know that our community is more affected by not having access to fresh food.” Only one advocate mentioned that financial compensation influenced her decision to join the CFA program.

The personal, values-based motivations that advocates expressed relate to their overall impressions of their involvement in the CFA program and suggest that involvement in the CFA is meaningful to most advocates. Seven of eight Advocates mentioned a sincere satisfaction or joy with being involved in the CFA program and carrying out its mission, particularly when they can directly observe the effect the program has on recipients. One advocate remembered positive interactions with DUFB recipients, farmers, and market staff, where DUFB recipients were
exposed to new food through the farmers’ markets saying, “we [advocates] had more laughs in our little group, and it was so awesome to see folks [DUFB recipients] look at veggies or those little Shishito peppers and say, ‘gosh I've never used those, what are they for?’ and then one of the farmers might just reach out and take a small bag and say ‘take a small bag and try them.’”

Other advocates mentioned the importance of “celebrating everyone’s efforts” and making sure that other advocates feel “recognized and valued” in their work as an advocate. Another advocate mentioned feeling that her involvement in the CFA program empowered her saying, “I feel phenomenal, I feel empowered, I'm excited to just have this as a tool to break down the barrier around fresh food. This is really my passion, this is my heart…it builds me as a community member.” Another advocate mentioned that her involvement in the CFA program helped her form greater connections in her community saying, “I'm just very like, I really appreciate LiveWell giving me the opportunity to be able to be part of this [the CFA program], I really like it and learn a lot and get to know a lot of different people from different places.” One advocate summed up her feelings about being involved in the CFA program as follows: “listen if we don't stand up as a people, as a community, gosh darn it we are all going to be eating something out of a box, so just make sure that you're [advocates] doing it [the CFA program] because, gosh darn it, fresh food is what you're about and because you love your community, you love people.”

**Short Term Goal #2: Increasing Core Competencies for Advocates**

Guiding documents for increasing core competencies for advocates outlined several skills-based competencies that could be used in an advocate training program including: communication, interpersonal advocacy, service coordination, organizational capacity building, and teaching. Advocates were first asked about the onboarding training they received at the beginning of the 2017 season. They were asked to rate their satisfaction with the on-boarding
training in preparing them to implement DUFB and in emphasizing these skills-based core competencies. The responses to these questions are outlined in Table 2.

**Table 2:** This table shows the average scores, calculated from all Advocate responses (n=8). The first question has a scale from 1-4, with 4 indicating “strongly agree”. The second question has a scale from 1-5 with 5 indicating “highly satisfied.”

<table>
<thead>
<tr>
<th>Question</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much do you agree with the following: the training prepared me to accomplish the goals of the Community Food Advocate Project?</td>
<td>3.25</td>
</tr>
<tr>
<td>Please indicate your level of satisfaction with the training in incorporating these core competencies [listed].</td>
<td>2.75</td>
</tr>
</tbody>
</table>

Later, advocates were asked whether they felt their skill-based core competencies improved due to their experience as an advocate in the 2017 season. Half (n=4) of the advocates felt that their competencies improved over the season, while the other half (n=4) did not feel any improvement in these skills. Those that mentioned feeling improvement noted improvement in communication skills, working remotely, and adapting communication styles and strategies for different cultural, ethnic, and language communities. Advocates that did not feel that they experienced improvement in skills-based competencies noted that professional development and skill acquisition was not stressed in training or program implementation, and some advocates mentioned that it was not clear that this kind of skill acquisition was a component of the
program. One advocate stated that she did not remember receiving any professional development training in the CFA program.

Communication Among Advocates

Many Advocates both noted a desire to have more communication with other advocates, but also noted the logistical challenges of arranging meetings with other advocates who often have busy and conflicting schedules. Overall, both local advocates and regional coordinators expressed a desire to have more communication with other advocates. One advocate noted, “in future seasons, I would encourage the Regional Partner… to just have more communication with the advocates throughout the season, because I know they're doing great work, but I didn't know what that work was until I read it on their activity log.” Several advocates noted the logistical challenges of meeting in person, but still felt that interacting with other advocates, particularly at the beginning of the market season, would be helpful in building a network and team atmosphere among advocates.

Feedback for LiveWell

Two of the eight advocates offered feedback on the performance and support of LiveWell staff over the 2017 season. These advocates mentioned that time spent building relationships in the community should be valued, and that these efforts were not easily recorded in advocates’ activity logs, which prioritized more formal forms of outreach such as distributing flyers or attending formal community gatherings. In addition, these advocates requested the opportunity to give LiveWell feedback, either throughout the year or at the end of the market season. As well, these advocates commented that LiveWell staff felt “really distant” at times and that they would enjoy regular, individual check-ins. Finally, these advocates felt that the extent of work they conducted and the expectations of the program did not align with the amount of compensation
they received. One advocate suspected that there was a discrepancy between the number of hours that CFAs put into outreach and the amount of compensation they received saying, “I think that part of the issue is that I would bet that everybody [advocates] worked way over the number of hours that we were expected to do for a very insignificant amount of money.” Similarly, another advocate noted, “I think in the grant-funded world and the evaluation piece, it's really hard to document and demonstrate the importance of relationship-building because it's long-term, like we're talking long-term relationships, we're not talking like you meet someone one time and they stop shopping at Walmart and all of the sudden they're shopping at the farmers' market, that's not going to happen. And so, how can we like adapt our grant-funded world to understanding and being able to track and document the value of building relationships and the time that takes, and then to compensate people adequately for the time that they spend building relationships.”

