Vegetable Prescription Programs: A New Take on Holistic Health

Zoe Blickenderfer

University of Pennsylvania
Vegetable Prescription Programs: A New Take on Holistic Health

Abstract
This article evaluates the efficacy of Vegetable Prescription programs through a case study of the Sayre Good Food Bags (GFB) program at Sayre High School in Philadelphia, PA. This paper answers the question, how do vegetable prescription programs affect their members’ attitudes, behaviors, and habits towards vegetables and cooking? Vegetable Prescription programs typically are the result of relationships between health care providers and farms or farmers’ markets. The Sayre GFB program is a result of the relationship between the Sayre Health Center, and the Sayre Garden. Through interviews with GFB members and administrators, this study found that vegetable prescription programs have a moderate impact on members’ cooking and eating habits, but this particular program also served as a tool to promote food justice and intergenerational learning. The Sayre GFB program serves as alternative to the expensive and/or poor quality produce the members usually encounter at supermarkets. Many members were excited by the variety of produce and the inclusion of recipes for the vegetables in the bags. Many members used the GFB as a tool to promote their own well-being. The GFB members were most excited about the youth interns at the Sayre Garden. More research must be done to analyze the health effects of vegetable prescription programs, as we as to compare the effects of this type of vegetable prescription program to similar programs across the country.

Keywords
health, holistic, diet, disease, obesity, diabetes

Disciplines
Social and Behavioral Sciences | Urban Studies and Planning

Comments
Suggested Citation:
Vegetable Prescription Programs: a new take on holistic health

Zoe Blickenderfer
Candidate for a BA in Urban Studies with Honors
University of Pennsylvania
4223 Osage Avenue, Philadelphia, PA, 19104

Abstract:

This article evaluates the efficacy of Vegetable Prescription programs through a case study of the Sayre Good Food Bags (GFB) program at Sayre High School in Philadelphia, PA. This paper answers the question, how do vegetable prescription programs affect their members’ attitudes, behaviors, and habits towards vegetables and cooking? Vegetable Prescription programs typically are the result of relationships between health care providers and farms or farmers’ markets. The Sayre GFB program is a result of the relationship between the Sayre Health Center, and the Sayre Garden. Through interviews with GFB members and administrators, this study found that vegetable prescription programs have a moderate impact on members’ cooking and eating habits, but this particular program also served as a tool to promote food justice and intergenerational learning. The Sayre GFB program serves as alternative to the expensive and/or poor quality produce the members usually encounter at supermarkets. Many members were excited by the variety of produce and the inclusion of recipes for the vegetables in the bags. Many members used the GFB as a tool to promote their own well-being. The GFB members were most excited about the youth interns at the Sayre Garden. More research must be done to analyze the health effects of vegetable prescription programs, as we as to compare the effects of this type of vegetable prescription program to similar programs across the country.

Keywords: health, holistic, diet, disease, obesity, diabetes

Funding: This study was partially funded by the University of Pennsylvania’s Urban Studies Program’s Hassenfeld Grant

Conflict of Interest: Zoe Blickenderfer was an employee of the Agatston Urban Nutrition Initiative at the time of this study.
Introduction

You couldn’t place folks in the middle of a blighted neighborhood — without a strong family unit and without easy access to healthy food — and expect them to thrive. If you could create an environment in which people felt secure and healthy, though, you could provide the possibility of a better life.

—The Good Food Revolution (2012)

For the past fifty years, scholars have written about how individuals and society must change the way food is funded, grown, distributed, and consumed. In the past twenty years, rural and urban food movements have gained followers across the world and people are beginning to unify in their cry for justice and sovereignty.

Many activists see urban agriculture as one step towards a more just food system. Urban farms and gardens take on many different forms and develop different types of relationships with their communities. While low-cost Urban Community Supported Agriculture (CSA) is on the rise, a new incarnation of CSAs has been Vegetable Prescription programs, in which health care providers prescribe their patients bags of low-cost produce to prevent or combat diet-related disease. These new programs can be seen as having two effects: First, they pull agriculture in from the fringe of society, and welcome it into patients’ day-to-day lives. In addition, they change the way people look at healthcare. Rather than doctors being the gatekeepers of pharmaceuticals, they are beginning to treat their patients holistically. Because many of these programs are so young, their success has not yet been evaluated, and in many cases no metrics to evaluate their success have been created. This study sought to evaluate the efficacy of vegetable prescription programs through a case study of the Sayre Good Food Bags, a program that is a partnership between a high school garden tended by youth interns, and a local health center. I
answered the following question: Why do members join and stay in the program? What value do they see in participating in this new alternative food network?

