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Advancing Food is Medicine Approaches

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I.
Introduction

"You can either pay the farmer now or the doctor later."
—Oran Hesterman, Founder of Fair Food Network, during the Summit

America is leading the way in diet-related disease—but we're also forging the path forward on Food is Medicine!

Metabolically, more Americans are ill than healthy. Half of the adult population of the United States has diabetes or prediabetes, and when factoring in other conditions like high cholesterol and high blood pressure, only 1 in 15 adults have optimal cardiometabolic health. And we're failing the next generation even more starkly. Of teenagers, 1 in 4 already has overweight or obesity, and about the same proportion has prediabetes.

Poor health costs our nation lives and money. Every year, 300,000 American deaths from heart disease, stroke, or type 2 diabetes are directly attributable to poor nutrition. Annually, poor health creates upward of $1.1 trillion in economic losses between health care costs and lost productivity.

This nutrition emergency also underscores the degree to which food and agriculture can be a solution to some of our most pressing challenges. The food sector accounts for a tremendous economic and employment impact, particularly in marginalized communities, and better food is simply better business. Customers are demanding healthier foods—foods that can prevent and even help treat our failing cardiometabolic health.

Our current food system was designed to meet 20th-century goals— addressing hunger and food insecurity by providing accessible, shelf-stable calories, and supplying vitamins and minerals to combat nutrient deficiency diseases. And these goals were largely achieved: over the past five decades, collaborative efforts among scientists, policymakers, and private-sector and civil-society innovators have successfully alleviated some of the issues eaters faced in the 1950s onward.

But our current food system is no longer oriented toward the major nutritional challenges that our country presently faces. During the course of the 20th and into the 21st centuries, diet-related diseases have exerted a tremendous burden on the well-being of Americans, and nutrition insecurity—the inability to have consistent and equitable access to healthy, safe, affordable foods essential to optimal health and well-being—is more prevalent than food insecurity.

A major overhaul to the U.S food system is long overdue, and the integration of Food is Medicine approaches into this redesign can help the food and health care systems better meet the needs of the U.S. population and even save lives.

This report summarizes takeaways from a Summit held in Boston, MA on June 20, 2023, in support of the Biden-Harris Administration's National Strategy on Hunger, Nutrition, and Health. The goals of the event were to:

I. Identify the gaps and barriers that hinder implementation of Pillars 2 and 5 of the National Strategy and discuss opportunities to fill those gaps and reduce those barriers through new partnerships and innovation.
II. Raise awareness of work underway and engender ideas for new efforts and collaborations to integrate nutrition and health (Pillar 2) and enhance nutrition and food security research (Pillar 5), particularly within the umbrella of Food is Medicine efforts.
III. Encourage stakeholders to come forward with new commitments to support implementation of the National Strategy.

The following experts participated as speakers and/or facilitators to achieve these goals: **U.S. Congressperson Jake Auchincloss; Deborah Becker,** WBUR; **Sarah Blackburn,** Edible Boston; **Shirley Chao**, FoodPolicy Insights; **U.S. Congressperson Katherine Clark; Stephen Devries,** Gaples Institute Nutrition and Lifestyle Education; **Kimberly Dong,** Tufts University School of Medicine; **Christina Economos,** Friedman School of Nutrition Science and Policy at Tufts University; **Lauren Fiechtner,** Mass General Hospital for Children; **Taryn Forrelli,** Traditional Medicinals; **Dan Glickman**, Bipartisan Policy Center; **Oran Hesterman,** Fair Food Network; **Thea James,** Boston Medical Center; **Diana Johnson,** The Rockefeller Foundation; **U.S. Congressperson Bill Keating; Kim Kessler,** NYC Department of Health and Mental Hygiene; **Ashley Longacre,** Boston College; **U.S. Congressperson Stephen Lynch; U.S. Congressperson Jim McGovern; J. Robin Moon,** World Farmers Markets Coalition; **U.S. Senator Ed Markey; U.S. Congressperson Seth Moulton; Dariush Mozaffarian,** Friedman School of Nutrition Science and Policy at Tufts University; **Danielle Nierenberg,** Food Tank; **Catherine Oakar,** The White House; **Bisola Ojikutu,** Boston Public Health Commission; **Concetta Paul,** Community Advisory Board for the Food Is Medicine Massachusetts Coalition; **U.S. Congressperson Ayanna Pressley; Gordon Reid,** Stop & Shop; **Ismail Samad,** Nubian Markets; **Pam Schwartz,** Kaiser Permanente; **Zoe Simmons,** Community Advisory Board for the Food Is Medicine Massachusetts Coalition; **Lauren A. Smith**, CDC Foundation; **Brooks Tingle**, John Hancock; **U.S. Congressperson Lori Trahan; Ashley Tyrner**, FarmboxRx; **U.S. Senator**

