

US Commitments in Nutrition and Health for a Better Future

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As the COVID-19 pandemic concludes its second year, people worldwide continue to suffer its consequences, both direct and indirect, threatening decades of progress in the fight against hunger and malnutrition. The *State of Food Security and Nutrition in the World* report also mentions the effects of the climate crisis as a major driver of malnutrition, increasing prices of healthy foods as more crops are threatened by extreme weather.¹ Approximately 768 million people faced hunger in 2020, over 100 million more than 2019, and the number of those without sufficient nutrients is even higher. In the United States, diet-related disease accounted for over half of all deaths in 2018.² Globally, approximately 45 percent of the deaths of children younger than five are related to undernutrition.³

This is not a problem that is occurring "elsewhere": the United States has experienced a surge in demand at food banks as prices rise and limit access to healthy, nutritious, and affordable food.⁴ For decades, the United States has also experienced a rise in chronic diet-related diseases like diabetes, with disproportionate effects seen in communities of color.⁵ And as the COVID-19 pandemic has illustrated the link between nutrition and both risk and long-term consequences of pathogen infection, urgency to shift governmental nutrition approaches has never been higher.⁶ To strengthen domestic and global nutrition, the United States should catalyze critical change, starting with commitments made at the 2021 UN Food Systems Summit and additional funded programs, extending further to reach a wider subset of all people suffering from nutrition- and hungerrelated diseases. This white paper analyzes primary nutrition challenges, particularly issues of health, access, and education, and recommends policy actions that community, federal, private, and academic institutions can take domestically and globally to progress toward a well-nourished future.

US Global Commitments Related to Nutrition

The United Nations Food Systems Summit (UNFSS) presented an opportunity for countries to announce their commitments on five action areas in the 2030 Agenda: nourish all people; boost nature-based solutions; build resilience to vulnerabilities, shocks, and stresses; advance equitable livelihoods, decent work, and empowered communities; and develop innovative means of implementation.⁷ The United States announced \$10 billion in overall investment: \$5 billion domestically and \$5 billion internationally, much of which was planned funding now directed toward existing and new initiatives and programs.

On the domestic front, the US Department of Agriculture (USDA) committed to investing in systems and infrastructure for healthy diets and fair and efficient markets through a new Coalition of Action on Sustainable Productivity Growth for Food Security and Resource Conservation (SPG Coalition)⁸ in addition to expanded emergency access and modernization of the Supplemental Nutrition Assistance Program (SNAP) to facilitate easier access to nutrient-rich diets aligned with government dietary guidelines.⁹ The USDA has taken leadership on the new Agriculture Innovation Mission for Climate (AIM4C) initiative, jointly created by the United States and the United Arab Emirates, which seeks to increase public and private investment in climate-smart agriculture and food systems innovation.¹⁰

Internationally, the United States will continue to combat hunger and malnutrition with a \$5 billion investment in United States Agency for International Development's (USAID) Feed the Future initiative over the next five years.¹¹ USAID intends to expand the number of target countries reached through the program. USAID, the US International Development Finance Corporation, and the Eleanor Crook Foundation committed \$100 million in financing for projects targeted toward smallholder farmers in low- and middle- income countries. In addition, the United States committed \$60 million for research on food loss and waste reduction, and joined a new global coalition called Food Is Never Waste. Specific to nutrition, the United States also joined the School Meals: Nutrition and Education for Every Child coalition and pledged a new Feed the Future Innovation Lab for Food Systems for Nutrition.

Following the UNFSS in September, the United States announced further commitments at the December Nutrition for Growth Summit. Governments and private sector organizations pledged \$27 billion in funding to tackle malnutrition,¹² \$11 billion of which was pledged by the United States through a combination of planned assistance and additional investment over the next three years, subject to congressional appropriations. USAID highlighted as areas of interest data availability and use; prevention and treatment of wasting; breastfeeding maternal and newborn care; and large-scale food fortification.¹³

While these commitments are significant and welcome starting points, their implementation should consider and tackle several structural challenges for meaningful and sustainable change. Nutrition is too often seen as an independent issue to be solved, rather than inextricably linked with health, equity, education, and even climate. Therefore, execution of US commitments during the UNFSS and nutrition efforts beyond must consider this wider web of issues to truly revolutionize US and global food systems and provide a food-secure and nutritious future for all.