This study found that the program has an impact not just on its members’ cooking and eating habits, but also has larger implications and additional effects as a site for intergenerational learning and the sharing of knowledge on gardening and food preparation. I hope that this study will serve to guide further research in this up-and-coming trend.

**Literature Review**

In the United States there are inequalities in health across color and class lines. Poor health and healthcare access can have extreme impacts on people’s well-being and longevity, and low income communities of color are disproportionately affected by diet-related and cardiovascular diseases (Peek et al 2007; Dezendorf 2013; Patel 2007; Walker et al 2010; Okoye 2014, Fiscella and Williams 2004). Many patients who visit the Sayre Health Center are fighting against these diet related diseases. While individual choice plays a large part in people’s diets, “Individual behavior to make healthy choices can occur only in a supportive environment with accessible and affordable healthy food choices” (Story et al 2008, 254). The Sayre Garden is attempting to create this supportive environment of healthy foods.

Sociologists and anthropologists discuss Alternative Food Networks (AFNs) as a one of the more common antidotes to the ills of our current food system (Okoye 2014; Kato 2013; Block et al 2012; Slocum 2013; McClintock 2014; Caraher and Dowler 2014), as they serve as a break from the traditional agro-industrial relationships between producers and consumers of food (Jarosz 2008). In AFNs the needs of both the growers and the consumers are taken into consideration. Some scholars of AFNs have been critical of their motivations and actions, however, warning of the potential exclusivity of networks that often are designed by and for
white, middle-class, participants (Okoye 2014; Caraher and Dowler 2014; Slocum 2013). Scholars do see more and more organizations deliberately seeking to include people of color in their creation and planning (Okoye 2014; Kato 2013).

Community Supported Agriculture (CSA) programs are one type of AFN, in which customers are required to pay for the food up front, by the month, or even by the year. CSAs are a way to promote the consumption of fresh produce and provide a more stable income for farmers. Oftentimes, the upfront payment, even for only a month, is not affordable for a low-income family. Limited pickup hours, and culturally inappropriate foods are other reasons why some groups might not participate (Okoye 2014; Kato 2013). CSA programs must use a food justice frame of reference to ensure the organization is taking into account the needs of the neighborhood (Kato 2013, Passidomo 2014).

Food justice is a framework that many activists use that focuses on the availability and affordability of fresh, culturally appropriate food. Eric Holt-Giménez explains that “this discourse, coming from the traditions of environmental justice, denounces the ways people of color and underserved communities in rural and urban areas are abused by the present food regime, and invokes the notion of a gradual, grassroots-driven transition, or passage, to a more equitable and sustainable food system” (323, 2011). The Agatston Urban Nutrition Initiative (AUNI) the parent organization of Sayre Garden sees its garden and nutrition education programs as tools to pursue food justice in the communities it works with.

The Sayre Good Food Bags is more than just a CSA program, its leaders consider it a vegetable prescription program, which is a new trend in preventative healthcare in which healthcare providers develop partnerships with gardens and farmers’ markets. Little has been written about these programs, and this paper will seek to evaluate one such example, as well as
determine whether the healthcare providers and farmers are promoting food justice in their prescription program.

**Data and Analysis**

**Demographics of Participants**

The current demographics of the twelve participants in the Good Food Bags (GFB) program are as follows: 91% of the members that pick up regularly are black, 25% pay with EBT\(^1\). 25% of participants are seniors, one participant is in her twenties, and the rest are above 40. According to data from PolicyMap, the demographics of the program’s catchment area are as follows: 96% of the residents in the borders defined above are black, about 80% of the population in Sayre High’s census tract are overweight or obese, and 20% have been diagnosed with diabetes. While no data on SNAP is available for the Sayre Health Center catchment area, approximately 30% of Philadelphia residents receive SNAP benefits. Approximately 1/3 of the catchment area is considered low-income and low-access (to food) by the US Department of Agriculture. The coordinators of the program are not sure which patients are recommended by the health center, but a majority of them do have diet-related diseases. The garden can only support 14 bags, with supplemental produce from the Bartram’s Community Farm and Food Resource Center. There are currently twelve members, and two bags are donated to the health center and building staff.

**Methods**

I interviewed half of the Good Food Bags members, one of whom is Hispanic, the rest of whom are black, and all between the ages of 43 and 81, aside from one woman in her early 20s.