Elizabeth Warren; David B. Waters, Community Servings; **Rick Whitted**, US Hunger; **Mayor Michelle Wu,** City of Boston**; Mike Wysong,** CARE Pharmacies and National Association of Chain Drug Stores; and **Fang Fang Zhang,** Friedman School of Nutrition Science and Policy at Tufts University.

Please note that the points included in this event summary report do not necessarily reflect the official views, opinions, or positions of the Friedman School of Nutrition Science and Policy at Tufts University.

A full replay of the mainstage program is available here: https://www.youtube.com/live/D0o-TrH5ZzI?feature=share&t=1884

Definition of "Food is Medicine"

Conceptions of the definition of "food is medicine" (FIM) vary in practice. To some, FIM refers to a baseline understanding that what we eat is foundational to our health. To others, FIM refers to food-based natural bioactive compounds to treat or prevent disease.

At the Summit and in this report, we use FIM to refer to food-based nutrition programs and interventions integrated into the healthcare system, sometimes with support from public policy, intended to treat or prevent disease while promoting food and nutrition security, and health equity.

II.
Progress Toward Pillar 2 of the National Strategy: Integrating Nutrition and Health

The Role of Health Care Provider Education

>Panel participants:

- ***Stephen Devries**, Adjunct Associate Professor of Nutrition, Harvard T.H. Chan School of Public Health and Executive Director, Gaples Institute*
- ***Ashley Longacre**, Assistant Professor of the Practice, Connell School of Nursing, Boston College*
- ***Kimberly Dong**, Associate Professor, Public Health and Community Medicine, Tufts University School of Medicine*
- ***Shirley Chao**, Former Co-Chair, Massachusetts Commission of Malnutrition Prevention Among Older Adults and Principal, FoodPolicy Insights*

>Moderator:

- ***Sarah Blackburn**, Publisher and Editor in Chief, Edible Boston*

The second pillar of the National Strategy on Hunger, Nutrition, and Health calls to integrate nutrition and health, and healthcare providers are on the front lines of this effort. Therefore, a focus on improving nutrition education for healthcare providers is key for developing a healthcare workforce that can effectively refer and counsel patients with regard to nutrition-related health matters. Medical students are entering a field in which established practices are largely treatment-oriented, whereas public health practices tend to focus on prevention and intervention. Panelists suggested that FIM can bridge these two disciplines.

Integrating nutrition education into medical school curricula is necessary, but will involve a shift in how medical schools operate. Current efforts largely coalesce around making nutrition courses mandatory, rather than elective. Progress is being made on that front, as described by **Stephen Devries**, Executive Director of the nonprofit Gaples Institute, who reported that 7 medical schools now require the Gaples Institute Nutrition Continuing Medical Education (CME) course for health professionals in their medical school curriculum. Devries noted the enthusiastic medical student feedback for learning about dietary approaches to improve both patient care and student self-care. Speakers in the panel titled "Expanding Nutrition Education for Healthcare Providers" agreed that nutrition courses need to be designed in a cross-disciplinary manner, in collaboration with professionals such as registered dietitian nutritionists (RDNs).

Standardized exams need to change, too. At Tufts University, for example, nutrition is embedded into the medical school curriculum. Despite this, students may feel disincentivized from focusing on these subjects when studying for mandatory tests

like the National Council Licensure Examination (NCLEX)—the national nursing license examination—and state medical licensing examinations that do not prioritize nutrition to the same extent, said **Kimberly Dong**, Assistant Professor of Public Health and Community Medicine at Tufts University School of Medicine.

