Journal of Agriculture, Food Systems, and Community Development
ISSN: 2152-0801 online
https://foodsystemsjournal.org

Growing community, food sovereignty, and health: A case study of a farm-based produce prescription program

Sara Shostak,[a]* Anna Kehoe,[b] Jolie Black,[c] and Rachel Bindman [d]
Brandeis University

Submitted September 7, 2024 / Revised November 17, 2024, and February 19 and 25, 2025 / Accepted February 25, 2025 / Published online May 31, 2025

Citation: Shostak, S., Kehoe, A., Black, J., & Bindman, R. (2025). Growing community, food sovereignty, and health: A case study of a farm-based produce prescription program. *Journal of Agriculture, Food Systems, and Community Development*, *14*(3), 355–370. https://doi.org/10.5304/jafscd.2025.143.016

Abstract

Produce prescription programs are an emerging strategy for making diet and nutrition central to efforts to improve population health. Although they have multiple potential implications for local food systems, assessments of produce prescription programs too rarely consider the perspectives of food producers. This paper reports on a mixed-methods case study of VegRx, a farm-based produce prescription program in Waltham, Massachusetts. Drawing on interviews with both farmers and clinicians, we first explore how produce prescription programs can be aligned with the missions of community farms, including increasing access to healthy, locally grown food, building relationships with and among underserved community members, and advancing food sovereignty. Based on quantitative data from pre- and post-program surveys, we then assess the outcomes of VegRx for program participants; these include significant improvements in their access to healthy and desired foods, vegetable and fruit consumption, and both

[a] * *Corresponding author:* Sara Shostak, PhD, MPH, Professor of Sociology and Health: Science, Society & Policy, Brandeis University; 415 South Street, MS 071; Waltham, MA 02453 USA; sshostak@brandeis.edu; https://orcid.org/0000-0003-3316-969X

[b] Anna Kehoe, BS, Health: Science, Society & Policy Program, Brandeis University, Waltham, MA 02453 USA.

[c] Jolie Black, BA, Health: Science, Society & Policy Program, Brandeis University, Waltham, MA 02453 USA.

[d] Rachel Bindman, BA, Health: Science, Society & Policy Program, Brandeis University, Waltham, MA 02453 USA.

Disclosures

The authors have no financial interests that might be construed as resulting in an actual, potential, or apparent conflict in conducting or publishing this research. One author, Sara Shostak, is a member of the advisory board for Waltham Fields Community Farm; this is not the farm's board of directors, but a group of dedicated volunteers.

Funding Disclosure

This research was supported by a Community Engaged Pedagogy Project Grant from the Vic '63 and Bobbi Samuels '63 Center for Community Partnerships and Civic Transformation (COMPACT) at Brandeis University.

physical and mental health. We conclude with recommendations for a broader understanding—and assessment—of produce prescription programs, to take into account not only their important capacity to improve diet and nutrition, but also to bring together local farms, health-care providers, and communities in support of food sovereignty and population health.

Keywords
produce prescription programs, community farms, food access, food sovereignty, population health

Introduction

Since 1999, there have been modest improvements in the diets of American adults; however, disparities in diet quality associated with race and ethnicity, education, and income have persisted or worsened[1] (Liu & Mozaffarian, 2024). People from low-income, minoritized, and structurally disadvantaged backgrounds also are more likely to experience food insecurity (Seligman & Berkowitz, 2019), which is defined by the U.S. Department of Agriculture (USDA) as "a household-level economic and social condition of limited or uncertain access to adequate food" (USDA Economic Research Service [USDA ERS], n.d., "CNSTAT Review," para. 9).[2] In 2023, 13.5% of U.S. households were food insecure at some time during the year (Rabbitt, 2023), meaning that they did not have "consistent, dependable access to enough food for active, healthy living" (USDA ERS, 2023, "Overview," para. 1); rates of food insecurity in Black (23%) and Latinx-headed households (22%) were more than double that of white-headed households (10%) (Rabbitt et al., 2024). Food-insecure households often lack the financial and physical resources to access healthy foods (Li et al., 2024), with significant consequences for population health (Downer et al., 2020).

Poor nutrition is a major risk factor for many common diseases, including cardiovascular disease, type 2 diabetes, and certain types of cancer (Liu & Mozaffarian, 2024). Food insecurity is also strongly associated with worse disease control for adults with chronic illness, which increases the risk for disease progression and complications (Seligman & Berkowitz, 2019). Barriers to healthy food access are one reason that chronic diseases are exemplar health disparity conditions, with people of lower socioeconomic status and from structurally disadvantaged racial and ethnic groups burdened with higher incidence, more severe morbidity, and earlier mortality (Golden et al., 2021).

For children, food insecurity is associated with poor overall health status (Cook et al., 2013), increased risk of hospitalization (Gunderson & Ziliak, 2015), and negative behavioral and academic outcomes (Kimbro & Denney, 2015). In order to protect their children from hunger and nutritional deprivation, mothers may adopt strategies that are likely to undermine their own health over time, including skipping meals, waiting to eat until later in the day, and/or eating less (Martin & Lippert, 2012). Likely as a consequence of gendered expectations, food insecurity is associated with anxiety and depression particularly for mothers (Ciciurkaite & Brown, 2017).

Food is medicine (FIM) initiatives seek to address population-level disparities in nutrition and diet-related illness by making food and nutrition a central and routine focus of disease prevention and treatment in healthcare systems (Downer et al., 2020). Broadly, FIM interventions subsidize or provide healthy foods to patients as a strategy for improving diet-related health outcomes (Little et al., 2022). Indeed, advocates distinguish FIM programs from existing initiatives to address food insecurity more broadly (e.g., food banks) by emphasizing how they leverage individual interactions with the healthcare system as "opportunities to offer evidence-based food and nutrition inter-

[1] This study identified the proportion of adults meeting targets for a poor, intermediate, or ideal diet based on the American Heart Association (AHA) 2020 continuous diet score. The range for this score is 0 to 80, with higher scores based on higher intake of fruits and vegetables, whole grains, fish and shellfish, and nuts, seeds, and legumes, and lower intake of sugar sweetened beverages, processed meat, saturated fat, and sodium (Liu & Mozaffarian, 2024).

[2] The USDA distinguishes food insecurity from the experience of hunger, which refers to individual experiences of discomfort, illness, weakness, or pain caused by food insecurity (USDA ERS, n.d., "CNSTAT Review," para. 10).

ventions to improve health outcomes and reduce healthcare usage and costs" (Little et al., 2022, p. 519; see also Downer et al., 2020).

That said, the FIM approach recognizes that individuals who are low income and/or from structurally disadvantaged backgrounds are at increased risk for poor nutrition, food insecurity, and diet-related illness (Newman et al., 2022). Typically, FIM interventions are funded by healthcare entities, government programs, or philanthropy, at no cost or very low cost to the patient (Downer et al., 2020). By improving the accessibility, affordability, and acceptability of healthy foods, FIM programs have the potential to address inequities in nutritional quality, food insecurity, and diet-related disease (Little et al., 2022).

