



# Partnering for Collective Impact

## Launching Off Point

The Affordable Care Act creates new opportunities for health-care establishments to work with local partners to address the social determinants of health. Hospitals are required to bring partners together to collectively define a community health needs agenda. Anti-hunger organizations and other stakeholders working to increase access to healthy foods in underserved communities need to be involved in this process.

A more just food system will lead to other improvements—improved health, less hunger, and less severe inequalities. Communities with limited access to healthy food are the locus of concentrated health disparities. Modest improvements in dietary quality in these communities would have a significant impact on reducing the burden of chronic disease.

Healthcare providers have already begun to engage community partners on strategies to improve access to healthy foods in underserved communities. Strategies include operating food pantries at health centers, writing prescriptions for fruits and vegetables redeemable at farmers' markets, installing food pharmacies on hospital campuses, and subsidizing

“Alone we can do so little; together we can do so much.”

— Helen Keller

## KEY POINTS

- Defining the health needs of a community is a collective endeavor involving stakeholders inside and outside of the healthcare sector.
- Health care should strengthen relationships with community partners who have expertise in addressing the social determinants of health. Engaging communities most affected by poor health outcomes is critical to developing effective solutions.
- The *Dietary Guidelines for Americans* are a launching off point for anti-hunger organizations to engage with the healthcare sector.
- Improving consumers' access to healthy foods in underserved communities is a cost-effective way to reduce the burden of chronic disease in the populations most affected by them.
- Improving access to healthy, locally grown foods can provide direct economic benefits to small and mid-sized farms.
- The active engagement of the healthcare sector could play a powerful role in ending hunger.

home-delivered meals for seniors and homebound patients. None of these activities would be possible without community partners to provide and distribute the food, explain and demonstrate to patients how to use unfamiliar foods, or assist in data collection to evaluate the effectiveness of what is being done.

There is broad concern in the United States—among people of all income levels—about the effects of the food system on health. Similarly, the benefits of improving the food system

would accrue to all households, making it attractive to policy-makers. But special attention must be given to overcoming access barriers in underserved communities.

### “Communities of Solution” Come of Age

Nearly half a century has passed since forward-thinking leaders in health care recognized a fundamental problem with the U.S. healthcare system. The 1967 Folsom Report, one of the seminal works in the field of public health, argued that healthcare institutions, on their own, were

incapable of dealing with the array of factors affecting community health outcomes.<sup>1</sup> The Folsom Report introduced the term Communities of Solution, based on the concept that a healthy community depends on contributions from a range of actors, inside and outside the healthcare sector, working together in a coordinated manner.

Community-based partnerships bring together a wide range of stakeholders who share a common interest in improving population health, meaning health outcomes spread over a community.<sup>2</sup> For example, Nemours, a children’s health system based in Delaware, serves a population with high rates of asthma. Nemours works with community partners to teach parents how to manage their children’s asthma. Nemours also pays to replace dusty mattresses, curtains, and carpets with hypoallergenic alternatives, and its partners make sure the purchases are made. Less than a year after the initiative began, children’s asthma-related emergency room visits had dropped by 40 percent.<sup>3</sup>



Joseph Molieri/Bread for the World

Farmers markets have become sites to engage members of a community on their health directly through the foods they eat.

## POVERTY POVERTY

Poverty rates are **TWICE** as high in the unhealthiest counties in each state compared to the healthiest ones.<sup>1</sup>

**353** counties in the United States have had poverty rates of 20 percent or higher for 30 years or longer. **84 percent** of these persistently poor counties are in the South.<sup>2</sup>



In Colorado, Kaiser Permanente partners with Hunger Free Colorado, a statewide advocacy and outreach organization, to help counter the effects of food insecurity on diet-related diseases.<sup>4</sup> Healthcare providers within Kaiser Permanente identify patients at risk of hunger and refer them to Hunger Free Colorado. The staff there reviews patients' eligibility for federal nutrition programs, educates them about which programs they qualify for, and helps them apply. Patients also learn about food pantries, senior food programs, and home-delivered meal programs that are available. Seventy-eight percent of the patients referred to Hunger Free Colorado are taking advantage of the opportunity to get help from the organization.<sup>5</sup>

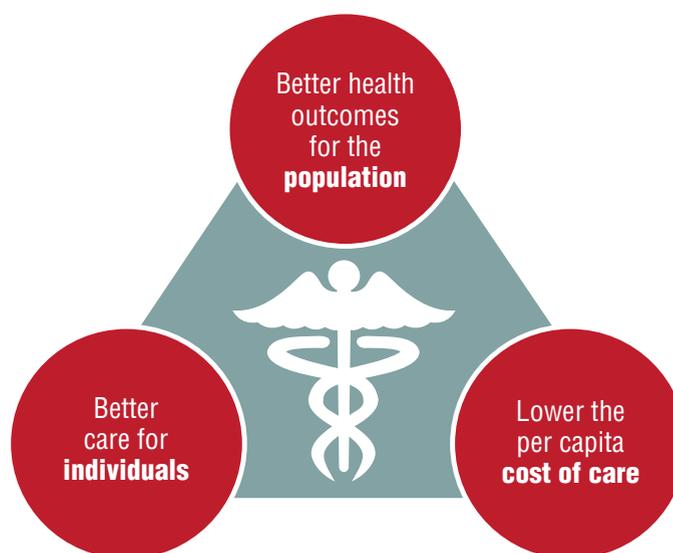
These two examples of institutions working with partners outside the formal healthcare system to improve population health outcomes in the communities they serve are not the only examples—but such partnerships are still uncommon. The healthcare sector has not focused its attention and resources upstream to social determinants of health such as food insecurity or substandard housing.

The Affordable Care Act (ACA) of 2010 has begun to change this. The triple aim of this landmark healthcare reform legislation is 1) to improve the patient experience,

2) to improve population health, and 3) to reduce the per capita cost of care. See Figure 2.1. The key to reducing per capita costs will come mostly from improvements in population health. Preventable chronic diseases now account for 86 percent of U.S. healthcare costs and affect 50 percent of the population.<sup>6</sup> As earlier parts of this report have shown, food insecurity and other social determinants are directly related to higher rates of chronic diseases.

Accordingly, the ACA includes a number of carrots and sticks to encourage healthcare institutions to work more closely with community partners. More than half of the hospitals

Figure 2.1 The Triple Aim of Healthcare Reform



Source: Donald Berwick, Thomas W. Nolan, and John Whittington (2008), "The Triple Aim: Care, Health, and Cost," *Health Affairs* vol. 27, No. 3.



Over **58 million** people—**18.7 percent** of the U.S. population—live in an area with a shortage of primary care health professionals. Six states exceed 30 percent, and Mississippi tops all at 57.3 percent.<sup>3</sup>

Unemployment rates are

**1.5 TIMES**  
higher in the least healthy counties in each state as they are in the healthiest counties.<sup>4</sup>

in the United States are classified as nonprofit institutions, which means they qualify for tax-exempt status under federal and state laws.<sup>7</sup> In exchange, the hospitals are required to carry out activities that benefit their communities. In 2011, the total estimated tax benefits accruing to nonprofit hospitals were \$24.6 billion.<sup>8</sup> Are hospitals using this money for community health improvement? Only a small part of it: a 2015 report by the Internal Revenue Service (IRS) showed that nonprofit hospitals in 2011 allocated less than 8 percent of all community benefit expenditures to community health improvement,<sup>9</sup> or less than 1 percent of their total expenditures.<sup>10</sup>



Zach Blum for Bread for the World

**A monthly checkup for a patient enrolled in a Medicaid-funded prescription fruit and vegetable program targeting children with type 2 diabetes or prediabetes.**

community health improvement? Only a small part of it: a 2015 report by the Internal Revenue Service (IRS) showed that nonprofit hospitals in 2011 allocated less than 8 percent of all community benefit expenditures to community health improvement,<sup>9</sup> or less than 1 percent of their total expenditures.<sup>10</sup>

In a 2015 New Jersey tax case, the court refused to recognize the hospital named in the suit as a tax-exempt nonprofit institution. The judge ruled that the hospital was using nonprofit status as a “legal fiction” and meanwhile paying exorbitant salaries to the CEO and other executives.<sup>11</sup> The ruling affects only this hospital, but experts warn it could have implications for nonprofit hospi-

tals everywhere.<sup>12</sup> There are reasons to be ambivalent about the New Jersey case. One could applaud the decision on the grounds that the hospital spent millions of dollars on executive salaries that could have been put towards community improvement, in line with the mission of a nonprofit institution. At the same time, the charitable care and other community benefits the institution was providing could well vanish altogether. Since it is no longer benefiting from tax-exempt status, it is under no obligation to continue to offer them. It also needs to conserve resources to pay the taxes it owes.

This was not the first time a nonprofit hospital’s tax-exempt status has been questioned. In 2011, three hospitals in Illinois were denied tax-exempt status for failing to provide enough charity care, which was broadly defined to include community health improvement activities.<sup>13</sup> The hospitals were granted a reprieve when the state enacted legislation that required all nonprofit hospitals to provide charity care valued the same as or more than their annual estimated tax liability.

The ACA expanded the community benefits that hospitals are required to provide in order to maintain their nonprofit status. Although nonprofit hospitals have been required to meet community benefits requirements since the 1960s, historically most met their obligations by providing charity care to uninsured patients. Under the ACA, however, that group is shrinking. Nearly 17 million additional people have obtained health insurance since 2013, reducing the uninsured population to 11.5 percent of the U.S. population, the lowest

level on record.<sup>14</sup> If more states expand their Medicaid programs, the size of the uninsured population will continue to fall; therefore, we can expect hospitals to focus more attention on building community health. To ensure adequate nutrition, hospitals could be hosting on-site farmers markets, establishing feeding programs for children during the summer when they don't have access to school lunch and breakfast, or teaming up with partners such as Hunger Free Colorado as Kaiser Permanente in our example has done.<sup>15</sup>

Hospitals are required to conduct a Community Health Needs Assessment (CHNA) every three years with input from key stakeholders and then develop programs to meet the identified needs. Stakeholders should be aware that the law allows them to participate in the CHNAs. Hospitals have significant discretion as to how they conduct CHNAs, set priorities among needs, and develop implementation plans. All of this must be done transparently, so the community can hold the institutions accountable. Under the regulations, “needs identified through CHNA may, for example, include the need to prevent illness, *to ensure adequate nutrition*, or to address social, behavioral, and environmental factors that influence health in the community.”<sup>16</sup>

The ACA also requires hospitals to reduce readmission rates for Medicare patients. In 2015, for the fourth year in a row, the majority of hospitals faced reductions in Medicare payments for failing to meet their readmission benchmarks.<sup>17</sup> An international study observed that hospital patients who are malnourished are nearly twice as likely to be readmitted within 15 days of their discharge as patients not malnourished.<sup>18</sup> Hospitals can take steps to ensure patients are nourished properly during their stay, but they have little control over what foods people are eating once they return home or over whether

there is enough food at home. One study of a large hospital in Detroit found that patients living in high-poverty neighborhoods were 24 percent more likely than others to be readmitted.<sup>19</sup> Presumably high food insecurity rates are a co-occurring condition in these neighborhoods.

Clearly there are concrete reasons for hospitals to be concerned about adequate nutrition in the communities they serve, and everyone agrees that preventive healthcare is highly cost effective. But this is a new way of doing business for everyone in health care, and payment models need to be adapted. The status quo is to pay for the volume of services provided, not the value of the care for the money spent.<sup>20</sup> “I’m not sure we know exactly what that payment system will look like,” explains Ashley Thompson, Vice President and Deputy Director of Policy at the American Hospital Association. “The first step of moving from paying for volume to paying for value is good ... but we haven’t determined what the most effective payment system is to result in a paradigm shift.”<sup>21</sup>



Meals on Wheels America

**One way for hospitals to reduce readmission rates is by partnering with organizations like Meals on Wheels America that provide home-delivered meals to food-insecure seniors.**

## ESKENAZI HEALTH CARES ABOUT NUTRITION

Eskenazi Health in Indiana is one of the largest safety-net health systems in the country. Its facilities include a 315-bed hospital in downtown Indianapolis and outpatient services at 11 health centers across Marion County, the state's most populous county with nearly a million people.



