Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

American Journal of
Preventive Medicine

CURRENT ISSUES

The Right to Food: Building Upon "Food Is Medicine"

Ellen K. Barnidge, PhD,[1] Sandra H. Stenmark, MD,[2] Marydale DeBor, JD,[3,4] Hilary K. Seligman, MD[5,6,7]

INTRODUCTION

During the past decade, the "food is medicine" movement has captured momentum and successfully acted upon evidence that a nutritionally adequate diet supports better health outcomes. Despite progress being made in integrating provision of food into healthcare services, there are on the ground limitations of "food is medicine" interventions that need to be acknowledged as barriers to creating lasting change. Goals must now expand beyond remediating the physiologic impacts of a poor diet and reducing associated healthcare costs and evolve toward the larger goal of promoting health over the long term. To do so, the authors advocate for adoption of a framework of thinking and action based upon the concept of the right to food,[1] a concept embodied in international law and undergirded by rich philosophical and moral traditions. The healthcare sector can help lead change toward the recognition of food as a human right upheld by systems-level protections. Although the healthcare sector alone is not responsible for this needed paradigm change, it can help to inspire it, especially in light of the COVID-19 pandemic and resulting economic fallout.

CONTRIBUTIONS AND LIMITATIONS OF "FOOD IS MEDICINE" INITIATIVES

In 2018, an estimated 11.1% of U.S. households were food insecure.[2] Food insecurity and poor diet quality result in higher prevalence and poorer management of chronic diseases, accounting for billions of dollars in annual medical costs.[3] This recognition has catalyzed the health sector's interest in "food is medicine" interventions. Some of these interventions focus on efforts to prescribe food or meals as part of health care for patients with complex illnesses who have special dietary needs, such as those with diabetes or congestive heart failure. The prescription of food in these contexts may improve self-management, reduce hospital admissions, and lower healthcare costs.[4] Other "food is medicine" interventions focus more broadly on lower-income patients. These interventions include screening patients for food insecurity during well visits, tracking food insecurity as a risk factor for poor outcomes in the electronic health record, and referring food-insecure patients to community resources or federal nutrition programs.

Although numerous "food is medicine" interventions are being tested, some with success, there are practical limitations that threaten their long-term impact. First, many are funded by short-term grants. The energy required to sustain patchwork funding is substantial and threatens the long-term viability of many programs. Second, many are implemented with a goal of demonstrating a return on investment. This focus has resulted in the concentration of resources to meet immediate food needs on a relatively small, already chronically ill population among whom a return on investment may be quickly observable. Yet, systems-level interventions will likely generate a much larger, albeit slower, return on investment. For example, Supplemental Nutrition Assistance Program (SNAP) and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) enrollment early in life is likely to have an enormous return on investment over a lengthy time horizon, given strong evidence that this intervention improves health, reduces metabolic syndrome, and improves economic self-sufficiency decades later.[5] Third, the duration of time in which many people exposed to "food is medicine" interventions receive services is inadequate to generate lasting impacts. Prescription produce programs are now widespread and can provide healthy food to meet

From the [1]College for Public Health and Social Justice, Saint Louis University, St. Louis, Missouri; [2]School of Medicine, University of Colorado, Denver, Colorado; [3]Fresh Advantage LLC, Cambridge, Massachusetts; [4]Department of Psychiatry, Yale School of Medicine, New Haven, Connecticut; [5]Department of Medicine, University of California San Francisco, San Francisco, California; [6]Department of Epidemiology and Biostatistics, University of California San Francisco, San Francisco, California; and [7]UCSF Center for Vulnerable Populations, San Francisco, California

Address correspondence to: Ellen Barnidge, PhD, College for Public Health and Social Justice, Saint Louis University, 3545 Lafayette Avenue, St. Louis MO 63104. E-mail: ellen.barnidge@slu.edu.

0749-3797/$36.00
https://doi.org/10.1016/j.amepre.2020.04.011

immediate needs. However, such programs generally offer support for a small number of weeks or months and lack infrastructure to connect individuals to safety net programs that may stabilize household food security in the long term.

Finally, even when infrastructure to connect patients to safety net programs does exist, efforts frequently still fail because they are designed with the assumption of individual agency within a resource-constrained environment. For example, many "food is medicine" interventions facilitate patient enrollment into SNAP or other community programs. However, the approach is deeply limited by fragmentation and inadequate funding of the social safety net, failure to address patient-identified barriers to engaging with available resources, and limited provision of reciprocal support for community organizations (such as food banks or home-delivered meals programs) that generally provide the food in these interventions.[6]

Although "food is medicine" efforts are well intentioned and recognize the important contribution of food to health, they are fundamentally flawed by their failure to address structural determinants of food insecurity, including limited educational opportunities, unemployment, lack of a living wage, structural racism, and an inequitable food system. Thus, when these studies, pilots, and programs end, they rarely have lasting impact for individuals or communities. Meanwhile, concentrating more resources in the healthcare system rather than systems better oriented toward population health (e.g., public health, education, and a social safety net) may ultimately do more harm than good.