Integrating nutrition into healthcare can improve cardiometabolic health and boost the quality of treatment overall. For many patients, Dong said, nutrition is at the heart of their concerns; an in-depth understanding on the part of the provider can help build trust between physicians and patients.

This is especially true for nurses, said **Ashley Longacre**, Assistant Professor of the Practice at the Connell School of Nursing at Boston College. Nurses often spend more time with patients than physicians do, and may thus garner more insight into patients' attitudes, questions, and common misconceptions, including those based on misinformation from social media. With a more thorough understanding of nutrition- and food-based patient needs, nurses and other professionals can both provide accurate and relevant nutrition information and help patients access federal nutrition assistance programs such as the Supplemental Nutrition Assistance Program (SNAP). As co-chair of the Massachusetts malnutrition commission, **Shirley Chao** testified that if physicians recognize symptoms as nutrition-related, then malnutrition can be identified earlier and treated or even prevented. Therefore, a physician's nutrition knowledge is critical.

Chao also stated that Food is Medicine-related initiatives raise awareness of this topic, and that leadership and advocacy from physicians will also make a significant impact on advancing the nutrition curriculum in medical schools. Devries agreed that getting physicians up to speed on nutrition can bolster interprofessional or team approaches to care.

When medical schools incorporate nutrition into the curriculum, it is important to ensure that content is included about the role and expertise of the RDN as a member of the health care team, Chao said. RDNs are food and nutrition experts with a degree from an accredited dietetics program and who completed a supervised practice requirement, passed a national exam, and continue professional development throughout their careers. They are trained to deliver medical nutrition therapy counseling and are also often well-versed in topics such as dietary behavior change counseling, environmental and policy influences on dietary behaviors, and food insecurity.

The Role of Food Businesses

>Panel participants (split into two conversations):

- ***Ashley Tyrner,*** *Founder and CEO, FarmboxRx*
- ***Mike Wysong,*** *CEO, CARE Pharmacies and Chair, National Association of Chain Drug Stores*
- ***Taryn Forrelli,*** *Chief Science Officer, Traditional Medicinals*
- ***Ismail Samad,*** *Founder, Nubian Markets*
- ***Gordon Reid,*** *President, Stop & Shop*
- ***Pam Schwartz,*** *Executive Director, Community Health, Kaiser Permanente*
- ***Brooks Tingle,*** *President and CEO, John Hancock*

>Moderator:

- ***Danielle Nierenberg****, President, Food Tank*

The private sector also has a major role to play in integrating nutrition and health. Businesses may face strong financial incentives and moral and social responsibilities to facilitate and empower FIM initiatives. Innovations across the private sector that are related to food is medicine involve public-private partnerships, brand advocacy, and procurement; such examples can provide models for other business leaders.

Food entrepreneurs, particularly those of color, are often deeply embedded in their communities and can play central roles in promoting equity and nutrition security. Chefs like **Ismail Samad**, Founder of Nubian Markets, act as connectors between community-based small businesses, farmers, and medical institutions like Boston Medical Center (BMC). These relationships can serve as models that encourage other food industry players to embrace social responsibility and promote health.

Samad, for example, has prioritized culturally responsive approaches to FIM by designing recipes that reflect the African disapora for the BMC Teaching Kitchen, which teaches food access strategies and culinary skills to patients (and their families) who are managing chronic diseases. And by amplifying Black-owned food products in his store, he can strengthen local food economies while better understanding consumers' preferences.

"At Nubian Markets, we center Black farmers as that reality so we can talk about sovereignty both on the land side and on the consumer side," Samad said. "People can choose what they would like to see — and we can collect the data at the grocery level to see, this is working, this is not."

By acting with intentionality, chefs, restaurateurs, grocers, and other food businesses can use their platforms and influence over food culture to demonstrate culturally relevant, healthful meals and ingredients. Stop & Shop Supermarket Company, for example, employs nutritionists and dietitians to work in its grocery stores.

"As a food retailer, I think we have a requirement that we're involved in food is medicine," said **Gordon Reid**, President of Stop & Shop Supermarket Company.