Produce Prescription Programs

Produce prescription programs (PPP) have been described as the FIM approach appropriate for the broadest number of participants, especially as they can contribute to both disease prevention and management (Downer et al., 2020). From a food systems perspective, PPP are potentially impactful not only for individual participants but also for local food economies, including food growers and the communities that they serve (Budd Nugent et al., 2022).

PPP are a relatively new intervention; as of 2019, most had been in operation for only 2−4 years (Newman et al., 2022). While there is significant variation in their design and implementation, a typical PPP consists of (1) a healthcare provider who identifies eligible patients, based on the diagnosis of a diet-related health condition, a qualifying income level, and/or a positive screen for food insecurity; and (2) the provision of a "prescription" for healthy food—most often, fruits and vegetables—which might take the form of a voucher, token, or coupon for purchases from a participating food provider (Budd Nugent et al., 2022). Food providers for PPP include grocery stores (Budd Nugent et al., 2022; Folta et al., 2023), farmers markets (Schlosser et al., 2019; Slagel et al., 2023), and local farms (Hileman, 2021). In hopes of supporting longer-term dietary changes, many PPP include nutrition education (Newman et al., 2022).

Evaluations of PPP have found that they can improve fruit and vegetable intake and reduce food insecurity (Bhat et al., 2021; Little et al., 2022). PPP participation is also associated with increases in nutrition knowledge, including learning about novel fruit and vegetables and new food preparation and storage methods (Slagel et al., 2023), and openness to trying new foods and techniques (Schlosser et al., 2019). Participation in PPP can have beneficial spillover effects for an entire household and for intergenerational familial networks beyond the household (Schlosser et al., 2019).

There is mixed evidence for the health outcomes of PPP, especially as assessed through biometric indicators and/or via electronic health records (Bhat et al., 2021; Cook et al., 2021; Little et al., 2022). Some recent studies have found that PPP are associated with improvement in measures of physical health, such as weight, systolic blood pressure, and HbA1C, including for individuals from minoritized and underserved communities (Hager et al., 2023; Sato Imuro et al., 2023; Stroud et al., 2023). There is also some evidence that PPP are of benefit to mental health, leading to reductions in measures of depression, anxiety, and stress (Sato Imuro et al., 2023).

Studies consistently find that participants *perceive* PPP to be beneficial for their health, with self-reported improvements in diet and nutrition, lifestyle, and chronic disease management (Little et al., 2022). While the lived experience of better food access and nutrition likely underly these perceptions, there is also evidence that PPP improve communication in clinical settings; research has found that healthcare providers are more willing to discuss patients' experiences with food insecurity when they are able to provide the specific, tangible resources made available through a PPP (Johnson et al., 2023).[3] Some PPP models also have the potential to diminish social isolation; in a study of a PPP that provides vouchers for a local farmers market, participants reported significant improve-

[3] Of note, despite the significant staff time required for successful implementation, clinicians generally report enthusiasm for PPP (Folta et al., 2023; Johnson et al., 2023; Schlosser et al., 2019; Stotz et al., 2022).

ment in quality of life associated with their social interactions at the market (Joseph & Seguin, 2022).

PPP have a myriad of potential implications for relationships between food producers and consumers and for local food systems. In a national study of PPP, 19 of the 20 programs surveyed prioritized locally sourced produce in some way, including tailoring their program timeline to match the growing season (Newman et al., 2022). Many PPP connect participants to farm direct settings, including farmers markets, farm stands, or community supported agriculture (CSA) programs at local farms (Slagel et al., 2023). By removing the financial barriers that incentivize low-income consumers to purchase produce at grocery stores or mass merchandizers, PPP create opportunities for positive experiences with farmers markets and other farm direct settings; they also support participants in building meaningful relationships with farmers, learning how to plan menus and prepare food when purchasing local and seasonal produce, and developing preferences for fresh produce available at these locations (Slagel et al., 2023; see also Schlosser et al., 2019).

Nonetheless, the potential implications of PPP for local food systems remain understudied. There is compelling anecdotal evidence that PPP can "create a link between farm viability and public health" and make food "not only a tool but also a catalyst for communitywide social change" (Hileman, 2021, p. 13). Similarly, a case study of a rural PPP found that it was a catalyst for change, which "led to the engagement of local stakeholders in providing new collaborative solutions to improve food access such as investment in community garden infrastructure, development of local food box program with home delivery options, and expansion of SNAP and food assistance programs at local farmers' markets" (Joseph & Seguin 2022, p. 908). Evaluations of PPP, however, tend not to consider the experiences and perspectives of farmers or other food system stakeholders, focusing, rather, on program participants and clinicians.

Relatedly, while evaluations of PPP often focus on their potential to improve food access and food security, they rarely take up the potential implications of such programs for food sovereignty. A study in two rural tribal communities found that, in contrast to federal programs that impose "western diets on Native peoples and a system of dependency that directly undermines food sovereignty efforts…," PPP "can be tailored to accommodate diverse cultures, strengthen community power" (Budd Nugent et al., 2022, pp. 180–190), and promote local control of the food system. These insights point to the importance of considering whether and how PPP honor and support the foodways and food cultures of participants and increase community engagement with the food system.

In this article, we report on a mixed-methods case study of VegRx, a produce prescription program designed and implemented by Waltham Fields Community Farm in partnership with Charles River Community Health in Waltham, Massachusetts, USA. Drawing on in-depth interviews with farmers and clinicians, we investigate their motivations for creating VegRx, experiences of implementing the program, and perceptions of its benefits and challenges. Then, based on survey data gathered at the beginning and end of the program in 2023, we assess key outcomes for participants. To our knowledge, this is the first study that centers the perspectives of the staff of a community farm,[4] alongside clinicians and participants, in considering the implications of a PPP.

Setting, Data, and Methods

Waltham Fields Community Farm (WFCF) is an 11-acre (4.5-hectare), nonprofit farm with a mission of cultivating "sustainable and equitable relationships between people, their food supply, and the land from which it grows" and a vision of "communities with equitable access to the beauty,

[4] Drawing on the names of farms across Greater Boston, including Waltham Fields Community Farm, we use the phrase "community farm," to refer to nonprofit farms that cultivate and steward land that is publicly owned. Community farms are vital components of our regional food system, as they provide a mechanism for farmland preservation (e.g., of land previously owned by family farmers), increase local food production using sustainable agriculture practices, and provide access to healthy food for community members through a variety of programs, including community supported agriculture, farm stands and stores, mobile markets, etc.

sanctuary, and food of local, sustainable farms" (Waltham Fields Community Farm, n.d., para. 1–2). Toward these ends, WFCF offers a variety of programs, including a 20-week CSA, educational opportunities for children and adults, farmer training, service learning and volunteer programs, and a yearly cycle of community events. As part of its commitment to making healthy food more equitably accessible, WFCF distributes 15–20 tons of produce each season, through its weekly Mobile Outreach Market; donations to food banks, pantries, shelters and nutrition programs; contributions to the Waltham Public School food service; subsidized CSA shares; and, most recently, through VegRx, a produce prescription program.

