When you hear the term “Food is Medicine” what other words come to mind?

Using Food is Medicine to Achieve Nutrition Equity in Oklahoma

Marianna Wetherill, PhD, MPH, RDN/LD, DipACLM

OKAND SPRING CONVENTION 2025 | APRIL 11, 2025 | 10:45-11:45 am

Hello!

Marianna Wetherill, PhD, MPH, RDN/LD

Associate Professor
Henry Zarrow Presidential Professor
Health Promotion Sciences, Hudson College of Public Health
Health Promotion Research Center

Director, Root Cause Food Equity Lab

George Kaiser Family Foundation Chair, Population Healthcare
Associate Director, OU Culinary Medicine Program
Family & Community Medicine, OU-TU School of Community Medicine

University of Oklahoma Tulsa Schusterman Center

Speaker Disclosures

- **I receive funding for the design, implementation, and evaluation of food is medicine.**
- **I believe access to healthy food--with dignity--is a human right.**
- **I have been doing this work for over 20 years.**
- **Current Financial Support:**
  - **Research Funding:** National Institutes of Health; USDA (sub-recipient); Morningcrest Foundation; Ascension St. John
  - **Consultant:** Sunflower Foundation
- **Previous Financial Funding:**
  - **Research Funding:** HRSA; Ardmore Institute of Health; CDC
  - **Consultant:** Feeding America; Aspen Institute Food & Society Program


Top Ramen
ORIENTAL Flavor
Top Ramen
CHICKEN VEGETABLE Flavor
Top Ramen
Picante BEEF Flavor
Top Ramen
SPICY CHILE CHICKEN Flavor
Top Ramen
CAJUN CHICKEN Flavor
Top Ramen
CREAMY CHICKEN Flavor
Top Ramen
CHICKEN Flavor
Top Ramen
SHRIMP Flavor
Top Ramen
BEEF Flavor
Top Ramen
TERIYAKI CHICKEN Flavor
Top Ramen
PORK Flavor
Top Ramen
CHICKEN MUSHROOM Flavor

How is Brian's food situation affecting his health and wellbeing?

Is Brian…

…Food insecure?

…Nutrition insecure?

…A "good" candidate for "food is medicine"?

Food Insecurity & Chronic Disease Disparities

An update to this article is included at the end

The Journal of Nutrition
Nutrition and Disease

Food Insecurity Is Associated with Chronic Disease among Low-Income NHANES Participants[1,2]

Hilary K. Seligman,[3,4]* Barbara A. Laraia,[4] and Margot B. Kushel[3]

[3]Department of Medicine, San Francisco General Hospital, University of California, San Francisco, CA 94143; and [4]Department of Medicine, Division of Prevention Sciences, University of California San Francisco, San Francisco, CA 94143

Abstract

Food insecurity refers to the inability to afford enough food for an active, healthy life. Numerous studies have shown associations between food insecurity and adverse health outcomes among children. Studies of the health effects of food insecurity among adults are more limited and generally focus on the association between food insecurity and self-reported disease. We therefore examined the association between food insecurity and clinical evidence of diet-sensitive chronic disease, including hypertension, hyperlipidemia, and diabetes. Our population-based sample included 5094 poor adults aged 18–65 y participating in the NHANES (1999–2004 waves). We estimated the association between food insecurity (assessed by the Food Security Survey Module) and self-reported or laboratory/examination evidence of diet-sensitive chronic disease using Poisson regression. We adjusted the models to account for differences in age, gender, race, educational attainment, and income. Food insecurity was associated with self-reported hypertension [adjusted relative risk (ARR) 1.20; 95% CI, 1.04–1.38] and hyperlipidemia (ARR 1.30; 95% CI, 1.09–1.55), but not diabetes (ARR 1.19; 95% CI, 0.89–1.58). Food insecurity was associated with laboratory or examination evidence of hypertension (ARR 1.21; 95% CI, 1.04–1.41) and diabetes (ARR 1.48; 95% CI, 0.94–2.32). The association with laboratory evidence of diabetes did not reach significance in the fully adjusted model unless we used a stricter definition of food insecurity (ARR 2.42; 95% CI, 1.44–4.08). These data show that food insecurity is associated with cardiovascular risk factors. Health policy discussions should focus increased attention on ability to afford high-quality foods for adults with or at risk for chronic disease. J. Nutr. 140: 304–310, 2010.

Introduction

Food insecurity refers to the inability to afford nutritionally adequate and safe foods (1). In 2008, more than 14% of all U.S. households, 49 million people, were food insecure (2). Most adults living in food-insecure households report being unable to afford balanced meals, worrying about the adequacy of their food supply, running out of food, and cutting the size of meals or skipping meals. At the most severe levels of food insecurity, many adults report being hungry because there was not enough money for food and not eating for an entire day (2). Each episode of food insecurity is generally short in duration. However, the dietary changes associated with food insecurity may persist over extended periods, because food-insecure households often experience repeated food budget shortages. On average, households that report being food insecure at some time during the year are food insecure for 7 mo during the year (2).

Common household responses to inadequate food supplies include food budget adjustments, reduced food intake, and alterations in types of food served (3–6). Dietary variety decreases and consumption of energy-dense foods increases. These energy-dense foods, including refined grains, added sugars, and added saturated/trans fats, tend to be of poor nutritional quality and less expensive calorie-for-calorie than alternatives (7,8). U.S. adults living in food-insecure households consume fewer weekly servings of fruits, vegetables, and dairy and lower levels of micronutrients, including the B complex vitamins, magnesium, iron, zinc, and calcium (5,9,10). These dietary patterns are linked to the development of chronic disease, including hypertension, hyperlipidemia, and diabetes (11,12).

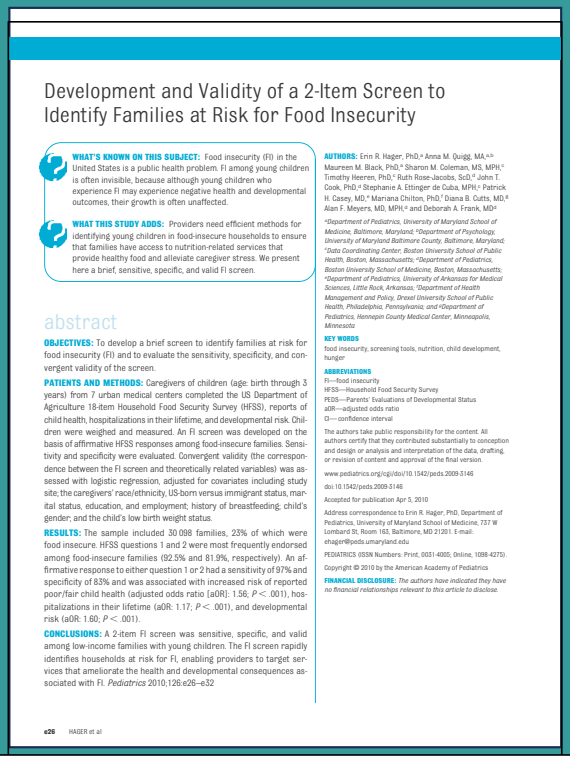
There have been many studies suggesting that food insecurity among children has adverse health effects, including increased rates of iron-deficiency anemia, acute infection, chronic illness, and developmental and mental health problems (13–19). A

1 Supported by NIH/National Center for Research Resources/Office of the Director University of California San Francisco-Clinical and Translational Science Institute grant no. KL2 RR024130 and by a Hellman Family Award for Early Career Faculty (to H.K. Seligman). The paper contents are solely the responsibility of the authors and do not necessarily represent the official views of the NIH.
2 Author disclosures: H. K. Seligman, B. A. Laraia, and M. B. Kushel, no conflicts of interest.
* To whom correspondence should be addressed. E-mail: hseligman@medsfgh.ucsf.edu.

Manuscript received July 6, 2009. Initial review completed August 21, 2009. Revision accepted November 30, 2009.
First published online December 23, 2009; doi:10.3945/jn.109.117523.

Food insecurity affects:

- 13% of US households overall
- 20% of adults with diabetes
- 25% of adults with poor glycemic control
- 22%-33% of households with a disabled adult
- Up to 70% people accessing mental health services



Development and Validity of a 2-Item Screen to Identify Families at Risk for Food Insecurity

WHAT'S KNOWN ON THIS SUBJECT: Food insecurity (FI) in the United States is a public health problem. FI among young children is often invisible, because although young children who experience FI may experience negative health and developmental outcomes, their growth is often unaffected.

WHAT THIS STUDY ADDS: Providers need efficient methods for identifying young children in food-insecure households to ensure that families have access to nutrition-related services that provide healthy food and alleviate caregiver stress. We present here a brief, sensitive, specific, and valid FI screen.

AUTHORS: Erin R. Hager, PhD,[a] Anna M. Quigg, MA,[a,b] Maureen M. Black, PhD,[a] Sharon M. Coleman, MS, MPH,[c] Timothy Heeren, PhD,[c] Ruth Rose-Jacobs, ScD,[d] John T. Cook, PhD,[e] Stephanie A. Ettinger de Cuba, MPH,[c] Patrick H. Casey, MD,[a] Mariana Chilton, PhD,[f] Diana B. Cutts, MD,[g] Alan F. Meyers, MD, MPH,[d] and Deborah A. Frank, MD[d]

[a]Department of Pediatrics, University of Maryland School of Medicine, Baltimore, Maryland; [b]Department of Psychology, University of Maryland Baltimore County, Baltimore, Maryland; [c]Data Coordinating Center, Boston University School of Public Health, Boston, Massachusetts; [d]Department of Pediatrics, Boston University School of Medicine, Boston, Massachusetts; [e]Department of Pediatrics, University of Arkansas for Medical Sciences, Little Rock, Arkansas; [f]Department of Health Management and Policy, Drexel University School of Public Health, Philadelphia, Pennsylvania; and [g]Department of Pediatrics, Hennepin County Medical Center, Minneapolis, Minnesota

KEY WORDS
food insecurity, screening tools, nutrition, child development, hunger

ABBREVIATIONS
FI—food insecurity
HFSS—Household Food Security Survey
PEDS—Parents' Evaluations of Developmental Status
aOR—adjusted odds ratio
CI—confidence interval

abstract

OBJECTIVES: To develop a brief screen to identify families at risk for food insecurity (FI) and to evaluate the sensitivity, specificity, and convergent validity of the screen.

PATIENTS AND METHODS: Caregivers of children (age: birth through 3 years) from 7 urban medical centers completed the US Department of Agriculture 18-item Household Food Security Survey (HFSS), reports of child health, hospitalizations in their lifetime, and developmental risk. Children were weighed and measured. An FI screen was developed on the basis of affirmative HFSS responses among food-insecure families. Sensitivity and specificity were evaluated. Convergent validity (the correspondence between the FI screen and theoretically related variables) was assessed with logistic regression, adjusted for covariates including study site; the caregivers' race/ethnicity, US-born versus immigrant status, marital status, education, and employment; history of breastfeeding; child's gender; and the child's low birth weight status.

RESULTS: The sample included 30 098 families, 23% of which were food insecure. HFSS questions 1 and 2 were most frequently endorsed among food-insecure families (92.5% and 81.9%, respectively). An affirmative response to either question 1 or 2 had a sensitivity of 97% and specificity of 83% and was associated with increased risk of reported poor/fair child health (adjusted odds ratio [aOR]: 1.56; $P < .001$), hospitalizations in their lifetime (aOR: 1.17; $P < .001$), and developmental risk (aOR: 1.60; $P < .001$).

CONCLUSIONS: A 2-item FI screen was sensitive, specific, and valid among low-income families with young children. The FI screen rapidly identifies households at risk for FI, enabling providers to target services that ameliorate the health and developmental consequences associated with FI. *Pediatrics* 2010;126:e26–e32

www.pediatrics.org/cgi/doi/10.1542/peds.2009-3146
doi:10.1542/peds.2009-3146
Accepted for publication Apr 5, 2010

Address correspondence to Erin R. Hager, PhD, Department of Pediatrics, University of Maryland School of Medicine, 737 W Lombard St, Room 163, Baltimore, MD 21201. E-mail: ehager@peds.umaryland.edu

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

FINANCIAL DISCLOSURE: *The authors have indicated they have no financial relationships relevant to this article to disclose.*

The Hunger Vital Sign™ identifies households as being at risk for food insecurity if they answer that either or both of the following two statements is 'often true' or 'sometimes true' (vs. 'never true'):

> "Within the past 12 months we worried whether our food would run out before we got money to buy more."

