

## Food is Medicine

Integrating Effective Nutrition Interventions  
into the Health Care System

Teresa Ambroz: Introductions

Presenter: Dr. Dariush Mozaffarian

DATE: June 28, 2022

PROTECTING, MAINTAINING AND IMPROVING THE HEALTH OF ALL MINNESOTANS

## Minnesota Health Plans Collaborative



## Managed Care Organization Diabetes Performance Improvement Collaborative

- Launched a new three-year PIP as of January 1, 2021 that will run through 2023.
- Care coordinators and case managers have an essential role in educating, supporting, and assisting members in setting and achieving health goals to improve their diabetes care.
- PIP aims to:
  - improve the comprehensive diabetes care and services for seniors and SNBC members
  - close the gaps in health care disparities within our populations

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## MDH: Health Promotion & Chronic Disease

**6 in 10 adults in Minnesota have a chronic condition.**

HPCD:

- Partners with communities and clinic systems to prevent and manage chronic diseases
- Analyzes and reports data on chronic conditions
- Supports policies and systems of care that promote health
- Raises public awareness of ways to prevent and manage chronic diseases and conditions

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## Food is Medicine



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## Welcome Dr. Mozaffarian!

- Dr. Dariush Mozaffarian is cardiologist and Dean at the Tufts Friedman School of Nutrition Science and Policy.
- Dr. Mozaffarian has authored more than 450 scientific publications on dietary priorities for obesity, diabetes, and cardiovascular diseases.

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# Food is Medicine – Integrating Nutrition Security Interventions into the Healthcare System

**Dariush Mozaffarian, MD, DrPH**

Dean

Jean Mayer Professor of Nutrition & Medicine

Minnesota Department of Health, Collaborative of Minnesota Managed Care Organizations

June 28, 2022



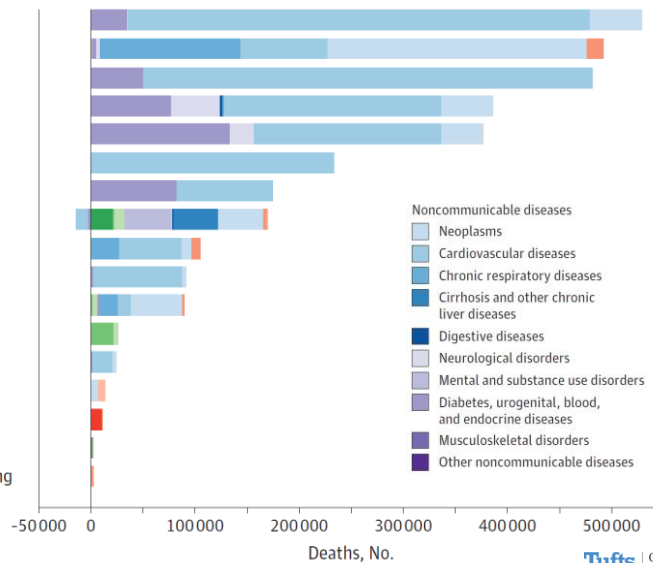
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## Our Food: The #1 Cause of Poor Health

### Risk factors

- Dietary risks
- Tobacco use
- High systolic blood pressure
- High body mass index
- High fasting plasma glucose
- High total cholesterol
- Impaired kidney function
- Alcohol and drug use
- Air pollution
- Low physical activity
- Occupational risks
- Low bone mineral density
- Residential radon and lead exposure
- Unsafe sex
- Child and maternal malnutrition
- Sexual abuse and violence
- Unsafe water, sanitation, and handwashing



US Burden of Disease Collaborators, JAMA 2018



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## Diet-Related Disease in the U.S.

- More American adults are **sick** than are healthy:
  - **1 in 2** have **diabetes or prediabetes**
  - **1 in 2** lifetime risk of **cancer**
  - **3 in 4** have **overweight or obesity**
  - Only **1 in 15** (6.8%) are **metabolically healthy**
- Among American teenagers:
  - **1 in 4** have **prediabetes**
  - **1 in 4** have **overweight or obesity**
  - **1 in 6** have **fatty liver disease**