Recommendations for Future Program Implementation

All eight advocates offered recommendations for future program implementation. Some of the recommendations included incorporating more opportunities to meet face to face and collaborate, as well as establishing institutional relationships early in the season before markets are in full-swing and institutions have less on their plate. In addition, it was recommended to map the areas where outreach is conducted in order for advocates to have a geographic understanding of the extent and distribution of outreach efforts and to identify areas that may have been missed. The other recommendations include:

- Host events at farmers’ markets
- Increase the kinds of promotional media and materials in English and Spanish--particularly media that can be used on social media
- Expand social media presence
• Create easy to understand materials that explain how DUFB works and how to use the benefits
• Establish institutional relationships early in the season
• Establish a regular schedule and flow of communication among Advocates

**Discussion**

Double Up Food Buck (DUFB) Colorado aims to increase fruit and vegetable consumption among low-income SNAP recipients by providing incentives to purchase fruits and vegetables at farmer’s markets. In order to spread the word about this program to eligible participants, LiveWell Colorado, a non-profit organization that administers DUFB in Colorado, established a group of Community Food Advocates (CFAs) that conduct advocacy and outreach in their communities. This evaluation seeks to understand the ways in which advocates increase participation in DUFB, the outreach strategies they use, and the ways in which the CFA program can improve in future years.

*Community Readiness*

This evaluation reveals some insights into the level of community readiness, both in the Denver Metro Area and in the Southwest. After consulting with advocates and reading DUFB documents, it appears that DUFB Colorado exists largely in the initiation stage of community readiness. This is logical, as 2017 represented a pilot year for the CFA program. In this way, within the conception of community readiness, the CFA program is certainly considered a “new effort,” thereby placing it in this sixth stage of community readiness (Oetting et al., 2001).

In considering the CFA program as largely existing in the initiation stage of community readiness, it is first important to consider whether the program has appropriately addressed the previous five stages of readiness and whether there are gaps that should be filled in for more
effective program implementation. The first stages of tolerance and denial largely revolve around acknowledgement of a problem within the community. In this way, it seems that DUFB and the CFA Program only partially meet the mark. Statements from advocates in the Southwest and in Denver reveal that there is certainly a need in these communities to improve food access for low-income populations. Several advocates mention the dearth of healthy food resources within their communities, particularly in Denver, where some Advocates revealed that some of the most accessible food options are convenience stores and fast food. It is not clear that the case has been made or understood in these communities for the need for increased access to farmers’ markets and their products. Here it is important to consider communal norms and values related to food purchasing and consumption, as these will be important for understanding whether these communities see a need for increased access to farmers’ markets for SNAP recipients.

Some statements from advocates reveal strong norms related to food purchasing in their communities. Several of the advocates who focused their outreach on Spanish-speaking and Hispanic communities noted that these communities, both in the Southwest and in Denver, have strong norms around food preferences. Some advocates stated that individuals in these communities tend to have strong preferences for culturally traditional foods. The specific foods were not mentioned, but the advocates noted that individuals from these communities likely prefer shopping at supermarkets, where they are confident that their favorite foods are continually available. Advocates also noted that individuals in these communities may be dissuaded from shopping at farmers’ markets due to the limited availability of items at these markets; instead, these shoppers tend to prefer a reliable shopping experience, a supermarket. In this way, norms around food preference in some communities may suggest that these communities see little need for increased access to farmers’ markets, as they are already satisfied
with their grocery shopping experience and worry that changing their shopping behavior is not worth the effort.

Additional norms, particularly in the Southwest context, may be at odds with DUFB, and specifically with farmers’ market visitation. Several advocates in the Southwest mentioned that the rural nature of the communities in this region influences grocery shopping behavior. One advocate mentioned that many people in her community are accustomed to shopping after work on weekdays, when they are already in town for work and close to grocery stores. For many in her community, shopping after work is more convenient than coming into town on the weekend for the farmers’ market, which imposes additional transportation and opportunity costs. In this way, some communities, particularly rural communities, may have shopping norms that conflict with the DUFB model. In this way, there may be significant barriers and costs to behavior change among those who could otherwise use DUFB.