VegRx provides boxes of fresh, seasonal produce to individuals who have been identified by healthcare providers as being low-income and/or food-insecure and having (or being at risk for developing) diet- and nutrition-related illness. Clinicians at Charles River Community Health (CRCH), a nearby community health center, refer eligible patients to the VegRx program by writing "prescriptions" for a 20-week share of produce from WFCF. Each week, from June through October, the WFCF outreach farmer delivers, to the clinic, boxes of vegetables and fruit that are designed to provide ample food for a family of four. The boxes also contain newsletters in multiple languages that identify the produce, share recipes, offer storage tips, and encourage participants to try new flavors and techniques of food preparation. Participants also are invited visit the farm and participate in its programs. The VegRx program was piloted in 2021 with 15 participants; as of 2023, it was enrolling approximately 30 participants each season.

Support from local philanthropies—including the Life Science Cares Foundation, Mount Auburn Hospital, and Cummings Foundation—has been vital to the launch and development of the VegRx program. Inclusive of personnel costs, the annual budget for VegRx is approximately US$64,000. More than 75% of the program's income comes from philanthropic grants and contributions from local businesses, with the remainder consisting of individual donations and in-kind contributions from WFCF.[5]

Study Design: Data, Methods, Analysis

In September 2023, the executive director of WFCF invited the first author[6] to lead an assessment of the VegRx program. Following review and approval from the Brandeis Univesity Institutional Review Board (#24165R-E), this project formed the core of a spring 2024 capstone class in the Health: Science, Society and Policy program at Brandeis University. This article develops and extends the research begun by students in the class, which included conducting in-depth interviews with the operational stakeholders of the VegRx program from both the farm and the clinic, and analyzing data from a survey completed by VegRx participants at the beginning and end of the 2023 program.

Qualitative Data and Analysis

In early 2024, farm and clinic staff who had worked in the VegRx program were invited to participate in in-depth, semi-structured interviews to share their experiences and perspectives. Of nine individuals invited, seven agreed to be interviewed; the sample includes three current WFCF staff (administrators and farmers), two former outreach farmers (i.e., the specific WFCF staff who support food access programs), and two CRCH clinicians who, per their request, were interviewed together.

Each interview followed a standardized guide, which was tailored to the organizational affiliation of the respondent (i.e., clinic or farm). The interview guides included questions about the respondent's role in the VegRx program; perspectives on the program's goals, structure, and processes; expe-

[5] WFCF leadership would be pleased to speak with interested readers about the specifics of the financial model for the VegRx program and how it has been coordinated with the broader operations of the farm. They can be reached at +1-781-899-2403. Additional information about the farm's finances is available from its Form 990, an information return that most organizations claiming federal tax-exempt status must file yearly with the IRS, at https://projects.propublica.org/nonprofits/organizations/43261186

[6] The first author is a member of WFCF's advisory board and had previously provided research assistance to farm leadership.

riences of challenges or barriers to successful program implementation; and perceived outcomes. The interviews were conducted in person or via Zoom and all were recorded; they varied in length, with a range of 18–49 minutes and an average of 28 minutes. To maintain confidentiality while making visible the range of voices in this paper, we refer to each interview by a number.

All of the interviews were de-identified, professionally transcribed, and then entered into Atlas.ti. The codes used in the analysis were generated through two parallel and iterative processes. First, codes were assigned to each question in the interview guide; coding each response to a question ensured that all answers were accounted for, as well as provided a clear structure for comparison. Second, codes were created inductively, according to the principles of constructivist grounded theory; this "open coding" is a means of identifying emergent patterns and themes (Charmaz, 2006). Each interview was coded by two members of the research team who then reviewed each other's coding to identify both concordances and discrepancies; these were discussed and resolved during research team meetings.

Quantitative Data and Analysis

In 2023, VegRx participants (n = 32) were asked to complete a survey at the beginning and the end of the program. These paper surveys were administered by clinic staff, who provided translation, as necessary, and recorded answers to questions in the following domains:

Demographics and Food Insecurity: Participants were asked to share sociodemographic data including their gender, age, race, ethnicity, and languages spoken in their home. Participants were also asked about the total number of people living in the household and the number of household members under the age of 18. The Hunger Vital Sign (HVS)—a validated two-question screening tool—was used to assess food insecurity (Hager et al., 2010).[7] Participants also provided information about whether they receive benefits from the Supplemental Nutrition Assistance Program (SNAP), Women, Infants, and Children Nutrition Program (WIC) or Massachusetts Healthy Incentive Program (HIP).

Food Access: Because the HVS screening tool asks about food insecurity over the past 12 months, and VegRx is a 20-week program, current food access was assessed with the following question: "In the last seven days, which of these statements best describes the food eaten in your household?" Participants responded using the following options: "We had enough of the kinds of food I/we wanted to eat," "We had enough, but not always the kinds of food I/we wanted to eat," "We sometimes did not have enough to eat," and "We often did not have enough to eat."

Dietary and Cooking Practices: Participants answered multiple-choice questions regarding how often they eat different kinds of vegetables and fruit (e.g., "How often did you eat a lettuce salad or other leafy green vegetables (like kale, collards, chard, bok choy) in the last 30 days?"). Using Likert scales, the survey also asked about participants' confidence in cooking with basic ingredients, following a simple recipe, tasting new foods, and cooking with new foods and recipes.

Subjective Health Status: To assess subjective health status, participants were asked to rate their own physical and mental health and their child's physical and mental health, using a Likert scale with the following options: *Excellent*, *Very Good*, *Good*, *Fair*, and *Poor*.

Connection to Farm: Participants were asked if they had been to a farm in the past 12 months.

All survey data were entered into a spreadsheet and answers were assigned numerical codes. The

[7] The Hunger Vital Sign identifies households as being at risk for food insecurity if they answer that either or both of the following two statements is 'often true' or 'sometimes true' (vs. 'never true'): (1) Within the past 12 months, we worried whether our food would run out before we got money to buy more; (2) Within the past 12 months, the food we bought just didn't last and we didn't have money to get more (Hager et al., 2010).

quantitative analysis was conducted using IBM SPSS, version 29.0.1.0.

Research Questions

Drawing on these two data sets, we address the following research questions:

- What are farmers' and clinicians' perspectives on the VegRx program, including its benefits, challenges, and potential outcomes?
- In what ways, if any, does the VegRx program improve food security, dietary habits, and/or subjective health status for participants?

Results

We begin with the analysis of data from the in-depth interviews with farm and clinic staff. Following, we present analysis of the data from surveys completed by VegRx participants.

