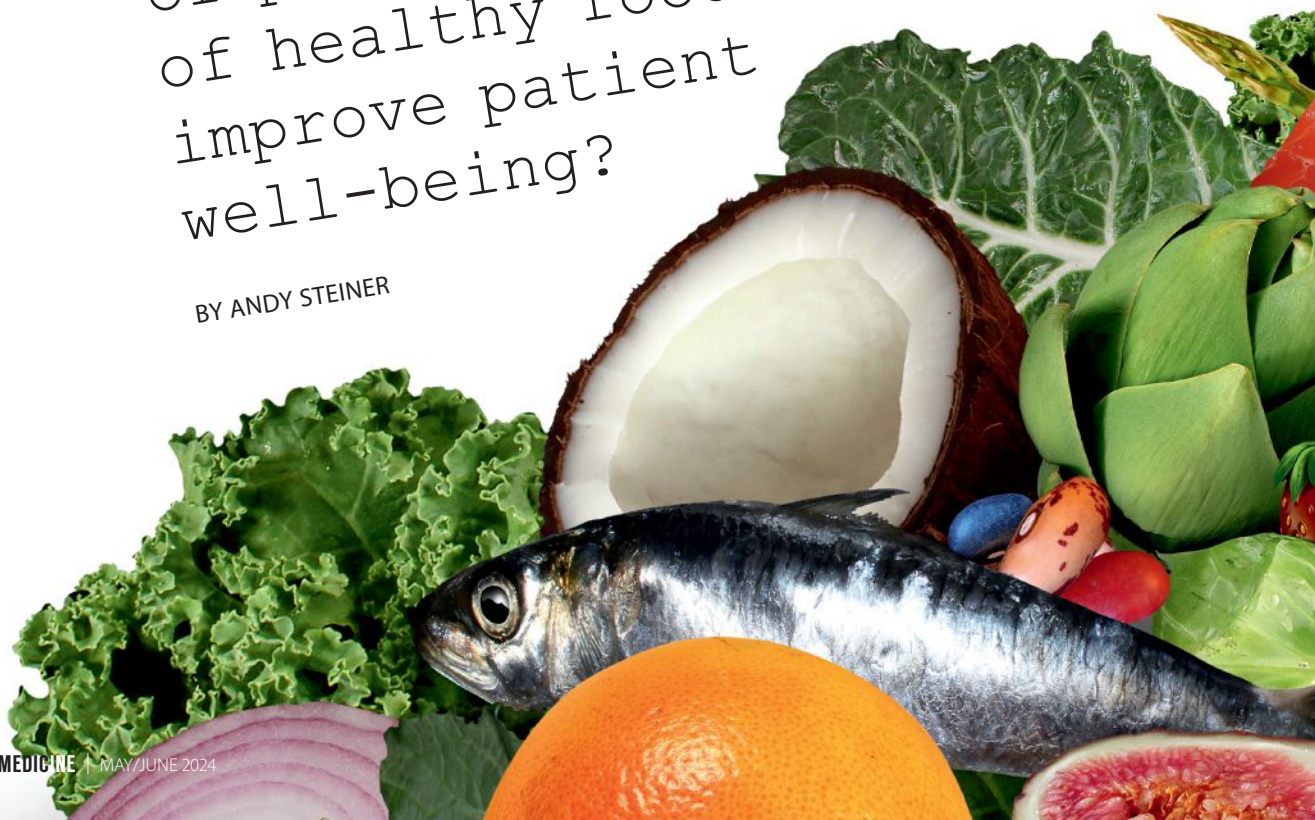



Prescriptions for healthy living

Can physicians' directives for healthy living or provision of healthy food improve patient well-being?

BY ANDY STEINER





Ten years ago, Kurt Hager was working at Second Harvest Heartland, a Minnesota food bank and food distribution nonprofit, when he met Diana Cutts, MD, chair of pediatrics at Hennepin Healthcare.

Cutts has been at the forefront of activism around child food insecurity for more than 25 years, since she joined Children's HealthWatch, a national network of children's health experts focused on achieving health equity for young children and their families. She knew that access to healthy food was important for overall child health, but she also understood that actually getting this kind of food was difficult for the families she served at her busy clinic, many of whom were low-income and lived in urban "food deserts," where grocery stores offering healthy options were few and far between.

When she came up with the idea of establishing a food pantry in the clinic, Cutts reached out to Second Harvest.

