



**Insights from a Year of Listening:**

*Health Equity  
Collaboratory  
Series*



In 2022, the United Nations estimated 1.3 billion people were food-insecure, 10 percent more than the previous year. Increasing food prices, global supply chain issues, and the Black Sea conflict all exacerbated global food security issues. At Bayer, we know that food has a direct impact on health and wellness.

Families facing food insecurity had 20 percent higher total healthcare expenditures than families that were food secure — a difference of \$2,456 every year (\$14,625 vs. \$12,169). Following the pandemic, we increased our efforts to address health inequities and hunger. With a vision—*Health for All, Hunger for None*—Bayer is in a unique position to advance equity in health and nutrition.

With a primary goal of listening and learning, Bayer created the Health Equity Collaboratory (HEC) Series. These facilitated dialogues allowed Bayer to hear from real people, scholars, health professionals, business leaders, entrepreneurs, and community organizers.

Viewed by more than 42,422 people, the lessons learned from these dialogues and new partnerships will continue to help Bayer for many years to come.

What follows is a summation of our Health Equity Collaboratory dialogues.

United in the cause,

**Beth Rodin**

Senior Vice President and  
Head of Communications, Bayer U.S.

**Mike Parrish**

Head of U.S. Public Affairs,  
Science, and Sustainability, Bayer U.S.





# Health and Nutrition Inequity in the U.S.

The landscape of health and access is disquieting with staggering imbalances in terms of outcomes. Healthy People 2030<sup>1</sup> priority areas, under the U.S. Department of Health and Human Services, declared its focus on eliminating health disparities. Likewise, Bayer has emphasized promoting health and nutrition equity with the elimination of health disparities as the basis for creating the Health Equity Collaboratory (HEC) Series.

Healthy People 2030<sup>2</sup> defines health equity as “the attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequality, historical and contemporary injustices, and the elimination of health and health care disparities.” Furthermore, Healthy People 2030<sup>3</sup> defines social determinants of health as “the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.” Examples include safe neighborhoods, racism, education, access to nutritious foods and physical activity opportunities, and water quality.

Hunger impacts health, including increased risk for chronic diseases, such as diabetes, hypertension, and kidney disease. Our research shows that consistent, reliable access to healthy and nutritious foods, positively impacts health outcomes. However, there are more than 6,500 food deserts across the U.S., impacting more than 19 million Americans. According to the US Department of Agriculture, Black households experience food insecurity at more than triple the rate of white households.<sup>4</sup> Coupled with the knowledge that heart disease is the top cause of death for men and women in the U.S.<sup>5</sup> as well as people of most racial and ethnic groups.

Therefore, we created this Series to learn from experts in health and nutrition equity—authorities to help us more deeply understand the causes and consequences of inequity.

At Bayer, we are interested in the intersection of food and nutrition and the impact they have on creating health equity.

We recognize there’s much to learn from colleagues who are focused on population health, and as a leading nutrition and healthcare organization, our business is eliminating hunger and health disparities. Bayer intends to take the learnings from the HEC Series to find how we can create solutions with and for populations.

Through this series and other internal efforts, it’s clear that addressing inequities in nutrition and health, must take a holistic, integrated approach with multisector leadership, including private, nonprofit, and governmental organizations.

The following pages of this report encompass brief summaries of each engagement in the HEC Series, including the participants and their insights for Advancing Access to Heart Health in the Community, Advancing Access to Nutritious Food, and Advancing Equity at the Intersection of Hunger, Health, and Nutrition. We conclude the report by sharing some additional thinking from the Bayer team in terms of where we see ourselves engaging in the future.

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<sup>1</sup> Priority Areas - Healthy People 2030 | health.gov

<sup>2</sup> <https://health.gov/healthypeople/priority-areas/health-equity-healthy-people-2030>

<sup>3</sup> <https://health.gov/healthypeople/priority-areas/social-determinants-health>

<sup>4</sup> USDA Actions on Nutrition Security

<sup>5</sup> <https://www.cdc.gov/heartdisease/facts.htm#:~:text=In%20the%20United%20States%2C%20someone,heart%20attack%20every%2040%20seconds.&text=Every%20year%2C%20about%20805%2C000%20people,States%20have%20a%20heart%20attack.&text=Of%20these%2C,are%20a%20first%20heart%20attack>



## Health Equity Collaboratory 1:

# Advancing Access to Heart Health in the Community

Our first-panel discussion, Advancing Access to Heart Health in the Community, looked at the impact of nutrition on cardiovascular health. Following Bayer U.S.'s investment in the Centers for Disease Control (CDC) Foundation Million Hearts Campaign, we wanted to continue our work in this area. The Centers for Disease Control and Prevention (CDC) reports<sup>6</sup> that heart disease is the top cause of death for men and women in the U.S. as well as people of most racial and ethnic groups.