Statements from some advocates suggest that many SNAP recipients have awareness and knowledge about what is healthy and have a desire to purchase more healthy foods. This fact is corroborated by the findings of Zachary et al. (2013), which indicate that SNAP recipients, on the whole, possess relatively high levels of knowledge about what foods are more or less nutritious or healthy, but that their purchases are often decided less on the basis of health and more along metrics such as the cost of the food, how long it will last, and whether family members, particularly children, will eat the food (Zachary et al., 2013). Consequently, there is a gap between the need for access to healthy foods, to fruit and vegetables in particular, and the decision-making of SNAP recipients with respect to food purchases. In this way, there may be a miss-match between the messaging of DUFB and the decision-making patterns of SNAP recipients. While the DUFB incentive to purchase more fruits and vegetables may be enticing, as
SNAP recipients largely understand the health benefits of these foods (Zachary et al., 2013), this incentive may not be enough to cause SNAP recipients to change their purchasing behavior based on the other metrics they use to inform their purchasing decisions. Given this miss-match, advocates may choose to emphasize elements of DUFB other than the health benefits of fruits and vegetables, such as the cost savings, increased buying power, or by giving examples of crowd-pleasing foods available at farmers’ markets.

As many SNAP recipients understand the health benefits of fruits and vegetables, but some evidence suggests that this is not the primary driver of purchasing decisions, messaging about DUFB should not only focus on the access to healthy foods; instead, this messaging should also focus on additional factors such cost, food perishability, and family food preferences to make this incentive more enticing to potential DUFB users. One advocate mentioned an effective strategy that seems very effective in this discussion. One advocate mentioned an effective strategy that she uses to encourage people to use DUFB revolves around cost saving. She mentioned that she tells potential DUFB recipients that they can double their money each time they come to the market, meaning that they can double their fruit and vegetable purchasing power several times per month. She tells potential recipients that, while many may currently only grocery shop once or twice per month, if they attended markets and use DUFB once a week, they could effectively have eighty redeemable dollars for fruits and vegetables, which she notes, is a significant amount for the SNAP recipient population. In this way, quantifying the DUFB benefit in terms of monthly amounts instead of per market visit amounts better serves to communicate the substantial purchasing power DUFB can provide to recipients. This framing, therefore, is an effective way of addressing cost as a metric for food purchasing decisions among SNAP recipients.
This still leaves the unaddressed metric of perishability and family food preferences. These two metrics of purchasing decisions may be significant barriers to DUFB participation, where if fruits and vegetables are expected to spoil or not be eaten by the family, families and individuals may decide that the extra incentive that DUFB provides will only go to waste. Thus, advocates and DUFB implementers should focus on way of addressing these concerns in their messaging of DUFB. Providing tips on food storage and preservation techniques, and well as offering taste tests, recipes, and access to cooking classes may address these other barriers to DUFB participation. This suggests that simply giving SNAP recipients more access to fruits and vegetables and farmers’ markets may not be sufficient; instead it may be more prudent and effective to focus on factors such as cost, perishability, and food preferences that keep people away from farmers’ markets in the first place. It will then be important to frame these strategies within clear action items and to identify the necessary resources so that they can be implemented in the community.

The staff at LiveWell Colorado and the advocates have done significant planning on the implementation of DUFB, so the community readiness stages of preplanning and preparation have been well addressed. Thus, the last element of community readiness that is important to consider is the progression to the next stage, institutionalization. Within this stage, it is important to foster general community support for the program as well as to solidify implementation strategies (Edwards et al., 2000; Oetting et al., 2001). This evaluation of the CFA program marks an important step towards confirmation and expansion, where evaluation is necessary to foster improvement and to further refine program implementation (Oetting et al., 2001). Advocates could employ some of the strategies suggested by Edwards et al. (2000) at this stage, including attending community meetings to provide updates on program efforts, planning publicity efforts
within the community, conducting training with community professionals, and networking between service providers and other systems within the community. Thus, focus going forward in DUFB implementation should include efforts aimed at creating a community climate that is “generally supportive” of the program efforts. This kind of organization is often accomplished through institutional strengthening, described below.

Assessing some levels of readiness based only on advocate testimony is somewhat problematic, in that advocates only share their perceptions of what occurs in the community and the general feelings about the community. In this way, many voices are left out of the discussion of community readiness. Personal testimony from community members would provide a more complete picture of community readiness for DUFB. Nonetheless, the advocate interviews do reveal some insights into community readiness.

**Institutional Partnerships**

Research and experience in other farmers’ market contexts suggest that establishing and fostering supportive ties between organizations and institutions is critical for the implementation of community-based program like DUFB. However, this evaluation reveals mixed results relating to institutional strengthening as a part of advocate promotional activities. While six advocates mention specifically working with other institutions, and all six recounted having mostly positive interactions with other institutions, when asked about outreach strategies, only two advocates mentioned reaching out to other organizations and institutions. This discrepancy suggests that while advocates commonly reach out to community organizations and institutions in their advocacy, they do not consider this an explicit strategy. While it is most important that advocates do this kind of outreach, it is notable that this is not considered by most advocates to be an explicit strategy to increase participation or communal support for DUFB. Given
organizations’ and institutions’ capacity to reach a wide number of people within a community, advocates should prioritize institutional partnerships in their outreach, and LiveWell should highlight this strategy in their advocate training program.