---

\(^1\) *Electronic Benefit Transfer.* Also known as Food Stamps or Supplemental Nutrition Assistance Program benefits. For more information, see https://www.able.acs-inc.com/paebtclient/
The names of the participants I interviewed are, Janet, Ruth, Gladys, Wanda, Erica, Pearl (all names have been changed to protect participants’ identities). While Wanda, Gladys, Pearl, and Janet all are patients at SHC, only Wanda, Pearl, and Ruth found out about the program while at Sayre, and only Wanda specifically mentioned being recommended to the program. Janet and Erica found out about it through their neighbors and families, respectively. Gladys joined because her son is a youth intern at the Garden. Unfortunately, none of the administrators or managers of the program have an exact count of which GFB members were recommended by the health center.

As explained above, I interviewed members and asked them a series of questions about their food shopping and cooking habits before and after the program, their feelings about the various aspects of the program, and their experiences with gardening and growing food. The following are the claims I have made about the success of the program as an alternative food network as well as its role in promoting food justice for the members.

*Produce is comparatively cheap and high quality*

For many members, cost of fresh produce in grocery stores is prohibitive, and the GFBs provide an affordable alternative to industrial or industrial-organic fruits and vegetables. My conversations with the GFB members confirmed what has been written about traditional food networks. In discussing which grocery stores they frequented, my interviewees were generally dissatisfied with the availability, quality, and the prices of produce. The GFB members frequently noted that the produce in the local grocery stores was poor quality. Wanda said that there is not a “good selection of vegetables at the Fresh Grocer. My mother was always a big stickler for driving out the suburbs to shop because the foods so much better.” She explained to me, in a matter-of-fact voice that “[Suburban stores] truck stuff that they didn’t want to sell, to
the store on 69th. If you’re experience is that, you don’t even know that you have substandard stuff.” The closest store to Pearl was formerly a Fresh Grocer but now has changed ownership and is a Great Value:

When it was a Fresh Grocer, it wasn’t too hot. When I was working and I had a client and I shopped there for him…I didn’t like going there for him, the vegetables are nonexistent.

The one at 40th and Walnut, that one is good.

Again, recognizing the vast differences in quality of produce between markets in different locations, Erica also spoke about this Fresh Grocer, “I don’t like the Fresh Grocer that’s here. I don’t like their produce. I don’t really get groceries from around the neighborhood.” Janet will travel as far as Reading Terminal, the Italian Market, and Produce Junction for her food, all locations are quite far from her home.

Members see the GFBs as an alternative to produce from local grocery stores, and way to cook with affordable produce that is high quality. Most members are quite impressed with the quality of the produce. Many say they cannot afford the high prices for fresh produce at other grocery stores and many of the area grocery stores have produce that is bad quality. Gladys said “Come on, for $5, you get a whole bag of fresh vegetables. Probably with $20 I could get a good food bag if I went to the farmer’s market.” She loves that “they normally give you stuff in the bags that’s so hearty, like the kale, the squash, the purple potatoes. They were so good.” Pearl even went so far as to say that GFB produce lasts longer because “they’re always fresh….I find it to be worth [the price]” she adds. Erica also says that she likes that the Good Food Bags include seasonings, because she would never buy those at the store. Janet raved about the program, and said she was immensely satisfied with “the prices, and the freshness.”
**The Good Food Bags promote creativity**

Though there are some instances in which the GFB members do not feel that the bags meet their needs, generally, GFB members treat the GFB as a tool they can use to branch out in the kitchen. Most Good Food Bag members are extremely excited about food and cooking; many of my interviews lasted almost twice as long as planned, as members diverged from my questions to share recipes and cooking techniques with me. Pearl, who I interviewed in her house, even sent me away with pumpkin bread she had just made. All of the GFB members I interviewed said that, to varying degrees, the GFBs give them a chance to try something new and to explore recipes and foods outside of their comfort zone, and said that they have received items in their bag that they were not previously familiar with. Oftentimes, the recipes in the bags help them determine how to use the produce. Gladys best summarized the general sentiment about the bags: “Honestly I do think I eat better. [The bags] definitely enhance the way that I’m cooking. It pushes me out of my comfort zone. I have to go in the books…or google it, what I can make with turnips.” Gladys, Pearl, Erica, and Janet all also mentioned using the recipes that were included in the bags.

Most members mentioned different vegetables that they got in the bags that they had not previously encountered. Erica had not previously cooked with melons or leeks before. Janet got extremely excited when the bags contained plantain. Both Erica and Ruth got excited about the frequency with which the bags contain fresh herbs. “I’m still getting used to the fresh seasonings,” said Ruth. She was thrilled by the inclusion of ground cherries in the bags, a fruit she had never tasted until they were served at an event at the garden. “There was [an event] here where they had those little cherry things [ground cherries]. The whole thing about it is, I got here

---

2 A medicinal herb used for salves and teas
a little late…Just to think, if I hadn’t known them!” Wanda, who has been cooking all her life said, “Pretty much I was familiar with most everything, [but] there was a squash that was kinda weird once this summers.” There is a limit to the willingness of participants to experiment, in particular if the items in the bag are not culturally relevant.