Why Nutrition Matters

In the context of food systems and a growing population, many believe an increase in production and calories is the best way to feed the world. However, this white paper considers the wider importance of meeting the nutritional needs of individuals following a devastating global pandemic. One issue to consider is the link between poor health—such as increased risk of noncommunicable diseases such as diabetes—and poor diet. Of the many factors that contribute to poor diet, lack of effective nutrition education and access to affordable nutrient-dense foods loom largest. US commitments to address food security, domestically and internationally, allow for renewed discussion into the underlying lack of nutritious foods.

Integration of Health and Nutrition

Nutrition is one of the most critical factors to human health. A healthy and nutritious diet can improve weight, blood pressure, and cholesterol levels as well as decrease the risk of developing chronic disease that can compromise quality and longevity of life. Improved diet and nutrition are also foundational to improving maternal and child health, particularly in the first thousand days from pregnancy to a child's second birthday.¹⁴ More generally, proper nutrition is instrumental to building a strong immune system, relevant especially as the COVID-19 pandemic has ravaged communities worldwide. Nutrition not only important in decreasing the risk associated with contracting and developing diseases, but also in treating them.

The current health system in the United States and in many low- and middle-income countries focuses on disease management and treatment rather than disease prevention. The World Health Organization's Global Health Estimates' top ten leading causes of death show an increase in noncommunicable, chronic diseases and a decrease in communicable diseases in the rankings, signifying increasing global development of diet- and nutrition-related disease.¹⁵ As low- and middle-income countries consider increasing healthcare expenditures to improve health outcomes, it is important to consider the other avenues of change to decrease rates of morbidity, because increased spending without a shift in focus or approach will only continue existing trends. Improved health outcomes would reduce spending in high-income countries, many of which have experienced an increase in diabetes, obesity, and other diseases that coincide with higher healthcare expenditures.¹⁶ While healthcare systems differ by country, many nations struggling with high malnutrition rates also have treatment-oriented, rather than prevention-oriented, healthcare systems. For example, many Latin American public healthcare systems have limited resources to treat expanding populations and are overstressed by the need to treat health problems stemming from nutrient deficiency.¹⁷

A shift in focus is needed to ensure healthier outcomes, especially for poor and marginalized communities. Prevention, through healthier and nutrient-rich diets, can strengthen immune systems and decrease the likelihood of developing diseases, both chronic and acute such as COVID-19.¹⁸ Poor eating habits and diets are one of the biggest contributors to noncommunicable diseases and exist across all income levels. Community-level interventions can provide great impact by creating incentives and providing examples of healthier diets while increasing affordability and access. A shift toward greater use of community health workers has already made important

changes in how communicable diseases like HIV/AIDs are treated and managed.¹⁹ Expanding community health workers to also focus on education around nutrition and how to prepare nutritious foods can potentially be effective in preventing noncommunicable, chronic diseases like diabetes as well.

Before major changes in food systems can occur, a shared understanding of what constitutes nutritious foods and a healthy diet is needed. Dietary guidelines are an effort to establish a foundational universal understanding of the nutrients required for the human body to perform at its best, although experts still disagree on select finer points. These guidelines are written by experts, for experts. To accompany the guidelines, a food guide is published to help individuals meet the recommended daily amounts of food and nutrients. However, the burden of disseminating nutrition education falls primarily on advocacy groups and health educators who lack the authority of the US federal government. The Healthy Eating Index, a government statistic that measures diet quality by how well Americans follow dietary guidelines, remains low. For the dietary guidelines to be an effective tool to prevent noncommunicable disease, a review and modernization of US efforts to promote the guidelines to the general public may be necessary.²⁰ Lack of knowledge around diverse cultural contexts of foods can compound the problem. Broader consensus on a core framework of nutritious foods and healthy diets that can be applied to different tastes, preferences, and circumstances is critical to promoting inclusive food baskets that meet the nutrient and dietary needs of individuals and communities.