> "Within the past 12 months the food we bought just didn't last and we didn't have money to get more."

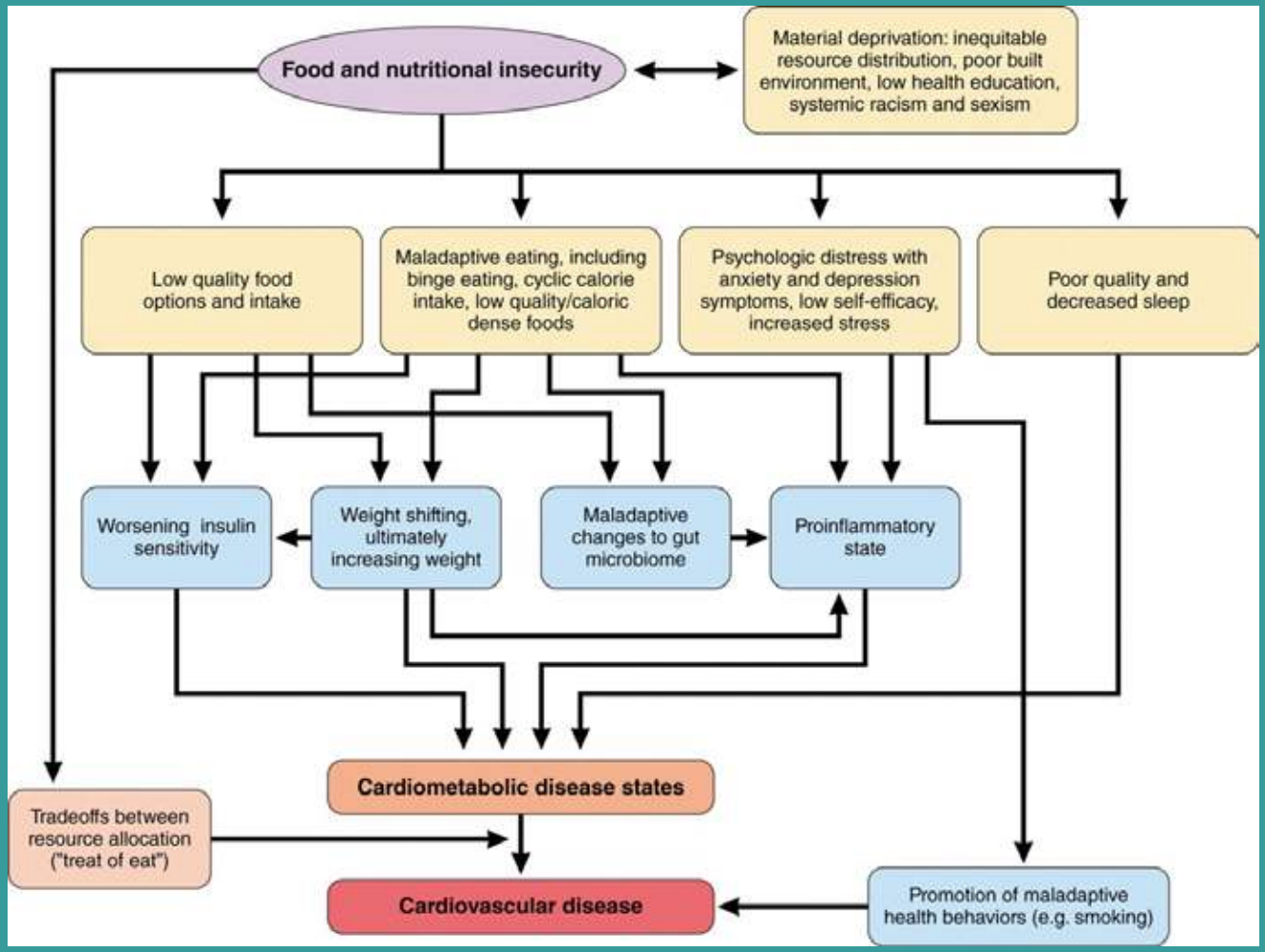


Figure 2. Mechanisms by which food and nutrition insecurity connect to cardiometabolic disease (CMD)

Brandt EJ, Mozaffarian D, Leung CW, Berkowitz SA, Murthy VL. Diet and Food and Nutrition Insecurity and Cardiometabolic Disease. Circulation Research. 2023/06/09 2023;132(12):1692-1706. doi:10.1161/CIRCRESAHA.123.322065

What is food security?

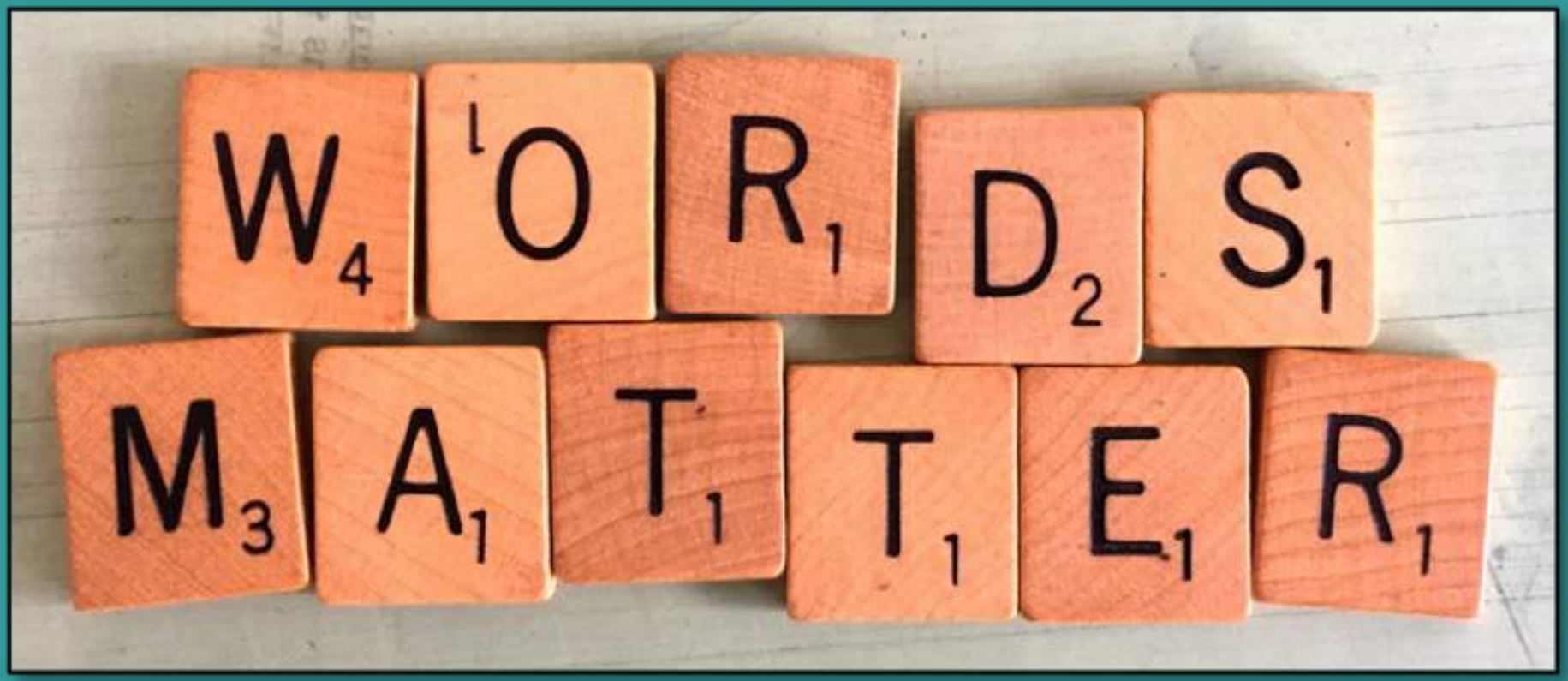
Access by all people at all times to enough food for an active, healthy life.

-USDA Definition, 2012

What is nutrition security?

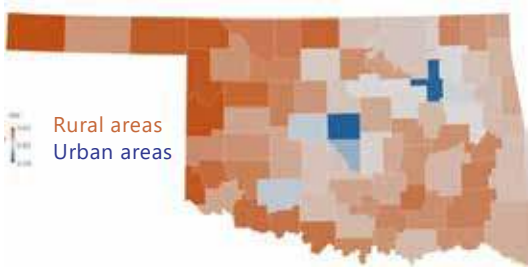
Nutrition security builds on food security by focusing on how the quality of our diets can help reduce diet-related diseases. It also ***emphasizes equity*** and tackling long-standing health disparities.

-USDA Definition, 2021


WORDS
MATTER

Oklahoma Landscape

A primarily rural state,
Oklahoma ranks 45th nationally for food security.



16.7% Food Insecurity Rate overall

1 in 4 children

81% of OK SNAP customers don't purchase **healthy food** because it's **too expensive**

Poor Dietary Quality

49th
Fruit & Vegetable Consumption

Only 5%
of OK adults with **diabetes or hypertension** meeting **minimum of 5 fruit/veg** daily

Oklahoma Ranks Poorly in Nutrition-related Chronic Health Conditions

43rd
High Blood Pressure

48th
Obesity

America's Health Rankings analysis of U.S. Department of Agriculture, Household Food Security in the United States Report Series, United Health Foundation, AmericasHealthRankings.org, accessed 2024.
https://map.feedingamerica.org/county/2022/overall/oklahoma
Whelan, L, Hartwell, M, Bell, SB Thomas, V, Huff, D., Wetherill, MS. Lifestyle Risk Factors and Chronic Disease in Oklahoma: A secondary analysis of the Behavioral Risk Factor Surveillance Survey 2017. JOSMA. 2019 October; 112(9): 349-356.

What is Social Policy?

- Society's' response to social needs
- Policies that affect the living conditions needed for human welfare
- Policy approaches to the same social problem can vary widely, depending on the lens applied

Examples:

- Health care
- Education
- Labor (wages and work conditions)
- Food systems
- Racism
- Same-sex marriage
- Legalization of marijuana

IMPROVING THE COLLECTION OF

Social Determinants of Health (SDOH) Data with ICD-10-CM Z Codes

What Are Z Codes?

- SDOH-related Z codes range from ICD-10-CM categories Z55-Z65 and are used to document SDOH data (e.g., housing, food insecurity, lack of transportation)
- Z codes refer to factors influencing health status or reasons for contact with health services that are not classifiable elsewhere as diseases, injuries, or external causes

What Are SDOH & Why Collect Them?