Safety-net health systems are those that primarily serve low-income patients, those insured by Medicare and Medicaid, and people without health insurance. For Dr. Lisa Harris, CEO of Eskenazi Health, health care reform means that the rest of the country's hospitals are catching up with Eskenazi and how it has operated all along. "We've always had to think about how to use our resources most efficiently," Harris says. "Our statutory mandate has been to care for all, regardless of their ability to pay. The challenges of providing as much care as we can to people who can't pay forces us to align incentives with keeping

Lisa Harris, CEO of Eskenazi Health, leads a health system that is committed to addressing the social determinants of health.

costs low and promoting community health."

Recently, Eskenazi Health launched a pilot program with the local affiliate of Meal on Wheels America (MOWA). Patients discharged from the hospital are enrolled with MOWA for 30 days and provided with medically tailored meals prepared in the hospital cafeteria. The hospital covers the costs of the meals that MOWA delivers. If the program helps reduce readmission rates, it will soon pay for itself. "Cardiac patients, who have high readmission rates, require a lower-sodium diet," says Harris. "If we can put someone on a low sodium diet for just two weeks, that's all it takes to change their taste buds."

The MOWA volunteers who deliver the food are trained to work with patients to improve their understanding of the connections between nutrition and health. "When patients are leaving the hospitals, they're bombarded with so much information," says Harris. "Take this medicine—don't eat this kind of food. All that patient is probably

**Safety-net health systems are those that primarily serve low-income patients, those insured by Medicare and Medicaid, and people without health insurance.**

thinking is, if this lady doesn't stop speaking, my son who's here to pick me up is going to be late for work and could lose his job."

The MOWA program is one example of how Eskenazi Health works with local partners to promote community health. Another is a food pantry at Eskenazi Health Center Pecar, which is located in one of the most disadvantaged sections of Indianapolis. It is a food desert that is home to a large concentration of immigrant families. The pantry is housed at the health center and staffed by members of nearby St. Luke's United Methodist Church. Most of the food is provided by Gleaners, the area food bank. The largest funder is Dow AgroSciences, whose global headquarters is located in the county.

Dawn Haut, chief physician at the clinic, says the pantry has made it so much easier for her to ask patients whether they have enough food at home. Every patient who comes to the clinic completes an electronic screening, and one of the questions is about their household food security situation. When they screen positive for food insecurity, Haut or another physician attending the patient receives a prompt. Before the pantry opened, Haut explains, she had reservations about asking patients about food insecurity, mainly because she didn't have anything in her tool kit to offer them.

Patients who report that they are food insecure during the electronic screening frequently deny they answered the question that way when she raises the issue with them face to face. "I say, well, if you know of someone in your neighborhood who could use help, let them know we have a pantry here at the clinic and they don't have to pay." Most of the time, she says, by the end of the appointment, the patient asks to be reminded of what hours she said the pantry was open.



Courtesy of Eskenazi Health

**Eskenazi Health Center Pecar, located in a food desert, runs an onsite food pantry for patients and others in the community.**

The ACA is testing new value-based payment models in Medicare and Medicaid, for example, by paying a health system a lump sum for all the health care given to a particular patient over a given period. Under this model, the system determines the right balance of clinical-based care and community-based services. Whatever the accumulating data show to be working best, it will be Medicare and Medicaid, which together insure nearly a third of the population, showing the way forward.

## Aligning With a Common Nutrition Agenda

Food insecurity in the United States should never be anything more than a short-term hardship caused by income shocks such as a job loss or health crisis. That description might fit in an era of plentiful jobs, fair wages, and reasonable out-of-pocket health costs. But many people struggling to put food on the table have jobs. The problem is that the jobs don't pay

a living wage. And employers may offer health insurance, but the premiums would consume a whole paycheck.

In recent years, the United States has had more than 45 million food-insecure people; the figure has been at least 30 million every year of the twenty-first century. The numbers tell us that for many people, food insecurity is not a temporary hardship—and it is not an individual problem. Given what we know about the effects on health of not getting enough nutritious food, it's time to talk about food insecurity as a public health problem as well.

Obesity is recognized as a

public health problem. The federal nutrition programs and local emergency food systems led by food banks are both indispensable in helping low-income families overcome food insecurity and obesity. Researchers at USDA who completed a study based on interviews with SNAP households report, "Families at all levels of food security told us that SNAP allowed them to purchase more food, and more healthy food than they would otherwise be able to afford."<sup>22</sup> SNAP makes healthy foods more affordable, but they are not affordable all the time. "Despite numerous cost-cutting strategies, most families find that they must maintain a repetitive diet of lesser quality to keep their family fed throughout the month."<sup>23</sup> Parents said that they shopped differently in the first weeks of the month, just after SNAP benefits had been issued, than toward the end, when they had been used up.

It is possible to stretch SNAP dollars a few days longer if you know how to do it. The nonprofit organization Share Our Strength sponsors Cooking Matters<sup>®</sup>, the largest nutrition education program working to reduce food insecurity. Cooking Matters<sup>®</sup> is a six-week course



Joseph Mölieri/Bread for the World

**Volunteers at food pantries, often times former clients themselves, are frontline healthcare workers in underserved communities.**

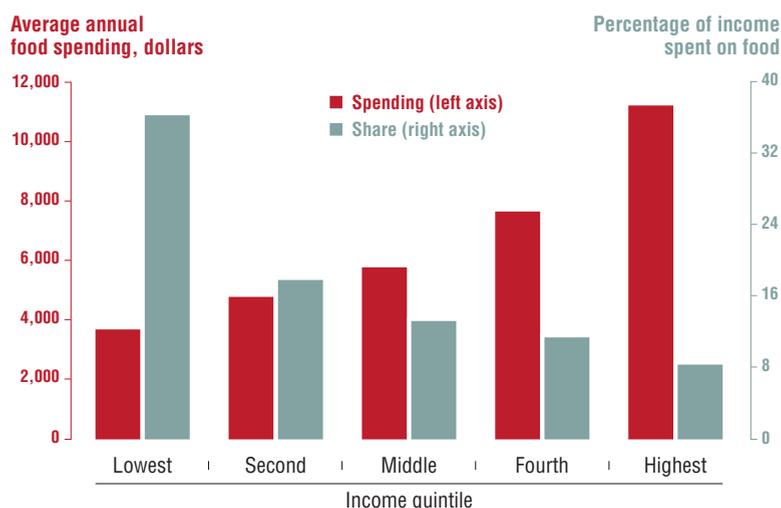
that teaches low-income adults, children, and entire families how to shop on a tight budget and how to plan and prepare healthy meals and snacks. In 2013, nearly 50,000 people in 44 states participated in the program.<sup>24</sup> Altarum Institute, a health systems research organization, evaluated the program and found that it does improve food security and leads to what would appear to be sustainable improvements in dietary quality.<sup>25</sup> Cooking Matters® is part of Share Our Strength's No Kid Hungry Campaign, one of the most popular and successful privately funded anti-hunger campaigns ever. For all its success in raising awareness about child hunger, attracting corporate donors, enlisting celebrities to spread the word, and raising money, the No Kid Hungry Campaign continues to wage battle against a seemingly inexhaustible foe. A greater proportion of children in the United States are hungry than in any other high-income country.

In 2013, the Institute of Medicine issued a report critical of the formula used to calculate the size of SNAP benefits.<sup>26</sup> The program provides an average benefit per person per day of approximately \$4.00.<sup>27</sup> In 2011, USDA estimated the cost of a day's worth of healthy food to be no less than \$6.65.<sup>28</sup> We do not encourage patients to take less than the prescribed dose of their medication—similarly, we should not be cavalier about the nutrition and health of SNAP families.

The American Recovery and Reinvestment Act of 2009 (ARRA), the national stimulus package designed to counter the Great Recession, raised SNAP benefits by an average of 15 percent, or what amounted to an additional 50 cents per day. USDA found that food security improved among households that received the additional SNAP benefits, while food security deteriorated among households just over the SNAP income threshold.<sup>29</sup> Nevertheless, Congress decided in November 2013 to let SNAP benefits revert to their pre-ARRA levels.

The cost of food and the money families have available to spend on it are crucial factors that influence food choices. See Figure 2.2. There is little evidence that simply opening grocery stores in low-income communities changes food purchasing and consumption patterns.<sup>30</sup> According to a recent study of more than 100,000 households in multiple markets across the United States, richer and better-educated consumers buy healthier foods. The study controlled for proximity of grocery stores and transportation barriers such as not having a car. Food insecurity rates on average are 10 times higher in households with an adult who has not completed high school than in households with an adult who has a college

Figure 2.2 Food Spending and Share of Income Spent on Food Across U.S. Households, 2013



Source: USDA, Economic Research Service using data from U.S. Bureau of Labor Statistics, Consumer Expenditure Survey, 2013.

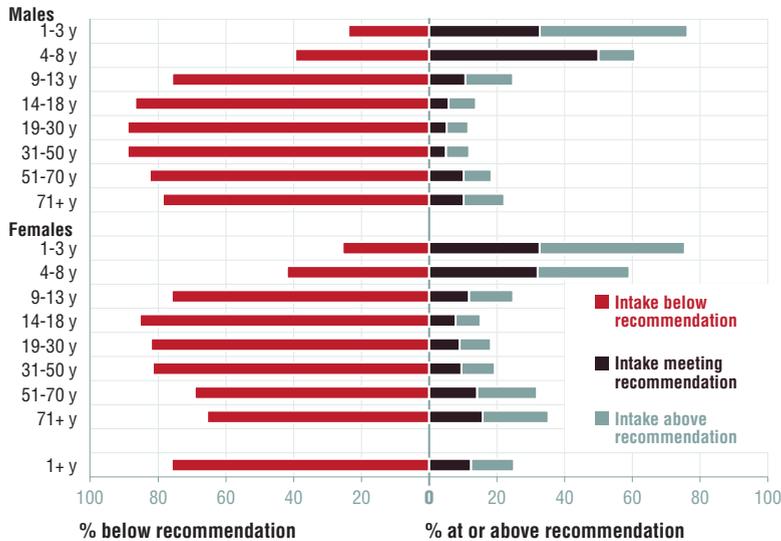
education.<sup>31</sup> That is not surprising since education levels are a reliable predictor of household income, and therefore of how much a family is able to spend on food.

In a national survey of food banks published by Feeding America in 2014, more than half of client households were also receiving SNAP. More than three out of four were buying

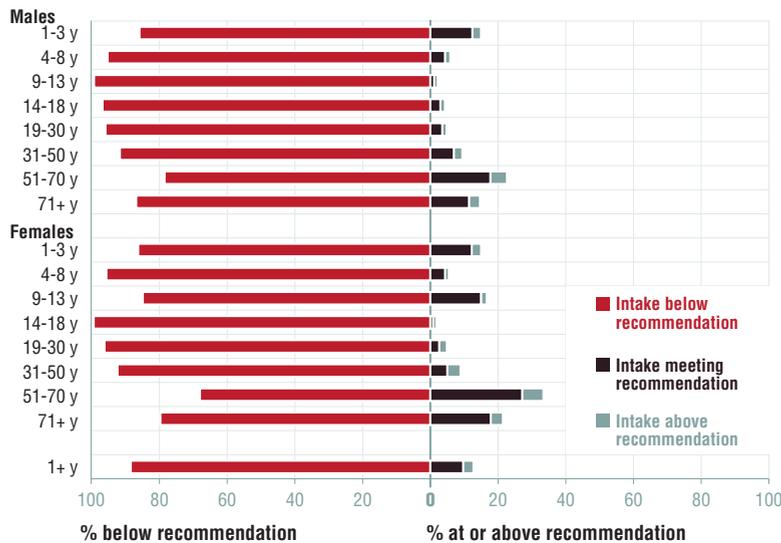
inexpensive, unhealthy foods to make ends meet. Nearly two-thirds had to choose between paying for food or paying for medicine in the past year.<sup>32</sup> The Feeding America network is extensive. The organization estimates that its network serves at least 17 percent of diabetics in the United States, and 13 percent of people with high blood pressure.<sup>33</sup>

Food banks have been concerned about the nutritional quality of the foods they provide for some time. In 2004, the Food Bank of New York City became the first food bank in the nation to adopt nutrition standards, no longer accepting donations of soda or candy. Other food banks have established similar criteria, but a 2011 survey by the University of California-Berkeley showed that only 20 percent were fully implementing their standards.<sup>34</sup> The fact is that food banks have limited control over the dietary quality of the foods they provide to clients. Healthier options such as fresh fruits and vegetables, lean meats, low-fat dairy, and cereals are more difficult to procure. Two-thirds of the food is donated, most by food retailers and manufacturers. Foods purchased independently make up just 14 percent of what the Feeding America network offers.<sup>35</sup> The remaining 20 percent comes from USDA and must meet nutritional guidelines.

