

Senate HELP Committee
“Feeding a Healthier America: Current Efforts and Potential Opportunities for Food is Medicine”
Testimony by Erin Martin, Founder and Director, FreshRx Oklahoma
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Chairman Markey, Ranking Member Marshall, Members of the Subcommittee, thank you for allowing me the opportunity to testify before you today.

My name is Erin Martin. I am a Gerontologist and the Founder and Director of FreshRx Oklahoma,¹ a non-profit committed to providing nutrient dense, locally grown produce to help people manage their diabetes and improve their overall health. We do this by running a Produce Prescription program which first launched in North Tulsa, a community that hadn’t had a grocery store in over 14 years with the highest rates of mortality from diabetes in the county. There is a significant longevity gap between residents of North and South Tulsa, with data indicating an approximate 8.5-year difference in average life expectancy.

FreshRx is a member of the National Produce Prescription Collaborative (NPPC). Since 2019, NPPC has worked to catalyze the vital role of food and nutrition in improving health outcomes by collectively leveraging the unique opportunities for Produce Prescriptions to achieve wellness. The collaborative's diverse membership of over 60 organizations includes program operator representatives from various geographies, research, education, healthcare policy, and national networks working to embed and institutionalize Produce Prescriptions as a health intervention tool.

The annual burden of diabetes on the U.S. economy is staggering, costing approximately \$412.9 billion in 2022. This includes \$306.6 billion in direct medical costs and an additional \$106.3 billion stemming from lost productivity.² The evidence is clear: diet-related interventions can dramatically reduce these costs. In Tulsa, our Produce Prescription program has already made significant strides. Participants, especially those with Type 2 diabetes and other diet-related diseases, have shown remarkable health improvements—ranging from reduced A1c levels to significant weight loss.

The Produce Prescription Journey

Our program, and other programs like ours, eliminate barriers to healthy food while empowering people to create long lasting behavioral change. Produce Prescriptions are a viable medical intervention and should be prioritized for those with diet-related diseases and as a supportive measure to a wider array of medical conditions. A few insurers and health systems are beginning to adopt it as a preventative service for patients who are eligible due to diet-related health risk or condition and food insecurity

¹ <https://www.freshrxok.org/>

² <https://pubmed.ncbi.nlm.nih.gov/37909353/#:~:text=Results%3A%20The%20total%20estimated%20cost,indirect%20costs%20attributable%20to%20diabetes.>

or other documented challenges in accessing nutritious foods. These prescriptions can be fulfilled through farmers markets, food retail, and CSAs (farm subscription models) to enable patients to access healthy produce with no added fats, sugars, or salt, at low or no cost to the patient. Produce Prescriptions are designed to improve health outcomes, optimize medical spending, and increase patient engagement and satisfaction.

While the Produce Prescription intervention model began just over a decade ago, today, more than 100 organizations administer programs across the country. The impacts of these programs have been undeniable and warrant serious consideration by all who wish to improve the health and the lives of vulnerable Americans in a cost-effective way.

My journey to Produce Prescriptions began through my extensive experience in long term care starting at the age of fifteen. After working in all levels of long-term care by the time I was 24 years old, I realized the importance and innovation of food as medicine as a mechanism to give people more ways to stay healthy. While learning about the natural biological processes of aging in my Masters program at the premier and world leading Leonard Davis School of Gerontology, I discovered serious discrepancies between the way we are supposed to age biologically, the ways people are aging in other countries, and the way we are aging in the United States. If you are 65 and older in the US, you are on an average of 15 or more prescription drugs per year. If you are over 50 in the US, you have at least one chronic condition. In fact, I saw clients who were on anywhere between 15 and 32 prescription drugs at one time. I studied Death and Dying with the University of Southern California in Italy and then, began to study the Blue Zones of the world.

The concept of "Blue Zones" refers to regions in the world where people have unusually long lifespans. Five regions have been identified as Blue Zones: Okinawa (Japan), Sardinia (Italy), Nicoya (Costa Rica), Icaria (Greece), and Loma Linda (California, USA). Despite the geographical and cultural differences, their diets share several common traits that contribute to their longevity. Their diet has an emphasis on whole, minimally processed foods. This means less sugar, fewer refined grains, and fewer processed foods. Diets are rich in healthy fats, primarily from sources like olive oil, nuts, and seeds. In Okinawa, for instance, the consumption of fish provides omega-3 fatty acids. Many of the Blue Zones practice some form of caloric restriction or mindful eating. This can be through cultural habits of eating until only 80% full or fasting practices. I found that people in these areas, unlike Americans, were dying of something called "old age" on zero prescription drugs.