"Dr. Cutts," recalls Hager, now an instructor at UMass Chan Medical School, "felt like starting the food pantry was the least she could do." With healthy food available at no cost, families could go home with a bag of food that would last for a few days.

The program was successful, Hager says, but Cutts and her colleagues wanted something that was more sustainable, a program that could grow and offer more lasting benefits to participants. They asked Hager if he could help design a program that would not only provide free groceries but also connect families with community food resources and federal nutrition programs.

Excited—and daunted—by the project, Hager was all in: Weaving together these multiple elements in a way that worked for participants felt "hard," he says, but also inspiring. In the end he created a program where staff members from Second Harvest referred patients from Hennepin County Medical Center and connected them with organizations and agencies that could help them have easier access to good, affordable food on an ongoing basis. Says Hager, "That project was really exciting to me. It was that experience that drew me to graduate school."

Eventually, Hager earned a PhD in food programs and policy. Much of his academic research has focused on ways that physicians and other healthcare providers can help food-insecure patients access healthier foods—and on the benefits of such programs—particularly those known as "prescriptions for healthy living," where providers write prescriptions that allow needy patients to access healthy foods at no cost, financing the program with donations or public assistance funds.

Recently, the results of Hager's research on prescriptions for healthy living, increasingly known "food-as-medicine

programs,” was published in the American Heart Association’s journal *Circulation: Cardiovascular Quality and Outcomes*. He found that people at increased risk for cardiovascular disease who participated in produce-prescription programs increased their consumption of fruits and vegetables, which is associated with improved body mass index, as well as lowering blood-sugar and blood-pressure levels.

The study gathered data from some 22 different produce prescription programs in 12 U.S. states including Minnesota. “Participating individuals were lower income or food insecure and were at risk for poor cardiometabolic health,” Hager says, explaining that all had at least one of three health conditions—obesity, high blood pressure, or diabetes. “These issues are very responsive to changes in diet.”

With easier access to healthy food options, Hager said, study participants saw measurable changes in their overall health, including clinically relevant improvements in glycated hemoglobin, blood pressure, and BMI.

“Our study found that, as we would expect, the daily consumption of fruits and vegetables increased. Food insecurity rates were cut in half,” he says. “The adult population with diabetes had improved blood sugar control. Adults with hypertension had notably improved blood pressure, and adults with obesity had weight loss.”



“[Patients] are thinking, ‘I don’t have the money to buy the foods I need.’ Unfortunately, healthy foods might not be accessible. That’s why these kinds of programs can really help.”



ANNA MILZ, MD
VICE PRESIDENT
MEDICAL
PRACTICE OF
PRIMARY CARE
M HEALTH
FAIRVIEW
PEDIATRICIAN
TAMARACK
CLINIC
WOODBURY

Advocates of so-called medically tailored meals have pushed for expanding the practice to Medicare. Hager’s research, published in *JAMA Network Open* in 2022, estimated that providing healthy prepared meals could save the program \$3.4 billion in just one year. Early this year Rep. Jim McGovern (D-Mass.) and John Rutherford (R-Fla.) introduced legislation to remove barriers to such a program for patients for whom specific nutrition is needed for treatment of their diseases.

Healthy living prescriptions in practice

While Hager’s findings are encouraging for advocates of prescriptions for healthy liv-

ing, do they actually work to improve the health and well-being of participants long term in the real world?

Several Minnesota healthcare networks and insurers have developed such programs, including M Health Fairview, whose VeggieRx program features, among other offerings, a free weekly box of locally grown produce that participants—all low-income and food insecure—can use to make healthy, veggie-filled meals for up to six family members.

The VeggieRx program, explains Terese Hill, M Health Fairview supervisor of community advancement food system strategy, is designed to meet the needs of a



“We use [EMR] technology to send electronic referrals to SNAP (Supplemental Nutrition Assistance Program) outreach for families who are food insecure. The families are contacted within usually 48 hours and screened for their eligibility for assistance programs. They’re also given resources for the food shelves and feeding programs that are relevant to their geographic location.”



DIANA CUTTS, MD
CHAIR, PEDIATRICS
HENNEPIN
HEALTHCARE



“Our study found that, as we would expect, the daily consumption of fruits and vegetables increased. Food insecurity rates were cut in half. The adult population with diabetes had improved blood sugar control. Adults with hypertension had notably improved blood pressure, and adults with obesity had weight loss.”