**Figure 2.3 Total Fruit Consumption: Estimated Percent of Persons Below, at, or Above Recommendation**



**Figure 2.4 Total Vegetables: Estimated Percent of Persons Below, at, or Above Recommendation**



Source: What We Eat in America, NHANES 2007-2010.

The *Dietary Guidelines for Americans* serves as a blueprint for what constitutes a healthy diet. The U.S. population as a whole is doing poorly in meeting the guidelines. See Figures 2.3 and 2.4. Developed by experts in health and nutrition science, the *Dietary Guidelines* are a launching off point for anti-hunger organizations to engage with the health care sector. Feeding America set a goal of having 75 percent of the food distributed through its network aligned with the *Dietary Guidelines* by 2025.<sup>36</sup> WIC food packages and the school meal programs are already aligned with the guidelines. SNAP succeeds in improving health despite its inadequate “dosage” or benefit levels, but as mentioned earlier, it is a challenge for SNAP families to get enough healthy food.

In the USDA interviews with SNAP families, when parents were asked what they believe constituted a healthy diet, they almost always cited fruits and vegetables as the key.<sup>37</sup> Fresh fruits and vegetables are the most sought-after items that food bank clients report they are not receiving.<sup>38</sup> Fruits and vegetables are staples of a healthy diet, and increasing their consumption is a recommendation of the *Dietary Guidelines*.<sup>39</sup> Later in the chapter we explore ways for healthcare providers to take advantage of new opportunities to promote fruit and vegetable consumption as a component of treating chronic diseases.

A customer at a farmers market exchanges tokens to pay for some of her purchases funded by the Supplemental Nutrition Assistance Program (SNAP).



USDA Photo by Lance Cheung

## MCKENNA'S WAGON AT MARTHA'S TABLE

by Caron Gremont, *Martha's Table*

For over 35 years, Martha's Table has been feeding the hungry and homeless in and around the District of Columbia. Like many other regional and national organizations dedicated to the fight against hunger, the focus has been on getting food—any food—to those in need, but not necessarily the best or right food.

Martha's Table believes that everyone—regardless of income level—deserves a healthy life. While 55 percent of DC residents are overweight or obese, and with diabetes rates at 8 to 15 percent across the city, the problem is even more acute in low-income communities. In many cases, the population that Martha's Table serves is disproportionately overweight or obese and diabetic. We believe we have a responsibility to provide food that supports the efforts of our community to lead a healthy life.



Courtesy of Martha's Table

McKenna's Wagon is named after one of the founders of Martha's Table, Father Horace McKenna.

In addition to running free pop-up healthy grocery markets in elementary schools across DC, Martha's Table operates McKenna's Wagon, a mobile food truck that rolls out 7 days a week, 365 days a year to feed the homeless and hungry at three established downtown locations.

Each evening, McKenna's Wagon feeds 300 of the city's most vulnerable men and women, with a hot, one-pot meal, sandwiches, dessert, and a drink. The one-pot meal, made on-site at Martha's Table, consists of fresh vegetables, rice, and meat or beans. For many years, we have depended on contributions from local grocery stores, which consisted of, among other items, sheet cakes, cookies and pies just past their sell-by dates for dessert on the Wagon. Each afternoon, a crew of volunteers would come to Martha's Table to help us place these desserts on single serving plates and wrap them in plastic wrap to go out on the van in the evening. These desserts would often include pink and red heart-shaped cookies days after Valentine's Day, or standard "Happy Birthday" sheet cakes that just didn't sell.

Earlier this year, we at Martha's Table decided to make a significant change. Instead of depending on donated sweets, we decided we would bake homemade muffins in-house and send those out on the Wagon for dessert each evening. Before we made this change, we tested out some muffin recipes and asked our clients for feedback. We started with slightly sweeter muffins and, over time, decreased the sugar content. The muffins—which vary from oat banana to blueberry to chocolate chip—are all made with whole-wheat flour. The same volunteers who showed up daily to package the grocery store sweets now help with muffin baking. And, each evening, fresh (and sometimes warm!) muffins go out to hundreds of men and women in DC as part of their meal. In addition to supporting health, freshly made muffins make the men and women we serve feel valued and important because we care enough about them to bake, from scratch, healthy treats. This is a positive step towards healthier living for the community we work with in Washington, DC.

*Caron Gremont is the Senior Director of Healthy Eating at Martha's Table In Washington, DC.*

## Weighing the Harm in the U.S. Food System

In a survey conducted by National Public Radio, the Robert Wood Johnson Foundation, and Harvard's T.H. Chan School of Public Health, people were asked to choose five things from a list of 16 they thought would improve their health a great deal. Fifty-seven percent chose improving access to healthy food—a higher percentage than any other single item, including increasing access to high-quality health care (52 percent) and improving the economy and the availability of jobs (49 percent).<sup>40</sup>

What is behind Americans' poor diets? One factor is that families spend less time cooking and eating at home. At the same time, the portion sizes of foods eaten away from home have increased.<sup>41</sup> Americans work longer hours than people in every one of our peer countries.<sup>42</sup> From 1979–2007, married women in middle-income families increased the number of hours they worked annually by 58.5 percent—the equivalent of an additional three months of full-time work.<sup>43</sup> Because men's wages declined in real value over the same period, many married women had to work longer hours to maintain their family's foothold in the middle class. The percentage of mothers with children under age 18 who were in the workforce increased by 14 percent, mothers with children under age 6 by 19 percent, and mothers with infants by 25 percent over this period.<sup>44</sup>

Another factor is the way the U.S. food system is set up. Our farmers are very productive: between the early 1980s and 2000, the number of calories available per person per day increased from about 3,300 to 3,900.<sup>45</sup> The problem is that the additional calories came predominantly from added fats and sugars. Since the first *Dietary Guidelines for Americans* were issued in 1980, per capita consumption of fruits and vegetables has barely changed. Soaring obesity rates are the most glaring sign that something is out of balance. Between 1980 and 2000, obesity rates doubled among adults and tripled among children.<sup>46</sup> These increases coincided with the changes in the food supply.

In 2012, the average American consumed more than 20 teaspoons of sugar per day. That is almost double the USDA recommended allowance, and more than double and triple the American Heart Association's recommended amounts for men and women respectively.<sup>47</sup> A 2014 report by the Environmental Working Group analyzed 80,000 food products sold in supermarkets around the nation and found that 58 percent had added sugar. This included at least 75 percent of deli meats, just one class of products consumers might be surprised to learn have been sweetened.<sup>48</sup>



USDA photo by Lance Cheung

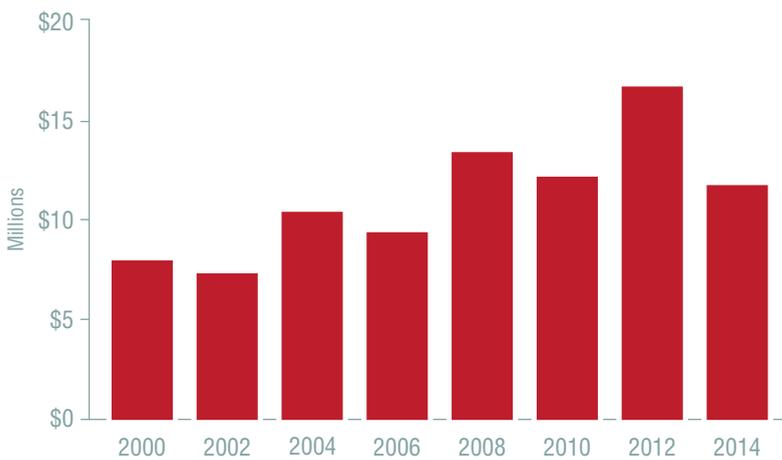
**U.S. farm programs have paid more subsidies to raise corn than any other crop. Meanwhile, high-fructose corn syrup has been linked to the dramatic rise in obesity among American adults and children.**

Beverages are the biggest source of added sugar in the U.S. diet, and the linkage between obesity and overconsumption of sugar-sweetened beverages is scientifically proven.<sup>49</sup> The 10 largest food and beverage companies spend billions of dollars each year to convince Americans to consume more sugar, with soft drinks and other sugar-sweetened beverages leading the way.<sup>50</sup> Research shows that children are innately more receptive to sweet tastes than adults.<sup>51</sup> The food industry spends more than \$1 billion annually on youth-directed advertising. Soft drinks, cereals, candy, and sugary snacks account for the largest share.<sup>52</sup>

The Institute of Medicine (IOM) has criticized marketing practices directed at children and youth. A 2006 report concluded that “food and beverage marketing practices geared to children and youth are out of balance with healthful diets, and contribute to an environment that puts their health at risk.”<sup>53</sup>

Policy responses to obesity thus far have predominantly emphasized education and personal responsibility, making people aware of the health consequences and encouraging them to adjust their lifestyle and be more mindful of what they consume. “The food industry supports this conceptualization with considerable resources,” says Kelly Brownell, dean of Duke University’s Sanford

**Figure 2.5 Campaign Contributions to Congress from the Food and Beverage Industry**



Source: Center for Responsive Politics

School of Public Policy, “to train the spotlight away from the parties producing, marketing, and selling food to those consuming it.”<sup>54</sup>

In 2003, U.S. sugar producers threatened to pressure Congress to withhold \$406 million in U.S. contributions to the World Health Organization (WHO) after WHO issued a report advocating that people limit their intake of products with added sugars.<sup>55</sup> The food and beverage industry is a generous contributor to members of Congress. See Figure 2.5.<sup>56</sup> And it spends millions more on lobbying. In 2014, the industry spent a total of \$32.2 million on lobbying, with Coca-Cola and Pepsi leading all individual contributors.<sup>57</sup> We can say without reservation that Congress may have been too good a friend to the industry. The Personal Responsibility in Food Consumption Act, also known as the “Cheeseburger Bill,” was a bill in Congress designed to ban lawsuits against the fast-food industry. The bill passed in the House of Representatives in 2005 before it failed in the Senate. Since then, versions of it have been adopted in more than 20 states.<sup>58</sup>

The American Beverage Association, a lobbying group for the soft drink industry, has been remarkably successful in defeating proposed taxes on soda and other sugar-sweetened beverages, maintaining that the taxes infringe on people’s freedom of choice. In 2009, the

association spent \$19 million lobbying to defeat a proposed soda tax in the ACA that would have helped fund the fight against obesity.<sup>59</sup>

Public health groups are frustrated, which is why SNAP has become entangled in policy debates about how to address the nation's obesity epidemic. In 2013, a letter to the Secretary of Agriculture signed by dozens of public health groups proposed allowing states to conduct pilot projects to collect the data “needed to make an informed decision concerning ways to improve the nutritional quality of purchases through the SNAP program.”<sup>60</sup> States cannot regulate what SNAP recipients purchase without a waiver from USDA. State and local policymakers from several areas of the country have sought waivers to restrict purchases of soft drinks and other sugar-sweetened beverages with SNAP benefits.<sup>61</sup> USDA has rejected all of these.

