

Global health has a stake in the upcoming UN Food Systems Summit



Good health requires healthy and nutritious food. In their current state, food systems are not providing access to sufficient, affordable, healthy, and safe food for all people. Worse, recent years have seen an explosive proliferation and active marketing of foods increasingly associated with negative health outcomes.¹ At the same time, food systems are contributing to further environmental degradation that undermines the future continuity of food production and its quality and threatens human health.^{2,3} Food systems urgently need to be transformed to provide equitable access to healthy diets, produced in sustainable and resilient ways; the continuation of current trends is nearly guaranteed to be disastrous for humanity.^{4,5} Preserving past achievements in health and addressing remaining inequities depend on this food system transformation.⁶

Food system transformation, if achieved, promises to reduce the burden of diet-related non-communicable diseases, reduce the prevalence of food-borne illness, address malnutrition in all its forms, and keep the earth within the 1.5°C warming needed to avoid catastrophic health and other effects of climate change.^{3,4} Food may be at the heart of the problem, but food is also the solution for optimal health. Food system actors (ie, businesses, government agencies, and civil society organisations working with food and food system workers, and on policies and programmes that affect food systems) cannot achieve this large-scale change alone and need allies in health systems.

Most people interact with a health professional multiple times over their life course, whereas few ever interact with a dietitian. Yet poor diets are among the leading causes of morbidity and mortality worldwide.⁷ Overall, encounters between patients and health providers are underused moments to include nutrition literacy and diet discussions.⁸⁻¹⁰ Not addressing diets at the point of care undermines the ability of clinicians to uphold the ethical standards of the Hippocratic oath because their patients make dietary choices every day amid the complex maze of food systems.

Health system actors are also crucial in shaping healthy communities, yet have rarely emphasised the critical role of food systems in ensuring healthy and

nutritious foods are available and affordable to all.¹¹ Health system actors and practitioners could become allies in advocating for healthier food environments and for sustainable food production practices that restore the natural resources needed to guarantee food security and health of current and future generations. A combination of regulations, legislation, and taxes can improve food environments and promote healthy consumer choices and diets.¹¹⁻¹³

On Sept 23, 2021, the UN convenes a Food Systems Summit in service of garnering political momentum towards food system transformation. Leading up to the Summit, nations, non-governmental and civil society organisations, food-related businesses, and scientists have been working to synthesise the evidence base, develop a coherent vision of transformation, and propose a set of actions that can achieve that transformation. This is a momentous occasion: the first time in history that the governments of the world are addressing food from a whole systems perspective that includes many diverse stakeholders. Historical global gatherings and commitments related to food have until recently focused on food security, agriculture, malnutrition, environment, and livelihoods in silos.¹⁴

Health systems and food systems are deeply connected to one another. There is no better example than the COVID-19 pandemic: a health systems shock that

Published Online
September 8, 2021
[https://doi.org/10.1016/S0140-6736\(21\)02047-X](https://doi.org/10.1016/S0140-6736(21)02047-X)



Andrew Tse/Panos Pictures

most likely originated as a zoonotic spillover event, and which reverberated throughout not only food systems, but social, education, and economic systems, and even affected the environment through changes in transportation, energy use patterns, and seismic noise. Large income shocks, major food system disruptions, and significant interruptions in direct nutrition interventions delivered through health systems all put substantial pressure on malnutrition rates that are estimated to have climbed rapidly.^{15,16} Further, COVID-19 severity is exacerbated by diet-related non-communicable diseases while COVID-19 exposure risk has disproportionately affected vulnerable and low-income populations globally.¹⁷ An interconnected systems approach with equity and human rights at the core is essential to achieve health, food, and environmental goals simultaneously. The health community has a vested stake in this approach, and what happens during and after the Summit.

We propose four concrete areas of action in which food and health communities can, and must, work together. First, the capacity of health practitioners who receive very little, if any, nutrition and diet training during their education must be increased. There is a crucial need to ensure that nutrition is embedded in medical school and nursing training.¹⁸ Second, care practices must be integrated. Health practitioners can take best practices into their clinical interactions with patients by prioritising nutrition counselling, literacy, and education at the point of care.¹⁸ Third, information systems must be expanded. It is challenging to understand which dietary factors contribute to health without information about what people eat. Data information systems need to be expanded by including food consumption data in health surveys and tracking nutrition outcomes in medical records.¹⁹ Fourth, win-win policies must be pursued. Healthy food policies and subsequent programmes must be guided by the health community. Policies include improving the foods served and sold in public food distribution and health-care settings (eg, school meals, care homes, government workplaces, food-based benefit programmes and direct food transfers, and health-care facilities); instituting regulations, legislation, or tax policies to ban or limit unhealthy ingredients (eg, trans fat) and decrease incentives for ultra-processed food and beverage consumption, while subsidising or otherwise incentivising greater access to and consumption of foods such as fruits, vegetables, pulses, nuts, fish, and other

nutrient-rich foods that are low in added salt, sugar, and fat; and promoting easy-to-understand health labelling and regulating unfounded food marketing claims.^{11,20-22}

Health professionals are some of the most trusted members of our communities. Without including health systems, we cannot completely address the multiple food system crises facing humanity today. Transformation is urgent, and everyone's health depends on it.