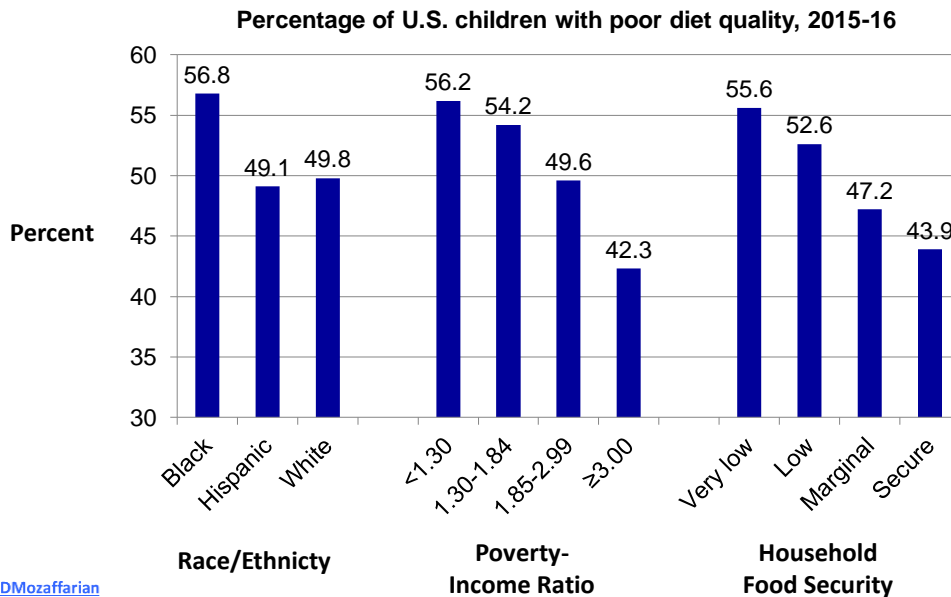
Centers for Medicare & Medicaid Services, 2018  
 American Heart Association, *Heart Disease and Stroke Statistics*, 2018  
 The Milken Institute, *America's Obesity Crisis*, 2018  
 O'Hearn M et al., *JACC* 2022 *in press*

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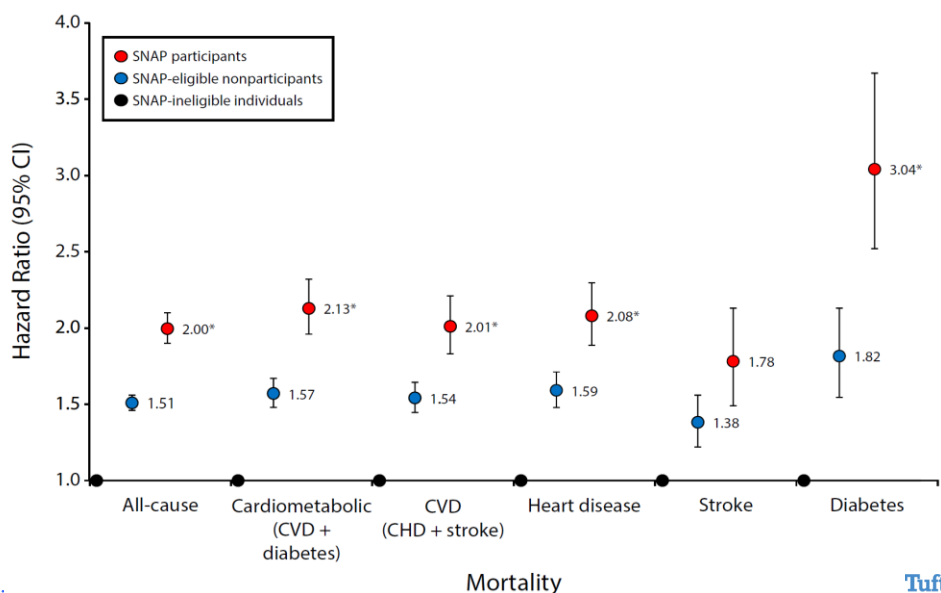
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## Major Dietary Disparities



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## Major Diet-Related Health Disparities



Conrad et al.,  
AJPH 2017

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## Crushing Economic Costs

- In 50 years, healthcare costs have skyrocketed from :
  - **7% to 18%** of U.S. Gross Domestic Product (GDP)
  - **1 in 20** to nearly **1 in 3** dollars in the federal budget and average state budgets
  - **\$80 billion** to **\$1.2 trillion** for US businesses
  - **\$11,500/year** per man, woman, and child in the US
- **80% of healthcare dollars** spent on preventable chronic diseases
- The US government spends **\$160 billion** on direct medical costs for **diabetes alone**

Centers for Medicare & Medicaid Services, 2018  
American Heart Association, *Heart Disease and Stroke Statistics*, 2018  
The Milken Institute, *America's Obesity Crisis*, 2018

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## Food as Medicine: True Cost Accounting



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*True Cost of Food: Measuring What Matters to Transform the U.S. Food System.* The Rockefeller Foundation 2021  
<https://www.rockefellerfoundation.org/wp-content/uploads/2021/07/True-Cost-of-Food-Full-Report-Final.pdf>

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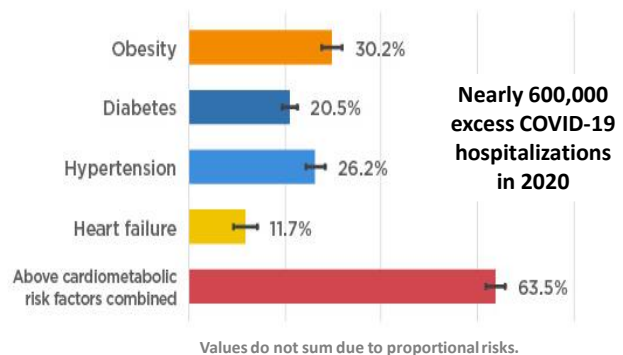
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## COVID-19: A Fast Pandemic on a Slow Pandemic