Regardless of how well intentioned they may be, the proposals to restrict SNAP purchases to fight obesity are misplaced. Studies show SNAP does not increase the risk of obesity.<sup>62</sup> Obesity develops over years. Although some households have to rely on SNAP for years at a time, USDA reports that half of all new SNAP recipients leave the program within 10 months.<sup>63</sup> USDA found SNAP recipients no more likely to consume sugar-sweetened beverages than eligible nonparticipants.<sup>64</sup> Because SNAP benefits are intended to cover only a portion of food purchases, anyone who wanted restricted beverages could purchase them with their own money. Finally, restrictions could end up doing more harm than good by increasing the stigma associated with the program.

A tax on all consumer purchases of sugar-sweetened beverages would address the obesity epidemic more equitably and have a much better chance of achieving lasting impact. Taxes on other products, such as alcohol and tobacco, are used to promote public health goals. In 2011, Brownell and colleagues at the Rudd Center for Food Policy and Obesity reported that a nationwide tax of one penny per ounce on all sugar-sweetened beverages would generate \$80 billion nationally over five years.<sup>65</sup>

In 2013, Mexico surpassed the United States as the most obese nation in the world. On January 1, 2014, the country imposed a 10-percent tax on sugar-sweetened beverages that affected all consumers. The Mexican National Institute of Public Health and the University of North Carolina reported that the tax led to a 6 percent reduction in consumption for 2014 as a whole, and the reduction was as much as 12 percent by the later months of the year.<sup>66</sup>

The food and beverage industry is a powerful lobby, but so is health care. By 2013, the healthcare sector was the dominant source of employment in 35 states. Hospitals are the



Sean Madden for Bread for the World

**The Personal Responsibility in Food Consumption Act of 2005, also called the “Cheeseburger Bill,” was designed to ban lawsuits against the fast-food industry. It passed by a large majority in the House of Representatives but failed in the Senate.**

## FAITH, FOOD, AND COMMUNITY BUILDING ACROSS THE RACIAL DIVIDE IN THE RURAL SOUTH

Macon County, Alabama, is located within the rural southern Black Belt, a region of the country that suffers disproportionately from persistent poverty, poor health, structural racism, and chronic food insecurity.

In 2015, the Robert Wood Johnson Foundation released county health rankings for every state in the country. Of the 67 counties in Alabama, Macon was ranked third from the bottom on a Food Environment Index, based on the food insecurity rate (26 percent) and the share of the population with limited access to healthy foods (19 percent).<sup>67</sup>

The Black Belt is predominantly African American, the main reason for its name. The Black Belt is also a reference to the original places of black slavery from Africa.

At one time it was also named for the rich, dark soil, and the black workers who cared for the land and made it possible for Alabama to have a profitable agricultural sector. The soil is still there and so are the descendants of that time, but many have left the rural areas for the urban way of life thereby leaving the land behind. This has had consequences for the people and the land.

“It was amazing to me how much we had gotten away from that history,” says Rev. Otis

Head, pastor of Mount Calvary Missionary Christian Church in Macon County. “All this land and good soil that we have and aren’t doing anything with. Our community has food, but so little of it is healthy.” Rev. Head moved to Macon County in 2006. His parents had attended Tuskegee University in Macon County, and as a child he visited here many times, remembering the pride his parents’ generation had in its agricultural legacy.

The agricultural department at Tuskegee was headed originally by none other than George Washington Carver, who was offered the position by its founder and first president, Booker T. Washington. Carver was already famous for his contributions to agricultural science, and Washington wanted Carver because agriculture was central to his philosophy of black self-sufficiency.

Founded in 1881, Tuskegee is one of the country’s first Historically Black Colleges and Universities (HBCUs). HBCUs have their roots in the black church, and the close association continues to this day. Rev. Head and others on the Macon County Ministers Council reached out to the agricultural department at the university, asking for help in using available land to improve the local food system. They

**The Macon County Ministers Council reached out to the agricultural department at Tuskegee University, asking for help in using available land to improve the local food system.**

started with community gardens on church properties. The foods grown there are distributed through a pantry run by the council, and they are available to the entire community. “It has made a difference,” says Rev. Head. “People tell me they feel better, and I can see it myself.”

The black church is the key stakeholder when it comes to matters of community health and building trust and bridges between the African American community and the health profession, particularly in rural communities. It is not uncommon, for example, for clergy in Macon County to take calls from families asking for help because they have run out of food. When someone in the family is sick, it may require a minister to persuade the person to see a doctor given the history of racial discrimination in health care which, in great part, explains why some African American communities are wary of doctors.<sup>68</sup> This kind of leadership by African American churches can help the community to overcome the history of racial discrimination in health care.

“The past isn’t dead and buried. In fact, it isn’t even past,” said candidate Barack Obama, in a 2008 speech about race relations.<sup>69</sup> The ACA, better known as Obamacare, will have only limited success in places like Macon County without support from the church leaders. The church will lead the community building as it always has, because the church has the trust of local residents that other structures often do not. This may be true in other parts of the country as well, but it is especially true in the rural Black Belt.

Rev. K. G. Jones, pastor at the Bethel Missionary Baptist Church in Tuskegee, Alabama tends to the community garden on the grounds of the church.



Wylin Wilson

second largest employer in the private sector, supporting one in every nine jobs in the United States;<sup>70</sup> and, in 2013, hospitals spent more than \$782 billion on goods and services from other businesses.<sup>71</sup>

Some of the revenue from a tax on sugar-sweetened beverages in the United States could be used to provide incentives to SNAP participants to purchase healthy foods. Incentives, although not widely tested in SNAP, have been shown to work. In 2011 and 2012, USDA conducted an experiment in Hampden County, Massachusetts, the Healthy Incentives Pilot, providing a randomly assigned group of SNAP recipients with an additional 30 cents for each dollar of SNAP benefits spent on fruits and vegetables. Compared to a control group, SNAP participants in the incentive program spent an additional 11 percent on fruits and vegetables. Three-quarters of the households receiving the benefit reported that fruits and vegetables had become more affordable due to the incentive and were more inclined to purchase them in higher quantities.<sup>72</sup> The evaluation team estimated that the total cost of implementing a similar incentive program nationwide would range from \$825 million to \$4.5 billion a year.<sup>73</sup>

## Food System Reform Meets Healthcare Reform

One of the fastest growing trends in U.S. agriculture in the twenty-first century has been the rapid growth in demand for food produced in ways that are perceived as supporting health and causing a softer environmental footprint than large-scale production agriculture. Despite supportive rhetoric from the Secretary of Agriculture, USDA has made only modest strides to catch up. U.S. agricultural policies remain geared to a small number of commodities and a small number of farmers who produce them, and the emphasis remains on calories at the expense of dietary diversity.<sup>74</sup>

In metropolitan areas, farmers markets have been multiplying yearly; farm-to-school programs cannot keep up with the school districts that want one of their own; and consumer

demand is skyrocketing for foods grown locally by farmers perceived to be operating sustainably. Consumers don't have to shop at farmers markets—grocery stores sell plenty of the fruits, vegetables, and other products available at the farmers markets. What farmers markets offer that supermarkets do not is direct contact with the people who produce the foods that consumers want. The markets have become a popular venue for community engagement on health and nutrition. This didn't happen overnight, but the momentum now is truly breathtaking. At one time, farmers markets were asso-

**U.S. farmers producing foods aligned with the recommendations of the Dietary Guidelines for Americans receive little or no support from U.S. farm programs.**



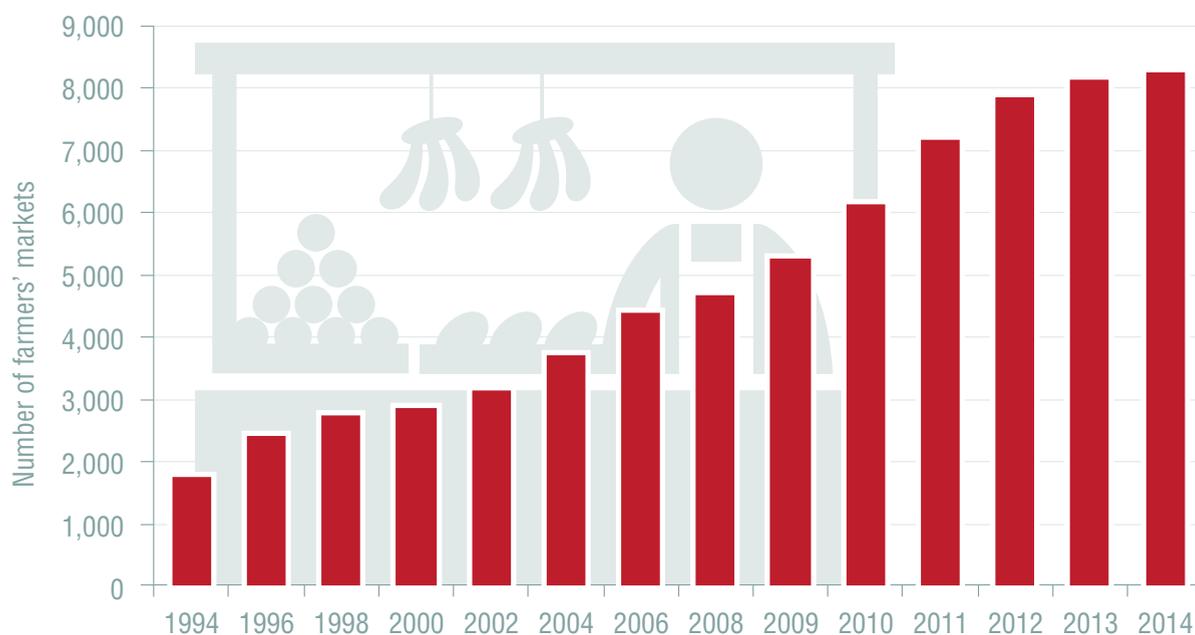
USDA Photos by Lance Cheung

ciated with a countercultural food movement. That has changed as interest in local food production has gone mainstream.

Farmers markets started popping up in metropolitan areas in the 1970s. Most markets were in upscale neighborhoods and not easily accessible to the average SNAP participant (back then, SNAP was known as the Food Stamp Program). Between 1994 and 2014, the number of farmers markets increased fivefold. By 2014, there were 8,268.<sup>75</sup> See Figure 2.6. The explosive growth of the last decade has helped low-income people overcome access barriers, but it has not eliminated them. Until recently, for example, farmers markets were not equipped to accept the debit card that people on SNAP use to access their benefits. In 2009, there were 900 markets where people could make purchases with SNAP benefits. By 2012, that number had increased to 5,900,<sup>76</sup> and USDA now provides wireless technology to vendors at no cost so that they can accept the SNAP card.

In 2014, Congress passed a farm bill that included \$100 million in grants over four years to create incentives for SNAP participants to purchase healthy foods at farmers markets. The Food Insecurity Nutrition Incentive program (FINI) allows SNAP recipients to double their purchasing power when they use their benefits on fruits and vegetables. FINI did not come out of nowhere. Wholesome Wave, a private organization, working closely with Fair Food Network and other national partners, handed Congress the proof of concept after years of success with its Double Value Coupon Program. Households could use up to \$10 in SNAP benefits each month at participating farmers markets—matched dollar for dollar by Wholesome Wave.

