



# The Nourishing Effect: Ending Hunger, Improving Health, Reducing Inequality

“Let food be thy medicine and medicine be thy food.”

— Hippocrates, 431 B.C.

## KEY MESSAGES IN THE 2016 HUNGER REPORT:

- Nutritious food is essential to healthy growth and development and can prevent the need for costly medical care. Many chronic diseases—the main drivers of cost growth and poor population health—are diet-related.
- The United States spends more per capita on health care than any other high-income country but compares poorly with these others on key population health indicators such as life expectancy and child survival. This is due in part to our tolerance, as a nation, for higher levels of poverty and hunger.
- Socioeconomic inequalities drive population-wide health disparities. Socioeconomic factors such as housing, education, employment opportunities, and access to healthy food have a larger impact on health outcomes than medical care.
- Even as hunger rates decline in every region of the developing world, wide-scale malnutrition from vitamin and mineral deficiencies continues to impose a devastating cost on individuals. In addition, rising levels of obesity and related chronic diseases are imposing a huge burden on weak health systems in developing countries.

## Introduction

### *Health, Hunger, and Inequality*

Hunger, food insecurity, and malnutrition ruin health. But good nutrition is preventive medicine.

Hunger leads to poor health and poor health contributes to descents into hunger and food insecurity—especially among people who must choose between paying for food or medicine.

In the United States, the issues of hunger and health have been seen as two separate

and distinct challenges. But that is beginning to change as the system adapts to an ambitious reform agenda driven by the Affordable Care Act (ACA). The ACA is moving the U.S. healthcare system to focus on prevention and to address the root causes of chronic diseases.

The objectives (or triple aim) of healthcare reform are to improve the patient experience, improve health outcomes for the population, and adopt quality improvements to reduce per capita cost growth. All of these goals will be difficult to achieve as long as

hunger and food insecurity rates in the country remain stubbornly high. Every year since 2008, the number of hungry or food insecure people in the country has hovered between 48 and 50 million.

Through the array of federal safety net programs and a vast network of charitable organizations offering food assistance, the health system has an infrastructure to work with to support patients who face the agonizing choice of food or medicine, or who must choose between unhealthy food and running out of food altogether. Every year, the federal nutrition programs save the country hundreds of billions of dollars in additional healthcare costs. For health care, this is a starting point for deeper coordination with a range of partners who are addressing social determinants of health in their communities, unified behind a common understanding of the catastrophic effects of poverty on health.



Courtesy Meals on Wheels

In 2014,  
the most recent year  
we have data, the typical U.S.  
household spent **\$50.00**  
per person per week for food.<sup>1</sup>



In 2014, the average  
monthly SNAP benefit per  
person was **\$125.35**, or  
about **\$29.25** per week.<sup>2</sup>

## Chapter 1

### *Hunger and Health throughout the Life Course*

A life course perspective on health and hunger illustrates how the effects of hunger on health accrue during a lifetime. A food insecure woman gives birth to a premature, underweight baby. The undernourished infant is more susceptible to infections, requires more medical care, is more likely to be hospitalized, and faces delays in growth and development that may haunt her for the rest of her life.

Growing up poor, she has markedly different experiences than her peers in higher-income households: no high-quality preschool or center-based child care, parents who are overwhelmed with trying to earn enough to keep a roof over their heads, siblings competing for whatever food there is in the home.

In school, she struggles to catch up. She is chronically hungry and relies on the free school meal programs for low-income children for most of her nutrients. Growing up impoverished in a food insecure household exposes her to toxic levels of stress that contributes to early onset of chronic diseases. Toxic stress also makes her more vulnerable to depression and thoughts of suicide, substance abuse, and dropping out of school and, as a result, severely limited employment opportunities in adulthood.

The food insecurity she experienced early in life makes her more prone to overweight and obesity. She is more at risk of becoming disabled at an early age in adulthood, due to the likelihood that her job requires more physical labor than the work of someone with more education. By the time she reaches her senior years, she may well have multiple chronic conditions that are expensive to treat. With limited healthcare options as a younger person, she rarely invested in routine checkups to help diagnose and treat these problems earlier on.