Farmer and Clinician Perspectives

From the perspective of the farmers and clinicians interviewed this study, VegRx offers important opportunities to improve healthy food access for underserved individuals (and their families), to develop interpersonal relationships, and to support new connections to the farm and the land. The farmers also identified several ways that VegRx might advance food sovereignty.

From Food Access to Food Is Medicine

For WFCF, the VegRx program represents a meaningful opportunity to build on the farm's "long history of doing food access programs" by creating a program that explicitly aims to "impact food-related illness in the community" (Interviewee 01). Farmers talk about VegRx as an important strategy for getting "nutrient dense, locally grown vegetables" (05) to individuals with "a diet-related issue that will benefit from more fresh vegetables" and who would not otherwise have "ready access to those resources" (03). They also note that the program is a "good match," (02), given that "we have this great wealth of nutrient dense food," while at CRCH, clinicians are caring for individuals with "a health need for the vegetables" (05) and whom "we probably wouldn't reach otherwise" (04). Every farmer interviewed said that they would recommend the VegRx program as "a really smart way to get food to people who need it" (03).

CRCH clinicians report that VegRx participants "really appreciate the opportunity to have a fresh box of vegetables every week" since "getting quality food can be a barrier" to improving their health (08/09). They also suggested that there are likely positive spillover effects for participants' families, who often come with them to pick up the box of produce:

> Families with young kids, maybe they're trying new veggies. And definitely my patients with diabetes, they really appreciate the variety. They look forward to it. (08/09)

The clinicians therefore see VegRx as offering participants a way of "taking care of their families," as "the kids are involved, the grandparents are eating the same food" (08/09). As such, they strongly endorsed VegRx as an important strategy for connecting underserved communities with healthy food (08/09).

Building Community

In addition to improving nutrition and food security, VegRx was designed to build community in several ways. First, the VegRx model—in which the farm delivers weekly boxes of produce to the clinic—aims to connect participants directly with the farm: "We wanted to take out that supermarket element and that impersonal voucher program, and we wanted to provide access to food that was grown in … [the] local community" (01). One of the farmers commented that it is "really special," especially in an urban area, "that they can say these veggies have come from a mile down the road …" (03). WFCF staff also perceive that delivering the boxes to the clinic makes the food more immediately accessible, as compared to voucher programs: "I think it's nice that we're actually physically bringing the food to them. If people are given vouchers, there's no saying that they're actually going to use them …" (04). At the same time, as a collaboration between the farm and the clinic, VegRx has created a meaningful connection

between the two organizations (02, 08/09).

The partnership between WFCF and CRCH is vital to the VegRx program. While clinicians refer participants to the program by writing "prescriptions," farmers also "rely on Charles River" for relevant information about patients' health concerns and dietary needs (05). WFCF staff expressed appreciation for being able to partner with such a "well-established organization" (01) and noted that being "geographically really close to each other is amazing" (03). They also appreciated the significant investment of time and effort that implementing the program requires of busy clinic staff.

Both farmers and clinicians report that the box delivery model supports social interaction and connections. As one clinician commented,

> They get to meet each other, they get to communicate, they know someone now. They get to know someone steady at the health center and they can rely on a box of great produce for several weeks. That's a great benefit. (08/09)

Another clinician observed that

> when you give the boxes … to that group of people coming at the same time, being seen every week makes friends, a lot of connection. …. [In] the first few weeks, everybody's so serious, but the third week, everybody smile[s]. (08/09)

While the outreach farmers expressed regret that their interactions during drop off tended to be brief, they nonetheless appreciated the opportunity to meet program participants and hear about how they had used the previous week's vegetables: "People were excited about … using the veggies from the farm. Just hearing people being like, 'Oh, I make the soup and this is what I do,' was really great" (05).

Connecting with the Land

Even though the boxes are delivered to the clinic, WFCF staff encourage VegRx participants "to be at the farm with us, as much as they can be, and experience the farm and be a part of the farm community as well" (01). This is aligned with WFCF's vision of "providing access to the sanctuary of local farms and to not only the nutrients and the nourishment, but to the land and connecting people to the land. …" (01).

Therefore, in addition to welcoming participants to the farm in the newsletters that accompany the produce boxes, WFCF invites participants and their families "to the farm to get a tour and a demo" of how to access the produce that is available as part of the pick-your-own component of the farm's CSA program; these include cherry tomatoes, peas, beans, and herbs (03). Recognizing that "a big barrier is transportation for participants to come out to the Farm" (04), staff "provide lifts for people to come out" (03). One farmer recounted that the participants "brought their kids and their whole families came out and it was really fun" (04). Another noticed that when participants come to the farm, they "recognize a lot of stuff or were curious about it" and that it was great to have "excitement around that" (05). The CRCH clinicians also express enthusiasm for the farm tour, commenting that "it is successful and we really have a good time and people enjoy so much and after that people keep going to visit the farm" (08/09).

Catalyzing Change

While the primary objective of VegRx is to "break down barriers" to healthy food access and expand the impact of the farm in addressing diet related illness in Waltham, the program also has broader implications for "the way we [WFCF] serve our community" (01). WFCF staff hope that the "authentic relationships" being created between the farm and the clinic, between program participants and the farm, and among individuals will support "larger partnerships and collaborations with our community members" and increase the farm's capacity to contribute to nutrition, food security, and health equity in Waltham (01).

Already, as VegRx builds connections with "a more culturally and ethnically diverse community," WFCF staff are "learning from the clients that we're serving … about the traditions in their household"; this knowledge has implications for "how we can serve our community members better," including "what crops we should be looking

at" that have not previously been cultivated at WFCF (01, 04). In addition to informal interactions, the yearly post-program survey asks VegRx participants a series of open-ended questions about their food preferences, including what new vegetables they (and/or their children) liked and/or did not like; what vegetables they wish they had received more of; and, what vegetables they use at home and in family recipes that were not included in the boxes they received. In this way, "patients [who before the program] don't even know that we have the farm in Waltham," now help to inform what is grown each season (04), advancing food sovereignty in the community.

VegRx also has generated new resources that support WFCF's commitment to increasing food access in Waltham. As one of the farmers noted, VegRx is "a program that you can definitely get funding for" (03). This potential for philanthropic funding is important because "financially, farming is pretty difficult," (03) and

> for a small agricultural operation, especially a small agricultural nonprofit, to find the capacity to develop resources for a program like this and to have the capacity to do that is very challenging. (01)

One farmer recounted that in a year when WFCF "lost some of our growing land," the farm "didn't decrease any of our food access programs or the VegRx," but rather decreased the number of CSA shares, which constitute a significant part of the farm's yearly income (05). Despite these challenges, the farmers agreed that produce prescription programs should be "an essential core program for a lot of community farms" as "the more small, local farms that are providing programs like this, the more people that will be fed from local land …" (01).