Figure 2.6 U.S. Farmers' Markets, 1994-2014



Source: USDA-AMS 2014; USDA AMS Marketing Services Division Farmers market information is voluntary and self-reported to USDA-AMS

Gus Schumacher, co-founder of Wholesome Wave, and Marydale DeBor, founder and managing director of Fresh Advantage, whose work includes helping hospitals improve the quality of food they serve, were instrumental in getting the words “ensure adequate nutrition” included in the IRS regulations specifying how nonprofit hospitals could meet their community benefit requirements. Schumacher and DeBor formed a broad coalition—including the National Farmers Union, individual farmers and farmers market organizations, and the Harvard Law School Center for Health Law and Policy Innovation, to name a few. Members filed public comments as part of the IRS rulemaking process that implemented the legislative language of the ACA. Of all the comments the IRS received, about a third came

from this advocacy coalition. They contained compelling arguments and detailed descriptions of the ways in which nonprofit hospitals could address “diet deficits” at the community level. For example, hospitals could form partnerships with and provide in-kind support to community-based organizations focused on neighborhoods of need, organizations such as food banks, pantries, and kitchen programs. Or they could build infrastructure to strengthen local and regional food systems in partnership with organizations such as Wholesome Wave and Fresh Advantage. The advocates’ efforts paid off: the IRS Final Rule states



Joseph Molieri/Bread for the World

**Fruit and vegetable incentives funded through the federal nutrition and health-care programs create markets for small to medium-size farmers and strengthen local food systems.**

that significant health needs in the community are not limited to access to clinical service but also can include social determinants, specifically consideration of food insecurity, hunger, and poor diet that are root causes of chronic disease and obesity.

In 2010, Wholesome Wave piloted its first fruit and vegetable prescription program (FVRx<sup>®</sup>), targeting pediatric patients ages 2 to 18 who had been diagnosed as overweight or obese. The program is growing in leaps and bounds each year. Wholesome Wave developed FVRx<sup>®</sup> in response to requests from doctors who were familiar with the Double Value Coupon Program and wanted to do something similar for their own low-income patients who could not afford the types of food that were healthiest for them. Patients are enrolled in FVRx<sup>®</sup> for four to six months, during which they set healthy eating goals, receive nutrition education, and meet monthly with their primary care provider. See Figure 2.7. The prescription is for \$1 per day per person in the household. At the farmers market, people go to the information booth and exchange the prescription for tokens, which can be used at any of the vendors to purchase fruits and vegetables.

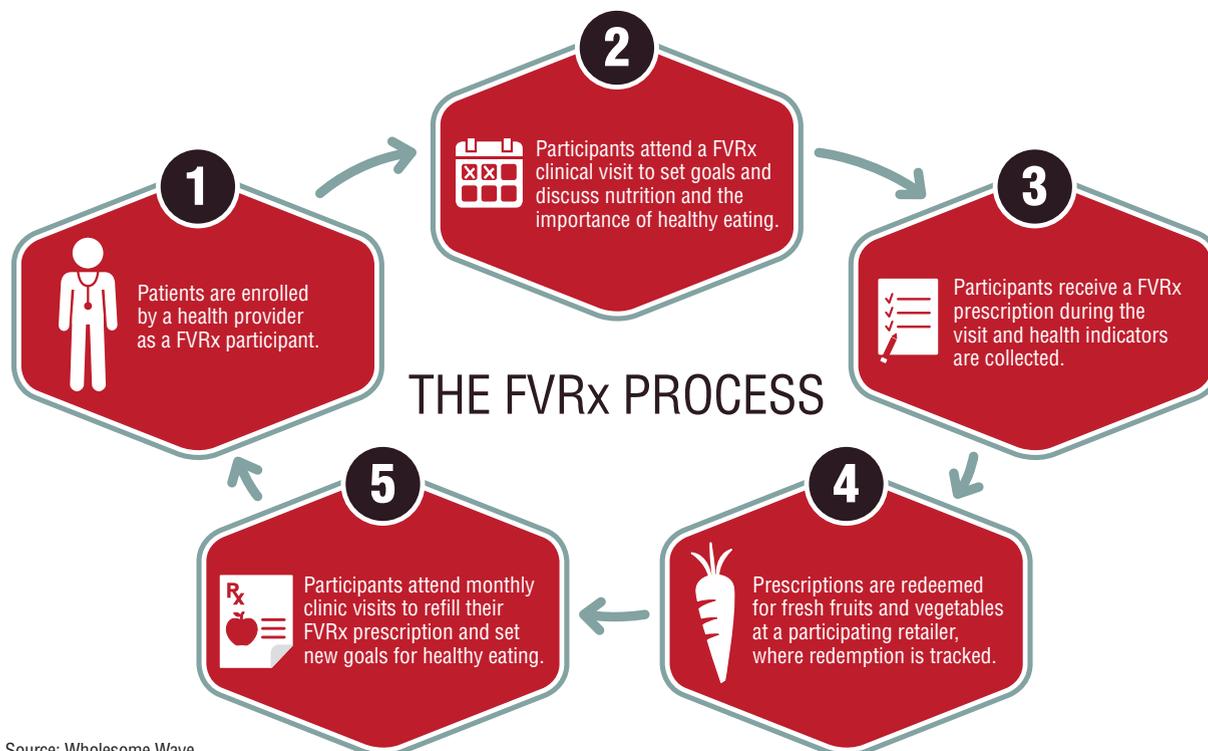
“Demonstrate it and then institutionalize it,” says Schumacher. “We’ve done it in SNAP, and now we want to do the same with fruit and vegetable prescriptions, including for families

in Medicaid.” In Medicaid, states can use waivers to test innovative approaches of delivering health care, just as they can in SNAP. The main condition for getting a waiver is that the demonstration project must be budget neutral.

New York applied for and received a waiver to test FVRx<sup>®</sup> with Medicaid patients. Two hospitals in the New York City Health and Hospitals Corporation (HHC), the largest municipal healthcare system in the United States,<sup>77</sup> participated in an FVRx<sup>®</sup> program in 2013. They were Harlem Hospital Center, a 272-bed teaching hospital that serves an estimated 5,000 overweight or obese children every year, and Lincoln Medical and Mental Health Center, a 347-bed teaching hospital that provides health care to people who live in the South Bronx and in parts of Upper Manhattan. An estimated 30 to 40 percent of the community’s residents are overweight or obese. The two hospitals enrolled 116 patients, with 551 family members also sharing in prescription benefits. The average age of the patients was 9. In its first year, FVRx<sup>®</sup> helped 40 percent of the children lower their Body Mass Index, and more than half of the families reported having more food to eat at home.<sup>78</sup>

At the end of 2014, Dr. Ramanathan Raju, HHC’s president and CEO, explained to his board of directors: “I think we’ve learned that sometimes a prescription for fresh food can be even better than a prescription for medicine. And when doctors do more than just ask patients to eat more fruits and vegetables—when they take concrete steps to make it easier for patients and go out of their way to demonstrate the benefits—patients really listen.”<sup>79</sup>

Figure 2.7 The Fruit and Vegetable Prescription<sup>®</sup> (FVRx<sup>®</sup>) Program: How Does It Work?



Source: Wholesome Wave

## SUSTAINABLE WILLIAMSON, WEST VIRGINIA— WHERE MESSAGING MATTERS

“We’re saying let’s get healthy together,” explains Darren McCormick, the mayor of Williamson, the largest town in Mingo County, West Virginia, and the epicenter of an outstanding effort to transform the self-image of a community—from poor health and persistent poverty to good health and a sustainable future.<sup>80</sup>

Mingo County is located in the heart of Central Appalachian coal country. At first blush, it would seem to be the most unlikely of places to be described by the word “sustainable.” Mingo County is one of the poorest, unhealthiest counties in West Virginia. The early death rate is one of the highest in the nation. Almost 40 percent of adults are obese, and the child obesity rate is not much better. One in three of fifth graders have been diagnosed with high blood pressure.<sup>81</sup>

Fifty years ago, Mingo County, by virtue of its location in Central Appalachia, was one of the proving grounds in the War on Poverty. Politicians from Washington, DC, came to the region and said, “We’re going to end poverty in Appalachia.” But poverty wasn’t ended here, and many people who live in the region feel they’ve been stigmatized as losers ever since.

It’s a mindset that McCormick says he shares. And yet he’s thankful for the support provided by federal programs such as SNAP and WIC. In the early 1960s, there was rampant hunger and severe malnutrition in the region, and the social programs created to address those hardships did erase them for the most part. But what the War on Poverty failed to do was to help diversify the economy to be less dependent on coal.

Geologists predict that it will be only another two to three decades before the county’s coal reserves run out. Nearby McDowell County has already been totally mined out. Thus, sustainability is more than

a rebranding campaign for Williamson. Community leaders recognize that if the place is not only going to survive, but also thrive, residents have to transform the way they see themselves. So the town’s message is designed to give people hope. “Our mission statement isn’t individual projects anymore,” McCormick said. “Our project is creating a more sustainable way of life.”<sup>82</sup> If it sounds like a long shot to some outsiders, you won’t find many people in town without hope.

One priority is stemming the diabetes epidemic. “Health, quality of life, and economic development issues are inseparable,” says Dr. Christopher D. Beckett, who grew up in Williamson and goes by Dino to people around town.<sup>83</sup> Mingo County is located in what is sometimes called the nation’s diabetes belt: 644 counties spanning 15 states.<sup>84</sup> See Figure 2.8. For the country to make progress against the rising costs of health care, it will have to develop innovative approaches to managing diabetes.

In 2011, the Mingo County Diabetes Coalition was established with support from a federal grant to pilot such approaches and ultimately help reduce the cost of diabetes to the Medicaid and Medicare programs. The Centers for Disease Control and Prevention reports that if current trends continue, as many as 1 in 3 U.S. adults could have diabetes by 2030.<sup>85</sup> Places like Mingo County are today’s proving ground to try to reverse those trends.

Beckett leads the Diabetes Coalition, which has patients participating in a comprehensive program that includes exercise, eating well, and proper use of medication. Patients who’ve gone through the program have experienced a drop in A1c hemoglobin levels by an average of 2.1 percent. A1c is associated with blood glucose levels; it is a critical indicator in managing a diabetic patient’s condition. A 2.1 percent drop is huge, explains Beckett. “If you were a drug

**Community leaders recognize that if the place is not only going to survive, but also thrive, residents have to transform the way they see themselves.**

manufacturer and you were able to drop [A1c levels] by just 0.6 percent, you would have a billion-dollar drug.”<sup>86</sup> A 2.1 percent improvement translates into a 29 percent reduction in the risk of a heart attack, a 50 percent reduction in renal failure and need for dialysis, and a 90 percent reduction in the likelihood of amputation. The program’s success explains why more people around town are starting to wear pedometers and mid-day walks have become popular among townsfolk of all ages.<sup>87</sup>

Beckett has gotten patients to eat healthier by prescribing (literally writing prescriptions for) a diet high in fruits and vegetables. The Mingo County Diabetes Coalition provides patients with vouchers to purchase the food. Much of that shopping is done at the Williamson farmers market since the town is a classic example of a rural food desert. The closest full service grocery store is more than 30 miles away. The farmers market, started in 2012, was designed not only to improve access to healthy foods but also to be part of an economic development strategy. During the planning phase, McCormack approached the USDA Extension office at West Virginia University in Charleston, a hundred miles north, and asked how many people in Mingo County were farming. “USDA told us nobody was farming here—because nobody had gone to the extension office for help. Well, anybody who lives here knows that wasn’t true.” McCormack dispatched a VISTA volunteer to go back into the hollows and survey how many people were growing food. The survey found that there were many more “farmers” than anyone had realized. The farmers market now provides a source of income for these local growers.

