



## **Empowering Health Through Food: The Growth of Produce Prescription Programs**

Diet-related chronic diseases, including obesity, diabetes, cardiovascular ailments, and specific forms of cancer, continue to rise across the United States. According to the [U.S. Food and Drug Administration](#), more than one million people die from these diseases each year.

Despite a widespread awareness of the connection between diet and overall well-being, a majority of Americans still struggle to establish and sustain healthy eating habits.

This challenge is significantly exacerbated among people facing food insecurity, a condition in which access to sufficient and nutritious food is limited. These individuals tend to eat less fruits, vegetables and healthy meals, opting instead for more affordable but nutrient-poor foods. The effects of food insecurity are often compounded by poverty and limited access to healthcare, resulting in higher rates of obesity, cardiometabolic disease, mental distress and functional limitations.

To help combat food insecurity and diet-related health conditions, many communities are turning to food prescription programs. These programs provide individuals and families in need of assistance with consistent access to fresh and nutritious produce.

“Think of it like a food subscription or meal kit program,” said Dr. Meagen Rosenthal, co-director of the University of Mississippi’s Community First Research Center for Wellbeing & Creative Achievement (CREW), which has partnered with several communities and organizations in Mississippi to help establish food prescription programs. “Participants are provided with a variety of fruits and vegetables that they can use to help make nutritious meals for themselves and their families. In many programs, participants are



often provided with nutrition education, recipe suggestions or even cooking equipment such as knives and cutting boards.”

While food prescription programs may seem like a small effort when faced with such a significant problem, the potential impact for individuals and the healthcare system in general is significant. According to a 2023 [report](#) from researchers at the Food is Medicine Institute at the Friedman School of Nutrition Science and Policy at Tufts University, national implementation of produce prescription programs for patients with both diabetes and food insecurity could avert 292,000 cardiovascular events and add 260,000 quality-adjusted life years — a measure of how well a treatment lengthens or improves patients’ lives — while being highly cost-effective from a healthcare perspective and cost-saving from a societal perspective.

“Food prescription programs offer a substantial return on investment,” said Dr. Rosenthal. “These initiatives not only enhance both the quality and duration of individuals’ lives but also play a vital role in addressing the significant disparities within our food and healthcare systems.”

### **The Growth of Food Prescription Programs**

The promise of food prescription programs has captured the attention of funders, nonprofits, and community and government leaders alike, generating a significant increase in the investment of these programs around the country.

In New York, [SNAP-Ed New York](#) of the Hudson Valley — a program that teaches people how to shop for and cook healthy meals on a limited budget — announced the launch of a Fruit and Vegetable Prescription Program (FVRx) in January. The program will provide up to 60 families vouchers to purchase produce locally.

In Georgia, healthcare and insurance company [UnitedHealth Group](#) donated \$300,000 in July to Wholesome Wave Georgia to help them expand their



Food For Health program into Athens-Clarke County. Food For Health is a produce prescription, evidence-based intervention program for chronic diet-related illnesses in underserved communities.

In [California](#), the federal Farm Bill is funding 14 prescription programs across the state, while a slew of other sources, including the philanthropic Abbott Fund, Kaiser Permanente and local governments, continue to fund other prescription programs throughout the state.

And in Texas, the [Amerigroup Foundation](#), the philanthropic arm of Medicare and Medicaid provider Amerigroup Texas, awarded a \$450,000 grant to the Houston Food Bank to continue and expand a Food Rx Food as Medicine program. This grant will continue to help healthcare providers screen for food insecurity and connect their patients with resources via food prescriptions.

But these programs aren't just happening at the state and local level. For example, the [U.S. Department of Health and Human Services](#), through the Indian Health Service, announced in July it would award \$2.5 million in funding to support the development of produce prescription programs in tribal communities.

"There is a misconception that people aren't eating fruits and vegetables because they don't know how to prepare them or they just don't like them," said Dr. Rosenthal. "But what the success of these programs and others like them around the country show is that it's not a willingness problem, it's an access problem."

This is something Dr. Rosenthal and her team have experienced firsthand. Over the last couple of years, CREW has partnered with various organizations to help launch food prescription programs in some of the poorest and most food insecure areas of Mississippi.



In Quitman County, where the medium annual income is just over \$24,000 and residents spend 30% of their income on food, CREW worked with Aaron E. Henry Community Health Services, the Quitman County School District, the James C. Kennedy Wellness Center and the Harvard Law School Food Law and Policy Clinic, to create a program that allows participants to shop for their produce as the area's only grocery store. They use a punch card that allows them to spend \$35 each trip on fresh produce.