While nutritious foods are an important facet of health, there is little integration between the health system and the food system. Whether in international development funding for health or nutrition programming, or in siloed health and nutrition initiatives in the United States, health and nutrition are not always recognized as the intricately linked issues they are and addressed in concert. For example, doctors in the United States are offered limited, if any, nutrition-focused education during their medical career, with most receiving far less than 25 total hours of nutrition education, even though dietary factors are the single leading cause of death globally.²¹ Medical education worldwide also substantially lacks a nutrition component in curricula.²² Medical students are too often left to conclude that the absence of nutrition education and interventions in medical curricula translates to its unimportance in medicine. However, interest in nutritional interventions for health has been developing. Some healthcare providers are writing prescriptions for fruits and vegetables through community or health networks to offer a more effective, lowcost treatment for worrying health indicators, but these efforts have not yet been nationally or globally scaled.²³ Without deeper integration of health and food systems, especially through the concept of "food as medicine," policy fails to incentivize healthier dietary choices. The current system is unsustainable, as it fails to give doctors and patients the tools to decrease the development of disease, especially in response to the exponential rise in problematic health indicators worldwide.

By prioritizing healthy, nutritious foods and increasing dietary diversity, there is a critical opportunity to reduce costs and improve health outcomes, especially in lower-income and marginalized communities. As nations globally seek to achieve Sustainable Development Goals (SDGs) before 2030, a better integration between

health and nutrition is a sustainable way to reach SDG goal three, "Good health and well-being" and other health- and malnutrition-related goals.²⁴

Demand for and Access to Nutritious Foods

Although the link between health and nutrition is clear, it remains unclear how to ensure that nutritious foods are part of everyone's diet. Nutritious foods should be accessible and affordable to increase widespread consumption of key nutrients and prevent poor health outcomes, while also ensuring consumers can choose based on their tastes and preferences. To help inform these choices, education around nutrition and preparation of nutritious foods should also be universal, both in healthcare settings and among general consumers.

Many people in the United States and abroad lack access to nutritious foods whether because of limited physical access or the higher cost of nutritious foods compared to heavily processed foods. In the United States, a food desert is defined as an area in which residents, usually of lower incomes, do not have access to a source of nutritious foods within a specific distance, varying on the basis of population density. At least 14 million people in the United States live in areas with very low physical access to healthful foods, although the actual number could be much higher.²⁵ The term "food swamp" has also been recently introduced, describing areas oversaturated with high-calorie fast food and junk food, with clear negative health impacts on surrounding communities.²⁶

While physical access to healthy food is difficult to calculate on a global scale, several nutrition indicators demonstrate that access is a real barrier facing millions of people. For example, in the World Health Organization's 2020 Global Nutrition Report, large differences were evident between stunting and wasting in children under five between rural and urban areas, with rural areas facing far greater rates of malnutrition.²⁷ Differences in malnutrition also intersect with household income levels, another potential barrier to accessing nutritious foods. In the United States and abroad, access to nutritious foods also requires a larger framework of infrastructure, from transportation to cold storage, particularly for perishable items such as fruits and vegetables that contain key nutrients. Without adequate food infrastructure, communities domestically and globally lack the full ability to supply nutritious foods, forcing consumers to travel longer distances, if they can at all, to access a healthy and diverse diet. Conversations around physical food access have been changing, as physical accessibility.²⁸

Financial access to nutritious foods is also a major challenge. A 2021 Nature Foods study illustrated that income losses and food price increases from the COVID-19 pandemic have affected millions more people, particularly in lower- and middle-income households, than prior to the pandemic.²⁹ The study also notes that the "depth of unaffordability" is increasing—millions more cannot even afford half the cost of a healthy diet compared to before the pandemic. Another analysis notes that globally, 3 billion people cannot afford healthy diets, with the proportion of people who cannot afford these diets reaching 87 percent in some low-income countries.³⁰ In the United States in 2020, food banks served 55 percent more people than prior to the pandemic, indicating how vulnerable our current food system is to shocks.³¹ Food

banks in the United States and more than 70 countries worldwide can address food insecurity with local, private sector support but do not replace critical social protections and policies that expand nutrition access. Without concerted efforts to render nutritious foods more affordable and available, malnutrition rates will continue to worsen, especially among marginalized communities in the United States and abroad that already face major barriers.