**Implications of Institutional Partnership and Social Networking**

Other evaluations of community advocate programs suggest that advocates that report working with community leaders are significantly more likely to participate in community advocacy, indicating that an advocate’s leadership qualities are important for her ability to connect with other community leaders (Ingram et al., 2008). Consequently, incorporating specific leadership training into the beginning-of-season advocate training could better prepare advocates to conduct effective outreach throughout the market season. Likewise, community advocates who worked collaboratively with other community advocates were more likely to participate in community advocacy (Ingram et al., 2008). Thus, it may be fruitful to encourage and facilitate DUFB advocates to work cooperatively on outreach activities, whether remotely or in person.

One advocate noted the compounded impact of meeting with other institutions and organizations to conduct outreach for DUFB saying, “going to some of those different coalition meetings where a lot of different organizations and agency representatives are all in the same room at the same time and presenting on Double Up at those types of meetings, that felt effective because you get so many people in the room at once, instead of each of those organizations, you've got like 20 people present at the same time.” This kind of institutional partnership and connection is effective in outreach because it harnesses nodes within social networks. Nodes are points of connection within the network that are highly connected to other points in the network (Lin, 1999). Resources, such as information, can be embedded in social networks, where they
can then be transferred between entities and individuals (Lin, 1999). Institutions, with their many social connections, are often deeply imbedded in the social network. Within the dense areas, resources like information or social capital (ideas, information, money, services, favors) are often concentrated (Lin, 1999). In this way, transferring social capital from intuitions in the network can give DUFB participants access to more resources and can help them guard against future loss of these resources.

Accessing nodes in a social network may be particularly important in the advocacy contact. There are two types of connections between points in a network: bridging and liking. Bridging connections connect different clusters within the social network (Lin, 1999). This kind of connection is important as clusters tend to be internally homogenous; thus, different subgroups can be reached by several bridging connections in a network (Lin, 1999). Similarly, linking connection connect clusters with nodes (Lin, 1999). A linking connection can provide a cluster that is distal in the network, with the connection it needs to access important resources within the network. Nodes, such as institutions, tend to have bridging and linking connections to other entities (Lin, 1999; Szreter & Woolcock, 2004). Thus, these nodes aid other entities, like advocates or SNAP recipients, in searching and obtaining resources, as these bridges emanating from nodes release the information or social capital embedded in the dense parts of the network (Lin, 1999). An increased focus on harnessing linking social capital, can facilitate the transfer or resources and support, can make valuable connections, and can initiate relationships based on mutual trust and respect (Szreter & Woolcock, 2004). Consequently, it is important for the CFA outreach strategies to prioritize intuitional partnerships.

*Relevance of the CFA Project Model to Models of Behavior Change*
Statements from advocates show that they have been successful in bringing new DUFB participants to farmers’ markets. Yet, as one advocate notes, “we're not talking like you [potential DUFB participant] meet someone one time and they stop shopping at Walmart and all of the sudden they're shopping at the farmers' market, that's not going to happen.” This sentiment is grounded in theory. Story et al. (2008) note that “individual behavior change is difficult without addressing the context in which people make decisions.” This fact is a reminder that the model of DUFB often requires behavior change on the part of the participant within a broader context, and while incentives can make change easier, behavior remains one of the most challenging things for individuals to alter, precisely because it is contextual. Consequently, the CFA model can be augmented if it is considered in the light of behavior change models that pay attention to the larger ecology or context.

At its core, DUFB operates on the policy level. Through offering an incentive, the policy landscape is changed such that SNAP recipients now have increased access to farmers’ markets and the healthy foods that are available at these markets. By offering this incentive and installing EBT machines at farmers’ markets, DUFB changes the farmers’ market environment, making it more accessible, if not perhaps overtly welcoming or inclusive to SNAP recipients. DUFB also operates on the interpersonal and intrapersonal level in facilitating connections between groups and individuals through a new shared space, the farmers’ market, and through changing an individual’s knowledge about what resources and services are available to her. While DUFB operates in all of these ways, there are some small strategies that could augment the effect of DUFB for low-income populations. Specifically, markets can include translators to make market-goers feel more comfortable. Likewise, the inclusion of cultural foods into the foods available at markets can make markets feel more inclusive (Fisher, 1999). Finally, improving
access to farmers’ markets for low-income people generally, and not only focusing on SNAP and DUFB recipients, can change the composition of market-goers, making the market a more comfortable place for low-income individuals, where they can see themselves represented in the general clientele.