That said, to address the fact that a produce prescription program can be "a lot to ask of a farm" (02)—especially as it requires "stable quantifiable produce" that can be distributed every week (05)—the farmers also suggested that "it would work out better if multiple farms came together and created one program as opposed to each farm having their own" (04). The farmers saw this "co-op model" as having a variety of benefits, including being able "to offer an even wider range of vegetables for your boxes," "not having to give as much of their land as they would need to if they were just taking it on themselves," and "the potential to reach more people" (04). One farmer suggested that a coalition of small, local farms could work together to aggregate produce, with one taking primary responsibility for distribution (02). WFCF already is experimenting with this collaborative model, albeit in a very limited way, as the fruit included in the VegRx boxes is grown by a partnering local orchard. Moving forward, WFCF staff envision a "VegRx coalition" of local farmers working together, and with health system providers, to provide healthy, local, culturally appropriate and desired produce to community members at risk of diet-related illness.

VegRx Participant Outcomes

In 2023, all but one of the 32 individuals participating in VegRx completed a survey at the beginning and conclusion of the program. The sample for this analysis therefore includes 97% of program participants. The descriptive statistics (Table 1) come from the data collected at the beginning of VegRx, while outcomes (Tables 2–5) are assessed using paired-samples t-tests that compare answers from the pre- and post-program surveys.

Sociodemographics and Food Insecurity

As shown in Table 1, VegRx program participants are predominantly women (93%) who identify as Hispanic or Latino (74%). Most speak a language other than English at home, including Spanish (74%), Creole (19%), or Portuguese (7%). The average household size of participants is 4.5 (SD = 1.8), with an average of two household members under the age of 18 (SD = 1.3). According to the HVS screening tool, at the beginning of the VegRx program, 90% of VegRx participants were food insecure; 39% use SNAP, 45% use WIC, and 10% use HIP to provide food for themselves and/or their families.

Food Access

VegRx participation is associated with statistically significant increases in access to healthy and desired foods for participants ($t(28) = 4.7$,

$p < .001$). As shown in Table 2, at the beginning of the VegRx program, only 29% of participants reported that they had enough of the kinds of food that they and others in the household wanted to eat in the last seven days; this increased to 76% of participants at the conclusion of the program. At the same time, the percentage of participants who reported that they "often did not have enough to eat" declined from 29% to 0%.

Dietary and Cooking Practices

The VegRx program appears to support a myriad of positive dietary outcomes, including statistically significant increases in participants' consumption of leafy greens ($t(29) = 5.2$, $p < .001$), red and orange vegetables ($t(29) = 6.00$, $p < .001$), and fruit ($t(29) = 2.72$, $p = .011$). As shown in Table 3, at beginning of the program, 39% of participants reported eating leafy greens 5–7 times per week; this increased to 74% at the end of the program. Similarly, at the beginning of the program, 32% of participants reported eating orange or red vegetables 5–7 times per week, which increased to 74% at the end of the

Table 1. Demographic Characteristics of VegRx Program Participants (2023)

	n	%
Gender		
Female	28	93.3
Male	2	6.7
Age	*M* = 44.3	*SD* = 16.8
19–24	2	7.4
25–34	7	25.9
35–44	6	22.2
45–54	5	18.5
55+	7	25.9
Population of Households		
Number of people in household	*M* = 4.5	*SD* = 1.8
Number of people in household under 18	*M* = 1.7	*SD* = 1.3
Race		
Black or African American	6	50.0
White	3	25.0
Other multiracial	3	25.0
Ethnicity		
Hispanic or Latino	23	74.2
Not Hispanic or Latino	8	25.8
Language spoken in the home		
Spanish	23	74.2
Creole	6	19.4
Portuguese	2	6.5
Food insecurity		
Food insecure	28	90.3
SNAP/EBT	12	38.7
HIP	3	9.7
WIC	14	45.2

Table 2. Food Access

In the last 7 days, which of these statements best describes the food eaten in your household?			
		Pre-test	*Post-test*
1.We had enough of the kinds of food I/we wanted to eat.	*n*	9	22
	%	29.0	75.9
2.We had enough, but not always the kinds of food I/we wanted to eat.	*n*	7	5
	%	22.6	17.2
3.We sometimes did not have enough to eat.	*n*	6	2
	%	19.4	6.9
4.We often did not have enough to eat.	*n*	9	0
	%	29.0	0
Average (SD)		**2.5 (1.2)**	**1.3 (.6)**
p-value		<.001***	

Significance is denoted as follows: * < .05; ** < .01; *** < .001 (2-tailed, paired t-test).

program. Participants also increased their fruit intake, from 60% eating fruit 5–7 times per week at the beginning of the program, to 74% at its conclusion. There was no statistically significant change in participants' reported consumption of fruit and vegetable specifically for snacks.

As shown in Table 4, over the course of the program, there was also a statistically significant increase in participants' confidence in tasting new foods ($t(29) = 2.33$, $p = .021$). At the outset of program, 45% of participants reported that is "often true" that they are confident tasting new foods, whereas at its conclusion, this increased to 71% of participants. Relatedly, the percentage of participants reporting that it is "never true" that they are confident tasting new foods declined from 26% to 0%. There were no statistically significant changes in participants' confidence in regard to other practices, such as cooking for their family, following a recipe, or cooking new foods.

Table 3. Vegetable and Fruit Consumption

How often do you eat the following:									
		Leafy greens		**Orange or red vegetables**		**Fruit**		**Fruit or vegetables for snack**	
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
5–7 times per week	*n*	12	23	10	23	18	23	14	45.2
	%	38.7	74.2	32.3	74.2	60.0	74.2	45.2	76.7
1–4 times per week	*n*	12	6	15	6	7	6	11	2
	%	38.7	19.4	48.4	19.4	23.3	19.4	35.5	6.7
<1 time per week	*n*	6	2	6	2	4	2	5	3
	%	19.4	6.5	19.4	6.5	13.3	6.5	16.1	10.0
<1 time per month	*n*	1	0	0	0	0	0	1	2
	%	3.2	0	0	0	0	0	3.2	6.7
Never	*n*	0	0	0	0	1	0	0	0
	%	0	0	0	0	3.3	0	0	0
Average (SD)		**1.9 (.8)**	**1.0 (.2)**	**1.9 (.7)**	**1.0 (.2)**	**1.6 (1)**	**1.1 (.3)**	**1.8 (.9)**	**1.5 (.9)**
p-value		<.001***		<.001***		.011*		.213	

Significance is denoted as follows: * < .05; ** < .01; *** < .001 (2-tailed, paired t-tests).