Laura Elizabeth Pohl for Bread for the World

**1.9 billion**  
adults worldwide  
are estimated to  
be overweight  
or obese,<sup>3</sup>

and  
**1 in 12**  
have Type 2  
diabetes.<sup>4</sup>

Only **5 of 193**  
**countries**

(Djibouti, Iceland,  
Malta, Nauru, and  
Venezuela) have

slowed the rise of diabetes.<sup>5</sup>



## Chapter 2

### *Partnering for Collective Impact*

Defining the health needs of a community is a collective endeavor involving stakeholders inside and outside of the healthcare sector. Health care must work with community partners who have the necessary expertise in addressing the social determinants of health.

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. 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 home delivered meals for seniors and homebound patients. None of these activities would be possible without community partners to prepare 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.

We need to recognize the value of food to health and the value of health to society. A more just food system would improve health, contribute to ending hunger, and reduce health disparities. The benefits of improving the food system would accrue to all households, making it attractive to policymakers. There is broad concern in the United States—among people of all income levels—about the effects of the food system on health. Improving access to healthy, locally grown foods could also provide direct economic benefits to small and mid-sized farms.



Joseph Molieri/Bread for the World

## Chapter 3

### *Hunger, Health, and Inequality in Developing Countries*

The global hunger rate now stands at 1 in 9 people—the lowest level in recorded human history. The Millennium Development Goals (MDGs), launched at the beginning of this century, were instrumental in achieving progress against hunger, poverty and other related hardships. As the MDGs expire in 2015, the global community prepares to embark on a more ambitious set of Sustainable Development Goals (SDGs), which include a goal to end hunger by 2030.

In developing countries, it is clearer how hunger and poor health are bi-directional. Death and permanent disability from hunger occur all too often, especially in vulnerable groups such as women of child bearing age and young children. Even as hunger rates decline in every region of the developing world, wide-scale malnutrition from vitamin and mineral deficiencies and rising levels of obesity remain a huge burden on health systems in developing countries. Malnutrition is the underlying cause of 45 percent of deaths in children under 5, and is one of the main factors of maternal deaths in childbirth.

Economic growth in developing countries has given people more to eat but has also worsened their diets in some respects. Obesity rates in the developing world are climbing rapidly and, as a result, so are noncommunicable disease rates for diabetes, hypertension, and cardiovascular disease. Overall, the numbers of people who are overweight or obese in the developing world exceed the numbers in the developed world by a factor of three to one.

The triple-burden of hunger, micronutrient deficiencies, and obesity presents a major challenge to the capacity of national health systems in developing countries. Capacity development is essential for achieving the SDGs. Looking beyond 2030, countries will be relying mainly on their own capacity to adapt to climate change. The sustainability of ending hunger and malnutrition in an environment where climate is changing unpredictably is above all else a capacity challenge facing every country.



Joseph Moller/Bread for the World

## Conclusion

### *A Transformational Agenda*

As in other countries, the United States will be developing plans to achieve the SDGs domestically. In the 2016 Hunger Report, we call on the U.S. government to engage its domestic civil society partners who are working to address the many social determinants of hunger and health in communities across the nation. Achieving progress will depend on leaders rising to the challenge everywhere, so the federal government will need to engage state and local leaders.

The U.S. government will also be looking afresh at its international development assistance programs. Countries and communities around the world have made tremendous progress against poverty and other hardships. We are the generation that could see the end of hunger and poverty. The SDGs provide a bold and ambitious framework that would transform the world we live in for generations to come.

If the question of what do all people need to survive and thrive drove national and global priorities—the world would be a very different place. The SDGs are an opportunity to put that question at the heart of policymaking.