LH declares his role in the UN Food Systems Summit as the Chair of Action Track 1: Ensuring Access to Safe Nutritious Food for All. We declare no other competing interests.

*Kate R Schneider, *Jessica C Fanzo, Lawrence Haddad, Jose Rosero Moncayo*
jfanzo1@jhu.edu

Paul H Nitze School of Advanced International Studies (KRS, JCF), Berman Institute of Bioethics (JCF), and Bloomberg School of Public Health (JCF), Johns Hopkins University, Baltimore, MD 20036, USA; Global Alliance for Improved Nutrition, Geneva, Switzerland (LH); Food and Agriculture Organization of the United Nations, Rome, Italy (JRM)

- 1 Pagliai G, Dinu M, Madarena MP, Bonaccio M, Iacoviello L, Sofi F. Consumption of ultra-processed foods and health status: a systematic review and meta-analysis. *Br J Nutr* 2021; **125**: 308–18.
- 2 Mbow C, Rosenzweig C, Barioni LG, et al. Food security. In: Shukla PR, Skea J, Calvo Buendia E, et al, eds. Climate change and land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems. Geneva: Intergovernmental Panel on Climate Change, 2019.
- 3 Clark MA, Domingo NGG, Colgan K, et al. Global food system emissions could preclude achieving the 1.5° and 2°C climate change targets. *Science* 2020; **370**: 705–08.
- 4 Webb P, Benton TG, Beddington J, Flynn D, Kelly NM, Thomas SM. The urgency of food system transformation is now irrefutable. *Nat Food* 2020; **1**: 584–85.
- 5 UN Secretary General. Secretary-General calls latest IPCC climate report “code red for humanity”, stressing “irrefutable” evidence of human influence. Aug 9, 2021. <https://www.un.org/press/en/2021/sgsm20847.doc.htm> (accessed Aug 14, 2021).
- 6 Swinburn B, Kraak VI, Allender S, et al. The global syndemic of obesity, undernutrition, and climate change: the Lancet Commission report. *Lancet* 2019; **393**: 791–846.
- 7 Afshin A, Sur PJ, Fay KA, et al. Health effects of dietary risks in 195 countries, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet* 2019; **393**: 1958–72.
- 8 Frost JC, Baldwin AJ. “Food for thought”: the importance of nutrition to patient care and the role of the junior doctor. *Clin Med* 2021; **21**: e272–74.
- 9 Macaninch E, Buckner L, Amin P, et al. Time for nutrition in medical education. *BMJ Nutr Prev Health* 2020; **3**: 40–48.
- 10 Suarez-Balcazar Y, Mirza MP, Garcia-Ramirez M. Health disparities: understanding and promoting healthy communities. *J Prev Interv Community* 2018; **46**: 1–6.
- 11 John S, Lyerly R, Wilde P, Cohen ED, Lawson E, Nunn A. The case for a national SNAP fruit and vegetable incentive program. *Am J Public Health* 2021; **111**: 27–29.
- 12 Swinburn B, Kraak V, Rutter H, et al. Strengthening of accountability systems to create healthy food environments and reduce global obesity. *Lancet* 2015; **385**: 2534–45.
- 13 Vandevijvere S, Barquera S, Caceres G, et al. An 11-country study to benchmark the implementation of recommended nutrition policies by national governments using the Healthy Food Environment Policy Index, 2015–2018. *Obes Rev* 2019; **20** (suppl 2): 57–66.
- 14 Byerlee D, Fanzo J. The SDG of zero hunger 75 years on: turning full circle on agriculture and nutrition. *Glob Food Sec* 2019; **21**: 52–59.
- 15 Osendarp S, Akuoku JK, Black RE, et al. The COVID-19 crisis will exacerbate maternal and child undernutrition and child mortality in low- and middle-income countries. *Nature Food* 2021; **2**: 476–84.

- 16 FAO, IFAD, UNICEF, WFP, WHO. The state of food security and nutrition in the world 2021. Transforming food systems for food security, improved nutrition and affordable healthy diets for all. Rome: Food and Agriculture Organization of the United Nations, 2021.
- 17 The Lancet. COVID-19: a new lens for non-communicable diseases. *Lancet* 2020; **396**: 649.
- 18 Katz DL. How to improve clinical practice and medical education about nutrition. *AMA J Ethics* 2018; **20**: e994–1000.
- 19 Micha R, Coates J, Leclercq C, Charrondiere UR, Mozaffarian D. Global dietary surveillance: data gaps and challenges. *Food Nutr Bull* 2018; **39**: 175–205.
- 20 Pingali P, Mitra B, Rahman A. The bumpy road from food to nutrition security—slow evolution of India's food policy. *Glob Food Sec* 2017; **15**: 77–84.
- 21 Winter G. Ditching the junk: making hospital food healthier. *Br J Health Care Manag* 2019; **25**: 13–15.
- 22 Au LE, Rosen NJ, Ritchie LD. Does eating school meals make a difference in overall diet quality? A comparison study of elementary school students. *J Acad Nutr Diet* 2015; **115**: A16.