- SDOH are the conditions in the environment where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks[1]
- The World Health Organization (WHO) estimates that SDOH accounts for **30-55% of health outcomes**[2]

Using Z Codes for SDOH

- SDOH information can be collected before, during, or after a health care encounter through structured health risk assessments and screening tools
- These codes should be assigned only when the documentation specifies that the patient has an associated problem or risk factor that influences the patient's health
- Coding professionals may utilize documentation of social information from social workers, community health workers, case managers, or nurses, if their documentation is included in the official medical record

- SDOH information can be collected through person-provider interaction or self-reported, as long as it is signed-off on and incorporated into the medical record by a clinician or provider
- It is important to screen for SDOH information at each health care encounter to understand circumstances that may have changed in the patient's status

VIEW JOURNEY MAP

Collecting SDOH can improve equity in health care delivery and research by:

- Empowering providers to identify and address health disparities (e.g., care coordination and referrals)
- Supporting quality measurement
- Supporting planning and implementation of social needs interventions
- Identifying community and population needs
- Monitoring SDOH intervention effectiveness for patient outcomes
- Utilizing data to advocate for updating and creating new policies

ICD-10-CM Z Codes Update

- New SDOH Z codes may become effective each April 1 and October 1. New codes are announced prior to their effective date on CDC website
- Use the CDC National Center for Health Statistics ICD-10-CM Browser tool to search for all the current Z codes.
- Join the public process for SDOH code development and approval through the ICD-10-CM Coordination and Maintenance Committee

[1] Healthy People 2030 [2] World Health Organization

go.cms.gov/OMH

For Questions Contact: The CMS Health Equity Technical Assistance Program | ICD-10-CM Official Guidelines for Coding and Reporting FY 2024

CMS

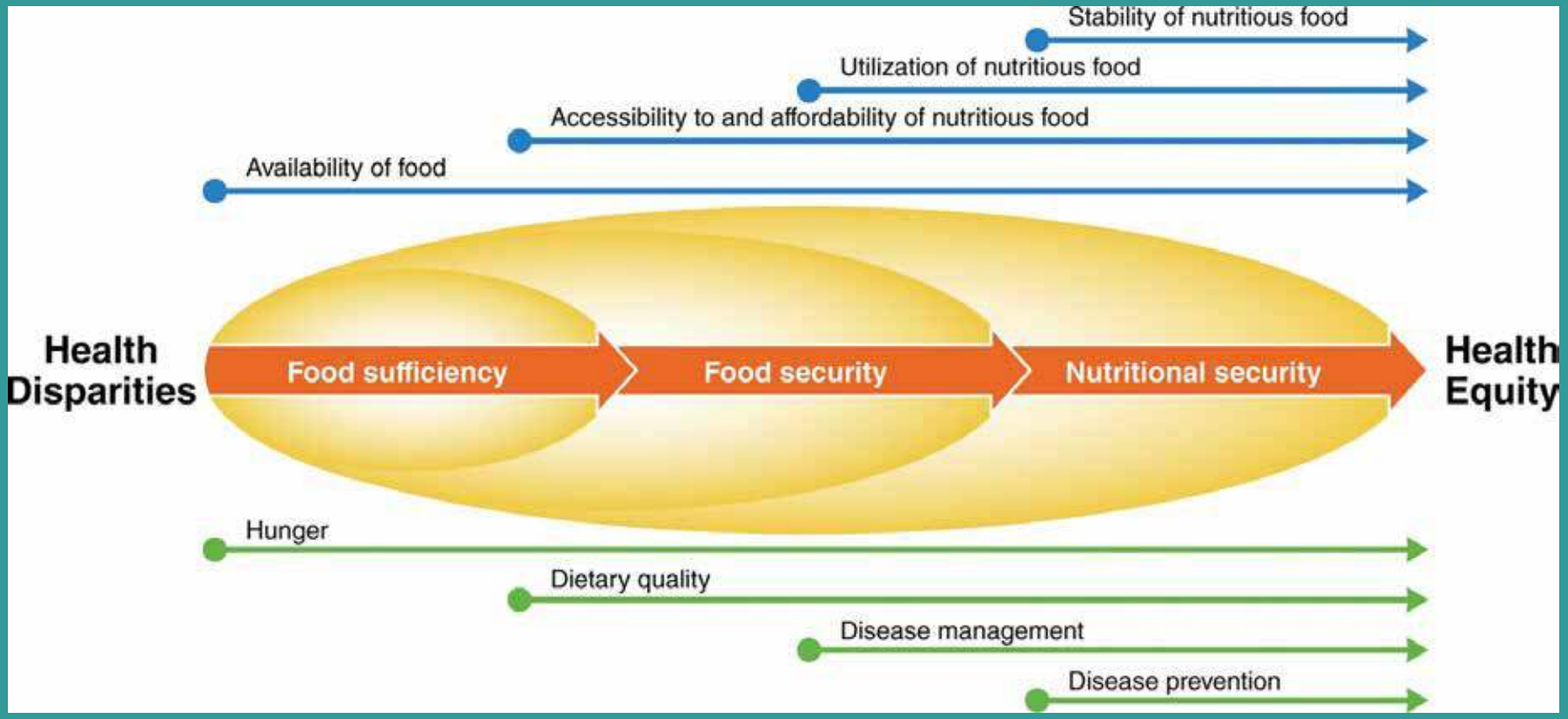
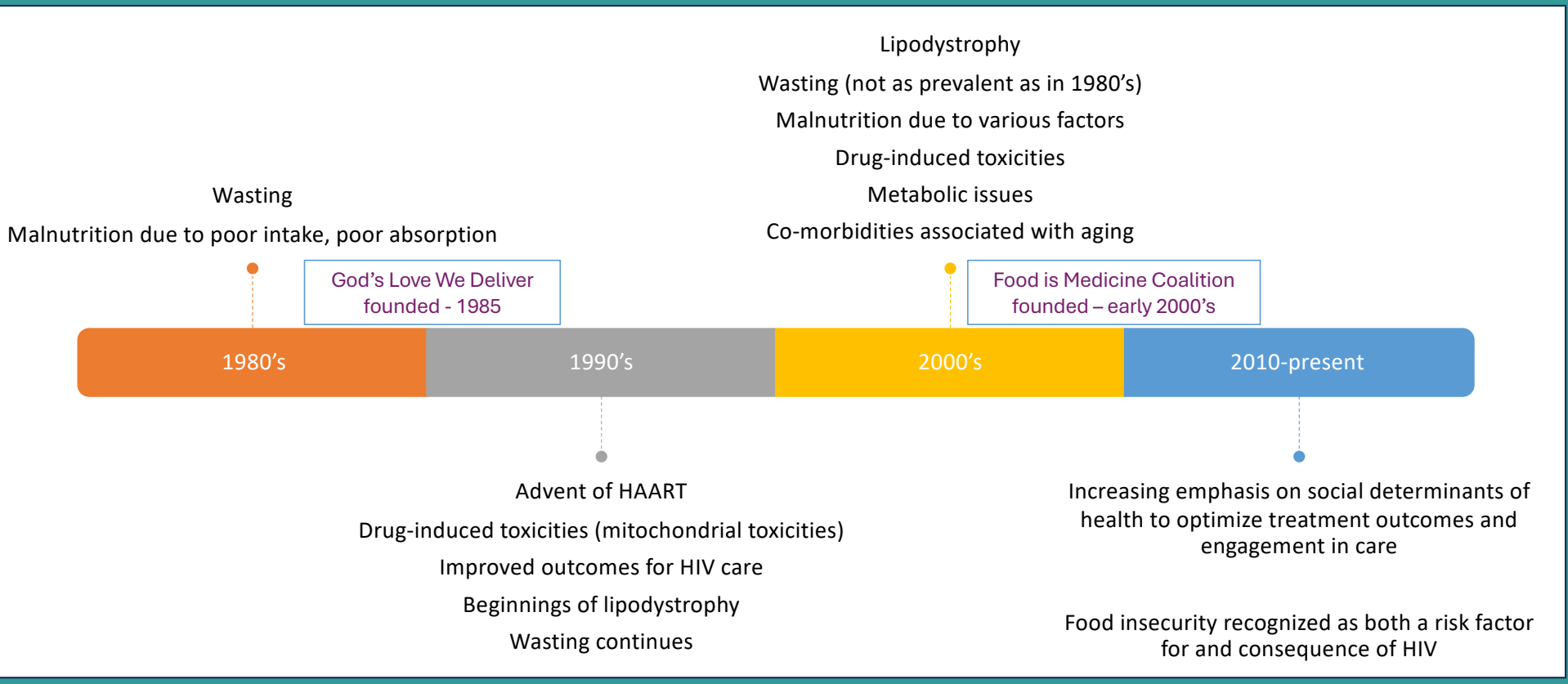


Figure 1. Moving from food sufficiency to nutrition security in the United States.

Brandt EJ, Mozaffarian D, Leung CW, Berkowitz SA, Murthy VL. Diet and Food and Nutrition Insecurity and Cardiometabolic Disease. Circulation Research. 2023/06/09 2023;132(12):1692-1706. doi:10.1161/CIRCRESAHA.123.322065

The origins of food is medicine began in HIV care: Where Have We Been & Where Are We Headed?

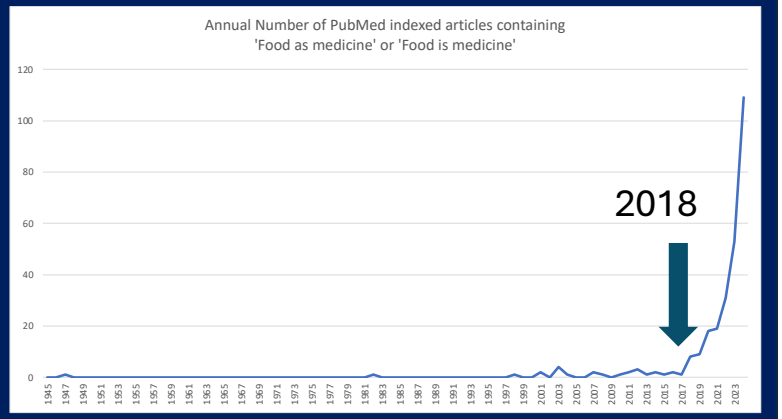


Big Picture:
Food is Medicine Nationally

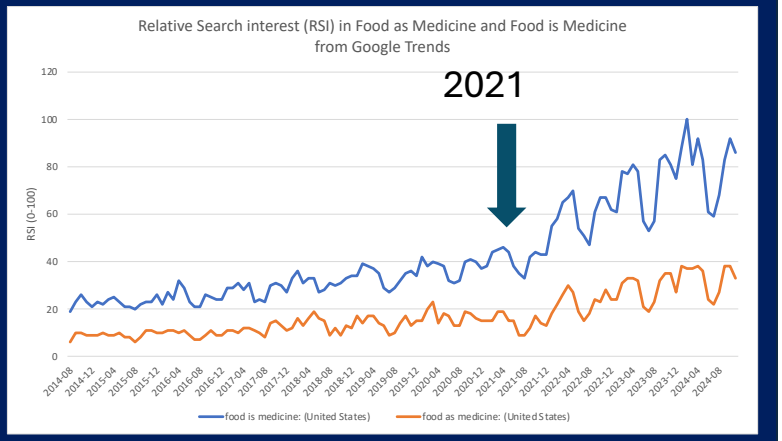
2022 – 1st Edition

2024 – 2nd Edition

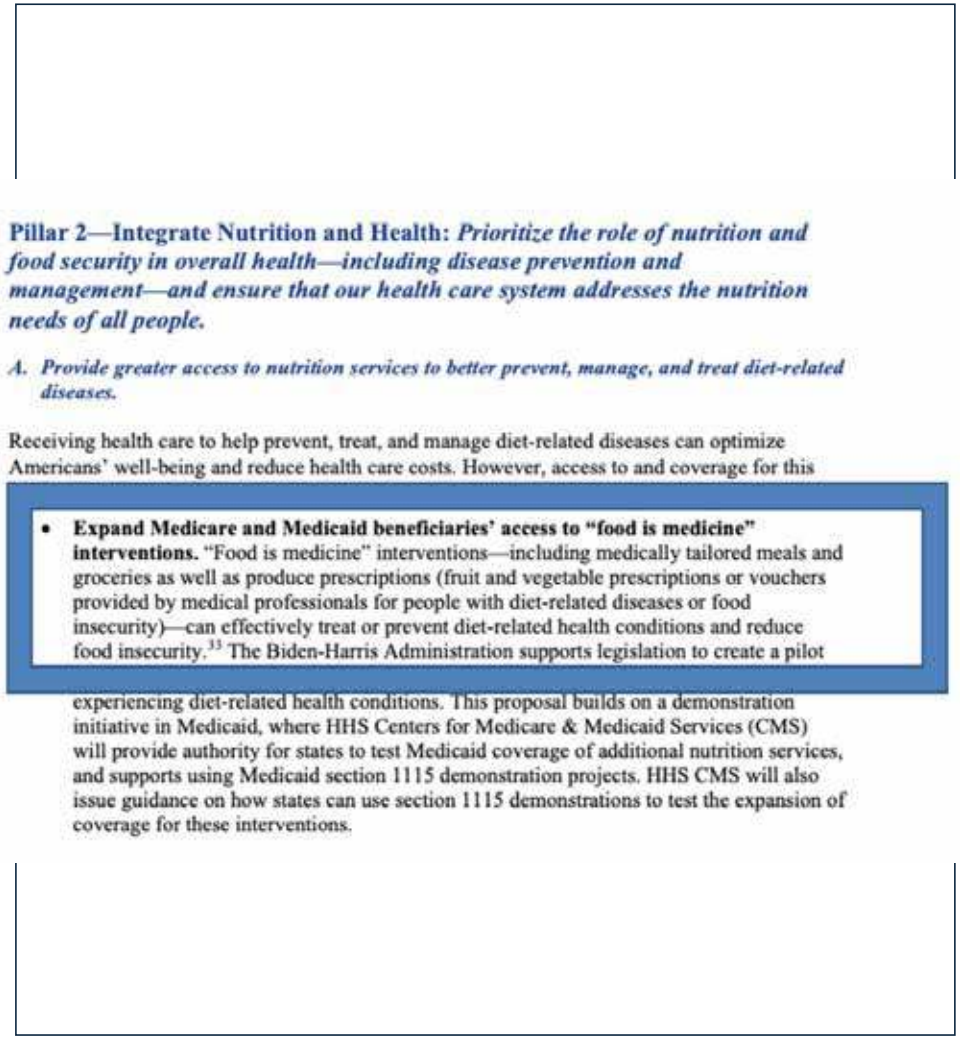
Goal of this Work:
To Disseminate Collective Learnings and Identify Knowledge Gaps to More Rapidly Advance Evidence-Based Best Practices