KURT HAGER
INSTRUCTOR
UMASS CHAN
MEDICAL
SCHOOL

diverse population, with a focus on partnering with farm-owners of the cultures that make up much of the patient population, including Hmong, Karen, Somali, and Latino. There is also an emphasis on community buy-in and collaboration. “We are working on increasing access to healthy food and the community building that can be such an important part of that,” Hill says.

The program has some measurable results. An internal 2021 study of 296 VeggieRx participants showed encouraging outcomes for participants, including a 13% increase in self-reported health, a 9% decrease in food insecurity and a slight trend decrease in ER visits and utilization for three years in a row.

Because the program is community and health-equity centered, Hill explains that she and her colleagues want to create something that helps everyone—participants and providers included.

“We are really thinking with VeggieRx, how we do our food-as-medicine work is just as important as the food in the boxes themselves,” she says. “The way we run this work is just as important in the impact we’re having on the community as the decrease in food insecurity we’re bringing with these foods.”

This care extends to the local farmers who grow the foods as well as the workers who pack and deliver them. “We partner with youth organizations and have a strong youth workforce development aspect,” Hill says. “We provide well-paying jobs to the people who pack the boxes,

offer market rate contracts to the farms, and distribute them to the community.”

Some Minnesota physicians see a clear, lasting benefit from prescriptions-for-healthy-living programs.

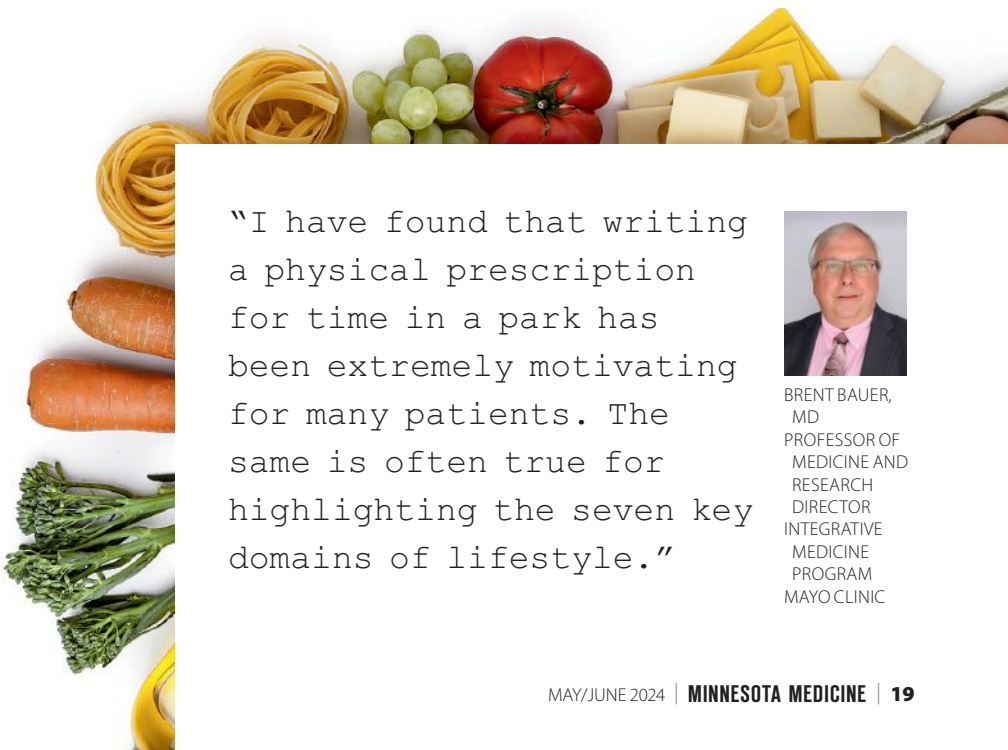
Anna Milz, MD, M Health Fairview vice president of medical practice of primary care and a pediatrician at Tamarack Clinic in Woodbury, says she has used the VeggieRx program for patients who, “have challenges with access to healthy food or have underlying conditions like diabetes.”

Understanding that having access to affordable, healthy food is key to overall health, Milz explains that her clinic screens patients at least once a year for, “food insecurity, housing needs, transportation needs. If we identify a food-

insecurity need, we try to connect them to resources.”