Therefore, one must ask some difficult questions: How can the healthcare sector fully recognize what has been learned from the "food is medicine" movement while simultaneously pushing for long-term, structural change? How can this sector lead the movement toward systems-level changes that support adequate nutrition at all stages of health?

MOVING TOWARD FOOD AS A HUMAN RIGHT

Despite societal acknowledgment of the special importance of food to health, the U.S. does not officially recognize food as a universal human right nor support systems ensuring universal access to adequate nutrition. However, there is strong precedent for this approach. The recognition of food as a human right was codified in international law, together with the right to health and other rights, by the United Nation's Universal Declaration of Human Rights (1948), specifically the International Covenant on Economic, Social, and Cultural Rights (1966).

The philosophical foundations of these documents offer a structure for understanding food as both a legal and moral right. The legal right to food is based on the philosophical tradition of moral universalism. Moral universalism posits that there are universal truths on which all people, regardless of nationality, can agree.[7] This tradition informs and justifies individual and collective action to secure the necessary conditions for a minimally good life, which are agreed to be universal moral norms. Such conditions include, for example, freedom from torture, access to health care, and access to nutritionally adequate food.

Applying a human rights approach to food facilitates engagement and alignment of multiple sectors in a change process that can enable all people to meet their need for nutritious food across the life course.[1] This approach does not respond to people in need of food out of generosity, with a limited focus on autonomy or dignity. Instead, a rights-based approach elevates systems, supported by society at large, that create conditions whereby individuals can provide for themselves. It would require the healthcare sector to adjust its thinking within and then beyond its own domain, identify its strengths, and then collaborate with other sectors to enact practices and policies that remove the social, economic, agricultural, and educational barriers impeding the right to food.

The Office of the High Commissioner for Human Rights identifies 5 tenets of a right to food approach. Although the intended audience is government bodies, they suggest responsibilities that the healthcare sector can uphold to move the "food is medicine" movement toward a human rights approach[1]:

1. facilitating social and economic environments that support human development;
2. strengthening people's access to adequate nutritious food through activities that enable them to ensure their own livelihood;
3. respecting access to adequate food and preventing barriers that impede peoples' ability to acquire food;
4. providing nutritious food (or money for food) directly, in situations where individuals and communities are unable to provide for themselves; and
5. protecting individuals from interference by third parties in actions to meet their need for adequate nutritious food.

A WAY FORWARD

The healthcare sector is responding to significant patient need through "food is medicine" interventions (Tenet

4). Yet, on the ground lessons demonstrate that it must move beyond screen and intervene and prescription models that meet the immediate needs of some patients and are limited in their provision of long-term solutions for a broader patient population. Tremendous economic power and influence lie within the healthcare sector. A rights-based shift that is championed by health care and influential in healthcare sector operations and policies can set a powerful example.

Although this work will be complex, proceed slowly, and rely on leadership and generation of trusting relationships, there are immediate steps the healthcare sector can take to align its actions with the right to food approach. First, healthcare systems have invested in patient navigation systems to connect patients to community-based resources. To facilitate environments that support human development as outlined in Tenet 1, healthcare systems can follow the examples of hospitals in San Francisco, Boston, and Detroit that identify as anchor institutions, seeking out employees from low-income neighborhoods and providing a living wage, stable hours, and opportunities for training and advancement.[8] These activities break down barriers to employment and advancement, strengthening the capacity of community members to ensure their livelihood and thus provide food for their household (Tenet 2).

Second, federal law requires nonprofit healthcare systems to address community needs as a condition of tax exemption. The law sets forth a rational, realistic framework for conducting a sound multisectoral needs assessment (community health needs assessment [CHNA]).[9] The CHNA process is an opportunity to engage multisector partners and identify social and economic patterns that contribute to poor health outcomes in a local community. A rights-based approach would emphasize Tenets 1 and 2 through the following actions in the CHNA process:

1. conducting research on federal, state, and regional social and economic conditions that create and sustain environments conducive to enabling all people to feed themselves;
2. training healthcare sector staff conducting CHNAs in health equity to minimize unintended consequences that increase health disparities; and
3. meaningfully investing in identified systems gaps in partnership with other sectors and community partners.

Third, healthcare systems can adopt policies and practices that further promote a sustainable food system (Tenet 3).[10] For example, hospital food procurement policies should encourage purchasing of food from vendors that prioritize the purchase of regionally grown food and minimize food waste. These policies should require food service management contractors to adhere to the same guidelines.