Table 4. Confidence in Cooking Practices

Do you feel confident…									
		Cooking for family		**Following a recipe**		**Tasting new food**		**Cooking new food**	
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Often true	*n*	14	21	14	20	14	22	17	22
	%	45.2	67.7	45.2	64.5	45.2	71.0	54.8	71.0
Sometimes true	*n*	15	9	11	9	8	8	8	7
	%	48.4	29.0	35.5	29.0	25.8	25.8	25.8	22.6
Never true	*n*	0	0	2	1	8	0	1	0
	%	0	0	6.5	3.2	25.8	0	3.2	0
I don't know	*n*	2	1	4	1	1	1	5	2
	%	6.5	3.2	12.9	3.2	3.2	3.2	16.1	6.5
Average (SD)		**1.7 (.8)**	**1.4 (.7)**	**1.9 (1.0)**	**1.5 (.7)**	**1.9 (.7)**	**1.4 (.7)**	**1.8 (1.1)**	**1.4 (.8)**
p-value		.142		.102		.021*		.184	

Significance is denoted as follows: * < .05; ** < .01; *** < .001 (2-tailed, paired t-tests).

Subjective Health Status

Participating in the VegRx program is associated with strong, positive improvements in subjective physical health ($t(29) = 3.61$, $p = .001$) and mental health status ($t(28) = 2.99$, $p = .006$). As shown in Table 5, at the beginning of the program, 55% of participants rated their physical health as *excellent*, *very good*, or *good*, while 45% of participants rated their health as *fair* or *poor*. At the conclusion of the program, the proportion of participants who rated their physical health as *excellent*, *very good*, or *good*, increased to 90%, with only 10% of participants rating their health as *fair* or *poor*. At the beginning of the program, 77% of participants rated their mental health as *excellent*, *very good*, or *good* (vs. *fair* or *poor*); this increased to 100% of participants rating their mental health as *excellent*, *very good*, or *good* at the conclusion of the program. There were no statistically significant changes in participants' perceptions of the physical or mental health status of their children.

Farm Involvement

While there was an increase in the proportion of participants who had visited a farm, from 19% at the beginning of the program to 38% at follow-up, this change was not statistically significant ($t(24) = -2.01$, $p = .056$).

Discussion and Conclusions

Based on a mixed-methods case study of VegRx—a community farm-based produce prescription program—this paper makes three unique contributions. First, it demonstrates the importance of including the perspectives of food producers in assessments of PPP. By interviewing WFCF staff, as well as clinicians, our paper identifies how PPP can be aligned with the missions of community farms, including by increasing access to healthy, locally grown food, building relationships with and among underserved community members, and partnering with healthcare organizations to make the health-enhancing resources of a farm more widely available.

Second, this paper reports on the outcomes of a PPP which uses a "box model"; while this approach is somewhat atypical for PPP (Little et al., 2022), it is a common method of distribution in CSA programs. An analysis of data from surveys completed at the beginning and end of the 2023 VegRx program demonstrates that it made statistically significant improvements in participants' diets, including the frequency with which they eat leafy greens, orange and red vegetables, and fruit. The VegRx program also significantly increased participants' access to the kinds of food that they and others in the household want to eat and their confidence in tasting new foods. VegRx participants reported significantly better physical and mental health at the end of the program. Together, these outcomes point to the potential of VegRx's box model in achieving the goals of a PPP.

Lastly, this study points to two ways that farm-based PPP might catalyze change in local food systems. To begin, asking PPP participants about the produce that they wish to eat (and including their preferences as part of crop planning) offers a mechanism for increasing access to healthy and culturally appropriate food and providing individuals with opportunities to shape local food produc-

Table 5. Subjective Health Status

In general, how would you describe your and your child's health and mental health?		Health		Mental health		Child health		Child mental health	
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Excellent, Very good, Good	*n*	17	27	23	30	21	26	21	26
	%	54.8	90.0	76.7	100	80.8	96.3	84.0	96.3
Fair, Poor	*n*	14	3	7	0	5	1	4	1
	%	45.2	10.0	23.3	0	19.2	3.7	16.0	3.7
Average (SD)		**3.1 (1.2)**	**2.5 (.9)**	**2.8 (1.0)**	**2.5 (.7)**	**2.7 (1.0)**	**2.5 (.8)**	**2.6 (1.1)**	**2.4 (.9)**
p-value		.001***		.006**		.103		.186	

Significance is denoted as follows: * < .05; ** < .01; *** < .001 (2-tailed, paired t-tests).

tion; these are important aspects of food sovereignty (La Vía Campesina, 2009*)*. This finding is congruent with studies of other PPP (Budd Nugent et al., 2022), subsidized CSA programs (Lu et al., 2023), and mobile farmers markets (Shostak et al., 2017), which have highlighted the importance of learning from participants about their traditional diets and integrating their preferences for specific kinds of produce. Moreover, insofar as local community farms begin to work together to implement PPP—a strategy strongly endorsed by the farmers in this study and consonant with the first-hand experiences of others in the Northeast (Hileman, 2021)—their relationships with each other, program participants, and healthcare providers have the potential to both strengthen local food systems and advance community health.

Of course, this study is limited by its focus on only one community farm–based PPP. As such, it should be seen as a first step toward integrating the perspectives of food producers in assessments of PPP, in particular, and the Food is Medicine movement, more broadly. Certainly, there is much to be learned from the experiences of farmers at farms of varied sizes and locations, who serve diverse communities, and who deploy different models for their PPP. This study also highlights some of the less-often considered questions about PPP that should be included in future research, especially in regard to how such programs can advance food sovereignty, both from the perspective of participants (How does the program honor the foodways of participants? What practices ensure that programs' definitions of "healthy food" do not reinforce structural inequalities?) and for local food systems (How does the program contribute to the viability of community farms? What relationships are created between organizations? What kinds of advocacy emerge from these initiatives?).

This study may also be seen as limited insofar as it does not use any biometric indicators to assess the outcomes of the VegRx Program. Indeed, the clinicians who participated in the study stated that they hope, in the future, to gather data about participants' BMI, cholesterol, and blood pressure, as part of ascertaining program outcomes (08/09). Demonstrating that PPP improve biometric indicators of health status will likely increase the support and funding for this approach, perhaps especially from federal programs such as Medicaid, and other large health insurers and healthcare systems (Downer et al., 2020). That said, improving healthy food access, decreasing food insecurity, and enhancing the subjective health and well-being of participants should not be undervalued as outcomes of PPP.

The VegRx survey data allowed us to assess program outcomes in a population comprising primarily women (93%) who identify as Hispanic/Latino (74%). While the specificity of this sample makes it difficult to generalize to other populations, this analysis suggests that PPP may be remarkably effective in improving food access, dietary practices, and subjective physical and mental health status in a population that is disproportionately affected by food insecurity (Rabbitt et al., 2024). As such, this study joins a growing body of evidence demonstrating the potential of PPP to improve food access and health outcomes for individuals from minoritized and underserved communities (Hager et al., 2023; Sato Imuro et al., 2023; Stroud et al., 2023).