While the model of DUFB does well in altering the environment to create behavior change, more work is needed. Advocates are well-positioned to bridge the gap between the change in environmental conditions and an individual’s behavior change. Advocates can arm potential DUFB recipients with the knowledge of the Double Up program, such that recipients can comfortably and confidently engage with the DUFB market environment. Advocates can best encourage potential DUFB recipients to engage with the market environment by tailoring their messaging about the program to the stage of behavior change that an individual SNAP recipient is in. Those in the precontemplation or planning stages may be most greatly influenced by relevant, salient information (such as information about health, cost savings, etc.) that they can use in their cost/benefit analysis of the behavior change they are contemplating. Individuals in later stages of behavior change, such as maintenance, may need reinforcement so that they do not relapse to their previous behavior. Potential strategies to combat this kind of relapse can include cooking classes, tastings, and other community events that reinforce the behavior and provide the individual with more tools for maintenance. In this way, strategies are needed that encourage individuals to make repeat visits to the markets and provide them with tools and skills, such as cooking knowledge or familiarity with the market, to reinforce and sustain diet-related behavior change.

Outcomes and Meaning Making
In reflecting on the pilot CFA market season, all advocates saw positive outcomes in their performance as advocates. Most advocates described success as measured by bringing new people to the markets, engaging with the community, and promoting a program that focuses on healthy eating and community health. These successes can largely be divided into two categories: the first are tangible successes, where advocates recounted bringing new people to farmers’ markets or forming relationships with other institutions that facilitated bringing new customers to DUFB venues; the second category of success relates more to advocates’ perceived sense of satisfaction in their work and in the amount of change they were able to affect through their work. Perceived satisfaction has significant impacts for the future success of the CFA and its implications for building advocate core-competencies and staying power among advocates for the DUFB program.

At the beginning of each interview, advocates were asked about their motivations for joining the CFA program. Nearly every advocate revealed motivations that were based on their core values, beliefs, world views, or motivations related to personal experience. Many advocates spoke passionately about the importance of access to quality nutrition and the importance of living a healthy lifestyle. As one advocate succinctly described, “I really believe that healthy eating and healthy living is an important part of anyone's life.” Similar comments by other advocates suggest that they feel a strong moral or value-based connection to the mission and goals of DUFB.

When these highly personal motivations are paired with their perceptions of program and professional success in terms of having a positive effect on their community and feeling satisfied by their work, collectively they suggest that participating in the DUFB as food advocates fosters meaning-making processes (van den Heuvel et al., 2009). This is evidenced by the following
quote: “I think they [advocates] have to believe in the program, they have to actually make it something that they will do and that they will appreciate so... the people that are benefitting from it [DUFB], they feel like they are in collaboration, they are working as team, rather than this person is helping me, it's like no, we are helping each other, we are believing in the same thing.”

Considering interpersonal processes is crucial to understand the effectiveness and sustainability of the CFA program. By improving personal resources, and related processes such as self-efficacy, optimism, and mastery, the program is allowing CFAs to find meaning in their work and thus will be more likely to continue with this work and feel committed to program success (van den Heuvel et al., 2009) (May et al., 2004) (Kanter, 1983) (Spreitzer, 1995). While most advocates reported moderate dissatisfaction with the advocate training in increasing core-competencies (one of LiveWell’s stated goals), advocates’ personal resources may have nonetheless improved through their experience in the program. That is, the development of personal resources aid advocates in their personal and professional skills, and these resources may transfer to other situations and tasks.

Recommendations for Future Program Implementation and Evaluation

Future CFA program evaluation should include more targeted questions to address community readiness. For example, Donnermeyer et al. (1997) developed some questions for “key informants” in the community that can be tailored to the DUFB context. These questions include: What kinds of programs or activities have occurred in your community? What is the general attitude about [problem: food insecurity] in your community? What are the primary obstacles to [affordable and nutritious food] in your community? What is the next step your community needs to take in [program implementation]? (Donnermeyer et al., 1997). These questions can further assess community readiness for DUFB and can provide perspectives from
multiple stakeholders, if implemented widely. Furthermore, it may serve advocates to ask these questions of institutional partners, in an effort to better understand the community environment with respect to program implementation.

The model of community readiness also suggests that different communities may possess different attitudes and may have different resources available at different times (Edwards et al., 2000). Thus, it is important not only to uncover these differences, but to catalogue them and tailor outreach and program implementation strategies to reflect differences in attitudes and resources (Edwards et al., 2000). Advocates should work to understand these characteristics of their community (and of sub-communities therein) and should consult with LiveWell staff on ways to best implement DUFB outreach based on these communal characteristics. In addition, community readiness is a dynamic metric and communities change over time (Edwards et al., 2000), thus it will be critical that community readiness be regularly reevaluated in areas where DUFB is available or areas where LiveWell intends to extend DUFB.