### Participants included:

- Lisa Waddell, MD, MPH, chief medical officer of the Centers for Disease Control and Prevention (CDC) Foundation;
- Elizabeth Ofili, MD, MPH, FACC, professor of medicine; director and senior associate dean, Clinical Research Center & Clinical and Translational Research, Morehouse School of Medicine; and board chair, Association of Black Cardiologists;
- Al Mitchell, EMBA, president, Bayer Fund.

### What we learned:

In this session we examined barriers to cardiovascular health from the perspectives of those serving communities directly affected. According to data reported in the Million Hearts Campaign:

- More than 1.6 million people in the U.S. suffer from heart attacks and strokes annually.
- Cardiovascular disease is the greatest contributor to racial disparities in life expectancy.
- 4.1 million people are not taking aspirin as recommended.
- 69.7 million people are physically inactive.

At the event, the panelists discussed some of the innovative approaches currently used in advancing health and nutrition to address cardiovascular disease. We also looked at how the social determinants of health impact someone with cardiovascular disease and because cardiovascular disease impacts African Americans at a high rate, the conversation highlighted inequities in the Black Community.


One of the challenges discussed was the complexity of disparities and cardiovascular disease. Understanding that “access” – to care, diverse health care providers who understand the patient, nutrition, fruits and vegetables, and safe places to practice physical activity – is a top barrier to success.

Bayer Fund has a focus on health equity and access to nutrition at the community level. The availability of nutritious diets, ones that include adequate fruits and vegetables, is a concern described in a study

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<sup>6</sup> <https://www.cdc.gov/heartdisease/facts.htm#:~:text=In%20the%20United%20States%2C%20someone,heart%20attack%20every%2040%20seconds.&text=Every%20year%2C%20about%20805%2C000%20people,States%20have%20a%20heart%20attack.&text=Of%20these%2C,are%20a%20first%20heart%20attack>

<sup>7</sup> <https://millionhearts.hhs.gov/about-million-hearts/index.html>



showing nearly 18 million people live in areas too far from supermarkets. To help address this, the Bayer Fund contributed more than \$120 million dollars over the last 5 years, much of that making a difference for organizations working with communities, providing immediate food and nutrition relief.

Another challenge highlighted in the conversation was the way the current U.S. healthcare system is structured. Currently, the system is focused on high patient volumes that translate into billable minutes, and then on the patient's needs.

An innovative approach highlighted was patient empowerment, with a focus on self-monitoring, increasing health knowledge, and stoking confidence so people feel reassured for future doctors' visits, building small, meaningful changes over time.

**Key takeaways from the discussion:**

- Creating a positive relationship between healthcare providers and patients is critical.
- Ensuring patients get the culturally relevant information they need to make effective health decisions is key to long-term success.
- Understanding the role nutrition and food plays in addressing cardiovascular disease is important.
- Access – to food, care, and safe places to exercise – and the way the U.S. Health Care System is currently structured, creates barriers to success, and highlights the inequities in the social determinants of health.

“It’s important to step back and recognize that cardiovascular disease has a lot of complexities. Disparities have a lot of complexities. There are many contributors to high rates of disease and death [from cardiovascular disease].”



**Lisa Waddell, MD, MPH**  
Chief Medical Officer, CDC Foundation

“Alleviating barriers requires partnerships; collaboration with public, private, and governmental organizations united with communities to build different strategies reaching recipients of different backgrounds. It’s more than just building awareness. Working together, the collective partners must address underlying barriers preventing access to heart health in our communities.”



**Al Mitchell, EMBA**  
President, Bayer Fund



## Health Equity Collaboratory 2: Advancing Access to Nutritious Food

The second event in our Series, Advancing Access to Nutritious Foods, centered on the challenges faced to obtain healthful food and acknowledging the role food plays in overall well-being, especially in heart health. Panelists leaned into their expertise in health policy, agriculture, food systems, and retail healthcare for this discussion.