The outcomes in this specific group of PPP participants also highlight some intriguing directions for future research. First, we suggest that research on PPP consider how cooking skills, confidence, and resources shape the experiences and outcomes of participants. At the beginning of the VegRx program, participants reported high levels of confidence (i.e., that it is *always* or *sometimes* vs. *never* true that they feel confident) in cooking for their family (93.7%), following a recipe (80.7%), and cooking new foods (80.6%). As such, it is possible that these individuals were particularly well positioned to use the vegetables and fruit they received weekly from VegRx, contributing to the significant positive outcomes associated with program participation. Especially because PPP often include nutrition information and education (Newman et al., 2022), understanding the strengths and needs of specific populations—and their relationships to important program outcomes—could provide a basis for meaningfully tailoring program offerings. Second, while the literature is quite clear that food insecurity has negative impacts on mental health (Myers, 2020), especially for mothers

(Ciciurkaite & Brown, 2017), there is more work to be done to identify the specific mechanisms linking participation in a PPP with significant improvements in subjective mental health status.

At the same time, this study has important implications for the development of the VegRx program and others like it. For WFCF, the multiple positive outcomes of VegRx for participants affirm the importance of the program and the potential impact of extending its time frame (beyond 20 weeks per year), which will require funding for season-extending farm infrastructure. The finding that less than 50% of participants had visited the farm highlights an opportunity for further program development and, likely, the need for more consistent transportation support. More broadly, these findings point to the importance of more robust and sustained funding for PPP, including support for food producers, as "current produce-prescription programs have limited reach and sustainability due to piecemeal funding from relatively short-term grants" (Auvinen et al., 2022, p. 2). Lastly, this research shows that just as PPP may serve as a mechanism for increasing the "accountability of healthcare systems to addressing social needs" (Budd Nugent et al., 2022, p. 191), they also provide an important opportunity for local community farms to become an integral partner in efforts to improve food access, food sovereignty, and health equity.

Acknowledgments

We are grateful to Waltham Fields Community Farm for entrusting us with this study of the VegRx program. We appreciate also the time and thoughtfulness of the staff of both Waltham Fields Community Farm and Charles River Community Health who participated in interviews and shared survey data with our team. This article builds upon research that was begun by students in a spring 2024 capstone class in the Health: Science, Society and Policy (HSSP) program at Brandeis University; we are pleased to acknowledge their early contributions and commitment to the work. As well, we thank Margarita Corral for lending her expertise to the analysis and presentation of the quantitative data. We are grateful to the Vic '63 and Bobbi Samuels '63 Center for Community Partnerships and Civic Transformation (COMPACT) at Brandeis University for the Community Engaged Pedagogy Project Grant that made this project possible. Lastly, we thank the two anonymous reviewers for their many helpful comments and insights.

References

Auvinen, A., Simock, M., & Moran, A. (2022). Integrating produce prescriptions into the healthcare system: Perspectives from key stakeholders. *International Journal of Environmental Research and Public Health*, *19*(17), Article 11010. https://doi.org/10.3390/ijerph191711010

Bhat, S., Coyle, D. H., Trieu, K., Neal, B., Mozaffarian, D., Marklund, M., & Wu, J. H. Y. (2021). Healthy food prescription programs and their impact on dietary behavior and cardiometabolic risk factors: A systematic review and meta-analysis. *Advances in Nutrition*, *12*(5), 1944–1956. https://doi.org/10.1093/advances/nmab039

Budd Nugent, N., Ridberg, R. A., Fricke, H., Byker Shanks, C., Stotz, S. A., Chung, A. G. J., Shin, S., Yaroch, A. L., Akers, M., Lowe, R., George, C., Thomas, K., & Seligman, H. K. (2022). Food sovereignty, health, and produce prescription programs: A case study in two rural tribal communities. *Journal of Agriculture, Food Systems, and Community Development*, *11*(3), 177–196. https://doi.org/10.5304/jafscd.2022.113.014

Charmaz. K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. SAGE Publications.

Ciciurkaite, G., & Brown, R. L. (2017). Food insecurity and mental health: A gendered issue? In S. Shostak (Ed.), *Food Systems and Health* (pp. 59–76). Emerald Publishing Limited. https://doi.org/10.1108/S1057-629020170000018003

Cook, J. T., Black, M., Chilton, M., Cutts, D., Ettinger de Cuba, S., Heeren, T. C., Rose-Jacobs, R., Sandel, M., Casey, P. H., Coleman, S., Weiss, I., & Frank, D. A. (2013). Are food insecurity's health impacts underestimated in the U.S. population? Marginal food security also predicts adverse health outcomes in young U.S. children and mothers. *Advances in nutrition*, *4*(1), 51–61. https://doi.org/10.3945/an.112.003228

Cook, M., Ward, R., Newman, T., Berney, S., Slagel, N., Bussey-Jones, J., Schmidt, S., Sun Lee, J., & Webb-Girard, A. (2021). Food security and clinical outcomes of the 2017 *Georgia Fruit and Vegetable Prescription* Program. *Journal of Nutrition Education and Behavior*, *53*(9), 770–778. https://doi.org/10.1016/j.jneb.2021.06.010

Downer, S., Berkowitz, S. A., Harlan, T. S., Olstad, D. L., & Mozaffarian, D. (2020). Food is medicine: Actions to integrate food and nutrition into healthcare. *BMJ*, *369*, Article m2482. https://doi.org/10.1136/bmj.m2482

Folta, S. C., Li, Z., Cash, S. B., Hager, K., & Zhang, F. F. (2023). Adoption and implementation of produce prescription programs for under-resourced populations: Clinic staff perspectives. *Frontiers in Nutrition*, *10*, Article 1221785. https://doi.org/10.3389/fnut.2023.1221785

Golden, S. H., Joseph, J. J., & Hill-Briggs, F. (2021). Casting a health equity lens on endocrinology and diabetes. *The Journal of Clinical Endocrinology and Metabolism*, *106*(4), e1909–e1916. https://doi.org/10.1210/clinem/dgaa938

Gundersen, C., & Ziliak, J. P. (2015). Food insecurity and health outcomes. *Health Affairs, 34*(11), 1830–1839. https://doi.org/10.1377/hlthaff.2015.0645

Hager, E. R., Quigg, A. M., Black, M. M., Coleman, S. M., Heeren, T., Rose-Jacobs, R., Cook, J. T., Ettinger de Cuba, S. A., Casey, P. H., Chilton, M., Cutts, D. B., Meyers, A. F., & Frank, D. A. (2010). Development and validity of a 2-item screen to identify families at risk for food insecurity. *Pediatrics*, *126*(1), e26–e32. https://doi.org/10.1542/peds.2009-3146

Hager, K., Du, M., Li, Z., Mozaffarian, D., Chui, K., Shi, P., Ling, B., Cash, S. B., Folta, S. C., & Zhang, F. F. (2023). Impact of produce prescriptions on diet, food security, and cardiometabolic health outcomes: A multisite evaluation of 9 produce prescription programs in the United States. *Circulation: Cardiovascular Quality and Outcomes*, *16*(9), Article e009520. https://doi.org/10.1161/CIRCOUTCOMES.122.009520