#### Box ES.1

## ESTIMATING THE HEALTH-RELATED COSTS OF FOOD INSECURITY AND HUNGER

U.S. policymakers and the public should understand the devastating toll of hunger and food insecurity on people's health, and they also need to know the economic costs. Individual stories of how hunger ravages bodies and souls are sometimes reported in the media, with little apparent effect on the status quo. Policymakers and the public are less likely to hear about the economic costs.

Hunger and food insecurity cost the United States as a nation much more than we may realize. In 2014, the most recent year for which we have data, the estimated health-related costs of hunger and food insecurity in the United States were a staggering **\$160.07 billion**.

John T. Cook of Boston Medical Center and Ana Paula Poblacion of Universidad Federal De São Paulo have updated and built upon a 2011 study by a team of researchers from Brandeis University. Their full-length

study, *Estimating the Health-Related Costs of Food Insecurity and Hunger*, is in Appendix 2.

Hunger and food insecurity also cost us dearly in other ways: educational outcomes, labor productivity, crime rates, Gross Domestic Product, and much more. The overall costs of hunger and food insecurity to society may well be incalculable. But this report demonstrates hunger and food insecurity are a health issue, and we are hopeful the solid research to back up the estimate reported here, \$160.7 billion of health-related costs in one year alone, will draw attention. We also argue that much more research is needed to fully understand the impact of poverty and hunger on health outcomes. Bread for the World and its advocacy partners will use every opportunity to make this estimate a part of the public conversation about hunger, health care, and the federal budget.

## RECOMMENDATIONS

### For health care:

- Use the Hunger VitalSign™, a two-item food-security tool, and include results in patients' electronic medical records.
- Promote federal nutrition programs and community-based food assistance whenever food insecurity is a risk factor in patient outcomes.
- Expand medically tailored meal programs for homebound patients with chronic conditions and at risk of food insecurity or malnutrition.
- Build the evidence base for nutrition services such as fruit and vegetable prescriptions and medically tailored meals.
- Build and sustain partnerships with local anti-hunger organizations and others to more systemically and completely understand and address the social determinants of health.
- Advocate for ending hunger and poverty as a cost-effective measure to improve population health and reduce the costs of treating chronic diseases.

### For anti-hunger advocates and service providers:

- Strengthen relationships with healthcare institutions such as hospitals and public health departments in your local area to more quickly end hunger and poverty.
- Become familiar with opportunities to collaborate with health care under the Affordable Care Act.
- Participate in the community health needs assessment that all local nonprofit hospitals are required to perform, and participate in developing a community health plan based on the assessment.
- Communicate to your constituency, including policymakers and clients, how hunger is a health issue and why nutrition programming is an underappreciated asset for improving health outcomes.
- Advocate for improving the healthcare system in ways that will end hunger and poverty.

### For policymakers:

- Require all healthcare providers to use the Hunger VitalSign™; and aggregate, analyze, and report the data.
- Promote and support research on associations between hunger and food insecurity with adverse health outcomes.
- Maintain strong support for the federal nutrition programs, which save the country billions of dollars per year in additional healthcare expenses and are the main way millions of households are able to afford healthy food.
- Invest in public health and prevention strategies to achieve the triple aim of health care reform: better care of individual patients, better population health outcomes, and lower per capita costs of care.
- Ensure that everyone in the United States has access to health care by enforcing existing anti-discrimination laws and proactively eliminating inequities caused by bias and discrimination.
- Increase support for small and medium-sized farmers, who are essential to increasing the supply of healthy foods in underserved communities and scaling up nutrition services used in health care.
- Ensure that the USAID Multi-Sectoral Nutrition Strategy and the whole-of-government nutrition coordination plan are implemented and resourced, and also monitor food security and global health programs for improved nutrition outcomes.
- Strengthen the capacity of national health systems in developing countries.
- Support the Sustainable Development Goals (SDGs), a global development framework that calls on all countries to cooperate in ending hunger and poverty by 2030, as well as on other goals that address social and economic inequalities.
- Adopt the SDGs domestically, setting goals appropriate for the U.S. context.