PubMed indexed articles (1945-2024)



Google search trends (2014-2024)



Pillar 2—Integrate Nutrition and Health: ***Prioritize the role of nutrition and food security in overall health—including disease prevention and management—and ensure that our health care system addresses the nutrition needs of all people.***

A. Provide greater access to nutrition services to better prevent, manage, and treat diet-related diseases.

Receiving health care to help prevent, treat, and manage diet-related diseases can optimize Americans' well-being and reduce health care costs. However, access to and coverage for this

- **Expand Medicare and Medicaid beneficiaries' access to "food is medicine" interventions.** "Food is medicine" interventions—including medically tailored meals and groceries as well as produce prescriptions (fruit and vegetable prescriptions or vouchers provided by medical professionals for people with diet-related diseases or food insecurity)—can effectively treat or prevent diet-related health conditions and reduce food insecurity.[33] The Biden-Harris Administration supports legislation to create a pilot

experiencing diet-related health conditions. This proposal builds on a demonstration initiative in Medicaid, where HHS Centers for Medicare & Medicaid Services (CMS) will provide authority for states to test Medicaid coverage of additional nutrition services, and supports using Medicaid section 1115 demonstration projects. HHS CMS will also issue guidance on how states can use section 1115 demonstrations to test the expansion of coverage for these interventions.

Food Is Medicine

- **Food is Medicine interventions** – a spectrum of programs and services that respond to the critical link between nutrition and health.
- Two components:
  - Provision of food that supports health, such as medically tailored meals or groceries, or food assistance, such as vouchers for produce
  - A nexus to the healthcare system

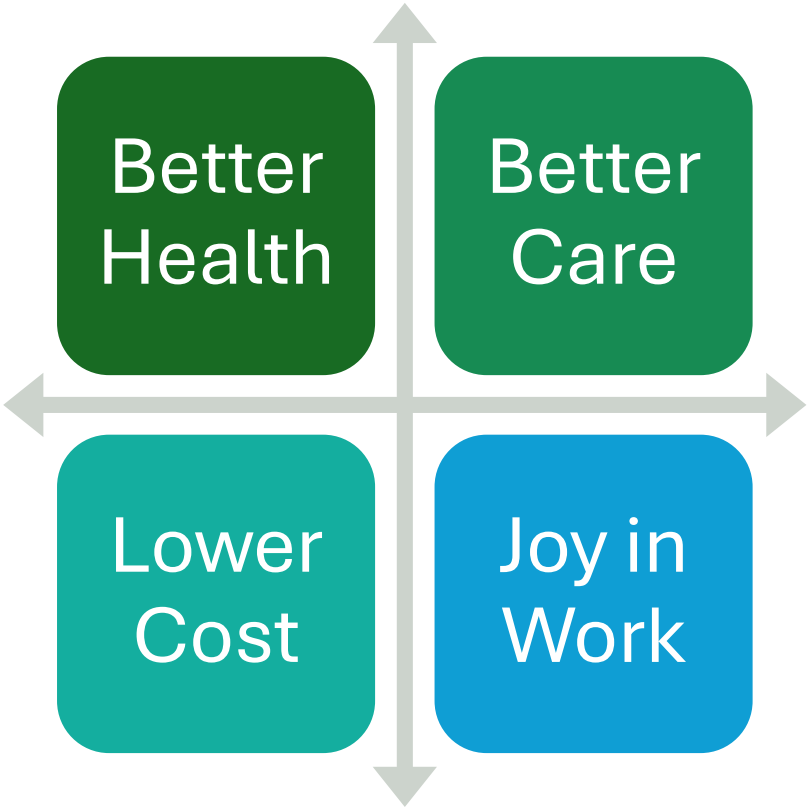
Source: Food is Medicine Research Action Plan. Aspen Institute Food & Society Program; White House National Strategy on Hunger, Nutrition, and Health

National FIM Research To Date:
What Do We Know? What Are the Knowledge Gaps?

Food Security, Dietary Quality, Med adherence, Glycemic control, blood pressure, weight, mental health

Healthcare cost

De-prescribing drugs



↓ Readmission

↑ Patient Satisfaction

↑ Provider Satisfaction, Purpose, and Meaning

Big Unknowns:

- Dose
- Frequency
- Duration
- Baseline Patient Health as Effect Modifier
- Clinical Roles

Bold denotes consistent findings

Food is Medicine Pyramid

HUNGER FREE OKLAHOMA

DOUBLE UP OKLAHOMA

FOOD

By Colin M. Schwartz, Alexa M. Wohrman, Emily J. Holubowich, Lisa D. Sanders, and Kevin G. Volpp

DOI: 10.1377/hlthaff.2024.01343
HEALTH AFFAIRS 44,
NO. 4 (2025): 406–412

POLICY INSIGHT

What Is 'Food Is Medicine,' Really? Policy Considerations On The Road To Health Care Coverage

Colin M. Schwartz (colin.schwartz@heart.org), American Heart Association, Washington, D.C.

Alexa M. Wohrman, American Heart Association, Huntington Beach, California.

Emily J. Holubowich, American Heart Association, Washington, D.C.

Lisa D. Sanders, American Heart Association, Atlanta, Georgia.

Kevin G. Volpp, University of Pennsylvania, Philadelphia, Pennsylvania.

ABSTRACT **Food Is Medicine interventions are increasingly gaining attention from policy makers, payers, and health care professionals as a promising approach to addressing diet-related chronic health conditions in the health care setting, given the increasing burden and cost of these conditions. The American Heart Association defines Food Is Medicine as the provision of healthy food such as medically tailored meals, medically tailored groceries, and produce prescriptions to treat or manage specific clinical conditions in a way that is integrated with and paid for by the health care sector. Importantly, Food Is Medicine is distinct from, yet complementary to, food and nutrition assistance programs and population-level healthy food policies and programs. In this article, we discuss the importance of this distinction and the prerequisites for successfully integrating Food Is Medicine interventions within the health care system: a standard definition of Food Is Medicine focused on medically tailored meals, medically tailored groceries, and produce prescriptions; a research base showing clinical effectiveness and cost-effectiveness; and implementation that ensures fidelity and quality.**

After a long history of Food Is Medicine initiatives showing promise to improve health outcomes, policy makers, payers, and health care professionals are considering Food Is Medicine as a clinically effective and cost-effective way to address diet-related chronic health conditions in the health care setting. This interest is largely driven by rising health care costs and poor health outcomes. An estimated 90 percent of the $4.5 trillion annual cost of health care in the United States is spent on medical care for chronic conditions, and for many of these conditions, diet is a major risk factor.[1] Despite spending the most on health care when compared with other high-income countries, the US ranks last on key health care outcomes.[2] Unhealthy diets are linked to poor health outcomes, which is concerning, as more than nine in ten people in the US eat less than the recommended amounts of fruit and vegetables and consume too much sodium, saturated fat, and calories.[3–5] There is also growing recognition that diet-related chronic conditions disproportionately affect historically underserved populations, with reduced access to healthy, safe, and affordable food playing an important role.[6]

Recognizing the inextricable link between nutrition and health, stakeholders and policy makers are considering future health care coverage of clinically effective and cost-effective food-based interventions as an approach to improving the treatment and management of chronic conditions. An inherent challenge is that Food Is Medicine as a health care intervention does not have a standard definition. Indeed, with its rise in popularity as a concept, we have observed stakeholders defining Food Is Medicine broadly, such as any food- or nutrition-related activity or intervention that promotes health and well-being.

> Clinicians, advocates, researchers, and policy makers should adopt a standard definition of Food Is Medicine that is focused on medically tailored meals, medically tailored groceries, and produce prescriptions.

Three Primary Food as Medicine Models

Medically-tailored meals

Medically-tailored groceries (food pharmacies)

Fruit & vegetable voucher programs

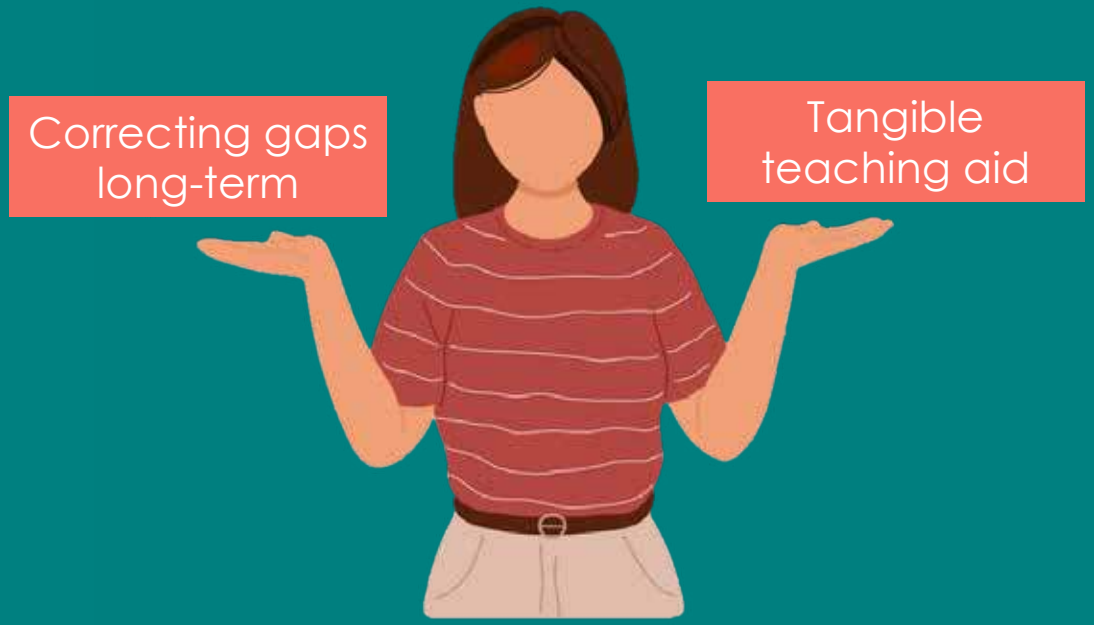
Medically-Tailored Meals

- Fully prepared meals designed by a Registered Dietitian Nutritionist (RDN)
- Address an individual's medical diagnosis, symptoms, allergies, medication management, and illness side effects

Medically-Tailored Groceries

- Distributions of unprepared foods for patients to prepare at home
- Includes produce, whole grains and legumes, and lean proteins
- All are foods considered essential to a healthy diet or for effective management of disease