Food businesses specifically oriented toward health must also step up. The current healthcare landscape is one where interagency communication is nonexistent and a line-item budget for food does not exist, said **Ashley Tyrner**, Founder and CEO, FarmboxRx, which partners with healthcare providers across the country to offer qualified Medicare and Medicaid members the ability to order fresh produce, healthy cooking kits, and pantry essentials through their insurance or over-the-counter member benefits.

In the face of this reality, she said, private companies like hers can play an important role as a proof-of-concept—both in making a business case for FIM to for-profit healthcare companies and in reaching out directly to Medicare and Medicaid clients.

However, highlighting links between nutrition and health via FIM cannot become a marketing gimmick, and innovation must perpetuate equitable and ethical marketing practices.

Businesses dedicated to food production and provision can influence consumer perspectives of food through packaging and advertising, said **Taryn Forrelli**, Chief Science Officer at Traditional Medicinals. These food system actors are often able to be nimble in pioneering innovative approaches to FIM. These actors must prioritize honesty and transparency with regard to messaging around a food's influence on health, e.g., it is important not to overstate a food's health benefits beyond those demonstrated by sound evidence.

The Role of Private Health Care Institutions and Insurers

Private entities within the health care system, such as pharmacies and insurers, can be better utilized as bridges between customers, nonprofits, and public institutions.

More than 9 in 10 Americans live within five miles of a pharmacy and high-risk patients visit pharmacies ten times more than they do primary care doctor offices, which means pharmacies and pharmacists can play a crucial role in localizing and expanding FIM programs and liaising between consumers and public/private institutions.

Pharmacies were instrumental in the Covid-19 vaccine rollout, highlighting their previously untapped potential ability to deliver health initiatives, said **Mike Wysong**,

the CEO of CARE Pharmacies and chair of the National Association of Chain Drug Stores Board of Directors.

Health insurance companies are seeing interest around FIM initiatives, and for some, a compelling business case for FIM exists. Insurers make money by balancing premiums to payouts; a healthier client base could earn insurers more years of payments from customers with lower health service costs.

FIM initiatives that result in healthier clients are a worthwhile investment, said **Brooks Tingle**, the President and CEO of John Hancock. For his company, an established New England life insurance provider, FIM provides a direct financial incentive: Longer-lived clients pay into policy programs for more years. John Hancock Vitality, a health program offered to the company's life insurance clients, includes a "Healthy Savings" program through which clients can save money on nutritious groceries through partnerships with thousands of stores.

The Vitality program has been financially successful, he said. Therefore, it's worthwhile for healthcare companies to study the financial returns of FIM.

"If we want to get this into the fabric of health care, we have to continue to build the evidence about what works and under what conditions," said **Pam Schwartz**, Executive Director of Community Health, Kaiser Permanente. "And the business case inside healthcare, so that we can scale this and so that we can sustain this."

The Role of Nonprofits

>Panel participants (split into two conversations):

- ***David B. Waters,*** *CEO, Community Servings*
- ***Thea James,*** *Vice President of Mission, Boston Medical Center*
- ***Antigone Zoe Simmons,*** *Member, Community Advisory Board for the Food Is Medicine Massachusetts Coalition*
- ***Concetta Paul,*** *Member, Community Advisory Board for the Food Is Medicine Massachusetts Coalition and MTM recipient*
- ***Lauren A. Smith, MD, MPH*** *Chief Health Equity and Strategy Officer, CDC Foundation*
- ***Oran Hesterman,*** *Founder, Fair Food Network*
- ***Rick Whitted,*** *CEO, US Hunger*

>Moderator:

- ***Deborah Becker,*** *Senior Correspondent, WBUR (National Public Radio)*

Nonprofits have considerable potential to advance food is medicine initiatives. They often have latitude to engage in longer-term research, test potentially transformative

models, and serve individuals and communities without a predominant financial motive.

Nonprofits like Boston Medical Center can devote resources not only to immediate challenges but also to their root causes in a way that centers people over profits, said **Thea James**, Vice President of Mission, Boston Medical Center.