Participants included:

- Sara Bleich, PhD, director of nutrition security and health equity, Food and Nutrition Service, U.S. Department of Agriculture
- Kamal Bell, MS, founder, Sankofa Farms
- Jenny Maloney, JD, global-Americas strategic accounts manager, Bayer Vegetable Seeds
- Colleen Lindholz, president, Kroger Health

**What we learned:**

In this session, moderated by Beth Roden, senior vice president and head of communications for Bayer U.S., the panel discussed nutrition, access to food, affordability to healthy foods, and inequities in the food system.

Poor nutrition is a leading cause of illness, responsible for more than 600,000 deaths per year. Studies have shown that children without access to proper nutrition are at a greater risk for obesity and diabetes.

The dialogue discussed the concepts of “nutrition security” and “food insecurity.” Both highlight the needs and negative consequences of not having consistent and equitable access to healthy, safe, affordable food.

The pandemic, inflation, climate change, and the growing number of unemployed and under-employed are leading more Americans to be food insecure. Bayer recently commissioned a consumer survey demonstrating 71% of respondents were moderately to extremely concerned about food shortages caused by Russia’s invasion of Ukraine. Discussants explored novel ways of working together across public and private stakeholder groups and meeting communities where they are.

The second conversation in the series built on some of the challenges we uncovered in our first dialogue on heart disease.

The food system is a global problem with many complexities. Addressing the inequities in the system will take stakeholders at all levels – businesses, governments on the national, state, and local levels, and community organizations.

The Bayer Vegetable Seeds team pledged its commitment to the science behind agriculture, to intensely understand what consumers seek in their fruit and vegetable experiences, and the team is resolved to support growers who can deliver desirable fruits and vegetables to market.

Kroger, other businesses, and non-profit groups are elevating the “food-as-medicine” strategy approach. Kroger is testing an employee model that is resulting in a remarkable reversal in disease progression for employees.

**Key takeaways from the discussion:**

- The global food ecosystem is complex and the pandemic showed the world its fragility.
- Access and affordability of healthy foods are vital to addressing health conditions.
- Testing innovative approaches using food to address medical conditions is showing great results and improving health conditions.

“Properly addressing inequities in the food system takes a lot of time. We all should continue to establish better relationships and seek mutual understanding from stakeholders at all levels.”



**Kamal Bell, MS**  
Founder, Sankofa Farms

“We’ve created a dedicated, personalized approach to eating, living a healthier lifestyle, and either preventing disease before it starts or reversing disease to reduce impact.”



**Colleen Lindholz**  
President, Kroger Health

“We need to look at challenges holistically and continue to bring together both public and private sectors. Establishing these linkages will accelerate nutrition access.”



**Jenny Maloney, JD**  
Global-Americas Strategic Accounts Manager,  
Bayer Vegetable Seeds

“Poor nutrition is a leading cause of illness, responsible for more than 600,000 deaths per year.”



**Sara Bleich, Ph.D.**  
Director of Nutrition Security and Health  
Equity, Food and Nutrition Service, U.S.  
Department of Agriculture



## Health Equity Collaboratory 3:

# Advancing Equity at the Intersection of Hunger, Health, and Nutrition

The third discussion in our Series, Advancing Equity at the Intersection of Hunger, Health, and Nutrition, built on momentum from the White House Conference where one of the pillars was integrating nutrition and health, championing food security, and connecting much-needed services with people in their communities. Panelists shared their perspectives on population health and the impact of nutrition on chronic health conditions, and they showcased some innovative “food-as-medicine” strategies and evidence-based models to improve inequities at the community level.

Participants included:

- Matt Habash, MBA, MA, president, and CEO, of Mid-Ohio Food Collective
- David Waters, MA, MA, MA, CEO, of Community Servings
- Tricia Barrett, MHSA, executive director, Quality and Population Health Strategy, Bayer

### **What we learned:**

In this session, moderated by Mike Parrish, head of U.S. public affairs, science, and sustainability for Bayer, the panel described the role of food in healthcare, continuing with the idea of food as medicine. Access to safe, affordable, nutritious food enables health. Food provides energy and nutrients needed for normal functioning, disease prevention, and chronic condition management.

However, nutrition programs, including those at the federal level, are not seen as healthcare programs despite the research showing the direct correlation between food and wellness. Because of this disconnect, non-government organizations providing medically tailored meals, are working to change this viewpoint using patient outcome data to showcase the success of their innovative approaches.