Several other community advocate programs offer examples of successful practices that enhance advocates’ ability to reach out to target populations. Some advocate programs conduct regular training programs with advocates (up to monthly sessions) and test advocates for their understanding of the training after each session to ensure that advocates have a clear understanding of program implementation and have absorbed the new training (Rodney et al., 1998). Other evaluations of community advocate programs suggest that advocates with flexible working hours and those with the flexibility and autonomy to start new projects are more likely to participate in community advocacy than advocates that do not have this kind of working situation, suggesting that an advocate’s work environment likely influences her ability to conduct effective advocacy (Ingram et al., 2008).
If future iterations of this evaluation were to include more specific measurements of meaning-making and personal resources, several validated instruments are available. Meaning-making can be measured with the Meaning in Life Questionnaire and the Meaningful Life Measure, among others (van den Heuvel et al., 2009). Work engagement can be measured through the Utrecht Work Engagement Scale (van den Heuvel et al., 2009). Finally, many generalized and specific instruments exist for measuring self-efficacy. Incorporating these instruments into future advocate interviews would validate or disprove the claims made in this study about meaning-making and personal resources as a result of involvement in the CFA program. Having more concrete information on these items can inform future advocate training and hiring, as advocates with values closely tied to those of DUFB may be ultimately more likely to positively contribute to the program, as they can more readily make meaning out their experiences as advocates (van den Heuvel et al., 2009).

Finally, as the CFA program moves out of its pilot year, it is important to consider the sustainability of the program. A sustainable program is one that has the capacity to deliver its intended benefits over a long period of time (Shedia-Ritzkallah & Bone, 1998), meaning that advocates can continue to conduct effective outreach about DUFB for many years to come. It will be important for LiveWell to consider strategies to improve the durability of advocacy in communities, such that long-term changes in community health and health behaviors associated with DUFB can be realized. Strategies to improve the durability of community-based programs, like the CFA program, include employing multiple intervention strategies, either synergistically or in a linear fashion, conducting evaluations of attrition among participants, and implementing booster or repetitive outreach sessions (Shedia-Ritzkallah & Bone, 1998). Consequently, it will be important for advocates to continually engage in outreach in their communities, particularly
given the mobility of the SNAP recipient population. Improving the durability of advocate work and having reinforcing sessions, such as following up with recipients about cooking classes or special events at the farmers’ markets, may be more likely to induce desired behavior change at the community and individual levels, as community members will be continually reminded to engage in health-promoting behaviors.

Conclusion

This evaluation examined the ways in which the Community Food Advocate (CFA) project increased participation in the DUFB program during its 2017 pilot season. The results of exit interviews with the advocates reveal that the program’s pilot season was largely a success. The advocates were motivated by the program’s mission, perceived success in their advocacy efforts over the market season, partnered and communicated with community organizations and institutions to conduct outreach, identified many barriers to participating in DUFB, and provided valuable recommendations for implementing the CFA project in the future. The evaluation also revealed several ways that the CFA project can be improved upon for future seasons. The CFA model of advocate-led outreach can be maximized through leveraging the network of resources and connections available through institutional and organizational partnerships, thereby increasing the reach of DUFB. Overall, this evaluation suggests that the CFA model is effective at conducting outreach about DUFB and increasing participation in the program, and several lessons from the pilot season may prove valuable in strengthening the project for the future.
Bibliography


https://doi.org/10.1016/j.jneb.2015.10.003


https://doi.org/10.4081/ija.2014.601


USDA Food and Nutrition Service (2007). Implication of Restricting the Use of Food Stamps Benefits- Summary.


Appendix

Local Advocate Interview Instrument

1. Why did you decide to become a community food advocate?

2. What were your goals as an Advocate?

3. How much do you agree with the following: the training prepared me to accomplish the goals of the Community Food Advocate Project?
   Scale: Strongly agree; agree; disagree; strongly disagree

4. The training addressed the following professional skills included the following: communication, advocacy, service coordination, organization, capacity building, teaching; please indicate your level of satisfaction with the training in addressing these themes.
   Scale: highly satisfied; satisfied; neutral; dissatisfied; highly dissatisfied

5. Describe your strategies for increasing participation in DUFB. Which strategy proved to be the most effective? What did you try that was not successful?

6. Did you work with community organizations or institutions promote DUFB? If yes, in what way where they able to help you? Were there instances where you made attempts to connect but were unsuccessful?

7. Were you able to connect with other advocates outside of the monthly call ins in order to share ideas or work together about strategies to reach communities?

8. Did you attend the markets in your area?

9. What else do you feel you need to be a successful food advocate?

10. What do you see as the barriers to participation for SNAP recipients in DUFB? Were you able address these barriers? Why or why not?
11. Did you accomplish what you hoped to this year as a Community Food Advocate?

12. Which professional skills did you improve on the most through your involvement with CFA this season?

13. What were your top three contributions as a Community Food Advocate?

14. For future Advocates, what would you like to share from your experience in the Community Food Advocacy Project?
Regional Coordinator Interview Instrument

1. Why did you decide to become a regional advocate?

2. What were your goals as a regional advocate?

3. How well did the training prepare you to accomplish the goals of the Community Food Advocate Project?

4. Describe your strategies for increasing participation in DUFB. Which strategy proved to be the most effective? What did you try that was not successful?