"The role of the nonprofit sector, in my belief, is to innovate, to test, to provide the evidence — and then to show both the public sector of government and the private sector models that work, so then we can work together to expand those models," said **Oran Hesterman**, Founder of Fair Food Network.

By demonstrating innovations like Double Up Food Bucks or the Gus Schumacher Nutrition Incentive Program that help consumers' dollars go further toward nutritious food — and that are effective — nonprofits can lead the way on collaborations with the private sector to scale them, Hesterman said.

The nonprofit sector has deep expertise, said **Rick Whitted**, CEO, US Hunger, but community organizations need institutional support in aggregating data, communicating their stories, and connecting their work upstream to health care, universities, and government.

"There are some major players that, when you put them all together, we actually have all the answers," Whitted said. "We literally have all the solutions — but everyone just remains siloed."

James, of Boston Medical Center, agreed: "As a health sector, we need to step outside of our own walls and help people collaborate with us."

Breaking down silos between sectors and organizations is not always frictionless, and nonprofits can take steps to facilitate the building of necessary relationships.

Food justice organizations should be willing to adopt language and priorities of institutionalized health care to be taken seriously by the medical establishment, said **David B. Waters**, CEO of Community Servings. Meanwhile, nonprofit organizations looking to collaborate with the private sector may need to empathize with a profit-motivated lens to better promote their priorities.

This does not mean sacrificing a nonprofit's mission or core values.

"I would encourage a holistic and comprehensive approach, regardless of whether or not it's being done by a for-profit entity or a non-profit entity." said **Lauren A. Smith**, MD, MPH, Chief Health Equity and Strategy Officer, CDC Foundation.

A discussion about nonprofits has to grapple with the role of philanthropy as well, Whitted pointed out. Though nonprofit leaders often prioritize breaking down silos between sectors, funders may inadvertently reinforce such divisions if they do not share nonprofit leaders' interdisciplinary goals or outlooks. For leaders of organizations whose models require them to be consistently engaged in fundraising, it's difficult to turn down grant money for programs that align with their goals but perhaps take too narrow or siloed a focus. To avoid this effect, funders could, for example, start with steps such as requiring collaboration among different stakeholders for grant awards.

Medically tailored meals (MTMs) provide a particularly compelling example of the powerful transformations in people's lives that can result from successful nonprofit initiatives.

MTMs are prepared meals delivered to individuals living with severe illness through a referral from a medical professional or healthcare plan. Meal plans are tailored to the medical needs of the recipient by a registered dietitian nutritionist. Research from the nonprofit Community Servings found that provision of MTMs–including five days of lunches, dinners, and snacks per week–helped decrease health care costs by 16 percent among critically and chronically ill populations. Another study, published in the Journal of the American Medical Association (JAMA) found that participation in a medically tailored meals program appeared to be associated with fewer hospital and skilled nursing admissions and less overall medical spending.

At the forefront of innovation within FIM, nonprofits can ask questions like: Why are people hungry, ill, and in need of MTMs in the first place? Can an MTM framework be applied to preventive care to boost nutrition security before diet-related diseases become acute?

According to panelists' personal experiences, food is medicine efforts are invaluable.

Concetta Paul, a member of the Community Advisory Board for the Food is Medicine Massachusetts Coalition, needed home-delivered meals after a serious injury.

"I was especially grateful for the ethnic component that was referenced earlier by the Nubian (Markets) representative," Paul said. "Those ethnic dishes represented my own food preferences and cooking style."

"The work that you all do — I'm happy to say the open pantry in Gloucester has pretty much saved my family and my life," said **Antigone Zoe Simmons**, also a member of the Community Advisory Board for the Food is Medicine Massachusetts Coalition.

And in addition to demonstrating these personal benefits, nonprofits can leverage an understanding of business and health care priorities to help establish a stronger case for FIM interventions like MTMs.

Community Servings has created an accreditation program for MTMs to standardize their nutrient content, Waters said, so insurers know that MTM programs across geographies will be consistent — important for facilitating large-scale purchasing. Waivers such as Section 1115 Demonstrations, which offer states an avenue to test new approaches in Medicaid that differ from what is required by federal statute, have given nonprofits flexibility to implement and refine FIM interventions for potential future adoption by other healthcare institutions.

