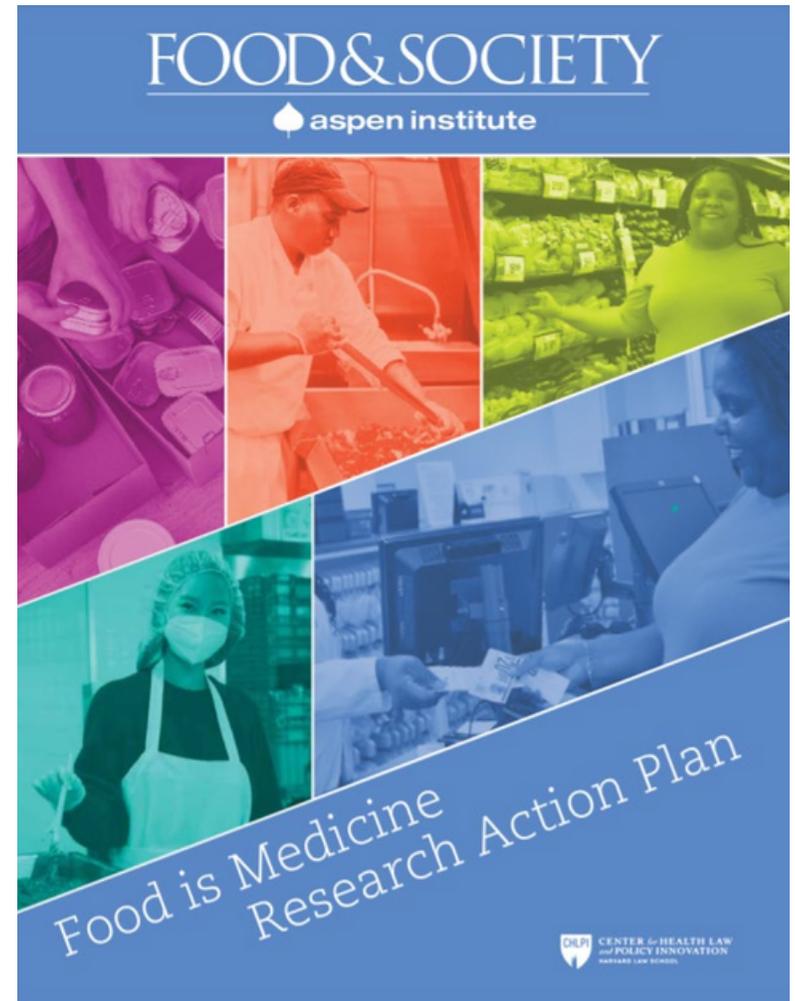


FOOD & SOCIETY

 aspen institute

AspenInstitute.org/food



Research Action Plan Advisors

Ann Albright, CDC

Karen Bachman-Carter, Indian Health Service

Seth A. Berkowitz, UNC School of Medicine

Lauren Shweder Biel, DC Greens

Joslyn Brenton, Ithaca College

Bridget Carle, The Rockefeller Foundation

Cathryn Couch, Ceres Community Project

Tiffany Gary-Webb, University of Pittsburgh

Graduate School of Public Health

Kurt Hager, Tufts Friedman School of Nutrition

Science and Policy

Sheila Hanley, Centers for Medicare & Medicaid

Services (CMS) Innovation Center

Devon Klatell, The Rockefeller Foundation

Gita Rampersad, Feeding America

Darshak Sanghavi, Babylon

Pam Schwartz, Kaiser Permanente

Hilary Seligman, UCSF School of Medicine

Karen Siegel, CDC

Andrea Talhami, DC Greens

Jean Terranova, Community Servings