Additional considerations: Medically-tailored groceries

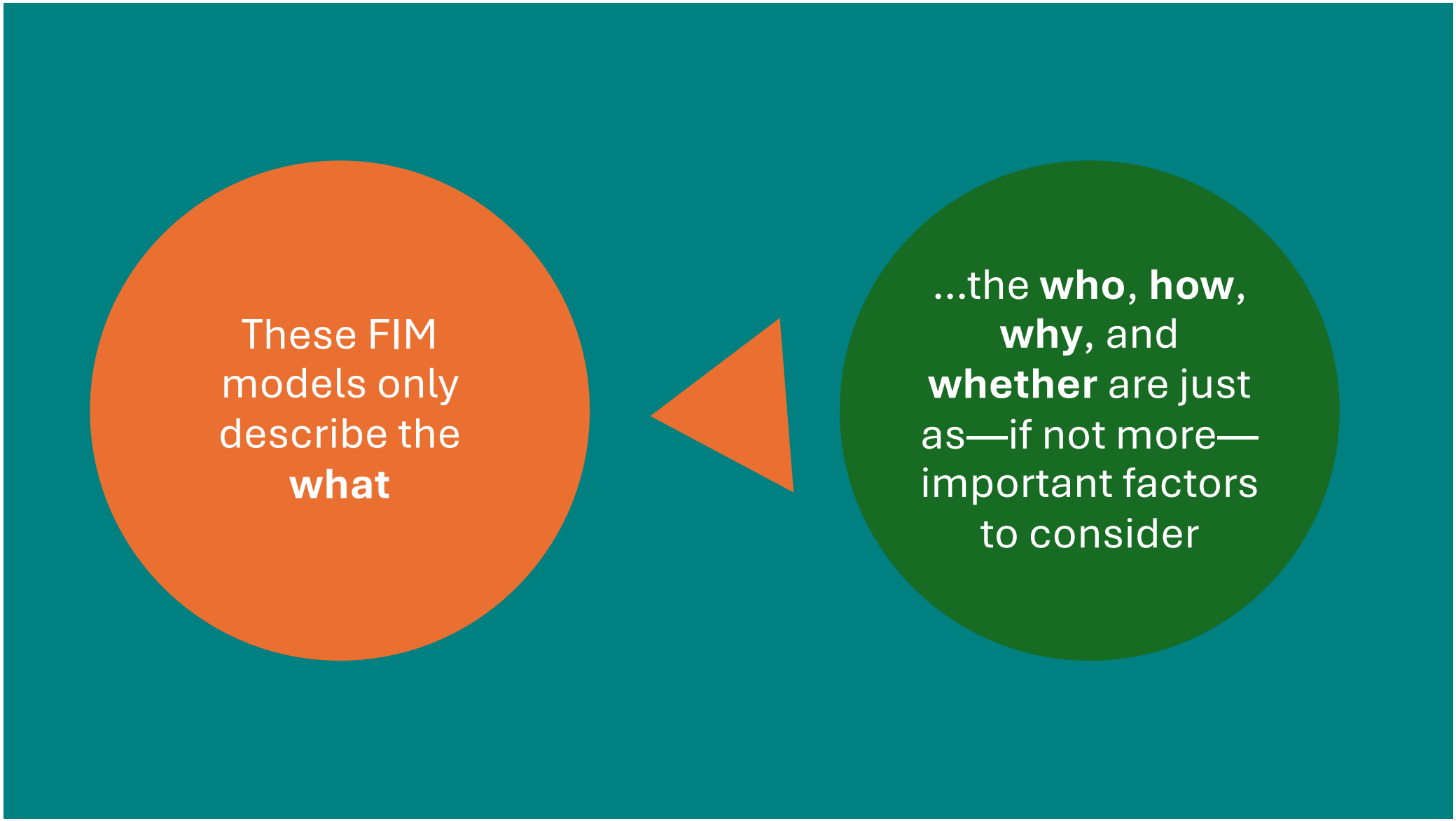


Fruit & Vegetable Vouchers

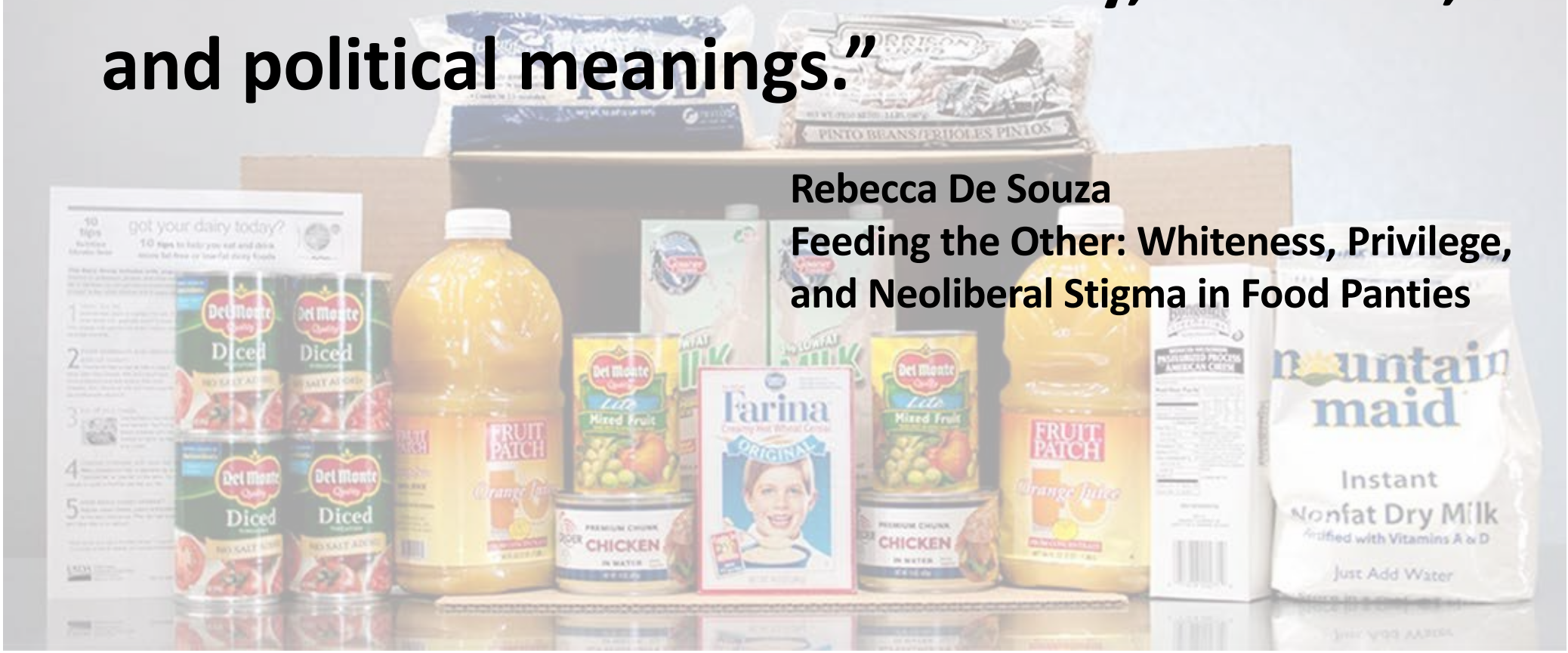
- Distributions of produce, or vouchers that can be redeemed for produce, made available to recipients based on a health condition or health risk.

Food is Medicine Project Scoping Worksheet

	Medically-tailored Meals	**Medically-tailored Groceries (e.g., food pharmacy)**	**Vouchers (e.g., produce prescription)**
Definition	Fully-prepared meals designed by a Registered Dietitian Nutritionist (RDN) that address an individual's medical diagnosis, symptoms, allergies, medication management, and illness side effects.	Unprepared foods for patients to prepare at home, with or without cooking tools and/or recipes designed to introduce patients to new diet or increase consumption of therapeutic diet.	Clinic-based distributions of vouchers to patients based on a health condition or health risk that can be redeemed for produce.
Program Effort (Labor, Coordination)	High	Moderate	Low
Patient Effort (Time, Energy)	Low	Moderate to High	Moderate to High
Type of Food	Ready to eat meals and snacks	Fruit, vegetables, whole grains, beans/lentils, low-fat dairy or dairy alternatives, lean proteins, low-sodium herbs/spices, no sugar added beverages, nutrition "boosters" (e.g., ground flaxseed)	Fruits; Vegetables
Typical "Dose" **Note: dose will be diluted if assistance is not based on household size, which will typically result in meals being shared with household members*	Large Nutritionally-balanced for macro- and micro-nutrient needs (67%-100% daily needs)	Moderate to Low 1-2 weeks' worth of food per month (sometimes designed to cover "SNAP gap")	Moderate to Low 1-2 daily servings of fruit or vegetable
Distribution Model	Delivered to patient's home or picked up at designated site	Distributed at clinic, at designated food pantry provider, or via home delivery	Redeemed at on-site clinic farmer's market or other designated partner site(s)
Assumptions	Patients will be at home to accept delivery or be able to pick up meals AND will eat the meal	Patients will pick up AND prepare AND eat the food	Patients will redeem the vouchers AND prepare AND eat the food


These FIM models only describe the **what**
...the **who**, **how**, **why**, and **whether** are just as—if not more—important factors to consider

“Food is inscribed with memory, histories, and political meanings.”



Rebecca De Souza
Feeding the Other: Whiteness, Privilege, and Neoliberal Stigma in Food Panties

Why I Hate Raisins: Natalie Diaz

Food apartheid is the result of intergenerational food systems oppression

"Systematic destruction of black self-determination to control one's food, hyper-saturation of destructive foods and predatory marketing, and blatantly discriminatory corporate controlled food system that results in [communities of color] suffering from some of the highest rates of heart disease and diabetes of all time."

This Land Is Not Your Land

A brief history of the US government appropriating farmland from people of color

1783: The United States, newly victorious in the Revolutionary War, begins to press for ownership of and access to Indigenous lands, ultimately seizing 1.5 billion acres over the next century.

1830: The Indian Removal Act allows the government to seize the lands of Native peoples in the East and South in exchange for a "colonization zone" west of the Mississippi River. The Trail of Tears soon follows.

1848: The lower Rio Grande Valley becomes part of the US. Anglos begin squatting on the land of Mexican subsistence ranchers, who eventually forfeit their holdings.

1862: Congress passes the First Homestead Act, allowing citizens to claim 160 acres in exchange for a small fee. Homesteaders dispossess Native Americans of 246 million acres in the West. Nearly a quarter of today's Americans are related to people who acquired land through these laws.

1865: Maj. General Sherman issues Special Field Orders, No. 15, providing thousands of Black Americans with 40-acre plots of tillable land. Part of a set of wartime declarations meant to help recently or soon-to-be-freed slaves, the orders were terminated after Lincoln's assassination.

1871: Congress passes the second Indian Appropriations Act, declaring that tribes are not independent nations, paving the way for more overt land takeovers.

1882: The Chinese Exclusion Act codifies economic resentment toward the 150,000 Chinese immigrants who had worked on railroads and farms in the West. Immigration from China is banned and Chinese workers are largely driven into urban enclaves. Japanese farmers soon begin to take their place in California's fields.

1887: The Dawes Act divides reservations into individual plots, often of unworkable land, cutting the overall acreage owned by Native Americans by more than 60 percent.

1901: President Theodore Roosevelt establishes 150 national forests, stripping Indigenous and Latino communities of access to traditional farming and hunting grounds.

1910: With approximately 100,000 acres of California farmland operated by Japanese Americans, the state passes the Alien Land Law, which bans the purchase and long-term leasing of land by those "ineligible for citizenship." By 1930, the farmland operated by Japanese Americans shrinks by almost 50 percent. Nine other states pass similar legislation.

Chinese American farmers in a hunger rally in Sacramento, California, in 1933

Japanese Americans forced to farm at the Tule Lake incarceration camp in 1942

Many Black farmers who moved north in the mid-1900s ended up taking jobs at factories like the Ford Motor Company complex in Dearborn, Michigan.

National Black Farmers Association President John Boyd and his mule, named Struggle, at a protest about the size of the *Pigford* settlement

1920: Black farmers own more land (15 million acres) and make up a greater share of the country's total farmers (14 percent) than they ever will over the next century.

1930s: White bureaucrats in county USDA offices systematically exclude Black farmers from New Deal subsidies, leading to a deepening concentration of wealth in large white-owned farms.

1942: Following the attack on Pearl Harbor, President Franklin D. Roosevelt signs Executive Order 9066, forcibly moving 110,000 people of Japanese descent from their homes and into concentration camps. Many lose their farms and businesses permanently.