III.
Progress Toward Pillar 5 of the National Strategy: Enhance Nutrition and Food Security Research

>Panel participants (split into two conversations):
- ***Dan Glickman**, Former US Secretary of Agriculture, and Senior Fellow, Bipartisan Policy Center, APCO Worldwide, FFAR*
- ***Christina Economos**, Dean ad interim and Professor, Friedman School of Nutrition Science and Policy at Tufts University*
- ***Bisola Ojikutu**, Executive Director, Boston Public Health Commission, Commissioner of Public Health, City of Boston*
- ***Diana Johnson**, Manager, Food Initiative, The Rockefeller Foundation*
- ***Lauren Fiechtner**, Director, Center for Pediatric Nutrition, Mass General Hospital for Children, and Professor of Nutrition, Harvard School of Public Health*
- ***J. Robin Moon**, Social Epidemiologist and Public Health Strategist, World Farmers Markets Coalition*
- ***Kim Kessler**, Assistant Commissioner, New York City Department of Health and Mental Hygiene*

>Moderator:
- ***Danielle Nierenberg**, President, Food Tank*

High-quality research is vital to understanding how to address pressing food system and healthcare challenges—and how well our responses are working.

Community-engaged research methodologies and practices need to be incorporated into research on FIM efforts so that interventions are better tailored to community members' stated values, needs, and preferences, panelists said. Researchers should be encouraged to work closely with community members—in their languages and cultural frameworks—at all stages of the research process, including defining research questions, collecting quantitative or qualitative data, interpreting findings, and communicating and disseminating results.

"(Local leaders) really know the community, and they really value them and know their stories," said **Lauren Fiechtner**, Director, Center for Pediatric Nutrition, Mass General Hospital for Children, and Professor of Nutrition, Harvard School of Public Health. "We want those stories to be lifted and part of the solution. We don't want to prescribe that for them. We want to hear it from them directly."

Across public institutions, businesses, academic institutions, and advocacy groups, knowledge around nutrition, health, and implementation of FIM efforts is constantly generated but not readily exchanged across these groups. Organizations like Food Tank are amplifying success stories, said **Dan Glickman**, Former U.S. Secretary of Agriculture and Senior Fellow at the Bipartisan Policy Center. He suggested that one strategy to address this gap is to develop a national registry of best practices to

centralize sharing of effective interventions across geographic and disciplinary boundaries.

Research partnerships such as those between The Rockefeller Foundation and the American Heart Association, for example, are potential models for other entities. These collaborations produce both quantitative data and stories of lived experiences with food and nutrition insecurity, which makes their outputs responsive both to health care/health insurance institutions' motivations as well as to movement-building efforts, said **Diana Johnson**, Manager of the Food Initiative at The Rockefeller Foundation.

Rigorous research can help promote bipartisan nutrition policy and also make public interventions more resilient to politicization. By consistently evaluating and re-evaluating programs, agencies can ensure their work is as strong as possible and more successfully defend it against opponents, Glickman said.

A wider base of research can also help sustain functional programs. For instance, resource mobilization during the early months of the Covid-19 pandemic directed funding toward both research efforts and community programs in order to fill urgent public health gaps. A common occurrence, **Bisola Ojikutu**, Executive Director, Boston Public Health Commission, Commissioner of Public Health, City of Boston, is that the impetus for mobilization falls away once a perceived emergency ends.

As we improve our understanding of the ways that systemic, communal, structural, and societal factors impact our health, the methodologies by which we research health and nutrition need to evolve in tandem.

This is according to **Christina Economos**, Dean *ad interim* and Professor at the Friedman School of Nutrition Science and Policy at Tufts University. She added that collaboration among institutions and communities is quickly becoming not a bonus but a necessity for efficient, accessible, good research.

Research models and consumer awareness/knowledge campaigns that are grounded predominantly in individual behavior change are not only insufficient but also can be dehumanizing and culturally insensitive to those experiencing nutrition insecurity, panelists explained.