**Good Food Bags work to include culturally appropriate foods**

While some members still express mild dissatisfaction with the kinds of vegetables they receive in their bags, the program has made strides in improving its cultural appropriateness. Cultural relevancy is an important aspect of food justice. When the program first began, Tracy said, “we got the feedback that patients just didn’t like the food.” She said that Kim adjusted the bags so that they will contain vegetables themed around a recipe. Kim echoed this, I got feedback when I first started based on what Drew had been growing. Kiasha told me that [the members were] not excited about kohlrabi. We try to grow things that people like. They like the herbs, and we get requests for extra mint and stuff, which is good because we [like to] really push drinking water and tea.

There are certain items that members are really excited about. Kim, “they really like when we have fruit like peaches and grapes, or huge bunches of greens.” In addition, thanks to the partnership with the Bartram’s CFFRC, Tracy said “We have okra now and patients have been over the moon, in the waiting room swapping okra recipes and jambalaya recipes.”

Still, there are some instances in which the bags still do not fit the needs of the members: “Spanish people don’t really eat turnips,” says Gladys. A woman of candor, Wanda said flatly, Do you know what I actually detest what’s in the bag?…radishes. Black people don’t eat radishes. Stop with the radishes, from like the beginning of the season to the end…I
either toss it, or I give it to someone who’s white…Like one time they made this radish salad, like it was ok, but I’m just not gonna do that, in order to use the radishes.

She had similar comments about the recipes that are included in the bag: “I think that some of the recipes are ridiculous, like no black people are gonna take that home and cook it, seriously.” The willingness of the GFB managers to adapt their produce to fit the needs of their members shows the democratic nature of the programming, and demonstrate that while the farmers at Sayre want to encourage members to step outside of their culinary comfort zones, they are more than willing to cater the bags to their members wants and needs.

*Good Food Bags promote well-being*

Many members use their GFB to supplement their current health regimens. While I was not intending to make any claims about the effect of vegetable prescription programs on members’ health, my interviews with participants and the coordinators of the program revealed that the GFB program tends to serve as more of a supplement to the patients’ either self- or doctor-imposed health regimens, rather than the primary solution to their health issues.

Wanda, explained one of the reasons why she joined:

I was having trouble making ends meet with food, and I was living back at my mom’s old place, and you couldn’t get a lot of fresh stuff around here, or you couldn’t for a long time…I’m diabetic now, so I’ve cut down on a lot of sugar. Like I don’t eat sugar so much, I may have a dessert now and then but…I’m trying to break my addiction to artificial sugars, I try to cut down on that too.

Gladys said, “I was vegetarian for a while…the whole thing about incorporating vegetables…for me its more of a health aspect, because I do feel that certain animals were put on this earth for us to consume, so I do this for my health.” Pearl was one of the only members who made a direct
connection between her diet-related health and her membership in the program “I Found out that I was Type II diabetic, and [the GFB] would be a good way to eat better, [because it would] introduce you to things you normally wouldn’t get, like different herbs.” She also was the only member who noticed a physical change in her health, and she referred to her weight-loss after having been a member for a few months. Erica, the youngest member of the GFBs by far, saw the program as being a helpful way to maintain her health: “I have allergies, asthma, eczema. So I have to eat right. My diet really helps.” She treats her participation in the program as an extension of her “health kick.”

Tracy was quick to say that there is no research being done to be able to make claims about the effect of GFBs on the members’ health (as compared to non-GFB patients at the Health Center). “We haven’t measured its success as an intervention,” she said, “we’ve incorporated it in our preventative care.” The program does, however, help members be more creative in the kitchen, as noted above by most participants. Tracy has noticed this as well: “It encourages them to look at ingredients again. It staves off being lazy about your food choices.” She continues on “Chard doesn’t solely improve diabetes but personal ownership of health outcomes does give patients the chance to see success. You may still have diabetes but with nutritional changes you can improve your ‘numbers’ [referring to] blood pressure, weight, lipids, which makes you healthier and makes any chronic illness more manageable. Patients…rely on professionals to support their health. [But with the Good Food Bags] they can own their participation in fitness and nutrition, [which] is empowering and encouraging.” The incorporation of Veggie Rx, and other similar programs, into conventional health care is valuable if doctors want to make lasting, meaningful improvements in their patients’ health.
Good Food Bag members are most excited about the youth programming.