Fourth, healthcare systems should inform and promote local, state, and federal government policies that protect people in need of food in an emergency, or in circumstances when self-provision is beyond their ability, in a way that strengthens the food system and reduces poverty and structural racism (Tenets 4 and 5). For example, healthcare leaders should voice the deleterious health (and nonhealth) effects of failing to provide nutritious school meals to food-insecure children, limiting eligibility for SNAP benefits, and shortening recertification periods for seniors on SNAP. They should also voice the deleterious effects of policies that entrench poverty and structural racism (Tenet 5), the root causes of food insecurity. Such activities will require deep personal investment and training.

Finally, healthcare leaders can support strategies and partnerships that result in enrollment of Medicaid beneficiaries into federal nutrition programs (i.e., SNAP and WIC) that are proven to support health and well-being (Tenet 3). These policies may be implemented more efficiently by supporting streamlined enrollment into multiple safety net programs instead of a component of screen and intervene programs. The healthcare sector can learn from the example of Children's Hospital of Denver: 85% of their primary care clinic families were insured by Medicaid, yet most were not enrolled in SNAP or WIC. In response, they hired a human service enrollment specialist to enroll families in all eligible federal benefits. Leveraging Medicaid expansion infrastructure to enroll patients based on eligibility would improve well-being, food security, and economic security without overburdening the clinical delivery systems.

CONCLUSIONS

The internationally recognized right to food[6] offers a framework for a paradigm shift that builds on the successes of the "food is medicine" movement while acknowledging the movements' limitations. The approach transcends fragmented and short-term responses to food insecurity that are now too narrowly defined. A rights-based approach allows for recognition of the principles of self-determination, sustainability, and human dignity to drive long-term solutions for a more just society.

ACKNOWLEDGMENTS

The authors of this publication are members of the Nutrition and Obesity Policy Research and Evaluation Network Food

Security working group. The Nutrition and Obesity Policy Research and Evaluation Network is supported by Cooperative Agreement Number 5U48DP00498-05 from the Centers for Disease Control and Prevention, Prevention Research Centers Program. The findings in this report are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.

All authors contributed to the conceptualization, writing, and review of the article.

No financial disclosures were reported by the authors of this paper.

REFERENCES

1. United Nations Human Rights. Office of the High Commissioner for Human Rights. The right to adequate food. Geneva, Switzerland: Office of the United Nations High Commissioner for Human Rights, United Nations Office at Geneva; 2010. www.ohchr.org/Documents/Publications/FactSheet34en.pdf. Accessed May 1, 2019.
2. Coleman-Jensen A, Rabbitt MP, Gregory CA, Singh A. *Household food security in the United States in 2018*. Washington, DC: U.S. Department of Agriculture, Economic Research Service; 2019. www.ers.usda.gov/publications/pub-details/?pubid=94848. Published September 4,Accessed April 21, 2020.
3. Berkowitz SA, Seligman HK, Rigdon J, Meigs JB, Basu S. Supplemental Nutrition Assistance Program (SNAP) participation and health care expenditures among low-income adults. *JAMA Intern Med.* 2017;177(11):1642–1649. https://doi.org/10.1001/jamainternmed.2017.4841.
4. Berkowitz SA, Terranova J, Hill C, et al. Meal delivery programs reduce the use of costly health care in dually eligible Medicare and Medicaid beneficiaries. *Health Aff (Millwood).* 2018;37(4):535–542. https://doi.org/10.1377/hlthaff.2017.0999.
5. Hoynes H, Schanzenbach DW, Almond D. Long-run impacts of childhood access to the safety net. *Am Econ Rev.* 2016;106(4):903–934. https://doi.org/10.1257/aer.20130375.
6. Stenmark SH, Steiner JF, Marpadga S, Debor M, Underhill K, Seligman H. Lessons learned from implementation of the food insecurity screening and referral program at Kaiser Permanente Colorado. *Perm J.* 2018;22 18-093. https://doi.org/10.7812/TPP/18-093.
7. Fagan A. Human Rights. Internet Encyclopedia of Philosophy. www.iep.utm.edu/hum-rts/. Accessed February 1, 2020.
8. Anchor institutions. Democracy Collaborative. https://community-wealth.org/strategies/panel/anchors/index.html. Accessed February 14, 2020.
9. Young GJ, Chou CH, Alexander J, Lee SY, Raver E. Provision of community benefits by tax exempt U.S. hospitals. *N Engl J Med.* 2013;368(16):1519–1527. https://doi.org/10.1056/NEJMsa1210239.
10. Good Food purchasing program overview. Center for Good Food Purchasing. https://goodfoodpurchasing.org/portfolio-items/good-food-purchasing-program-overview/?portfolioCats=68%2C66%2C67%2C69. Accessed May 5, 2019.