Just look at the words we use, said **J. Robin Moon**, Social Epidemiologist and Public Health Strategist, World Farmers Markets Coalition: Discussions of "smart choices" imply by contrast that individuals experiencing food insecurity are guilty of making "dumb choices." It's an implicit value judgment that serves to handwave away the

powerful structural and social factors outside of an individual's control, she said, that often play a role in development of diet-related conditions.

A more holistic research framework is needed, Moon continued, such as a "syndemic" framework, which analyzes how several different synergistic epidemics interact to exacerbate the inequitable effects of each. Currently, she said, we're seeing the Covid-19 pandemic interact with epidemics of diet-related disease and food insecurity.

Research is incomplete — and therefore of limited utility — if it fails to recognize these interplays, other panelists agreed.

"We need to think about food is medicine with that sort of broader application," said **Kim Kessler**, Assistant Commissioner, New York City Department of Health and Mental Hygiene. We might be looking primarily at clinical factors but we also need to think about things like financial stress and the realities of people's daily lives, she said as an example, and how those factors are associated with health, as we design and evaluate interventions.

IV.
Community Priorities For Food is Medicine Approaches

Following the plenary programming at the Advancing Food is Medicine Approaches: Summit in Support of the National Strategy on Hunger, Nutrition, and Health event, attendees joined one of three concurrent breakout sessions to discuss priorities for action to advance FIM and the implementation of the National Strategy.

Breakout sessions included:

A discussion on **Research + Education**, *facilitated by Fang Fang Zhang, Associate Professor, Friedman School of Nutrition Science and Policy at Tufts University*

A discussion on **Community-Based Nutrition Security**, *facilitated by David B. Waters, CEO, Community Servings*

A discussion on **Public-Private Partnerships**, *facilitated by Dariush Mozaffarian, Distinguished Professor & Jean Mayer Professor of Nutrition, Friedman School of Nutrition Science and Policy at Tufts University*

Selected points raised by participants in the three breakout sessions are summarized in the Community Priorities sections below.

Community Priorities: Stronger Research as a Starting Point

- Additional research is necessary to help answer questions about what delivery, dose, and duration of FIM programs is most effective (in terms of both health outcomes and other relevant outcomes, such as economic impacts) for various populations.

- The concept of "food is medicine research" can extend to one-on-one conversations in medical settings. In leading discussions with patients, medical providers are doing a form of research and can incorporate discussions of food in culturally competent conversations with patients. This can range from recognizing food insecurity as part of a medical history to understanding how patients' cultural backgrounds and health traditions impact their receptivity to and adoption of providers' recommendations.

- Cultural competency is especially important because in many cultures, food is central to traditional healing practices. Medical institutions can guide providers to honor these traditions and view them not as superfluous but as adjuncts or even entry points to allopathic care. Providers should work to understand how economic barriers and cultural lenses have significant impacts on a patient's perception and adoption of dietary recommendations.

- Population-level research remains important for spurring and validating policy change. Large-scale surveillance tools like the National Health and Nutrition Examination Survey (NHANES) should consider adding questions about access to cultural and religious foods to complement its questions about food insecurity. Also, in addition to objective health outcomes–such as blood pressure–subjective measures related to quality of life should also be taken into account, including mental wellness.

- Effective FIM research must ensure that findings are shared with the communities that were engaged in the research—and evaluate the effectiveness of such dissemination.

Community Priorities: Understand Nutrition Security As Rooted in Community

- Like many interventions, FIM approaches are most successful when deeply rooted in the community in which they are implemented. Amplifying and strengthening locally driven, culturally relevant programs must be a significant priority for those involved in hunger, nutrition, and health initiatives. Participatory approaches are necessary to identify factors that hinder providers' efforts to engage with nutrition-insecure clients, build food resiliency, and employ a continuum-of-care model that allows clients to smoothly transition between services.

- In a diagnosis-centered health care system, medical institutions and insurance companies can structurally disincentivize the holistic approach FIM requires. Building nutrition security often involves an examination of factors that are not directly tied to a specific diagnosis or prescribable treatment. Healthcare providers, social workers, and other care professionals must be trained on best practices to protect patient dignity while engaging with factors like socioeconomic class, adverse childhood or domestic experiences, and personal or culturally mediated reasons for low trust in medical institutions.