Produce Prescription Model in Oklahoma

My venture into Food is Medicine was furthered once I moved back to Tulsa, Oklahoma, a city where I had grown up, just before the COVID-19 pandemic hit. I saw firsthand the dire need for food access, improvements in the healthcare system, and the vast longevity difference between a North and South Tulsan. A physician, Dr. Kent Farish from Crossover Health Services in North Tulsa came forward and expressed that his

patients were compliant in their medications and their doctors visits but they were not getting better and he knew it was the food they had access to and were consuming that was the culprit.

Like many areas across the United States, parts of Oklahoma face economic and community factors that have led to food shortages and highlighted the vulnerabilities within our overtaxed healthcare system. North Tulsa had been without a grocery store for over 14 years plagued by a history of health and racial inequities.

In 2021, we started the first-of-its-kind PRx in the state of Oklahoma with 52 patients, providing a trifecta of access to local, fresh food, engaging and empowering education, and utilizing health metric checkpoints. We are proud to receive funding from private donors, private philanthropic organizations such as St. John Ascension, MorningCrest Health Foundation, Fazel Family Foundation, the Zarrow Commemoration Fund, and the federal government. Our federal funding comes from the USDA NIFA GusNIP programming. GusNIP supports projects that demonstrate the impact of PRxs on fruit and vegetable consumption, food insecurity and healthcare usage for vulnerable populations.

Physicians and other healthcare providers send a referral to FreshRx Oklahoma verifying their diagnosis and starting metrics (HbA1c, weight, and blood pressure). Our team enrolls the patient by conducting a full survey that captures additional data like mental health, pain management, socialization, medical adherence, hospitalizations, and more. The patient then starts the program at the next bi-weekly distribution date and receives a starter kit including cooking utensils, a cookbook, and a produce storage sheet. They receive free, local fruits and vegetables bi-weekly for 12 months along with 4-6 cooking and nutrition classes per month. We measure health metrics quarterly to mark the patient's progress and engage patients in ongoing feedback to ensure the program is meeting their needs.

As part of our GusNIP requirement, we work with an Internal Review Board (IRB) at Langston University in Oklahoma to provide ethical oversight, and help us to maintain HIPAA compliance, and review patient documents. We also contract with Oklahoma State University to act as our data partner, evaluating our pre- and post- survey data, to determine whether or not we are achieving our program goals (i.e. calculating if increased consumption of fresh produce by our patients is actually correlated to better health).

Patient and Community Impact

Our typical patients are people living with Type 2 diabetes in North Tulsa experiencing food insecurity and most recently, we are serving those with prediabetes in the Muscogee Creek Nation. We are deeply honored to serve the Muscogee Creek Nation while this program fits into their larger plan for public health and food sovereignty. 39 Native American nations call Oklahoma their home. Diabetes plagues Native Americans

at a higher rate than any other group of people. In fact, 1 out of 2 Native American children born after the year 2000 will be diagnosed with Type 2 diabetes.

We had a participant who was a veteran who slept on the floor of his apartment who hadn't had produce in over two years. He cried every time he got food from our program. He made a soup with all of the greens we gave him and he reported that the "floaters" in his eyes had disappeared in a few short weeks.

We had another participant who was feeling lethargic and unhappy. She was diagnosed at age 60 with Type 2 Diabetes. In our program, she lost 50 pounds and her HbA1c level went from a 9.6 to a 5.4. She now reports feeling happier, treating others with more kindness, exercising daily, and being able to keep up with her grandkids. Our greatest HbA1c reduction has been from a 13.6 to a 5.4 in 6 months! Recently, we had a record weight loss of 111 pounds!

These examples are not unique. Through our work, we have consistently improved intake of fruits and vegetables, improved overall dietary consumption, reduced the gap between actual consumption and the national daily recommendations, lowered weight, lowered blood pressure, and lowered Hemoglobin A1c among program participants.

In fact, our program targets key risk factors like blood glucose levels, blood pressure, and weight. On average, our patients see a 2.2% decrease in A1c levels, 13-point reduction in blood pressure, and an average weight loss of 9 pounds with many weight losses above 20 to 72 pounds. Patients in our program, many who have struggled with diabetes for 15 to 20 years, start experiencing improvement in a matter of weeks. Every meal impacts our health.

We have shown a significant statistical correlation between the increased consumption of fruits and vegetables with the overall improvement of health. We have shown a significant statistical increase in the consumption of garden salads and vegetable soup. At the same time, we have shown a significant statistical decrease in the consumption of soda.

Potential Economic Benefits

This program is making an impact on health care spending in our state. For example, if we scaled to 1,200 participants, it would cost \$3 million and the cost savings would be \$25 million for the state of Oklahoma. Let's say we have a 70% success rate, a cost of \$5,000 per patient, along with the national average cost of diabetes care, and the number of Oklahomans with diabetes, the net savings for Oklahoma could be close to \$2.6 billion when scaled statewide. And that is just in Oklahoma!