Alissa Wassung, God's Love We Deliver

Marianna Wetherill, University of Oklahoma-Tulsa
Schusterman Center

Norbert Wilson, Duke Divinity School and Sanford
School of Public Policy at Duke

Allison Yoder, Academy of Nutrition and Dietetics
Foundation

FOOD&SOCIETY

aspen institute

bit.ly/FoodisMedicineResearch

Vision

Rethinking Health System Design

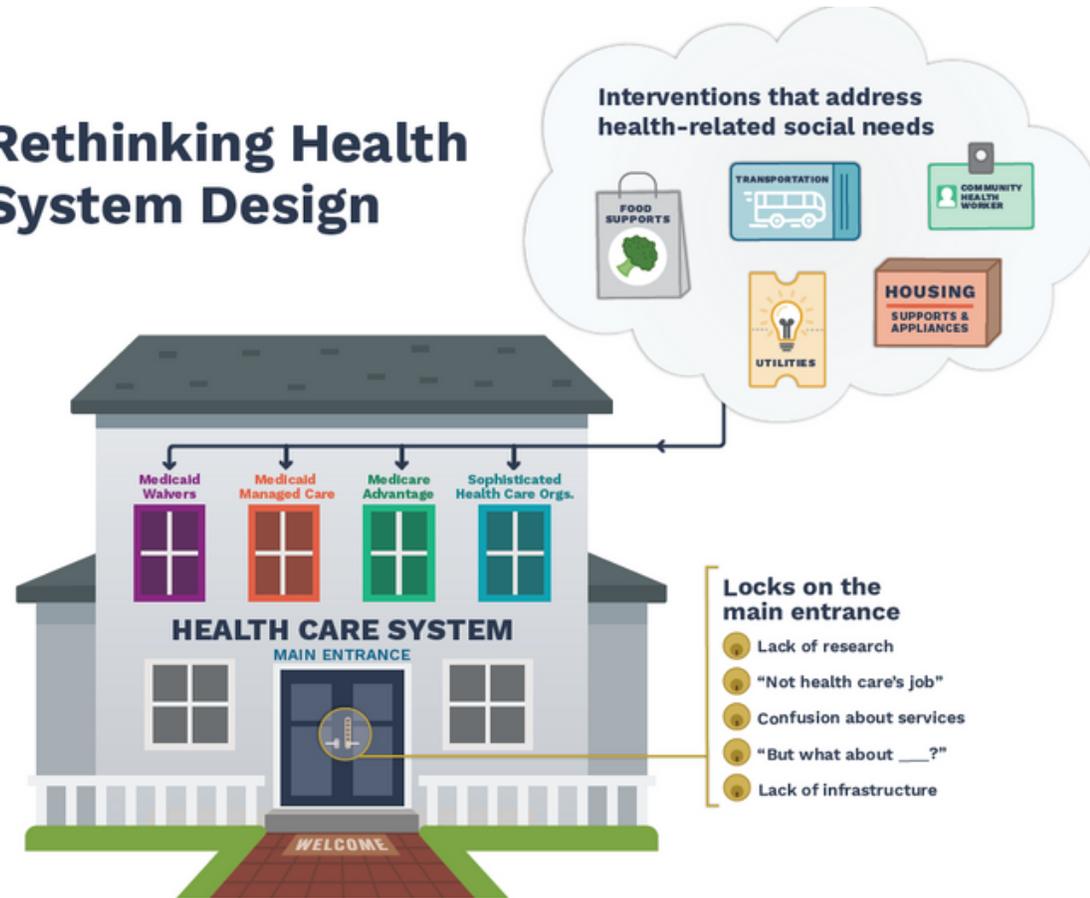


Image: Center for Health Law and Policy Innovation

- **Effective, appropriate** Food is Medicine interventions are **integrated into the US health care system**, providing access to a wide range of proven interventions.
- All Food is Medicine research **centers equity throughout the research continuum**, in order to ensure that interventions truly empower individuals and communities and are effective across demographic groups.
- Everyone has the food that will allow them to live a **healthy, dignified** life.