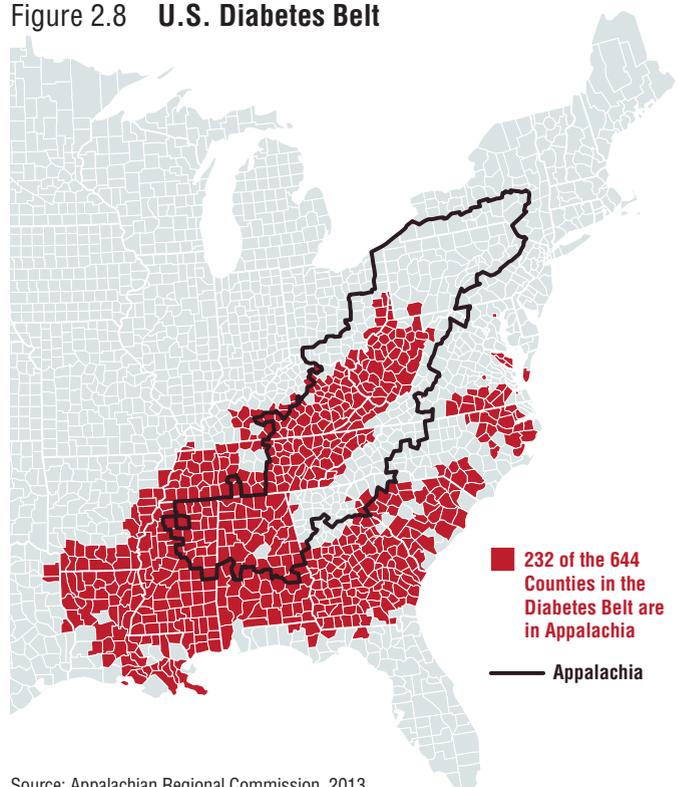
Healthy food is central to promoting the message of a sustainable future. Because of the market, and the new community gardens that have also been created, students at the middle school in Williamson—80 percent of them on free or reduced price meals—have asked their principal to create an agriculture program at the school.<sup>88</sup> An orchard has been built on an abandoned strip mine. A small-business incubator program is helping a local entrepreneur open a restaurant that will provide the first genuinely healthy menu in town. “If you had asked people where to go to eat, the only places

they might know are McDonald’s and Wendy’s,” says Beckett.

“It’s one of the best grassroots efforts I have ever seen,” said Tracey Rowan, area director of the U.S. Department of Agriculture. “At their meetings, the excitement is contagious. I’ve never seen anything like it. It’s likely to succeed and likely to last, in great part because these people are committed to living and working there.”<sup>89</sup>

Sustainable Williamson has captured the imagination of people in the community, and it has also captured the attention of people outside the community. In 2014, Williamson was one of six communities around the country to receive the Robert Wood Johnson Foundation Culture of Health Prize for Innovative Efforts to Improve Health.<sup>90</sup> “It is tempting to look at this area and think about everything that’s wrong with it and get discouraged,” says Beckett. “But there is also a different way of looking at it. Seeing these problems as opportunities.”

Figure 2.8 U.S. Diabetes Belt



Source: Appalachian Regional Commission, 2013.

Wholesome Wave's goals for FVRx<sup>®</sup> are as big as they are bold: "Our ultimate goal is to develop a model that is scalable...with high-profile implications for national replication and positioning partners as leaders in innovative treatment models."<sup>91</sup> Another top priority is to build support for local agriculture so that it reaches a tipping point. Wholesome Wave is hoping the convergence of health care and food assistance in the ACA can give it that nudge. The catastrophic drought in California that made headlines in 2015 provided some of the best public relations yet for the importance of strengthening local agricultural systems. Ironically, it was a study from the University of California-Merced, using sophisticated farmland-mapping technology, which showed that up to 90 percent of Americans could be fed entirely by food grown or raised within 100 miles of their homes.<sup>92</sup>

"These results are very timely with respect to increasing interests by the public in community-supported agriculture, as well as improving efficiencies in the food-energy-water nexus," said Bruce Hamilton of the National Science Foundation.<sup>93</sup> As incomes rise, consumers are willing to pay for higher quality food produced locally by small to medium-sized farmers.<sup>94</sup> But the incomes of people most at risk of food insecurity are near or below the poverty line; their access to healthy foods must be supported through public policy.

## School communities

Teachers really understand the difference good nutrition makes. A survey of the 2015 State Teachers of the Year asked the award winners to name the barriers they believe affect student's academic success. "Family stress" came out on top at 76 percent, followed by "poverty" at 63 percent. When asked which areas of school funding would have the highest impact on student learning, the category they agreed on most was "anti-poverty initiatives."<sup>95</sup> Shanna Peeples, a high school English teacher from Amarillo, Texas, and the 2015 recipient of the National Teacher of the Year award, spoke for them all: "Many of our students are stressed and traumatized by the effects of increasing poverty, which shows up in mental health issues as well as learning disabilities."<sup>96</sup>

No discussion of the anti-hunger infrastructure would be complete without a stop on the school lunch line.

Peeples knows firsthand the challenges of working with students who have experienced the traumas and toxic stressors of living in poverty. At the school where she teaches, 85 percent of the students are growing up in low-income households.<sup>97</sup> We know that education can be an empowering experience for children from low-income backgrounds, but children who come to school hungry are disempowered from the moment the school bell rings. They are robbed of the chance to benefit from education.

School systems are part of the anti-hunger infrastructure in their



Joseph Molieri/Bread for the World

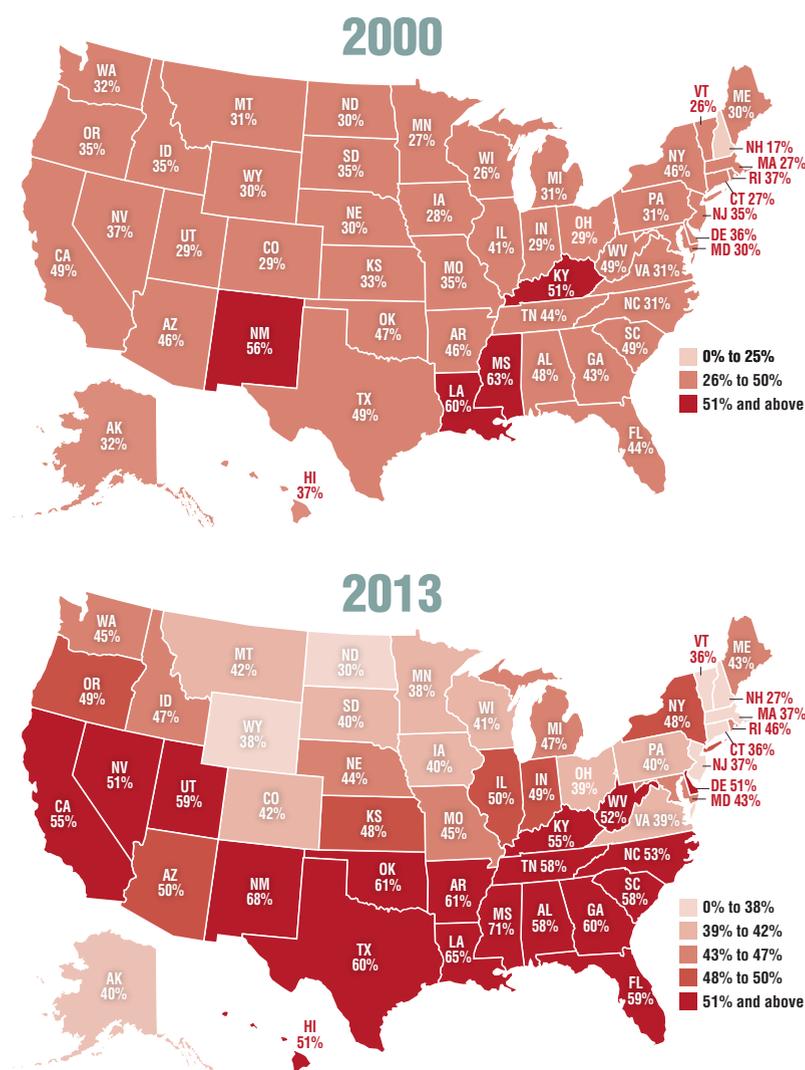
communities, though often they would not describe themselves in those terms. Children spend up to half the day at school, most days of the year. Schools administer the school meal programs. For most children, the federal school meal programs provide more than half of their daily calories; and on some days, these meals are the only food some children have.<sup>98</sup> Only at home is there a better opportunity to teach children about good nutrition and help them develop healthy eating habits that will last them a lifetime.

Only about two-thirds of schools that serve lunch also offer breakfast.<sup>99</sup> “When schools do not provide breakfast to children, the loss of return on educational investment becomes a hidden tax paid by the local district and community,” concludes a team of researchers from the Harvard School of Public Health and Medical School, drawing on evidence from more than 100 published studies on the effects of the School Breakfast Program.<sup>100</sup> The studies show that the School Breakfast Program helps prevent childhood obesity and other health problems.<sup>101</sup>

Congress reauthorized the Child Nutrition and WIC Reauthorization Act in 2010. Also known as the Healthy, Hunger-Free Kids Act of 2010, the legislation includes a “community eligibility provision” that allows schools with large percentages of low-income students to offer meals free to all, reducing the administrative burden on schools to track the eligibility of each student. Evaluations show that this provision has led to more schools serving breakfast.<sup>102</sup> In the 2011-2012 school year, breakfast participation increased by 25 percent in participating schools in Illinois, Kentucky, and Michigan.<sup>103</sup> Community eligibility did not become available in all states until the 2014-2015 school year.

The Healthy, Hunger-Free Kids Act also featured the most substantive changes to nutrition requirements in the school meal programs since the programs were

Figure 2.9 Low-Income Students\* in Public Schools, 2000, 2013



established. Ironically, the School Nutrition Association—representing the cafeteria professionals charged with meeting the requirements—has been an outspoken opponent of the improved nutrition standards, much to the chagrin of parents, pediatricians, and 19 past presidents of the association itself. The School Nutrition Association is now funded largely by processed-food manufacturers who recognize that healthier standards pose a direct threat to their bottom lines.<sup>104</sup> The official position is that the new standards are too difficult and expensive to implement and students don't like the new foods. School meal programs are indeed underfunded, but they always have been. USDA reports that more than 95 percent of schools are meeting the new standards;<sup>105</sup> and there is little evidence that students don't like the foods. According to recent studies, in fact, plate waste (the amount of food that goes uneaten) is less than it was before the new standards were adopted.<sup>106</sup>

There are no federal meal programs available to post-secondary students. Type the words “hunger” and “college students” into a search engine, and page after page of stories appear about college students struggling with hunger. At Western Oregon University in 2011, 59 percent of the students screened positive for food insecurity.<sup>107</sup> When students from the College of Osteopathic Medicine in the Pacific Northwest showed up at the food pantry in Lebanon, Oregon, the volunteers there could not believe they were serving med students.

In 2014, Janet Napolitano, the president of the University of California (UC) public university system,

launched an initiative to reduce student hunger across UC campuses. Food pantries have opened on every campus. At UC-Davis, a registered dietitian in Student Health Services provides prescription vouchers for fruit and vegetable purchases at the campus farmers market, a “swipe out hunger” policy allows students to donate unused meals in their meal plans to other students, and SNAP outreach is conducted on campus.