At the same time, Produce Prescriptions support local economies through the agriculture purchases and jobs being created. We have supported 27 small-scale farming businesses and expanded the volume, diversity, and seasonal production at 15 farms. In fact, the Food is Medicine movement has an economic ripple effect in the

healthcare industry, the agricultural industry, and workforce development that can transform lives and restore communities.

In the last four years, we have tripled in size and expanded to serve patients at 22 primary care clinics including Federally Qualified Health Centers, PACE clinics, and clinics serving the uninsured. We mostly serve those over 50 years of age, we see success at all ages, including participants all the way into their 90s finding success. We have received national attention for the innovative way we systematically address food and health.

I am extremely proud of our program and all that it has accomplished. I am also proud of my colleagues across the country who are leading the way on produce prescription efforts. FreshRx Oklahoma is one of many models that work. There are many ways to provide these services, including prepaid debit cards for retail like AboutFresh or in Kansas there is an online ordering model called Attane Health.

The results we are seeing are not unique to our state. Research has shown that prescribing healthy food to patients could prevent as many as 3.28 million medical conditions such as heart attacks and strokes and save more than \$100 billion in health-care costs. Subsidizing fruits and veggies would prevent 1.93 million cardiovascular events such as heart attacks and 350,000 deaths.³⁴ Time and again, these, relatively low-cost interventions have been found to yield improved health outcomes over time, including lowering weight, blood pressure, and HbA1c levels with an incredible health cost savings return on investment. This is not only an intervention that works, but an economic and viable business investment. Moreover, patients achieving these results through PRx have also reduced their reliance on more costly medications and other medical interventions (and increased medical adherence).

Congressional Opportunities

While investments in PRx are starting to happen at the federal level, including at USDA and Indian Health Services, there are a number of opportunities to infuse Produce Prescriptions into health programs not only across the Department of Health and Human Services, including the Administration on Aging, Centers for Medicare and Medicaid Services, and the Health Resources and Services Administration, but across the federal government, including within the Department of Veterans Affairs.

One near-term opportunity for this Committee to consider to advance access to Food as Medicine programs is through the upcoming reauthorization of the Older Americans Act (OAA). Since its inception in 1965, the OAA has provided a broad range of critical services and support for older adults, including nutrition services. Today's OAA has an

³<https://www.nih.gov/news-events/nih-research-matters/prescribing-healthy-foods-could-bring-cost-effective-benefits>

⁴<https://www.fastcompany.com/90323580/prescribing-fruits-and-veggies-would-save-100-billion-in-medical-costs>

opportunity to further encourage healthy aging, by strengthening the connection between food and health interventions for diet-related disease through PRx.

Given the breadth of their reach in urban and rural areas, OAA programs have the potential to engage program participants and provide meaningful interventions earlier that will lead to improved quality of life and healthier aging. Produce Prescriptions, Medically-Tailored Groceries, and Medically-Tailored Meals, as well as other Food is Medicine programs, would complement meals on wheels and congregate meal services being provided under OAA. These programs truly have the potential to elevate current programs and produce measurable health outcomes.

Another place where this Committee could help advance Food as Medicine access is within the Health Resources and Services Administration (HRSA) community health center program. A growing number of local Produce Prescription programs are beginning to partner with community health centers to bring this nexus of healthy food and health care together for low income and underserved individuals living with or at risk of chronic conditions. Including Food as Medicine among the allowable health services provided within the community health center setting would enable these programs to flourish at the local level.

I appreciate the Committee examining current and future opportunities of food as medicine funding pathways and implementation. The food we consume not only serves as a source of energy, but also contains nutrients that positively impact our bodies and promote healing to enhance our overall health and well-being. When we eat whole, unprocessed foods rich in essential nutrients, vitamins, minerals, antioxidants, and phytochemicals, these foods work to reduce inflammation and boost immunity, promoting more wellness and resilience.

A good diet plays a crucial role in maintaining a balanced immune system, reducing the risk of chronic diseases such as heart disease, diabetes, and certain cancers, and supporting optimal bodily functions. By being intentional with what we eat, we can harness the healing power of food to improve health outcomes, and prevent, manage, and even treat various health conditions.

The best part is that food as medicine recognizes the uniqueness of each person's specific dietary and cultural needs. It encourages people to explore different foods and customize what they eat in a way that works for them with dignity.

It can be difficult for anyone to stay compliant with doctor's orders, let alone those living with food insecurity and poverty. Produce Prescriptions get patients the nutrient-dense food they need to be back in control of their disease. Integrating Produce Prescriptions into the federal health system provides the opportunity to transform public health.

Again, thank you. I look forward to answering your questions.