Wholly interwoven at the intersection of hunger, health, and nutrition is the impact of climate, particularly on public health. Global warming underpins a growing incidence of many health conditions, especially among older populations, ethnic minorities, and those financially insecure. Moreover, increasing extreme weather events confound food production. Therefore, Bayer’s Crop Science division is working to ensure the foods produced by farmers are able to meet the nutritional needs of all people, are tasty, and are resilient.

### **Key takeaways from the discussion:**

- There’s evidence showing that poor diet and nutrition are the leading cause of preventable illnesses in the United States.
- There is also a tremendous problem of inaccessibility of the proper foods for individuals living in rural communities or in other areas where there are food deserts, their inability to afford the proper food, and then this inability to understand what are the right foods to eat and to have them available to prepare in the proper ways that will help to improve their health outcomes.



- Adding food as a prescription option in healthcare will open payment options, providing more access for those with need.
- However, medically tailored meals are often seen as an anti-hunger program and not as a healthcare solution, limiting the ability to scale these innovative approaches nationally.
- Offering grocery store experiences at food banks, open in the evenings and weekends, in locations with federally qualified health centers, creates wrap-around access for all community residents.
- Food banks cannot be the only solution to addressing hunger in the United States. Food banks are based on the premise of taking surplus food and getting it quickly to hungry people. But the majority of surplus food in the United States is fresh foods and produce.
- In the world of emergency food, people come for food services one to five times a year but to impact health conditions, patients need continuous access to fresh foods, at minimum, 11 to 24 visits for healthful foods and produce.
- Bayer helped create the Echo Diabetes Action Network to take a holistic approach to provide diabetes care. The program looks at the entire family's needs from a culturally relevant approach.

“We really believe, both locally and nationally, that we’re building the argument for reimbursement for meals through federal and state programs like Medicare and Medicaid. And with that, we want to build scale around the country such that medically tailored meals become a natural part of the healthcare system.”



**David Waters, MA, MA, MA**  
CEO, Community Servings

“We gave out three million pounds of food in our first year, and in 2022, we gave out 85 million pounds of food. We’re going in the wrong direction fast for wanting to go out of business, and we need to come up with a different strategy.”



**Matt Habash, MBA, MA**  
President and CEO, Mid-Ohio  
Food Collective

“There’s no shortage of articles that you can find that identify the significant impact that proper food and nutrition can play in the health of our population, all the way from having the right food to be ready to learn as children.”



**Tricia Barrett, MHSA**  
Executive Director, Quality and  
Population Health Strategy, Bayer



## Summary and Opportunities

Coordinating closely with external experts in population health, food and nutrition security, retail healthcare, and agriculture, we designed and deployed the HEC Series to hold a space for dialogue and listening, a space to learn from individuals and organizations dedicated to health and nutrition equity. As a leading agriculture and nutrition organization, combatting hunger and promoting health is our imperative, and we recognize others are successfully occupying this space—their successes are flush with insights and best practices.

The Series reinforces that to have an impact on inequity, we all must use a holistic, integrated approach, taking an inclusive view of both the challenges and opportunities of health and nutrition. These tremendous demands require a multisector approach, including leadership from private, nonprofit, and governmental organizations. Resulting solutions are more successful when they include a blend of community, participant representation, research, and education, underscored by meeting people where they are.

Our journey in this Series has affirmed previous commitments we made to advance health and nutrition, a journey where we are inspired to facilitate more opportunities uniting health, food, and nutrition—whether it's through empowering public-private partnerships, through research and development across our divisions, or through Bayer Fund philanthropy. And in parallel, we will continue to evaluate and evolve our internal Bayer teams, to ensure all our teams, across the globe, are diverse and inclusive, to solve urgent demands in health and nutrition.

We are gratified with our contributions in this space, including our support that enabled the creation of the Nutrition Gap Initiative and partnership with Vitamin Angels to expand access to vitamins and minerals to 50 million people in underserved communities by 2030 (both through nutritious food and supplementation); and Project ECHO, which stands for Extension for Community Healthcare Outcomes, addressing disparities in diabetes with a focus on diabetes-related chronic kidney disease to democratize diabetes specialty knowledge reaching frontline healthcare professionals and empowering underserved populations living with diabetes.

Bayer views food and nutrition as healthcare: access to safe, affordable, nutritious food enables health. While we appreciate the dialogue and learning from this Series, we understand there's much more to be done. We approach this with minds open—open to future possibilities, eager for additional conversation and convening of partners and thought leaders. Please visit our website to learn more about how we think about nutrition and health, and share your perspectives through our social channels. Together we can advance health equity and make nutrition accessible for all.