- Leaders must carefully balance the desire to scale up FIM efforts with the importance of community rootedness. A unifying entity could be identified to facilitate conversations and collaboration among culturally specific or grassroots initiatives. Organizations could also share data with one another, particularly when working in overlapping geographic areas, to ensure they are not inadvertently double-covering or neglecting certain populations, neighborhoods, or demographic groups. Crucially, this cannot come at the expense of privacy and confidentiality.

- Some participants called out registered dietitian nutritionists as ideal managers for an individual's experience with FIM programs given that RDNs are credentialed food and nutrition experts who are trained in patient counseling and perhaps also in behavior change theory and concepts such as social determinants of health.

- New York State's Social Determinants of Health requirement—that Medicaid programs using certain value-based payment structures need to incorporate social care interventions—may also provide a worthwhile model for other local and state agencies to emulate and strengthen.

Community Priorities: Build Public-Private Partnerships To Enact FIM Initiatives

- Food is Medicine provides a useful vehicle for developing collaborative relationships between public entities, including nonprofit organizations and governmental agencies, and private businesses and citizens. Symbiotically, these partnerships in turn can strengthen the effectiveness of FIM efforts.

- Community priorities expressed during a breakout session coalesced around (1) shifting food production and retail to promote nutrition security, and (2) increasing funding for food relief programs—including federal nutrition assistance programs and nonprofit hunger organizations—to support optimal health outcomes.

- Food relief and provision programs provide powerful yet untapped opportunities to incorporate FIM interventions into existing structures via collaborations between public and private entities.

- Federal food assistance programs, like SNAP, could be expanded to reach more eligible participants and reoriented more strongly toward nutrition security; public demand for healthier food could encourage industry to increase availability of such foods and show investors an expanding market.

- Even in the case of food relief programs, some interventions are more successful than others; cross-sector collaborations could help reach more people. Structural, economic, cultural, and knowledge barriers may limit the effectiveness of providing individuals or families with, say, a basket of healthful raw ingredients, i.e., they may lack the culinary know-how or kitchen equipment to turn the ingredients into meals.

- Government regulators can also play a role in catalyzing private investment. By treating FIM approaches with the same seriousness applied to drug trials and using similar evaluation metrics for key measures such as cost-effectiveness, regulators could provide a "stamp of approval" that (1) streamlines the adoption of FIM interventions in public-private sectors like health care, and (2) makes them more competitive against pharmaceutical companies for venture capital investment.

- Successful public-private partnerships could be attached to large-scale federal initiatives and other legislative vehicles like the Inflation Reduction Act of 2022 or the twice-a-decade Farm Bill. And by coupling funding/incentive structures for corporations and producers with meaningful consumer-reporting mandates to inform the public, lawmakers could boost accountability and trust.

- Supporting small-scale food entrepreneurs, particularly those of color, can simultaneously boost culturally relevant nutrition access and strengthen local economic systems. Foodservice professionals and chefs play an important role, too, by influencing local consumption habits and culinary trends. Through intentional collaborations between public agencies, private companies, investors, and consumers, food-related funding could be reoriented toward people, rather than ingredients.

V.
Conclusion

The Biden-Harris Administration's National Strategy on Hunger, Nutrition, and Health provides a useful framework for propelling progress to advance food and nutrition security and health equity, and Food is Medicine initiatives are a promising avenue for achieving the National Strategy's goals.

Summit participants are energized by current momentum toward greater collaboration among sectors and disciplines, the growth of medically tailored meals and produce prescription programs that can provide useful models for other nutrition security programs, and policy opportunities including Medicaid Section 1115 waivers that allow states the ability to use federal funds to test programs that provide access to healthy, nutritious foods.

At the same time, much work remains to be done to expand Food is Medicine initiatives so that more people can benefit from them and so that our country has a more equitable and resilient healthcare system that recognizes the power of nourishing food.

Such change is not possible without collaboration between public, private, and nonprofit players. That includes policymakers, health care providers and insurers, food businesses, chefs, farmers, pharmacists, researchers, and community organizers—as well as any other players that touch our food and health care systems.