Hileman, E. (2021). Empowerment, love, and connection: Lessons learned from the Farmacy Project, a food-is-medicine program in Rutland, Vermont. *Journal of Agriculture, Food Systems, and Community Development*, *11*(1), 11–13. https://doi.org/10.5304/jafscd.2021.111.011

Johnson, S., Fischer, L., Gupta, S., Lazerov, J., Singletary, J., & Essel, K. (2023). "I felt like I had something I could do about it": Pediatric clinician experiences with a food insecurity-focused produce prescription program. *Clinical Pediatrics*, *62*(9), 1018–1026. https://doi.org/10.1177/00099228221150604

Joseph, C. A., & Seguin, M. L. (2023). "Something fun to look forward to": Lessons from implementing the *Prescription for Health* Farmers' Market Initiative in Rural Upper Michigan. *Health Promotion Practice*, *24*(5), 903–910. https://doi.org/10.1177/15248399221093966

Kimbro, R. T., & Denney, J. T. (2015). Transitions into food insecurity associated with behavioral problems and worse overall health among children. *Health Affairs*, *34*(11), 1949–1955. https://doi.org/10.1377/hlthaff.2015.0626

La Vía Campesina. (2009). Food sovereignty: A new model for a human right (Statement, La Vía Campesina and Friends of the Earth International). https://viacampesina.org/en/food-sovereignty-a-new-model-for-a-human-right/

Li, Z., Zhang, F. F., Cash, S. B., Hager, K., Trevino, L., & Folta, S. C. (2024). Caregiver perceptions of a pediatric produce prescription program during the COVID-19 pandemic. *Frontiers in Nutrition*, *11*, Article 1304519. https://doi.org/10.3389/fnut.2024.1304519

Little, M., Rosa, E., Heasley, C., Asif, A., Dodd, W., & Richter, A. (2022). Promoting healthy food access and nutrition in primary care: A systematic scoping review of food prescription programs. *American Journal of Health Promotion*, *36*(3), 518–536. https://doi.org/10.1177/08901171211056584

Liu, J., & Mozaffarian, D. (2024). Trends in diet quality among U.S. adults from 1999 to 2020 by race, ethnicity, and socioeconomic disadvantage. *Annals of Internal Medicine*, *177*(7), 841–850. https://doi.org/10.7326/M24-0190

Lu, I., Suss, R., Lanza, D. V., Cohen, S., Yusuf, Y., & Yi, S. S. (2023). A qualitative study to inform the development of a subsidized community-supported agriculture program for Chinese Americans in Brooklyn, New York, U.S. *Preventive Medicine Reports*, *36*, Article 102480. https://doi.org/10.1016/j.pmedr.2023.102480

Martin, M. A., & Lippert, A. M. (2012). Feeding her children, but risking her health: The intersection of gender, household food insecurity and obesity. *Social Science & Medicine*, *74*(11), 1754–1764. https://doi.org/10.1016/j.socscimed.2011.11.013

Myers, C. A. (2020). Food insecurity and psychological distress: A review of the recent literature. *Current Nutrition Reports*, *9*, 107–118. https://doi.org/10.1007/s13668-020-00309-1

Newman, T., Lee, J. S., Thompson, J. J., & Rajbhandari-Thapa, J. (2022). Current landscape of produce prescription programs in the US. *Journal of Nutrition Education and Behavior*, *54*(6), 575–581. https://doi.org/10.1016/j.jneb.2022.02.011

Rabbitt, M. P., Hales, L. J., Burke, M. P., & Coleman-Jensen, A. (2023). *Household food security in the United States in 2022* (Report No. ERR-325), U.S. Department of Agriculture, Economic Research Service. https://doi.org/10.32747/2023.8134351.ers

Rabbitt, M. P., Reed-Jones, M., Hales, L. J., & Burke, M. P. (2024). *Household food security in the United States in 2023* (Report No. ERR-337). U.S. Department of Agriculture, Economic Research Service. https://doi.org/10.32747/2024.8583175.ers

Sato Imuro, S. E., Sabharwal, A., Conneely, C., Glantz, N., Bevier, W., Barua, S., Pai, A., Larez, A., & Kerr, D. (2023). Temporal changes in bio-behavioral and glycemic outcomes following a produce prescription program among predominantly Hispanic/Latino adults with or at risk of type 2 diabetes. *Heliyon*, *9*(8), Article e18440. https://doi.org/10.1016/j.heliyon.2023.e18440

Schlosser, A. V., Smith, S., Joshi, K., Thornton, A., Trapl, E. S., & Bolen, S. (2019). "You guys really care about me…": A qualitative exploration of a produce prescription program in safety net clinics. *Journal of General Internal Medicine*, *34*, 2567–2574. https://doi.org/10.1007/s11606-019-05326-7

Seligman, H. K., & Berkowitz, S. A. (2019). Aligning programs and policies to support food security and public health goals in the United States. *Annual Review of Public Health*, *40*, 319–337. https://doi.org/10.1146/annurev-publhealth-040218-044132

Shostak, S., Blum, J., Mancini, C., Oliviera, L., Robinson, L., & Satin-Hernandez, E. (2017). From food access to food justice: A case study of the Somerville Mobile Farmers' Market. In C. Bosso (Ed.), *Feeding cities: Improving local food access, security, and sovereignty* (pp. 59–75). Routledge.

Slagel, N., Newman, T., Sanville, L., Thompson, J. J., Dallas, J., Cotto-Rivera, E., & Lee, J. S. (2023). A pilot fruit and vegetable prescription (FVRx) program improves local fruit and vegetable consumption, nutrition knowledge, and food purchasing practices. *Health Promotion Practice*, *24*(1), 62–69. https://doi.org/10.1177/15248399211018169

Stotz, S. A., Budd Nugent, N., Ridberg, R., Byker Shanks, C., Her, K., Yaroch, A. L., & Seligman, H. (2022). Produce prescription projects: Challenges, solutions, and emerging best practices—Perspectives from health care providers. *Preventive Medicine Reports*, *29*, Article 101951. https://doi.org/10.1016/j.pmedr.2022.101951

Stroud, B., Jacobs, M. M., Palakshappa, D., & Sastre, L. R. (2023). A rural delivery-based produce prescription intervention improves glycemic control and stress. *Journal of Nutrition Education and Behavior*, *55*(11), 803–814. https://doi.org/10.1016/j.jneb.2023.08.006

U.S. Department of Agriculture, Economic Research Service [USDA ERS]. (n.d.). *Food security in the U.S.—Definitions of food security*. Retrieved June 14, 2024, from https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/definitions-of-food-security/

USDA ERS. (2023). *Household food security in the United States in 2022* [Webpage]. https://www.ers.usda.gov/publications/pub-details?pubid=107702

Waltham Fields Community Farm. (n.d.). *About Waltham Fields Community Farm*. Retrieved June 27, 2024, from https://communityfarms.org/about/overview