5. Did you communicate with the CFA in your region? If so, how often and in what way?

6. Did you communicate with other regional coordinators? If so, how often and in what way?

7. Did you interact with participating DUFB markets in your region? If so, how often?

8. What additional support would be useful to you throughout the season? (tech, finances, translation services)

9. Did you accomplish what you hoped to this season as a Regional Coordinator?

10. What did you hope to accomplish this season but were unable to?

11. Which professional skills did you improve on the most through your involvement with CFA this season?

12. What were your top three contributions as a Regional Coordinator this season?

13. For future Coordinators, what would you like to share from your experience in the Community Food Advocacy Project?
Motivation

Explanations for why Advocates decided to participate in the Community Food Advocate Project, including personal values, relevant incentives, and prior experience relevant to advocacy, the Community Food Advocate Project, or Double Up Food Bucks.

<table>
<thead>
<tr>
<th>SUB-THEME</th>
<th>DESCRIPTION</th>
<th>EXAMPLE</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>VALUES</td>
<td>Statements about personal values or morals related to the missions of the CFA Project and DUFB</td>
<td>“I really believe that healthy eating and healthy living is an important part of anyone's life.”</td>
<td>M-Val</td>
</tr>
</tbody>
</table>
### INCENTIVES

Statements about compensation and incentives for Advocates

“It's that we need to get compensated for the time we take to build relationships.”

M-FI

### PRIOR EXPERIENCE

Advocates’ previous experience or skills relevant to DUFB or the CFA Project

“I have definitely like done a lot of invoice management, coordination of a team, and that kind of stuff before.”

M-PE

### Implementation

Remarks on the structure and procedures of Double Up Food Bucks and the Community Food Advocate Project, including challenges experienced through the course of implementing the Project.

<table>
<thead>
<tr>
<th>SUB-THEME</th>
<th>DESCRIPTION</th>
<th>EXAMPLE</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPROACH</td>
<td>Remarks on the structure and procedures of the CFA process or DUFB</td>
<td>“The invoicing process, to me, it was very cumbersome and extremely time-consuming.”</td>
<td>Imp-P</td>
</tr>
<tr>
<td>STRATEGIES</td>
<td>Specific actions or strategies undertaken to reach potential DUFB participants</td>
<td>“I found that Facebook was an interesting place to put the word out.”</td>
<td>Imp-Strat</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>CHALLENGES</td>
<td>Remarks on difficulties implementing the CFA Project or DUFB</td>
<td>“The markets were getting caught left and right in problems getting the EBT machines.”</td>
<td>Imp-Chal</td>
</tr>
<tr>
<td>PROBLEM SOLVING</td>
<td>Remarks on Advocates’ capacity to solve problem relating to the implementation of DUFB and the strategies used to solve any problems that Advocates encountered</td>
<td>“A lot of my ability to support was just to call Wendy in Denver and ask her what to do…”</td>
<td>Imp-TS</td>
</tr>
<tr>
<td>CONTEXT</td>
<td>Description of the local area or local target population related to how the context may affect DUFB program</td>
<td>“I had the luxury of working in Denver where I felt there's a lot of activity already taking place.”</td>
<td>Imp-Con</td>
</tr>
<tr>
<td>INSTITUTIONAL STRENGTHENING</td>
<td>Communication between Advocates and other organizations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Kind of on the back end I had communicated with Beverly, Grant, and Lindsay Saperstone to get some local produce and some promotion around Double Up Food Bucks into the corner stores.”

**Perception of Community Readiness**

Remarks related to Advocate perception of community readiness including the receptivity of the community to the Advocates’ activity, the receptivity of the community to Double Up Food Bucks, perceived barriers to participation in Double Up Food Bucks, general comments and observations of participants navigating the Double Up Food Bucks process, and the influence of the local context on community readiness and program implementation.
<table>
<thead>
<tr>
<th>SUB-THEME</th>
<th>DESCRIPTION</th>
<th>EXAMPLE</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMUNITY</td>
<td>Remarks on the receptivity and readiness of the community to engage with Advocates and participate in DUFB</td>
<td>“So, I notice that when I am at the store, trying to help them, it's not easy feeling, they don't like that, they don't want you to know that they have the benefit and they also are afraid.”</td>
<td>CR-Recep</td>
</tr>
<tr>
<td>RECEPTIVITY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERCEIVED BARRIERS</td>
<td>Remarks on impediments to participation in DUFB</td>
<td>“There's some language barriers and cultural barriers to folks being, you know, wanting to come to the market or feeling comfortable at the market...”</td>
<td>CR-B</td>
</tr>
<tr>
<td>PARTICIPANT</td>
<td>Remarks on how participants navigate the DUFB process or observations made by Advocates of participants using DUFB</td>
<td>“I think that the market manager did a great job making them feel welcome.”</td>
<td>CR-ParExp</td>
</tr>
</tbody>
</table>
Interpersonal Communication Among Advocates

Remarks specifically related to communication among Advocates, including how Advocates organized communication among themselves, the content of discussion in Advocate communications, and challenges experienced in inter-Advocate communication.