Also in Quitman County, CREW partnered with the Start 2 Finish Farms and Happy Foods Project — a local farmer's market — to launch the North Delta FoodRX, which provides weekly deliveries of fresh produce to homebound clients across the county.

And in Charleston, Miss., which also only has one grocery store to serve its 2,000 residents, CREW used funding from the Walmart Foundation, to partner with the [James C. Kennedy Wellness Center](#) to distribute fresh fruits and vegetables to around 120 families, or about 400 people, paired with in-person and virtual nutrition counseling.

“With each of these programs, we had a waiting list of people who wanted to participate,” said Dr. Rosenthal.

### **Measuring the Health Impact**

Adult participants of the program in Charleston, for example, have seen significant improvements with biometrics that are being measured, including blood pressure and triglyceride levels.

And they are not the only ones.

Take the example of Harris Health's partnership with the Houston Food Bank. In 2018, to address health disparities, Harris Health launched an initiative in collaboration with the Houston Food Bank to install “food pharmacies” and implement a food prescription framework onsite in select Harris Health



ambulatory clinics and hospitals. Patients screened to be positive for food insecurity and diagnosed with a diet-related chronic disease are given a 9-month prescription that they can redeem bi-weekly in the food pharmacy clinic for healthy foods, such as fruits and vegetables, lean protein, legumes, and whole grains.

Harris Health and the Houston Food Bank then partnered with the University of Texas Health Science Center at Houston (UTHealth) School of Public HealthIn to implement a culinary medicine that worked with food pharmacy participants with diabetes. The program taught them about healthy eating habits and how to cook healthy food.

According to the [program report](#), "Impact of a Virtual Culinary Medicine Curriculum on Biometric Outcomes, Dietary Habits, and Related Psychosocial Factors Among Patients with Diabetes Participating in a Food Prescription Program," participants ate more fruits and vegetables, and less found cooking healthy meals challenging. In addition, participants cooked more meals from scratch and felt more competent when cooking and meal planning.

Participants also showed a reduction in HbA1c levels, which is critical for long-term blood sugar control for those with diabetes.

In addition, according to research published in [Circulation: Cardiovascular Quality and Outcomes](#), a peer-reviewed American Heart Association journal, adults at increased risk for cardiovascular disease who participated in produce prescription programs not only increased their consumption of fruits and vegetables by nearly one cup, but also saw changes in their systolic blood pressure and diastolic blood pressure, as well as their blood sugar levels and BMI.

## **Challenges & Policy Considerations**



Despite the interest and promise food prescription programs generate, there are limitations that impede long-lasting health changes within communities.

“To drive sustainable change, there must be policy changes around access to healthy food, healthcare and health education,” said Dr. Rosenthal.

Recommendations include:

- **Use of Double Up Food Bucks in grocery stores.** Double Up Food Bucks matches fruit and vegetable purchases made using SNAP \$1 for \$1. Currently, double up bucks are limited mostly to farmers markets, which aren't always accessible to rural populations or historically marginalized populations. If more grocery stores used this program, it would allow for wider reach. In addition, it would allow customers to get more bang for their buck given the higher prices at farmers markets.
- **Expansion grocery reimbursements.** Make the mechanisms for food and grocery reimbursement that Medicare patients can use available to other types of insured patients, including Medicaid and third-party payors. This could reimburse a portion of the cost of procuring food, help pay for rideshares to the grocery store or pay for food box delivery.
- **Building in long-term funding support for food prescription programs.** Because food prescription programs are generally tied to grants, their support is temporary. When the program concludes, it's difficult for former participants to sustain their healthy eating, due in large part because their access to affordable, nutritious foods is gone. Without carving out a permanent spot for these programs, the benefits a produce prescription program can deliver will always be constrained.

Produce prescription programs are an important tool for addressing food insecurity and diet-related health issues, but they cannot fix a broken health



system. Participants in these programs are often a part of vulnerable, marginalized and impoverished communities, with little to no access to medical care.

Uninsured or underinsured participants who have untreated chronic conditions cannot be addressed solely through produce prescription programs. These programs cannot be expected to address broader healthcare disparities or overcome mitigating factors, like socioeconomic status or housing, and instead should be considered in collaboration with other community support.

In addition, produce prescription programs play a valuable role in promoting healthy eating and preventing diet-related chronic diseases, but they cannot be universally applied to all communities in the same way. Without accounting for cultural preferences, food availability, and other factors, these programs may not suit the community they serve. Tailored programs that understand the local communities' unique context are more likely to address these issues comprehensively.

“In order to conceptualize produce programs sustainably, our policies must allow for long-term work with communities,” Dr. Rosenthal said. “We must fund programs well to maximize impact, understand how the support fits within the larger community, and value culturally-informed, tailored programs.”