FOOD&SOCIETY

aspen institute

bit.ly/FoodisMedicineResearch

What the Plan Includes

Food is Medicine definitions and explanation of Research Action Plan scope

Overview of foundational food and health research and peer-reviewed research on Food is Medicine interventions

Recommendations for the next phase of Food is Medicine research

FOOD&SOCIETY

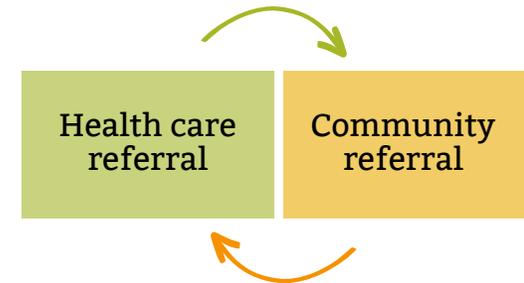
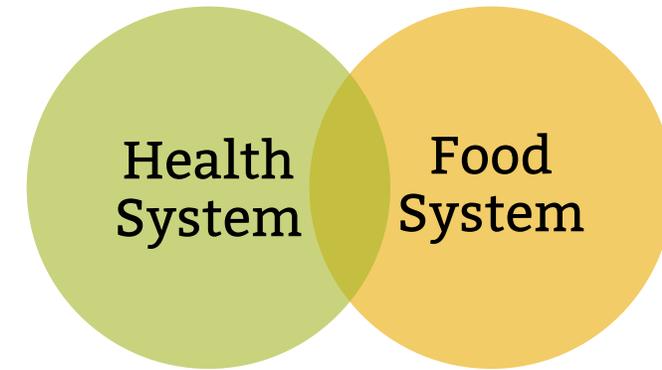
 aspen institute

bit.ly/FoodisMedicineResearch

Scope

Food is Medicine interventions include:

1. the provision of food that supports health, such as medically tailored meals or groceries, or **food assistance**, such as vouchers for produce; and
2. a **nexus** to the health care system.



In scope

Food/food assistance IN ADDITION TO education, resource referrals, lifestyle change programs, etc.

Enhancement of food support programs due to health risks/conditions

Medically tailored meals, medically tailored groceries, produce prescriptions

Out of scope

Interventions focused on micronutrients, supplements, or parenteral/enteral nutrition products

Existing federal food support programs with the exception of WIC

Nutrition education, lifestyle change programs without food support

FOOD&SOCIETY

aspen institute

bit.ly/FoodisMedicineResearch

Interventions Defined

Interventions are:

- Primarily developed in the community/evolution of community-based programs
- National associations and coalitions are coalescing around definitions and standards
- Dynamic, with innovation at the boundaries of each category

	Medically tailored meals	Medically tailored groceries*	Produce prescriptions*
Preparation level and type of food	Ready-to-eat (reheated in an oven or microwave) meals and snacks	A range of perishable and nonperishable grocery items, including produce, that will require further preparation	Produce—fresh, frozen, or canned (no added salt, sugar, or fat)—which, depending on the items, may require further preparation
Amount of food	Complete or near-complete (over 50% of caloric needs met) nutrition	Partial or near-complete nutrition	Supplemental nutrition

**There is significant overlap between these two categories as some produce prescriptions cover significant amounts of produce (either via voucher or direct provision) or even non-produce, minimally processed items.*

FOOD & SOCIETY

aspen institute

bit.ly/FoodisMedicineResearch

Interventions Defined



Medically tailored meals: Fully prepared meals designed by a Registered Dietitian Nutritionist to address an individual's medical diagnosis, symptoms, allergies, and medication side effects.



Medically tailored groceries: Distributions of unprepared or lightly processed foods that recipients are meant to prepare for consumption as home; the contents are sufficient to prepare nutritionally complete meals or provide a significant portion of ingredients for such meals, including produce, whole grains, legumes, and proteins



Produce prescriptions: Vouchers and debit cards that can be redeemed for produce, or direct distribution of produce made available to recipients based on a health condition or health risk; produce is generally fresh but can also be canned or frozen with no added sugar, fat, or salt.

FOOD&SOCIETY

aspen institute

bit.ly/FoodisMedicineResearch

Foundational Research: Food Insecurity

Over 20 studies examined the impact of food insecurity on health outcomes, finding that food insecurity is associated with:

- **Worsened mental health outcomes** including depression, anxiety, and stress
- **Worsened physical health outcomes** including heart disease, obesity, diabetes, hypertension, and hyperlipidemia
- Poor health and **developmental risk in children**
- **Health-damaging circumstances and behaviors** including poor diet quality, unhealthy weight control, disordered eating, poor diabetes self-management, low medication adherence, and missed clinical visits
- **Increased health care utilization and costs** including inpatient hospitalizations, emergency department visits, and prescription medications

FOOD&SOCIETY

 aspen institute

bit.ly/FoodisMedicineResearch

Foundational Research: Existing Programs

Over 50 studies examined the association between the following key federally funded food support programs and physical and/or behavioral health outcomes.