Lack of education around nutrition is another one of those major barriers. In the United States, the Centers for Disease Control and Prevention notes that children often receive less than eight hours of nutrition education per year, below the time necessary to change behavior or make fully educated choices.³² In lower- and middle-income countries globally, nutrition education varies widely and depends on access to education in general. Meanwhile, many processed or less-nutritious foods bombard individuals through far-reaching and targeted advertisements. Providing further education around what nutritious foods are, why they matter, and how to cook them can increase demand for more of them.

Food choice is equally as important in facilitating demand for and access to nutritious foods, therefore, education around nutrition should not promote only one specific diet. Individuals and communities should be given access to healthy alternatives that fit their tastes and preferences. This includes access to traditional or culturally appropriate foods. The complexity of food systems can often dilute the relationship between individuals and the foods they eat; facilitating options and choice rebuilds this personal relationship and can increase demand for nutritious foods.

In the United States, existing nutrition infrastructure has seen great success—from SNAP and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) to school feeding programs like the National School Lunch Program. In the United States, approximately one-third of the food distributed by food banks is provided by USDA programs, with the remaining 60 to 70 percent coming from private sector sources such as farmers, grocers, food service establishments, and food companies.³³ International programs such as the McGovern-Dole and other investments in nutrition have staved off higher rates of hunger and malnutrition. Additional global efforts such as food fortification—adding nutrients to food during processing or growing nutrient-rich crop varieties—also contribute to preventing chronic disease and ensuring proper cognitive and physical development. But with steep global and domestic challenges such as the climate crisis and the COVID-19 pandemic, these are no longer sufficient. The commitments made at the UNFSS should be used to initiate and support renewed focus on nutrition as an essential part of our food system as it is intricately linked to health, education, climate, and equity.

RECOMMENDATIONS

In rededicating resources to domestic and global nutrition through commitments made at the UN Food Systems Summit and Nutrition for Growth, the United States has the opportunity to focus on long-term, stable, and community-centered assistance inclusive of all consumers. In an increasingly complex global food system, grounding nutrition in issues of health, education, climate, and equity relevant to local communities will help ensure sustainable progress. While the complexity and intricacies of these issues will no doubt be a challenge, when all sectors of society act together on a united vision, systemic change is not only possible but inevitable.

Recommendations for Communities

1. Within the United States, federal and state nutrition programs should increase partnerships and standardize applications with municipalities, tribes, and community-based nonprofit organizations to make nutritious foods financially and physically accessible, convenient, and culturally appropriate. Significantly more support should be provided to community health worker programs and the role they play in nutrition education, linking especially to school mealtime initiatives to ensure availability of education on, and a positive association with, nutritious foods from an early age. If resourced appropriately, community health workers can improve community health outcomes in the United States and globally; there has been increased focus on the importance of community health workers during the COVID-19 pandemic.³⁴ Because nutrition and health are so linked, nutrition can be an important component of community health worker programs.

2. Even before the pandemic, 30 million to 40 million Americans were food insecure, aided by federal programs like SNAP and WIC and also forced to use food charities like pantries and soup kitchens supplied by food banks to fill gaps.³⁵ The COVID-19 pandemic resulted in an even higher demand, and many first-time visitors at food charities required food access assistance at home and abroad. To promote healthy diets and improved food access, food banks both locally and globally should increase education partnerships with local research institutions, nutritionists, and other nutrition experts to ensure meals distributed meet basic nutritional guidelines and offer as many choices as possible for varied community preferences. While some food charities already engage in such practices, others may require additional resources to ensure nutritionally balanced meals and nutritional information are widely accessible. Food accessibility for economically disadvantaged and food insecure people who struggle to purchase an adequate, healthy diet should take prominence, ensuring recipients have all ingredients and facilities to make the meals they receive.