For most of the last century, California had what was widely considered the best public university system in the nation. Nine UC campuses are still ranked among the top universities in the world.<sup>108</sup> What has changed is the egalitarian nature of the system. In 1978, Californians voted to oppose raising property taxes to pay for improvements in public education, in direct opposition to the vision of an earlier generation of Californians of making higher education affordable to all state residents.<sup>109</sup> Today, the state spends more to imprison people than it does on higher education.<sup>110</sup>

In January 2015, President Obama proposed two years of free community college for everyone. This may not be a solution for everyone, but it will certainly help in California, where the Public Policy Institute of California reports that by 2025 the state will need an additional 450,000 healthcare workers to keep pace with population growth and an aging popula-



Joseph Molieri/Bread for the World

Evaluations show the kids approve of the new nutrition standards enacted in the Healthy, Hunger Free Kids Act of 2010.

tion.<sup>111</sup> At least 40 percent of the jobs needed to meet the employment projections require no more than an associate's degree or a post-secondary certificate.<sup>112</sup>

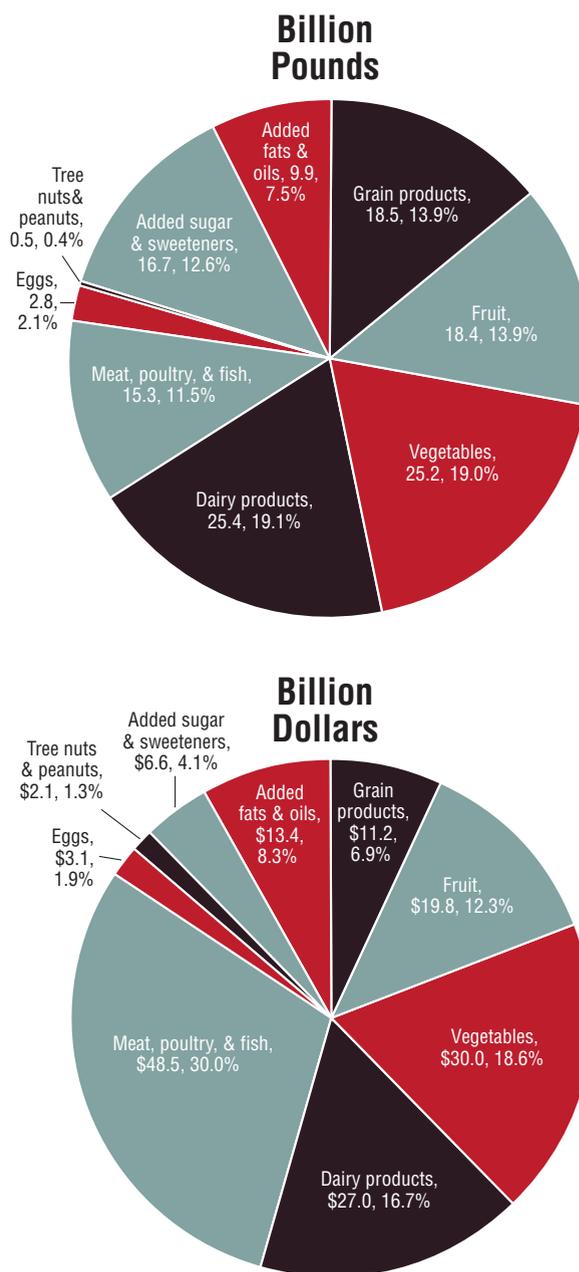
At the community level, academic institutions are working with understaffed nonprofits to build the evidence base of what works against food insecurity and malnutrition. Most nonprofits do not have the capacity to do this research and analysis themselves. Shreela Sharma, an epidemiologist focused on childhood obesity at the University of Texas School of Public Health in Houston, is compiling evidence on the effectiveness of Brighter Bites, a program she co-founded that reclaims wasted fruits and vegetables and provides them to low-income families. Food reclamation is probably the least developed part of the U.S. anti-hunger infrastructure. Every year billions of pounds of perfectly good produce go to waste.<sup>113</sup> See Figure 2.10. The United States throws away more pounds of vegetables than the total amount *produced* in most countries (all but eight, in fact).<sup>114</sup>

The produce for Brighter Bites comes from the Houston Food Bank, the largest depository of donated fresh food in the city. It is all high-quality fresh fruits and vegetables that are either too big, too small, or too awkwardly shaped to meet the uniform standards the stores demand from suppliers. Brighter Bites operates much like a food co-op. It takes place at schools, and parents bag the food and manage the distribution themselves. “By going into the schools we’re empowering them to make decisions in an environment where they already feel comfortable,” says Sharma.<sup>115</sup>

Each family receives a 30-pound bag of produce each week for 16 weeks, which saves them an average of \$35 to \$40 a week at the grocery store. Seventy-five percent of the parents reported that their families are continuing to consume more fruits and vegetables after the 16 weeks are up.<sup>116</sup>

In three years, Brighter Bites has grown from 150 families at one school in Houston to more than 5,000 in 20 schools and has also expanded to schools in Dallas. The goal of the program is to build a community at each school around healthy food. Like churches and farmers markets, the schools are a focal point for community activities.

Figure 2.10 Estimated Total Amount and Value of Food Loss in the United States by Food Group, 2010



Source: Jean C. Buzby, Hodan F. Wells, and Jeffrey Hyman (February 2014), The Estimated Amount Value, and Calories of Postharvest Food Losses at the Retail and Consumer Level in the United States, Economic Information Bulletin Number 121, Economic Research Service, United States Department of Agriculture.

## MEANS AGAINST THE CLOCK

*by Maria Rose Belding, MEANS Database*

Just-in-time donations have long been the lifeblood of emergency food providers. In a typical scenario, a local grocer might give 400 jars of peanut butter to a food pantry. But those jars expire in just two weeks, and some will end up in a landfill. This is especially frustrating when you consider how there is likely another pantry nearby that needs peanut butter and is going without or paying for it at cost.

In tens of thousands of food pantries, soup kitchens and food banks across the United States, volunteers and staff are in a battle against the clock to distribute donations before they expire. For decades, the clock has been winning.

American emergency feeding systems threw out an estimated \$650 million in product in 2012—and that number may be rising. As emergency food providers commit to serving healthier options, moving those goods is becoming a steeper challenge. Fresh fruit expires far faster than foods heavy with preservatives.

Our team at MEANS is representative of a growing population of young leaders challenging the status quo of how the emergency food system operates. MEANS is an acronym: Matching Excess And Need for Stability. We're an online database system that allows food pantries to communicate with each

other and with the donors who want to supply them. The same account allows users to alert their neighbors to their extra food and to receive targeted alerts that the food they're looking for is available—all at no cost.

MEANS represents a unique opportunity to move more highly perishable goods to kitchen tables instead of landfills. Donors and recipients work together to arrange how to move the food. Retailers, businesses and other groups with leftovers now have an option far better than a dumpster. They can type what they have into a computer and someone will come pick it up. The food goes to the first agency that claims it by clicking a button in the alert.

MEANS is proud to be working with emergency food providers representing 1,500 partner agencies in 12 states and dozens of cities, such as the District of Columbia, Baltimore, and Philadelphia. We know emergency food providers work incredibly hard and are up against overwhelming need. They are the last resort for millions of hungry Americans.

*Maria Rose Belding is the founder and executive director of the MEANS Database, which can be found at [meansdatabase.com](http://meansdatabase.com).*



Joseph Moller/Bread for the World

**The MEANS Database is an online tool designed to reduce food waste in the emergency food system.**

## Partners at the Table

“Healthcare systems and leaders must recognize that lacking access to nutritious, affordable food is a dire public health concern,” warns Randy Oostra, president and CEO of ProMedica, one of the largest healthcare systems in the United States.<sup>117</sup> Oostra has been sharing this message with other healthcare executives, encouraging them to join him and ProMedica by championing the cause of ending hunger in their own communities and nationwide.

Based in Toledo, Ohio, ProMedica is a mission-driven, locally owned, not-for-profit health care system serving 27 counties in northwest Ohio and southeast Michigan. As part of its mission to improve health and well-being, ProMedica, through its collaborative *Come to the Table* initiative, has made hunger chief among the many social determinants of health it has emphasized in recent years. The initiative evolved out of the system’s obesity prevention and nutrition education work because, as ProMedica learned, the hunger and obesity epidemics are linked. Communities cannot successfully reduce one without reducing the other.

To that end, ProMedica, with the help of generous philanthropist Russell Ebeid, will be opening the Ebeid Institute for Population Health in November 2015. Anchored by a fresh food market on the first floor, the building’s upper floors will be converted into education and community space where cooking classes, financial literacy education, health and parenting education, and other services can be offered to the community. This unique model will be established in an identified food desert where families do not have access to healthy, affordable food. ProMedica envisions the Institute as a hub that can be replicated in other communities nationwide.

In 2014, ProMedica launched another of its collaborative solutions on hunger and malnutrition by partnering with the local food bank and the local

The 2014 Farm Bill included \$100 million in grants to support projects that double the value of SNAP/food stamp purchases of fresh fruits and vegetables at farmers markets.



Wholesome Wave

casino in a food reclamation program. ProMedica hired and trained two part-time employees to work in the casino kitchen and reclaim prepared but unserved food that would have otherwise gone to waste. The food is frozen, picked up on a regular schedule by the food bank, and delivered to area homeless shelters and communal feeding sites. Since its inception, the program has reclaimed more than 200,000 pounds of food—approximately 125,000 meals.

This successful initiative has since expanded to include additional community locations and several of ProMedica’s hospital cafeterias.

These fruitful community partnerships led ProMedica to look in the mirror—seeking to identify how its own health system and providers could better help their patients. This was the beginning of ProMedica’s food insecurity screening program. Every patient who is admitted to a hospital in the ProMedica network is given a two-question food security screen. The screen is evidence-based and has been validated by Children’s HealthWatch. When they are discharged, patients who are identified as at risk of food insecurity are provided with an emergency



Zach Blum for Bread for the World

**Every patient admitted to a hospital in the ProMedica network is screened for food insecurity, and those who screen positive receive an emergency food package along with community resource information.**

food package along with community resource information. Oostrá is urging his peers to do the same at other hospitals and physicians’ offices, and he advocates making food insecurity screening a requirement when hospitals conduct their Community Health Needs Assessments. “We believe that this two-question screen is a tool that can easily identify the need for increased focus on social determinants and further link basic needs to clinical care,” he says.<sup>118</sup>

In April 2015, ProMedica opened its first food pharmacy. As part of this effort, ProMedica network physicians screen for food insecurity and refer patients who are determined to be at risk to the food pharmacy. The food pharmacy is connected to patients’ electronic health records, so the staff can provide patients and their families with several days’ worth of food that is appropriate given any health problems the patient may have. For instance, patients with diabetes are provided with low sugar options, while those with hypertension are provided with low sodium choices. Patients also have the opportunity to schedule a consultation with a registered dietitian to obtain additional nutrition education. With an initial referral, patients can visit the food pharmacy once a month for up to six months; if they are still in need of assistance after that, they can visit their primary care provider for an additional referral. ProMedica is beginning an evaluation of the program to determine the outcomes and impact of the intervention.

In an effort to bring the food insecurity screening to scale, ProMedica introduced its screening process to Epic, one of the largest electronic health record software companies in the country, and discussed embedding the two-question screen in Epic's basic platform. Epic collaborated with ProMedica to build the screening and referral process into the platform; as a result, Epic has now agreed to include the food insecurity screening in its base product. By building the screening tool and referral process into the electronic record, additional hospital and healthcare systems across the country can more easily establish their own interventions at the local level. They don't have the burden of developing the electronic portion of the process.

ProMedica is working to bring additional hospital and healthcare systems to the table to respond to hunger as a health issue. Conversations with its community partners pointed the network to national anti-hunger leaders Share Our Strength and the Alliance to End Hunger. ProMedica was chosen as a Share Our Strength No Kid Hungry Ally. It also joined the Alliance to End Hunger, whose members include corporations, private businesses, nonprofits, universities, foundations, and individuals committed to building the political will to end hunger in the United States and abroad. The Alliance to End Hunger is the secular affiliate of Bread for the World and Bread for the World Institute. These partnerships at the national level have helped to bring more members of the health sector into a discussion of hunger as a health issue rather than as solely a poverty issue or social problem.