1. Supplemental Nutrition Assistance Program (SNAP)
2. National School Lunch Program (NSLP)
3. Older Americans Act Nutrition Services Program (OAANSP)
4. Special Supplemental Nutrition Program for Women, Infants and Children (WIC)

Criteria: Conducted in the United States, written in English, and published in peer-reviewed journals within the last 25 years (15 for WIC).

FOOD&SOCIETY

 aspen institute

bit.ly/FoodisMedicineResearch

Foundational Research: Existing Programs

- All three programs are associated with lower health care utilization and positive health outcomes—notably, improvements in **weight status, self-reported health status, and diet quality**.
- Mixed results: higher rates of obesity among SNAP participants, particularly when participants are compared with eligible nonparticipants (those who meet the program's eligibility requirements but are not enrolled)
- Importance of understanding the baseline health and demographic characteristics of participants. Difficulty of isolating program participation.

FOOD&SOCIETY

 aspen institute

bit.ly/FoodisMedicineResearch

Foundational Research: WIC

Third-largest food program, serving about 7 million people (parents, children < 5, and infants) each month through the provision of food (via packages, vouchers, or credits), nutrition education, and referrals to social and health care services.

WIC **meets our definition of a Food is Medicine intervention:**

- **Provision of food:** Targeted, supplemental nutrition for different stages of pregnancy and childhood development (7 different packages). Food via checks, vouchers, or electronic benefits card.
- **Nexus to the health care system:** Applicants must undergo a health assessment by a health professional and be deemed “at nutritional risk” (criteria vary by state).

FOOD&SOCIETY

aspen institute

bit.ly/FoodisMedicineResearch

Recommendations

- The National Institutes of Health should invest significantly more in Food is Medicine research.
- A federal agency or federally appointed entity should be formally tasked with coordinating efforts across federal agencies to explore the impact of Food is Medicine interventions in many populations and geographies.
- The Centers for Medicare and Medicaid Services, along with state Medicaid agencies, should seek to capture data on Food is Medicine interventions from natural experiments generated by program policy changes. Evaluation of these impacts should be a priority for research funding.
- Build coverage for Food is Medicine Services into baseline benefits for U.S. health care programs
- Address regulatory barriers which currently inhibit community-clinical partnerships
- Improve access to fruits and vegetables in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

FOOD&SOCIETY

 aspen institute

bit.ly/FoodisMedicineResearch

Food is Medicine & Latinos



According to UnidosUS, food insecurity is **highest among Latinos in rural communities** who work on farms but face barriers to accessing healthy foods.

1 in **8** 

Americans struggle with hunger, according to UnidosUS.

15% 

of rural households experience food insecurity compared to **11.8%** of urban households.

Rural communities face unique challenges when it comes to accessing healthy and affordable food, including **limited transportation options, fewer grocery stores, and higher food prices.**

FOOD&SOCIETY

 aspen institute

bit.ly/FoodisMedicineResearch

Food is Medicine & Latinos

~1 in 6 

Latino households are more likely to experience food insecurity than non-Latino households.

~1 in 5 

Latino children are living in food-insecure households.

only 53%

of eligible Latino households participating in federal nutrition assistance programs like SNAP compared to 69% of eligible non-Latino households.

Language barriers, lack of information about the program, and **fear of deportation** are some of the reasons why Latino households may be less likely to participate in federal nutrition assistance programs.

FOOD&SOCIETY

 aspen institute

bit.ly/FoodisMedicineResearch

Latino Diets and Food is Medicine

1 in 5 

Latinas are experiencing food insufficiency and **1 in 3** Latinas are experiencing housing insecurity.