During the growing months, Milz explains, participants in Tamarack Clinic’s VeggieRx program can pick up free weekly boxes of fresh produce at M Health Fairview Woodwinds Hospital. “It’s been very well received by our patients,” she says. “They are very grateful and appreciative.”

Brent Bauer, MD, professor of medicine and research director at Mayo Clinic’s integrative medicine program, hasn’t used specific food prescriptions with his patients. But he includes recommendations for what he calls the seven “key domains” of health—nutrition, exercise, mind-body practice, social connection, sleep, spirituality, time in nature—in patient visits. “The goal is to make lifestyle foun-



“I have found that writing a physical prescription for time in a park has been extremely motivating for many patients. The same is often true for highlighting the seven key domains of lifestyle.”



BRENT BAUER,
MD
PROFESSOR OF
MEDICINE AND
RESEARCH
DIRECTOR
INTEGRATIVE
MEDICINE
PROGRAM
MAYO CLINIC

dational,” Bauer says, “even as we are often addressing specific problems with other therapies.”

In addition to including this lifestyle strategy in his notes, Bauer also frequently uses ParkRx, an online program that, he explains, “allows me to identify parks near the patient’s home location and actually write a ‘prescription’ for frequency and duration of activities in that park. It has been a great way to get patients engaged with nature, which we know has many critical health benefits.”

Bauer believes that ParkRx prescriptions send an important message about the importance of spending time outdoors on his patients’ overall health. “I have found that writing a physical prescription for time in a park has been extremely motivating for many patients,” he says. “The same is often true for highlighting the seven key domains of lifestyle.”

When she’s not prescribing healthy food, Milz says, she works with patients to explain strategies for using food to improve their general health. “In residency I learned a few tricks to keep it simple for patients and offer ideas with goals that they can build on.” One of those tricks includes the “5-4-3-2-1 rule,” she explains: “That’s five servings of fruits and veggies a day, at least four glasses of water, three servings of dairy, less than two hours of screen time per day, and one hour of activity. Then I add a 0 for zero sugary drinks like juice or pop.”

Tricks like these help remind patients of how even little dietary changes can make a difference. Milz backs that up in materials she provides at the end of a visit.

“I usually put in the written summary of the visit the prescription part of it,” Milz said. “I say, ‘This is the goal we agreed on today.’ Many families are eating just one or two servings of fruits and vegetables per day. I suggest moving it up to maybe four.”

“We are working on increasing access to healthy food and the community building that can be such an important part of that.”



TERESE HILL
SUPERVISOR OF
COMMUNITY
ADVANCEMENT
FOOD SYSTEM
STRATEGY
M HEALTH FAIRVIEW

‘Coloring outside the lines’

No matter how you measure it, it is clear that limited access to healthy food has a negative impact on people’s overall health.

In Milz’s experience, it does no good just to tell a patient to change their diet. Programs like VeggieRx help to make these changes feel more doable. “It can be very hard to make a change if you feel stuck,” she says. “You are thinking, ‘I don’t have the money to buy the foods I need.’ Unfortunately, healthy foods might not be accessible. That’s why these kinds of programs can really help.”

Making large-scale change in the way food is delivered to families takes more than an occasional visit to a clinic food pantry, Cutts says. She’s leaning into the use of electronic medical records, continuing Hager’s earlier work, as a way for her patient population—where approximately 40% of families and 20% of children in their clinic are food insecure—to get access to affordable, healthier food.

“We use that technology to send electronic referrals to SNAP (Supplemental Nutrition Assistance Program) outreach for families who are food insecure,” Cutts said. “The families are contacted within usually 48 hours and screened for their

eligibility for assistance programs. They’re also given resources for the food shelves and feeding programs that are relevant to their geographic location.”

Continuing to make these kinds of connections is important, Cutts says: Her goal is to work toward a society where no children face hunger. To do that, she’s willing to try any strategy to stop the cycle of poverty, and prescriptions for healthy living programs are an “outside-the-box” way to meet that ambitious goal.

“For years and years I’ve heard, ‘This isn’t what we do. You are coloring outside the lines,’” Cutts says. “But I think that mentality is changing and for some has already changed. As we look at our largest challenges in healthcare, which I think are about disparities in care, there is no way we are going to be able meet those challenges successfully without looking beyond what can be done in the clinic. That’s why programs like these are so important.” MM

Andy Steiner is a Twin Cities freelance writer and editor.