Recommendations for Government

1. The White House should convene a Conference on Food, Hunger, Nutrition, and Health, following the success of the groundbreaking 1969 conference that eventually led to the creation of many of our current domestic nutrition programs such as SNAP and WIC. Considering the devastating COVID-19 pandemic and its ripple effects, a fresh examination of nutrition programs in the United States and globally is necessary at the White House level. This conference should result in a comprehensive national strategy on food, hunger, nutrition, and health to coordinate a whole-ofgovernment approach. A recent GAO report, "Chronic Health Conditions: Federal Strategy Needed to Coordinate Diet-Related Efforts," also recommended this, noting that 200 initiatives across 21 government agencies attempt to improve American diets with no coordinating mechanism.³⁶

2. Nutrition research and science is critical to further understanding food as medicine and consumer behavior toward food, as well as what makes up a healthy diet, and assisting us in growing more-nutritious foods at a lower cost. Despite its importance, funding for nutrition research and opportunities for innovative research design have been declining, especially compared with other health-related funding. **Congress should increase funding for nutrition research and for communicating that research to the public in an accessible way**. Consumers are often confused by conflicting information around certain foods or nutrients. Wider and more-comprehensive distribution of evidencebased communication that synthesizes government-wide input is needed, especially in an age of misinformation.

3. While Congress has begun to recognize linkages between health and nutrition, **legislators can do more domestically and globally to invest in a healthy and well-nourished population**. Existing bills such as the bipartisan Medically Tailored Home-Delivered Meals Demonstration Pilot Act of 2021 (H.R. 5370), which would provide nutritious meals to Medicare beneficiaries with a diet-related disease, **should continue to explore ways to increase the accessibility of nutritious foods and the outcomes that increased nutrition has to our healthcare system**.

• This should be echoed on a global level, with proposed legislation such as the bipartisan and bicameral Global Malnutrition Prevention and Treatment Act of 2021 (H.R. 4693) that authorizes USAID to advance targeted interventions to prevent and treat malnutrition around the world. Congress and USAID should also consider a larger focus on quality, rather than quantity, of food.

4. School feeding programs have been extremely successful, domestically and internationally, in mitigating child hunger and malnutrition. In the United States, Congress should move to support free universal school breakfast and lunch through future Child Nutrition Reauthorizations. Research demonstrates that USDA child nutrition programs improve food security as well as nutritional intake in participants and educational outcomes.³⁷ In addition, hunger does not stop abruptly as a child turns 18—school lunch or vouchers should be provided to low-income students who attend public universities, community colleges, and trade schools.

 Globally, the United States is the largest international donor to school meal programs through the McGovern-Dole Food for Education and Child Nutrition Program. Congress should support the US commitment to participate in the new School Meals coalition, following the recent UNFSS, and should increase support to the McGovern-Dole program. Congress should also ensure improved coordination between health, nutrition, education, and agriculture entities, reflecting the multisectoral nature of nutrition. There are domestic and global opportunities to support increased collaboration between food banks and school meal programs to jointly plan for responding to emergencies and to share best practices in areas such as nutrition, reducing food waste, and improving food safety.

Recommendations for the Private Sector

1. The private sector, including food start-ups, should continue to invest in research and development and prioritize science-based, innovative approaches that incorporate consumer preferences (such as taste, cost, and convenience) in developing and providing nutritious crops and foods that people will choose. Private sector actors are often at the forefront of developing solutions and technologies that best address nutrition and dietary pattern issues and can continue to focus on meeting consumer preferences while elevating nutritional content and food group diversity to better fall in line with the Dietary Guidelines for Americans. Food start-ups, such as in the alternative protein space, in particular have begun to address gaps in the market, innovating to adapt to changing consumer preferences while meeting nutritional needs.

Recommendations for Academia

 Basic nutrition education should be integrated into the medical school curricula affirming the strong link between nutrition and health for future doctors. Although medical students report a desire and need to better understand nutrition as part of healthcare, there is little mention of the importance of nutrition to human health within current curricula38 Educating future doctors on nutrition and expanding care teams to include registered dieticians' input can also provide critical education to patients as they interact with the medical establishment throughout their lifetimes.

About the Authors

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