One important element of food justice and food sovereignty is intergenerational learning, and the GFB program is working towards food justice through its emphasis on, and encouragement of, intergenerational learning. All interviewed members pointed to the youth programming as one of the, or the, biggest reasons for their excitement for the program, because they felt that the program was improving their community. They saw it as being an important tool for educating kids about food and cooking and things that they might not be familiar with. Erica said, “I love the fact that it’s…happening. I think it’s great…for the neighborhood [and the] regular neighborhood school kids.” Kim explains, “a lot of the draw [of the GFB program] is the opportunity for intergenerational interactions. I think that the people who are most involved understand that they’re giving back…[that] it’s mutually beneficial for us and for the intern[s].”

Many of the program members see themselves playing the role of supportive and encouraging adult in the youth interns’ lives. “Nowadays it’s hard to find young people who is interested in things like that,” Janet told me. “I just feel as though as adults,” she continued, “if we interact with [the youth], that’s a way of showing them that we like what they’re doing…they’ll keep doing positive things.” Ruth loves to show off the produce that the students grow: “I couldn’t get over how they were putting everything together,” she says about the Good Food Bags assembly. “I was showing off [to a friend] about two weeks ago, and I took her cilantro, I said, ‘this is from the box that Sayre senior high kids made.’” Gladys’ son is a student intern at Sayre Garden. She says of the program, “I love the Good Food Bags and I love the people that are behind it and I love that they gave my son a chance to do this work and get paid.” Wanda explicitly stated the youth to be one of her reasons for joining the program, “I was fascinated because I found out that black children were learning how to grow food and cook it
and learning here it comes from…I felt like that was something I should get behind.” She takes her role as a GFB member seriously: “I like to talk to the children and tell them how proud I am of what they do. I think someone should tell them that.” Many Good Food Bag members join the program for the healthy eating, but they stay in the program to serve as mentors, and in some ways, sponsors, of the program.

In addition to the intergenerational learning, the garden is treated as a space through which members and staff members can share gardening and cooking advice. Tracy explains, “Some of the current participants have found…friendship in the program…Patients look forward to stopping in checking out the garden…[and] they [can] get sage gardening recommendations for their garden.”

**Conclusion**

While scholarly conversations about the relationships between food, health, and justice are not new, little research has been done on the impacts of vegetable prescription programs. This study demonstrated that the Good Food Bags, a vegetable prescription program in Philadelphia, not only benefits its members’ health, but also creates a space for intergenerational learning, where cultural relevancy of food is acknowledged and embraced. This also demonstrates the value of partnerships between urban health centers and gardens, in which health care centers and physicians have access to tools for preventative care and treatment for diet-related disease at their fingertips. The Good Food Bags program is also unique in its strict geographical requirements for membership.

This study was an exploratory look at Vegetable Prescription programs, and with only eight interviewees, generalizable conclusions are not possible. There are still some missing pieces of information that would be important to glean in order to develop a more complete
understanding of vegetable prescription programs. First, it would be helpful to evaluate the health impacts of the GFB program on its participants, as compared to patients who are not participating in any sort of structured dietary interventions. Since the many aspects of the Sayre Garden program is centered around the youth participants, a longer, more comprehensive study of the relationships between the older GFB members and the youth interns could demonstrate the effectiveness of intergenerational learning and community building. Finally, vegetable prescription programs take many different forms across the country. This means that it would be difficult to generalize the claims made by this paper to all vegetable prescription programs. A comparative analysis of the various forms of vegetable prescription programs would develop an understanding of best-practices for successful programs.

To solve the food crisis, we need to fix the food system. That entails re-regulating the market, reducing the oligopolistic power of the agri-foods corporations, and building agro-ecologically resilient family agriculture. We need to make food affordable by turning the food system into an engine for local economic development in both rural and urban areas. These tasks are not mutually exclusive—we don't have to wait to fix the food system before making food affordable, marketing fair, or farming viable. In fact, the three need to work in concert, complementing each other.

-Eric Holt-Giménez

“The World Food Crisis: what is behind it and what we can do” (2008)
Ethical Responsibilities of Author

As undergraduate research, this project was covered under a class exemption.

All interviewees have been anonymized.

Informed consent was obtained from all individual participants included in the study.
Works Cited

Agatston Urban Nutrition Initiative. urbannutrition.org


Quandt, S. A., Dupuis, J., Fish, C., & D'Agostino, J., Ralph B. (2013). Feasibility of using a community-supported agriculture program to improve fruit and vegetable inventories and consumption in an under resourced urban community. Preventing Chronic Disease, 10, E136.