<table>
<thead>
<tr>
<th>SUB-THEME</th>
<th>DESCRIPTION</th>
<th>EXAMPLE</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHODS OF COMMUNICATION</td>
<td>Management of communication among Advocates about DUFB</td>
<td>“Sometimes, we communicate via group email and sometimes it would be individual email.”</td>
<td>Comm-Proc</td>
</tr>
<tr>
<td>CONTENT</td>
<td>Remarks on matters discussed during communication among Advocates about DUFB</td>
<td>“In the beginning, we communicated a lot about the invoicing process...”</td>
<td>Comm-Con</td>
</tr>
<tr>
<td>CHALLENGES</td>
<td>Quality of communication among Advocates about DUFB</td>
<td>“The biggest challenge here was just figuring out how to effectively communicate with people I don't see on a regular basis.”</td>
<td>Comm-Chal</td>
</tr>
</tbody>
</table>
## Resources

Physical or organizational resources that played a role in the implementation and outreach strategies of Double Up Food Bucks.

<table>
<thead>
<tr>
<th>SUB-THEME</th>
<th>DESCRIPTION</th>
<th>EXAMPLE</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCAL</td>
<td>Resources in the area in which the Advocate works that affect in the implementation of DUFB and the CFA Project</td>
<td>“We have a very beautiful and active grange here in Mancos.”</td>
<td>R-L</td>
</tr>
<tr>
<td>MATERIALS AND TRAINING</td>
<td>Resources desired or needed by Advocates that would aid in implementing DUFB</td>
<td>“I've asked for a regionally specific flyer...”</td>
<td>R-R</td>
</tr>
</tbody>
</table>
Outcomes

Remarks that directly address the results of the program or effects of the program, both in terms of enrollment in Double Up Food Bucks and in Advocate professional development.

<table>
<thead>
<tr>
<th>SUB-THEME</th>
<th>DESCRIPTION</th>
<th>EXAMPLE</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARTICIPATION</td>
<td>Outcomes related to the CFA project or DUFB</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>“The WIC folks were amazing about publicizing the program.”</td>
<td>Out-Pro-P</td>
</tr>
<tr>
<td>POSITIVE</td>
<td>Advocates suggests pleasure or satisfaction with the outcome</td>
<td>“I didn't get what I hoped I would get from Social Services in Montezuma County.”</td>
<td>Out-Pro-N</td>
</tr>
<tr>
<td>NEGATIVE</td>
<td>Advocate suggests that the outcome was not as expected or was not successful</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERCEIVED</td>
<td>Remarks on Advocates’ own performance over the season and their relationship to the program as a result of their involvement as an Advocate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUCCESS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEANING</td>
<td>Remarks on Advocates’ sense of belonging the Advocate group and their sense of purpose related to DUFB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAKING</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SELF-EFFICACY</td>
<td>Advocates’ own beliefs about their ability to accomplish tasks and goals related to the CFA Project and DUFB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROFESSIONAL DEVELOPMENT</td>
<td>Outcomes related to Advocate professional development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROFESSIONAL DEVELOPMENT</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Recommendations for the Future

Remarks that recommend or discourage the use of different outreach strategies, communication, and expectations for Advocates in the future.

<table>
<thead>
<tr>
<th>SUB-THEME</th>
<th>DESCRIPTION</th>
<th>EXAMPLE</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>POSITIVE</td>
<td>Advocates suggests pleasure or satisfaction with the outcome</td>
<td>“Working remotely like communicating with people remotely and having that stay consistent and regular.”</td>
<td>Out-PD-P</td>
</tr>
<tr>
<td>NEGATIVE</td>
<td>Advocate suggests that the outcome was not as expected or was not successful</td>
<td>“I don't feel like the training addressed really any of those things.”</td>
<td>Out-PD-N</td>
</tr>
<tr>
<td>STRATEGIES</td>
<td>Suggestions for future outreach strategies and strategies related to program implementation</td>
<td>Personally, I'm really interested in working more with the healthy corner stores</td>
<td>Fut-Strat</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>COMMUNICATION</td>
<td>Suggestions for messaging or communication organization between Advocates</td>
<td>I would have liked opportunities for us to get together in person more.</td>
<td>Fut-Comm</td>
</tr>
<tr>
<td>EXPECTATIONS</td>
<td>Suggestions for future Advocate expectations</td>
<td>If I had not been doing what was expected of me they [LiveWell] should feel free to reach and say so.</td>
<td>Fut-Exp</td>
</tr>
<tr>
<td>FEEDBACK (POSITIVE)</td>
<td>Positive assessment of LiveWell from Advocates</td>
<td>I really appreciate LiveWell to give me the opportunity to be able to be part of this.</td>
<td>FB-Pos</td>
</tr>
<tr>
<td>FEEDBACK (NEGATIVE)</td>
<td>Critical assessment of LiveWell from Advocates</td>
<td>I felt like they're pretty disorganized a lot of times...</td>
<td>FB-Crit</td>
</tr>
</tbody>
</table>