1960s: As part of a broader backlash among the Southern white elite, "USDA programs were sharpened into weapons to punish civil rights activity," writes historian Pete Daniel. Cut off from federal aid, many Black growers are forced to sell or abandon their land, contributing to the migration of Black Southerners to the North.

1965: The Commission on Civil Rights finds that the USDA has discriminated against Black farmers. The department's first civil rights director is appointed, but his role is largely symbolic.

1999: In *Pigford v. Glickman*, a district court finds that the USDA has continued to discriminate against Black farmers and orders a $1 billion settlement. Of the almost 23,000 Black farmers who file claims, only 15,645 receive payments, most receiving $50,000 each.

2010s: Some Native tribes ask people to donate a yearly "land tax" as reparations. A woman in Utah pays for her great-grandfather's profiteering by transferring $250,000 to the Ute Tribe. A farmer in Nebraska signs a deed to return a 1.6-acre plot of native corn to the Ponca Tribe.

2017: Only 1.4 percent of all US farmers are Black. They collectively receive $65 million in annual farm subsidies, while white farmers receive $11.3 billion.

2020: The proposed Justice for Black Farmers Act aims to correct "historic discrimination" in federal subsidies and lending that has resulted in the loss of millions of acres in farmland and "robbed Black farmers and their families of hundreds of billions of dollars of inter-generational wealth." The bill would devote $8 billion annually to buying farmland and granting it to Black farmers.

—Andrea Guzman and Piper McDaniel

Cooper D. What is Food Justice? Dara Cooper. http://www.daracooper.com/food-justice-blog–more/what-is-food-justice. Published 2017.

Policy Engagement

Big "P" Policy Engagement

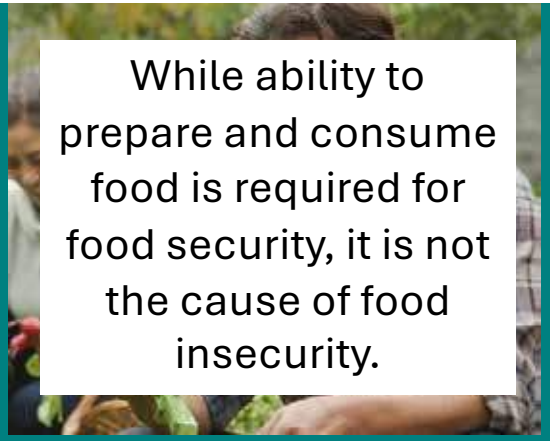
- National, state, or city governmental policy change
- Action by a governmental body(s)
- Mandatory or incentivized

Little "p" Policy Engagement

- Institution, department, or agency, and generally influence organizational practices
- Program and practices that are institutionalized
- Mandatory or incentivized

The impact of policy change is far reaching and can change systems and affect population health.

If They Only Knew



While ability to prepare and consume food is required for food security, it is not the cause of food insecurity.

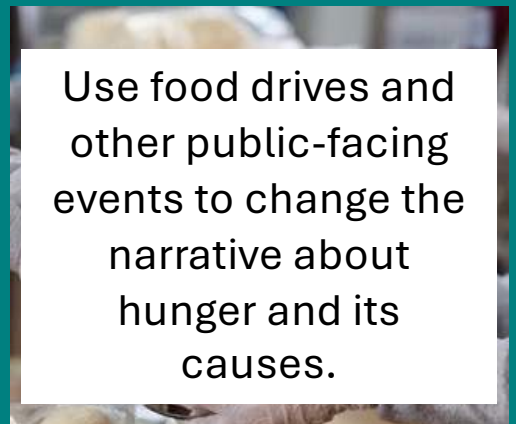
Good Food vs. Bad Food

Explore, appreciate, elevate, and invest in BIPOC foodways in food procurement, distribution, and educational programming.

Failure to Listen

Actively place community stakeholders in leadership and other decision-making positions;
Support agendas established by individual communities themselves.

False Food Narratives for Addressing Food Access & Nutrition Disparities



Use food drives and other public-facing events to change the narrative about hunger and its causes.

Focus on Food Charity

Award grants to community partners operating in affected areas; employ BIPOC to design and implement programs.

Communities Can't Take Care of Themselves

Prioritize community wealth-building strategies;
Explore alternative grocery models (co-op and not-for-profit grocery stores);
Use correct term of food apartheid instead of food deserts

Built It & They Will Come

Taken from: Identifying and Countering White Supremacy Culture in Food Systems

Case Study Discussion

-1- **Food Pharmacy Initiative**

There was rising controversy as to whether nonprofit hospitals provided enough community benefits. Most benefits were limited to charity care, and little spending led to community health improvement. In response, the Affordable Care Act mandated that nonprofit hospitals conduct a community health needs assessment and implement community health strategies, establish written policy for medically necessary and emergency care, and placed limits on billing and collection requirements. There are no minimum community benefits that a hospital must provide. Nevertheless, there are now incentives to work with community partners to improve community health.

A representative from an internal medicine clinic approaches their regional food bank with the idea to distribute healthy foods to Medicaid patients with hypertension. They believe this type of initiative will improve quality outcomes, including blood pressure control. The community has a primarily high Medicaid participant population, with every 1 in 5 individuals in the area eligible for services. The clinic's patient population is primarily 30% Hispanic/Latino, 40% Black, and 30% white.

To kickstart the project started, the clinic's dietitian works with the food bank to identify Dietary Approaches for Stopping Hypertension (DASH) diet-appropriate foods to include in the medically tailored food boxes. DASH guidelines encourage the consumption of vegetables, fruits, and low-fat dairy foods. There is also an emphasis on moderate consumption of whole grains, fish, poultry, beans, and nuts. The clinic's dietitian creates and develops recipe cards for patients that highlight key ingredients in each box. All eligible patients must have a hypertension diagnosis, receive Medicaid, and be an active patient at the clinic. Patients who enroll in the program will receive one box of pre-selected DASH-appropriate foods each month regardless of household size. Boxes are distributed at the clinic on designated days each week based on clinic staffing availability. The clinic decides that for patients to receive their food box each month, they must attend all scheduled medical appointments as well as comply with prescribed medications and services.

The clinic finds that participants are quick to sign up for their first box, but soon discover that many become ineligible for additional boxes due to violation of rules for program participation (e.g., missed medical appointments, lapsed prescription refills, etc.). For patients who meet participation requirements, they report not consuming all the food for various reasons (e.g., it does not meet their cultural needs, it takes too long to prepare, or food is shared with friends, family, or neighbors). After 12 months, the pilot program is ended due to low program retention and no improvements in the clinic's quality improvement metrics for blood pressure control. The clinical stakeholders conclude that patients are not interested in changing their diets.

DISCUSSION QUESTIONS

Part I: What is the Big P policy at play here? How has the Big P policy influenced little p policy (i.e., programmatic decisions) of the food bank? What stereotypes or damaged narrative frameworks are used to describe the "problem?"

Part II: What white supremacy food narratives appear in the proposed solution to the problem?

Part III: In this scenario, is the food bank an active or passive partner in the initiative? What little "p" policy changes could occur to make the program more equitable? How could the food bank work with the clinical partner to apply equity principles in the redesign of this program, or others like it in the future?

- What is the Big “P” policy at play here?
- How has the Big P policy influenced little p policy (i.e., programmatic decisions) of the food bank?

Case Study Discussion

-1- **Food Pharmacy Initiative**

There was rising controversy as to whether nonprofit hospitals provided enough community benefits. Most benefits were limited to charity care, and little spending led to community health improvement. In response, the Affordable Care Act mandated that nonprofit hospitals conduct a community health needs assessment and implement community health strategies, establish written policy for medically necessary and emergency care, and placed limits on billing and collection requirements. There are no minimum community benefits that a hospital must provide. Nevertheless, there are now incentives to work with community partners to improve community health.

A representative from an internal medicine clinic approaches their regional food bank with the idea to distribute healthy foods to Medicaid patients with hypertension. They believe this type of initiative will improve quality outcomes, including blood pressure control. The community has a primarily high Medicaid participant population, with every 1 in 5 individuals in the area eligible for services. The clinic's patient population is primarily 30% Hispanic/Latino, 40% Black, and 30% white.

To kickstart the project started, the clinic's dietitian works with the food bank to identify Dietary Approaches for Stopping Hypertension (DASH) diet-appropriate foods to include in the medically tailored food boxes. DASH guidelines encourage the consumption of vegetables, fruits, and low-fat dairy foods. There is also an emphasis on moderate consumption of whole grains, fish, poultry, beans, and nuts. The clinic's dietitian creates and develops recipe cards for patients that highlight key ingredients in each box. All eligible patients must have a hypertension diagnosis, receive Medicaid, and be an active patient at the clinic. Patients who enroll in the program will receive one box of pre-selected DASH-appropriate foods each month regardless of household size. Boxes are distributed at the clinic on designated days each week based on clinic staffing availability. The clinic decides that for patients to receive their food box each month, they must attend all scheduled medical appointments as well as comply with prescribed medications and services.

The clinic finds that participants are quick to sign up for their first box, but soon discover that many become ineligible for additional boxes due to violation of rules for program participation (e.g., missed medical appointments, lapsed prescription refills, etc.). For patients who meet participation requirements, they report not consuming all the food for various reasons (e.g., it does not meet their cultural needs, it takes too long to prepare, or food is shared with friends, family, or neighbors). After 12 months, the pilot program is ended due to low program retention and no improvements in the clinic's quality improvement metrics for blood pressure control. The clinical stakeholders conclude that patients are not interested in changing their diets.

DISCUSSION QUESTIONS

Part I: What is the Big P policy at play here? How has the Big P policy influenced little p policy (i.e., programmatic decisions) of the food bank? What stereotypes or damaged narrative frameworks are used to describe the "problem?"

Part II: What white supremacy food narratives appear in the proposed solution to the problem?

Part III: In this scenario, is the food bank an active or passive partner in the initiative? What little "p" policy changes could occur to make the program more equitable? How could the food bank work with the clinical partner to apply equity principles in the redesign of this program, or others like it in the future?

- What stereotypes or damaged narrative frameworks are used to describe the “problem?”
- What food narratives appear in the proposed solution to the problem?

Case Study Discussion

-1- **Food Pharmacy Initiative**

There was rising controversy as to whether nonprofit hospitals provided enough community benefits. Most benefits were limited to charity care, and little spending led to community health improvement. In response, the Affordable Care Act mandated that nonprofit hospitals conduct a community health needs assessment and implement community health strategies, establish written policy for medically necessary and emergency care, and placed limits on billing and collection requirements. There are no minimum community benefits that a hospital must provide. Nevertheless, there are now incentives to work with community partners to improve community health.

A representative from an internal medicine clinic approaches their regional food bank with the idea to distribute healthy foods to Medicaid patients with hypertension. They believe this type of initiative will improve quality outcomes, including blood pressure control. The community has a primarily high Medicaid participant population, with every 1 in 5 individuals in the area eligible for services. The clinic's patient population is primarily 30% Hispanic/Latino, 40% Black, and 30% white.

Excited to get the project started, the clinic's dietitian works with the food bank to identify Dietary Approaches for Stopping Hypertension (DASH) diet-appropriate foods to include in the medically tailored food boxes. DASH guidelines encourage the consumption of vegetables, fruits, and low-fat dairy foods. There is also an emphasis on moderate consumption of whole grains, fish, poultry, beans, and nuts. The clinic's dietitian creates and develops recipe cards for patients that highlight key ingredients in each box. All eligible patients must have a hypertension diagnosis, receive Medicaid, and be an active patient at the clinic. Patients who enroll in the program will receive one box of pre-selected DASH-appropriate foods each month regardless of household size. Boxes are distributed at the clinic on designated days each week based on clinic staffing availability. The clinic decides that for patients to receive their food box each month, they must attend all scheduled medical appointments as well as comply with prescribed medications and services.

The clinic finds that participants are quick to sign up for their first box, but soon discover that many become ineligible for additional boxes due to violation of rules for program participation (e.g., missed medical appointments, lapsed prescription refills, etc.). For patients who meet participation requirements, they report not consuming all the food for various reasons (e.g., it does not meet their cultural needs, it takes too long to prepare, or food is shared with friends, family, or neighbors). After 12 months, the pilot program is ended due to low program retention and no improvements in the clinic's quality improvement metrics for blood pressure control. The clinical stakeholders conclude that patients are not interested in changing their diets.