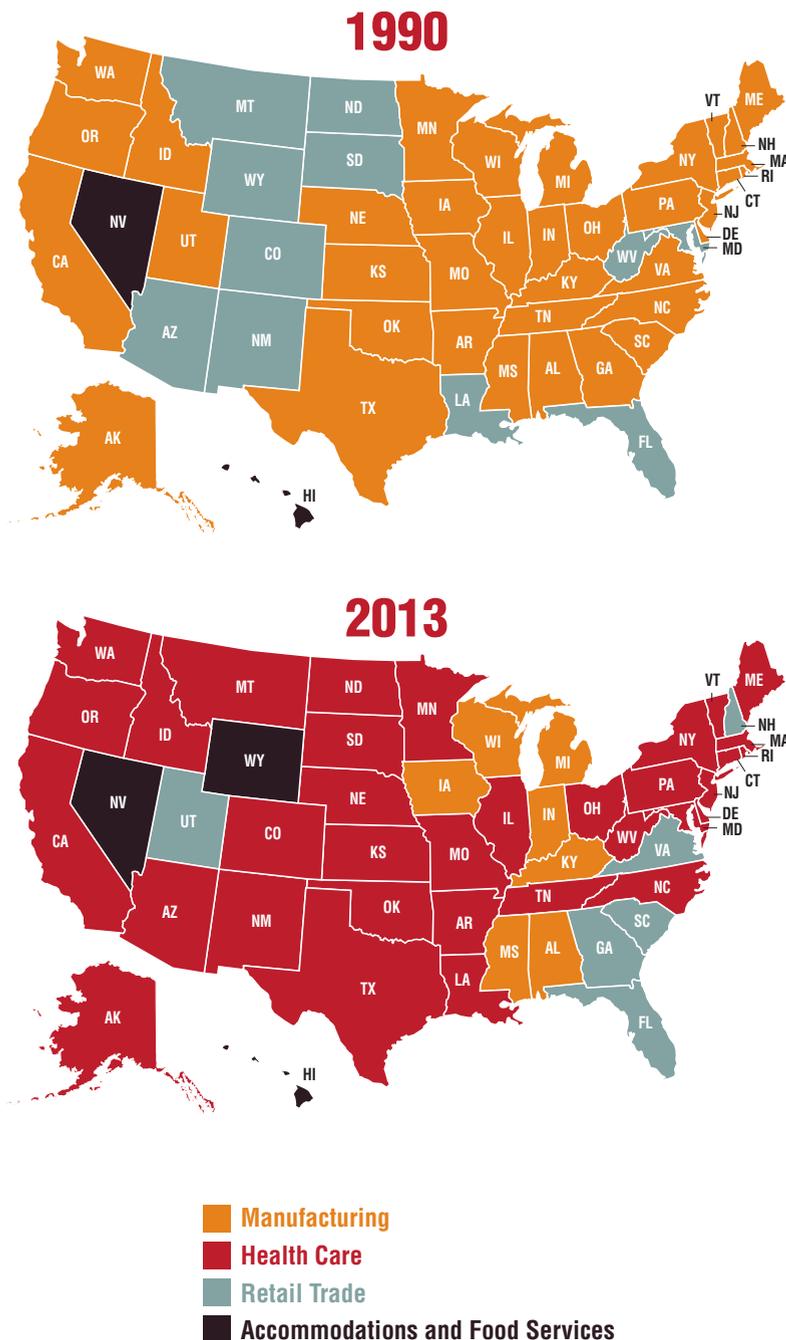
In February 2014, ProMedica partnered with the Alliance to End Hunger and USDA to hold the first of its *Come to the Table* summits. This one was held in Washington, DC, on Capitol Hill, and invited healthcare leaders, anti-hunger advocates, and members of Congress to discuss in what ways hunger is a health issue as well as potential responses. Subsequent *Come to the Table* summits have been held in Chicago, Atlanta, and Albuquerque. Based on its experiences, ProMedica firmly believes that broadening the dialogue on hunger to include the healthcare sector can lead to sustainable solutions.

In October 2015, ProMedica joined forces with the American Association of Retired Persons (AARP) Foundation to launch The Root Cause Coalition, a national coalition formed to address hunger as a public health issue along with other social determinants. With The Root Cause Coalition as its moniker, members of the organization will work to improve health outcomes for all through education, advocacy and research. Additionally, the partners have



Randy Oostra, president and CEO of ProMedica, speaking on Capitol Hill in 2014 at the first *Come to the Table* summit.

Figure 2.11 Industry With the Highest Employment by State



Source: U.S. Bureau of Labor Statistics

commissioned a study by the CDC Foundation in collaboration with the Centers for Disease Control and Prevention (CDC) to identify and disseminate effective strategies to address the cycle of food insecurity and its relationship to acute medical events in individuals with chronic diseases. ProMedica and AARP Foundation are confident the findings of this study will help others in the healthcare field to understand the need to engage in this issue and provide many opportunities to develop, evaluate, and deploy new strategies.

One of Oostr's first actions upon becoming ProMedica's president and CEO in fall 2009 was to establish an advocacy fund to help support community organizations in responding to people's basic needs, specifically food, clothing, and shelter. At this time, Toledo was still reeling from the effects of the Great Recession. The needs were obvious, and the fund was immediately supported by ProMedica's board of trustees. ProMedica has a parent board of 20-25 members, and each hospital in the ProMedica system has its own board. When you start adding all these entities up, it becomes clear that ProMedica has more than 450 to 500 board members.

All of the board members are invested in their communities; Oostr was pleased by how readily they supported the establishment of the basic needs fund and its primary emphasis on hunger and nutrition. Since its inception, the Advocacy Fund has provided

approximately \$300,000 annually in support to agencies throughout ProMedica's service area. The "request for proposal" system has illuminated specific needs in local communities. Successful projects stemming from proposals include starting a weekend backpack program for kids, purchasing a refrigerated box truck for a local food bank, and financing kitchen upgrades at a local senior center's feeding site.

In addition to working with healthcare providers and community partners, ProMedica has recognized the importance of working with policymakers to make progress addressing the social determinants of health. No lawmaker can afford to dismiss the concerns healthcare leaders raise about the economic impact of health problems in their communities. ProMedica is not just the biggest healthcare system in its region—it's the largest employer. The Department of Labor projects that by 2022, occupations and industries related to health care will create more new jobs than any other sector.<sup>119</sup> The rise of health care as an economic juggernaut coincides with the decline of the manufacturing sector. See Figure 2.11. The decline of manufacturing and the collateral damage it wrought is evident to ProMedica, as Toledo is one of the poorest cities of its size in the country.

Barbara Petee, the chief advocacy and government relations officer for ProMedica, says of its work, "Conversations with policymakers are much more meaningful when you can discuss the positive impact your health system is having on the community. You want them to understand the character of your organization and its commitment to the community. The nutrition programs and policies may not be a typical topic of a healthcare conversation across the industry, but they certainly have become a regular point of discussion for us and our legislators, and we're working hard to bring other health professionals to this point, as health care has a huge stake in the effects these policies have on our patients and families." This mindset helps drive ProMedica's advocacy work and its employee engagement as well. The network regularly shares action alerts with employees on legislation related to hunger and other social determinants of health to help ensure their strong voice is heard.

Building strong communities requires firm commitment and perseverance. Health care can play a pivotal role. "We believe it is critical to build awareness of this issue across the healthcare industry so that hunger as a health issue becomes a national priority," Oostra said to participants in the most recent *Come to the Table* summit, held in New Mexico. "We must work collectively to identify and address the core issues that lead to hunger."

**Based on its experiences, ProMedica firmly believes that broadening the dialogue on hunger to include the healthcare sector can lead to sustainable solutions.**

# ‘FOOD IS MEDICINE’ IN NAVAJO NATION

by Molly Marsh, *Partners In Health*

Store manager Cheryl Blair ushers a small group of employees and health workers into her second-floor office, which overlooks the shelves of Totsoh Trading Post near Tsaile, Arizona, in the Navajo Nation.

They settle themselves into chairs, ready to hammer out the mechanics of a program that aims to improve Navajos’ health by increasing their access to fruits and vegetables. Called the Fruit and Vegetable Prescription Program (FVRx<sup>®</sup>), the effort links retailers, community health workers, and clinics to create a better supply of and demand for fresh produce.

“Notice our food—it’s all junk food,” says Blair, gesturing toward aisles of chips and beef jerky, soda, and sugary confections. Not many kids are introduced to fresh foods at a young age, she continues. “It’s hard—if you can’t eat it as a kid, you’re not eating it now.”

There are only about 100 stores like this in Navajo Nation, an expanse of 27,425 square miles stretched across parts of Arizona, Utah, and New Mexico, and most carry little fresh produce. In fact, the U.S. Department of Agriculture has classified the entire territory as a food desert. The grocery stores and convenience stores are hard to reach—or out of reach—for Navajo who lack regular access to transportation, and high poverty rates mean most people can’t afford to buy healthier foods even if they were available: 44 percent of households live below the poverty line. With dollars to stretch, families opt instead for dense, calorie-rich food that fills them up.

The corresponding effect on health is alarming. Navajos experience high rates of obesity and malnutrition, as well as diet-related illnesses such as diabetes and hypertension. Heart disease and diabetes are the leading

causes of death on the reservation; about 26,000 people—nearly 22 percent of the adult population—have diabetes. Half of all children are overweight or obese.

Community Outreach & Patient Empowerment (COPE), a Gallup, New Mexico-based project of global health nonprofit Partners In Health, helps tackle these health disparities by providing training and support to nearly 100 community health representatives (CHRs) employed by Indian Health Services.

These CHRs play a critical role in communities. They visit people in their homes—many of whom they’ve known for years—to provide health care, and connect them to clinics and

hospitals when they need more specialized treatment. They also counsel clients on healthy living habits, including eating more nutritious foods. Without reliable access to those foods and extra money to buy them, however, clients struggle to

change their diets.

In response, COPE has become a catalyst and partner in a movement under way across the reservation to create stronger links between food and health. Scores of local and tribal health facilities, community organizations, and food security activists are pushing to create more awareness among Navajo about the importance of eating nutritious foods. These groups are also working to revitalize Navajo food traditions, promote food sovereignty, and spur economic development.

FVRx<sup>®</sup> is one part of this effort. Developed by food access organization Wholesome Wave, the program in Navajo Nation targets new and expecting mothers with gestational diabetes, and overweight or obese children from 3 to 6 years old. CHRs work with local health providers to identify families with these health risks and enroll them in the program. Clinicians

**“We want to bring back the notion that families can use healthy food to create healthy lifestyles.”**

also encourage their patients who meet these criteria to participate.

When an expectant mother visits her doctor at Tsaile Health Center, for example, she is referred to a CHR who talks with her about nutrition and is given a “prescription” worth \$1/day/per family member that she can redeem for fruits and vegetables at Totsoh Trading Post. The voucher is good for one month.

This mother will receive a check-up from her doctor once a month for six months, at which her weight and blood pressure are measured, as well as other vitals. If she has a young child who is overweight or obese, that child will also receive regular monitoring. Over their period of enrollment, COPE staff will collect data on their Body Mass Index measurements and fruit and vegetable consumption to check their progress.

“We’re working on the basic concept that food is medicine,” says Memarie Tsosie, COPE’s food access manager. “Back in the old days, most of our grandparents ate food to nourish their bodies. Now it seems like food is for convenience. We want to bring back the notion that families can use healthy food to create healthy lifestyles.”

So far, about 100 families from the territory’s southeast region are participating in FVRx<sup>®</sup>, as are 10 health centers, two grocery stores, four trading posts, six convenience stores, and one farmers market. More of each will join the mix in subsequent months. COPE’s goal over three years is to expand into every region of Navajo Nation, reaching 75 percent of its population—about 135,000 people.

To ensure fruits and vegetables are available for them, COPE’s FVRx<sup>®</sup> team has identified all retailers on the reservation, recruited stores to participate in the program—Totsoh is one of the first—and helped owners better promote the purchase of fruits and vegetables in their stores. The team also works with farmers markets and



Cecille Joan Avila/Partners In Health

local growers to try and get their produce on to store shelves. The idea is to encourage stores to increase the number of healthy offerings while guaranteeing a certain level of demand for owners and growers.

FVRx<sup>®</sup> teams also coach retailers through the voucher redemption process, which is the reason for the gathering in Blair’s office. The women work through possible snags—how to make sure IDs are accurate, what to do if shoppers forget their vouchers or if they buy more than they have credit for. The dietician among them also helps plan a menu for a cooking demonstration the store would like to hold. They settle on spinach smoothies, and chicken salad with pecans and cranberries.

While FVRx<sup>®</sup> enrolls specific families, the program’s underlying goal is to create an environment where entire communities have access to affordable fruits and vegetables. And it’s working—Blair and other store managers say they’ve seen an increase in the amount of produce purchased by families who aren’t participating in FVRx<sup>®</sup>. They initially worried they wouldn’t be able to sell everything; now they’re selling out.

*Molly Marsh is Managing Editor of Partners In Health, a global nonprofit that provides health care to poor communities in 10 countries. Read more at [www.pih.org](http://www.pih.org).*

**Fresh fruits and vegetables available at the Teec Nos Pos Trading Post, one of the early adopters of the fruit and vegetable prescription program.**