18% to 29%

Latino population is projected to increase by **2060**, therefore improving diet quality to prevent obesity and reduce obesity-related disease risk factors among Latinos is a critical public health priority.

In nearly every state, Latinas face higher levels of **no health insurance coverage, poverty, food insufficiency, and housing insecurity** compared to white, non-Hispanic women and men.

FOOD&SOCIETY

 aspen institute

bit.ly/FoodisMedicineResearch

Disparities in Latino Health Insurance Coverage

Predicating access to Food is Medicine interventions on health insurance **poses a very real risk of excluding uninsured populations** and further embedding health disparities.

In some instances, innovations in health care policy are required by statute or regulation to be cost-neutral or cost-saving before they can be tested or incorporated into public health insurance programs, as is the case with Medicaid 1115 waiver demonstrations and services evaluated as part of CMMI Innovation Models.

Even with significant policy changes over the past decade

17.7%



Latinos are not covered by health insurance in U.S. (2022)

Less than half of Latino children live with parents covered by private health insurance



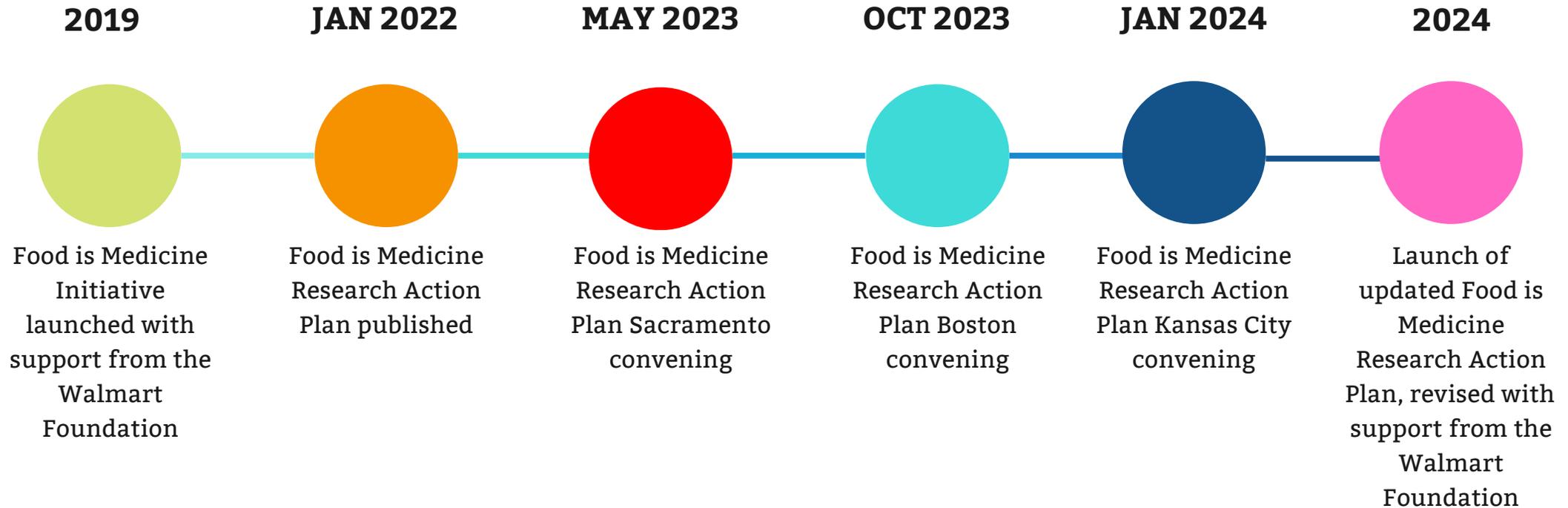
About 8.06M Latinos lack legal status in the U.S.

FOOD&SOCIETY

aspen institute

bit.ly/FoodisMedicineResearch

Food & Society's Work



FOOD & SOCIETY

◆ aspen institute

bit.ly/FoodisMedicineResearch

Q&A

Thank You



The Food is Medicine Research Action Plan can be downloaded from:

[AspenInstitute.org/food](https://www.aspeninstitute.org/food)

Email us at foodandsociety@aspeninstitute.org