DISCUSSION QUESTIONS

Part I: What is the Big P policy at play here? How has the Big P policy influenced little p policy (i.e., programmatic decisions) of the food bank? What stereotypes or damaged narrative frameworks are used to describe the "problem?"

Part II: What white supremacy food narratives appear in the proposed solution to the problem?

Part III: In this scenario, is the food bank an active or passive partner in the initiative? What little "p" policy changes could occur to make the program more equitable? How could the food bank work with this clinical partner to apply equity principles in the redesign of this program, or others like it in the future?

- In this scenario, is the food bank an active or passive partner in the initiative?
- What little “p” policy changes could occur to make the program more equitable?
- How could the food bank work with this clinical partner to apply equity principles in the redesign of this program, or others like it in the future?

Pre-implementation planning is vital!

- What is the health problem(s) we are trying to address?
- What are the specific, evidence-based ways by which food or nutrition is connected to the problems?
- Which of the above diet-health connections represent “low hanging” fruit for behavior change?
- Is there a specific “window of vulnerability” where nutrition may play a stronger role in shaping health outcomes for the health problem?
- How would I describe the population affected by the health problem?
- Who else needs to be at the planning table?

Food is Medicine Project Scoping Worksheet

Worksheet Overview: Planning is the **STRONGEST** predictor of success for a food is medicine initiative. The selection of the food is medicine model that you plan to employ should be the **LAST** decision you make. Here are a few questions that can help to guide you in this planning process. You can take notes on the second page.

What is the health problem(s) we are trying to address? You may select food insecurity itself or a specific health condition, such as hypertension, depression, or diabetes. Also consider how many available food is medicine “champions” are available at your clinic and what health problem they’d be most excited to address. How does the problem affect patient quality of life?

What are the specific, evidence-based ways by which food or nutrition is connected to the problem(s)? For example, low intake of dietary fiber contributes to high post-prandial blood glucose after meals. Eating at least 5 fruits and vegetables per day can reduce systolic blood pressure by 7 points. *Note: If you need help identifying these connections, registered dietitian consultants are available through the Sunflower Foundation, if needed.*

Which of the above diet-health connections represent “low hanging” fruit for behavior change? Things to consider include what the patient population has indicated to you is most needed and culturally acceptable, the needed “dose” of the food/nutrient and what stakeholders are able and ready to provide, etc.

Is there a specific “window of vulnerability” where nutrition may play a stronger role in shaping health outcomes for the health problem? For example, 1-month post-hospital discharge and heart failure re-admissions; First 1,000 days of life (preconception, pregnancy, through age 2); pre-diabetes is more reversible via lifestyle change than diabetes.

How would I describe the populations affected by the health problem? Helpful information includes: what % live alone (and therefore likely to prepare meals and eat alone), what % are meal caregivers to others, what % have a physical impairment that may limit their ability to prepare food from scratch, what % have a fully equipped kitchen? What is the level of readiness for change within this population? What, if anything besides food access and nutrition education, are barriers to nutrition change?

Who else needs to be at the planning table? Examples of stakeholders include: intended beneficiaries (clients, patients, members of the affected community), those who will play a role in delivering the intervention (food banks, food pantries, healthcare providers, other clinic staff), other key players (food producers, food suppliers, payers). Also consider, what are the bright spots in our community? Are there any other entities doing similar projects?

Oklahoma Case Example: NOURISH-OK

What is the NOURISH-OK study?

- NOURISH-OK stands for: Nutrition to Optimize, Understand, and Restore Insulin Sensitivity in HIV for Oklahoma
- A 5-year, 3-part study that uses a **community-based participatory research** approach
- Funded by the **National Institute of Diabetes and Digestive and Kidney Disease** of the National Institutes of Health (Grant Award R01DK127464)
- **Goal:** To adapt and evaluate a **community-driven, science-informed "food as medicine" intervention** designed to improve (reduce) insulin resistance through **healthy food access, food utilization skills, and other self-care behaviors**

Lead Community Partner

tulsacares

Lead University

HUDSON COLLEGE OF PUBLIC HEALTH
The University of Oklahoma Health Sciences

Collaborators and Consultants

Leah's PANTRY

OSU MEDICINE

UCSF University of California San Francisco

CHI CONNECTING HEALTH INNOVATIONS

OHHPC

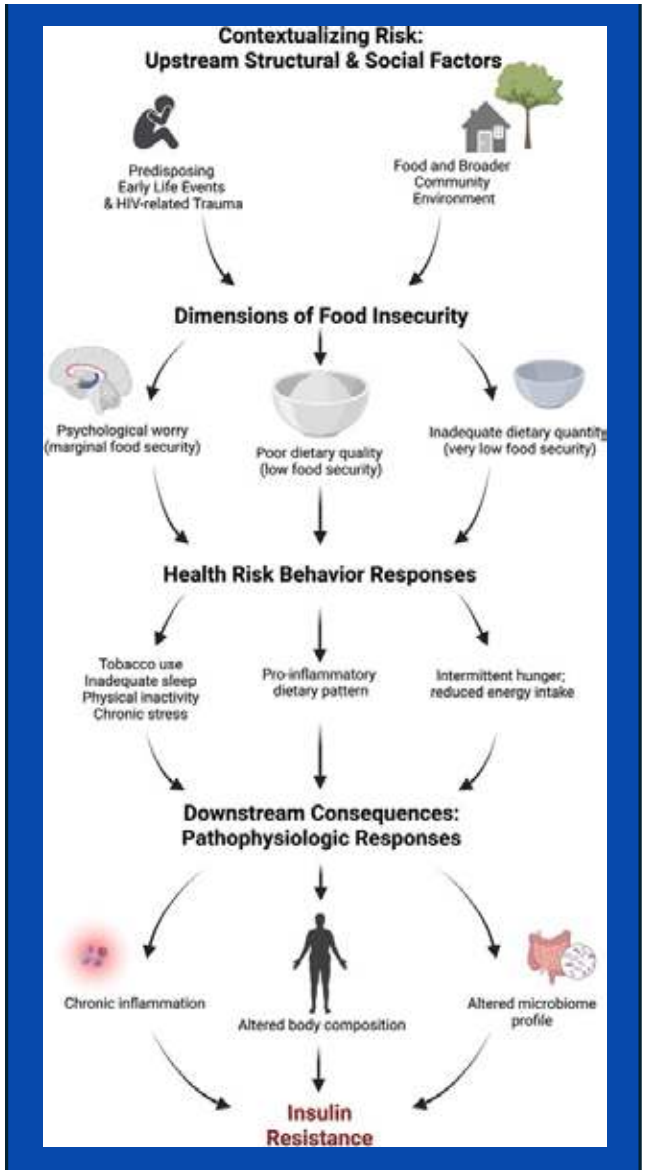
Other Options, Inc.

RAIN OKLAHOMA

Oklahoma State Department of Health

OKLAHOMANS FOR EQUALITY

NOURISH-OK Conceptual Framework



Ultimate Goal:

To design and test a FIM intervention for improving insulin sensitivity and chronic inflammation

Interviews explored meaning of food in life

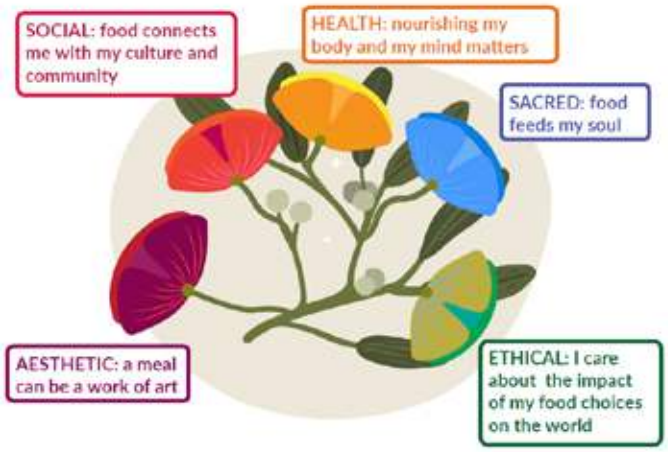
"[My picture is an] ...orange tree with oranges, banana, Salisbury steak and a watermelon…
I like them because they're all soft and I have no teeth so everything I have to eat **has to be soft** now."

"..**fruit to me symbolizes one's ability to be able to eat well**. Like you eat poorly if you live on a diet of just carbs, you eat okay if you live on a diet of carbs and fat, you live semi-okay if it's carbs, fat, and protein, **you're getting better if you throw in some vegetables. But you're doing really great if you can have everything and fruits**."

Focus Groups that included feedback on curriculum and food box content

What's in the Self-Care Curriculum?

Theme	Weekly Content
Stress Management and Mind Body Connection	• **Week 1** Exploring the Meaning of Food in My Life • **Week 2** Cooking and Easting with All Five Tastes and Senses • **Week 3** Food, Mood, Energy, and Stress Resiliency • **Week 4** Resiliency in the Kitchen
My Personal Food Story	• **Week 5** Building Flavors with Spices and Herbs • **Week 6** Our Body's Second Brain • **Week 7** Life in Full Color • **Week 8** Healthy Fats & Essential Proteins
Writing the Next Chapter of My Personal Food Story	• **Week 9** Dreaming Big, Starting Small • **Week 10** Nourishment From My Inner Circle • **Week 11** Nourishment From My Community • **Week 12** Revisiting Meaning of Food in Life and Wrap Up



Meaning of Food in Life Domains

Appendix: Self Care Skills

- Self-Compassion
- Gratitude
- Mindfulness

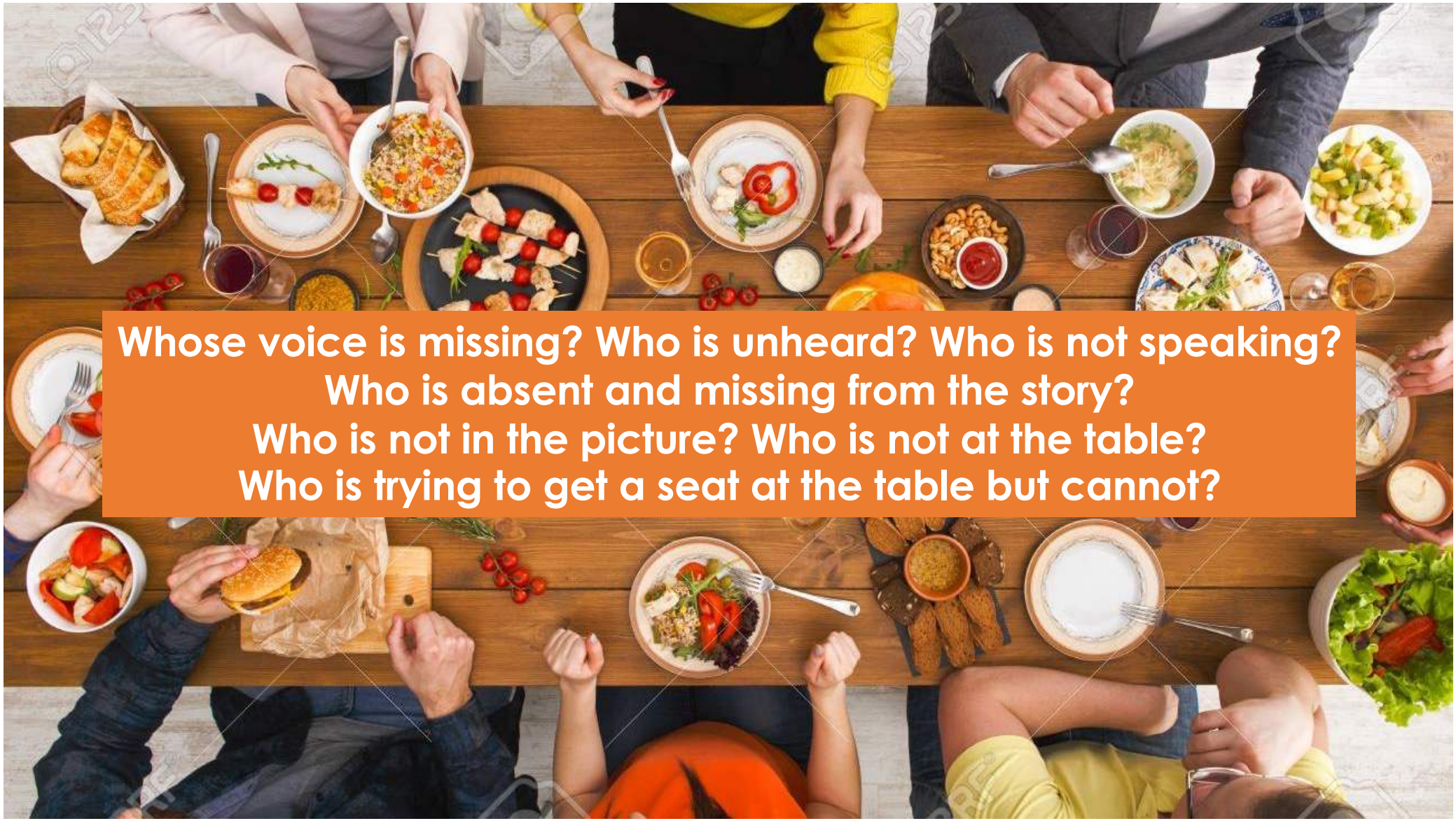
Arbit, N., Ruby, M., & Rozin, P. (2017, 2017/07/01/). Development and validation of the meaning of food in life questionnaire (MFLQ): Evidence for a new construct to explain eating behavior. *Food Quality and Preference, 59*, 35-45. https://doi.org/https://doi.org/10.1016/j.foodqual.2017.02.002

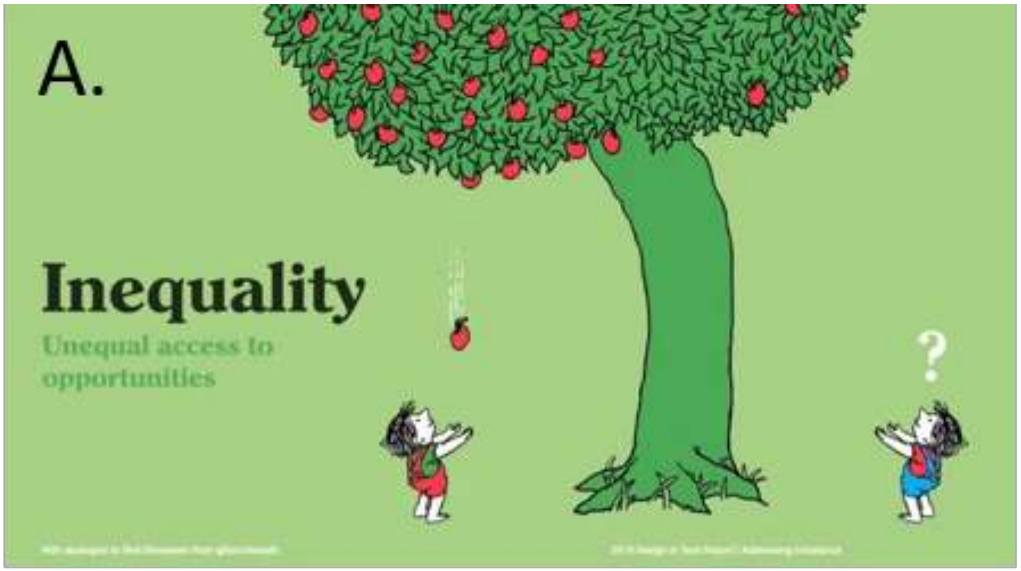

Anti-inflammatory herbs and spices
1 tsp per day
Bulk dehydrated vegetables (carotenoid-rich)
1+ oz per day
Other vegetables
½ serving per day
Beans & Lentils
1+ serving per day
Nuts & Seeds 1 oz per day
Fatty Fish
2+ oz. per week
Other Lean Animal Protein
2+ oz. per week
Healthy Fats
Cooking Staples
2-3 items monthly
Whole Grains
1+ serving per day
At-Home Cooking Supports
1-3 items monthly
Herbal, Green, Black Teas
1 per day
Self-Care Activities
1-3 items monthly
Self-Care Curriculum
12 weeks
Dehydrated Fruit
½ ounce per day
My Food Journey
A 12-WEEK JOURNAL AND SELF-DISCOVERY WORKBOOK

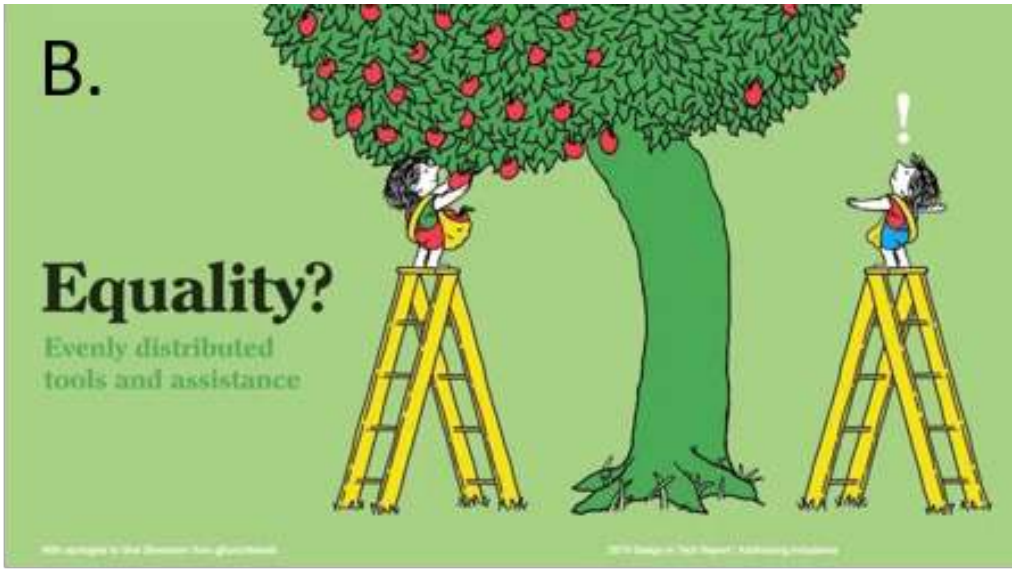
tulsacares

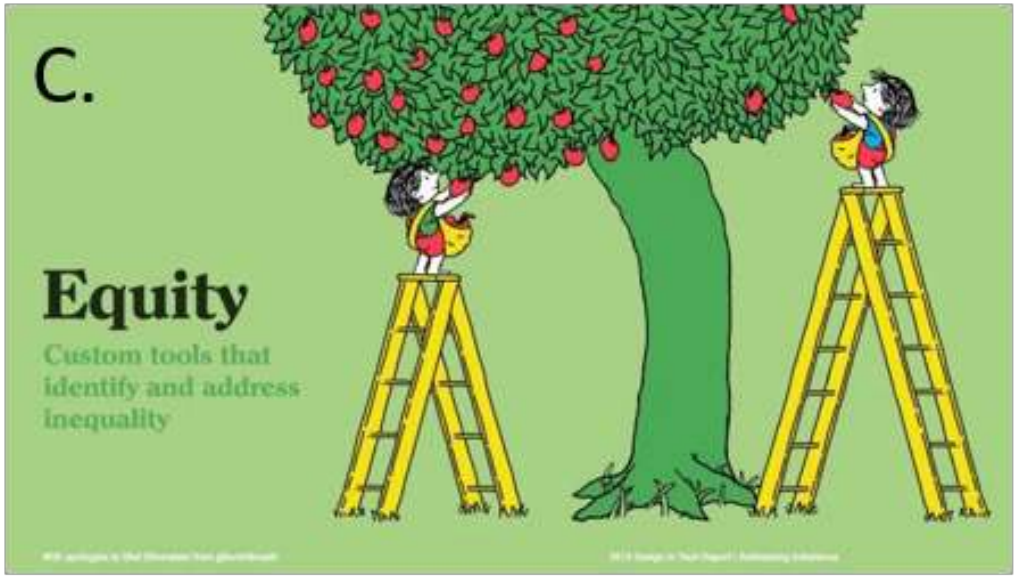
OU TULSA

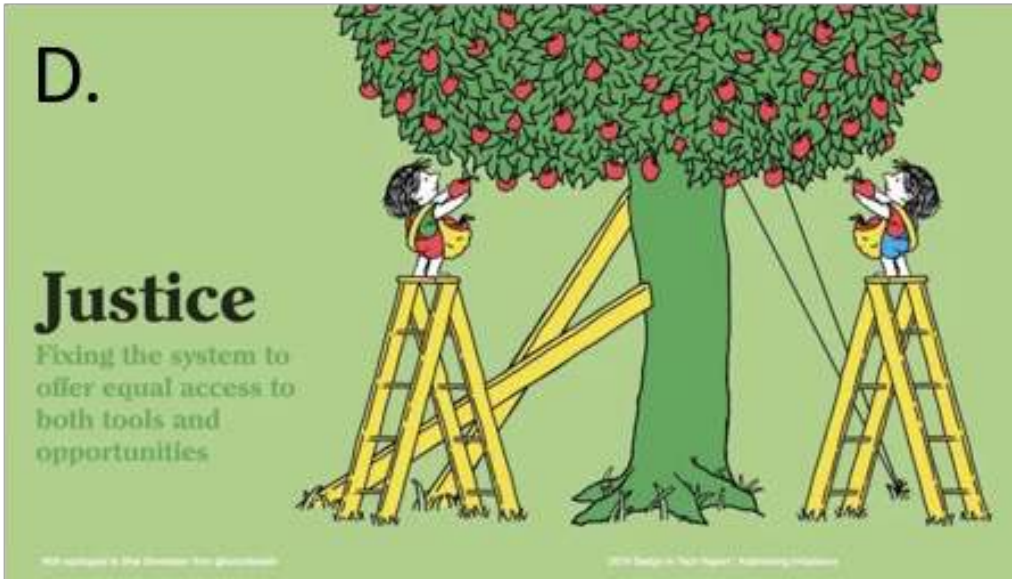
DOORDASH


Whose voice is missing? Who is unheard? Who is not speaking?
Who is absent and missing from the story?
Who is not in the picture? Who is not at the table?
Who is trying to get a seat at the table but cannot?


A.
Inequality
Unequal access to opportunities
?


B.
Equality?
Evenly distributed tools and assistance
!


C.
Equity
Custom tools that identify and address inequality


D.
Justice
Fixing the system to offer equal access to both tools and opportunities

What concrete steps can dietitians take to support “nutrition equity” for the patients and communities we serve?

SCAN HERE

FOR MORE INFORMATION

Want to Dive Deeper into Nutrition Equity Self-Reflection?

Check out more case studies (with answer keys) here:

Thinking about planning a Food is Medicine program at your clinic?

Consider these pre-implementation planning guides to ensure all perspectives are considered:

Want to connect your patients to nutrition security programs in Oklahoma?

Learn more about Double Up Oklahoma and Order Materials here:

Want to become a DUO for Health provider?

Visit the website here:

Are you part of a Food is Medicine program in Oklahoma? We want to know about it!

Food is Medicine Landscape Survey:

Want to be more active in Oklahoma's Food is Medicine movement?

Food is Medicine Coalition Sign up (use this code):

Questions about today's session? Email: Marianna-Wetherill@ouhsc.edu

Oklahoma Food is Medicine Coalition

- Meets once a month via Zoom- 3rd Monday at 1pm (pushed back one week if holiday falls that day)
- Perks: Get to know existing Food is Medicine programs in our state, create partnerships, and stay up to date on funding opportunities

Lauran Larson

Senior Manager of Food and Health

405-420-6658

Lauran.Larson@HungerFreeOK.org

Join Here!

Vision

The Oklahoma Food is Medicine Coalition will decrease the burden of nutrition related health conditions through increased, equitable access to food is medicine programs.

Goals

- Establish diverse funding pathways for Food is Medicine
- Expand the reach of evidence-informed Food is Medicine programs
- Wherever feasible, prioritize local food sourcing in Food is Medicine programs
- Foster collaboration among Food is Medicine stakeholders
- Collect and share impactful data while respecting data sovereignty
- Engage, listen to, and educate communities