- COVID-19: a **vascular, inflammatory** virus
- Diabetes, obesity, hypertension – **diet-related diseases** with vascular dysfunction, systemic inflammation – are **top risk factors** for worse outcomes with COVID-19
- ~**64%** of **hospitalizations** may have been **prevented** if we had a **metabolically healthy** population
- These diet-related conditions are major **contributors to inequities** in COVID-19 outcomes

### U.S. COVID-19 hospitalizations estimated to be due to cardiometabolic risk factors



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Teuwen et al., Nat Rev Immun 2020; Ackermann et al., NEJM 2020; O'Hearn et al., JAMA 2021

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# Nutrition: Passion and Confusion

**Paleo VS Atkins**

**MyPlate.gov**

**Be wise about your PORTION SIZE**

**WHICH APPS ARE BEST FOR YOUR DIET?**

**Weight Watchers**

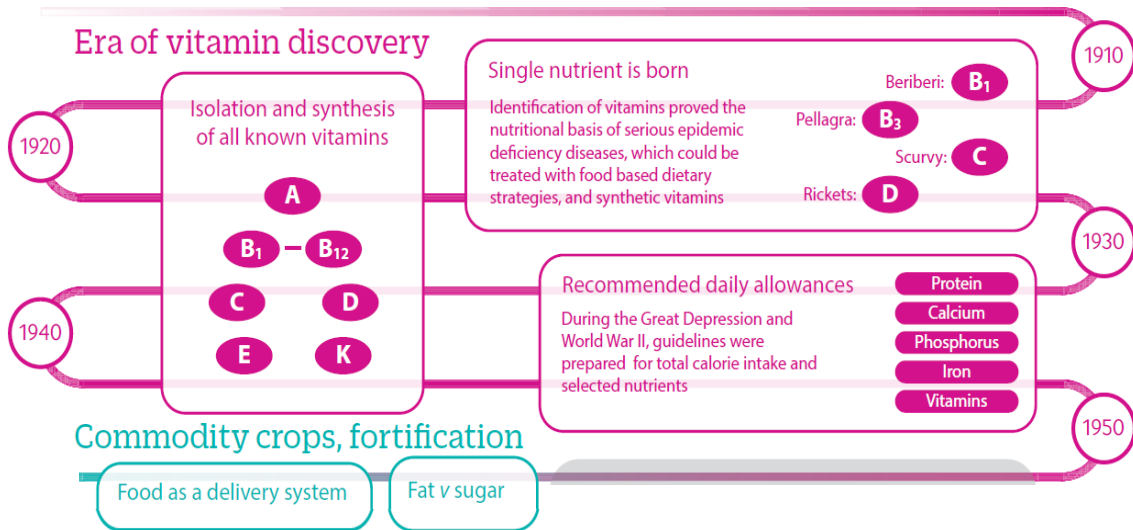
**FOOD BABE**

**WHAT is GOOD Nutrition?**

**Source: Google images**

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## 1920s to 1950s: The Era of Vitamins, Nutrients



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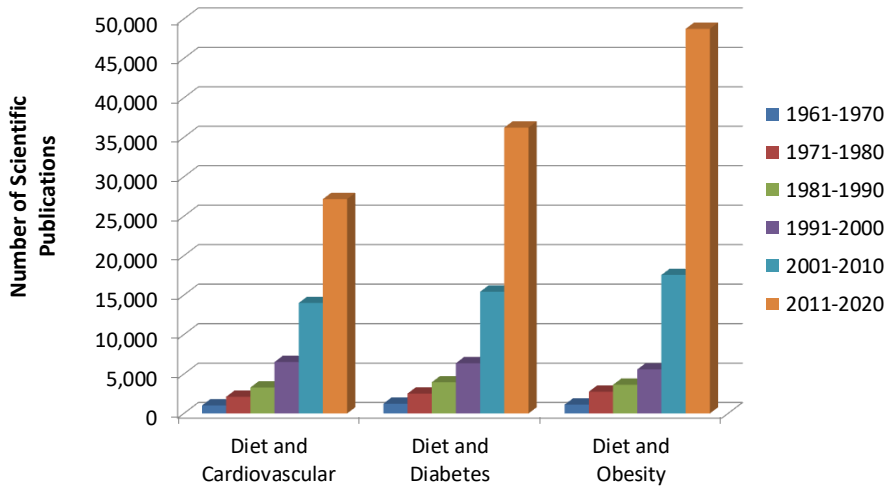
Mozaffarian et al., BMJ 2018

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## Explosion of Nutrition Science



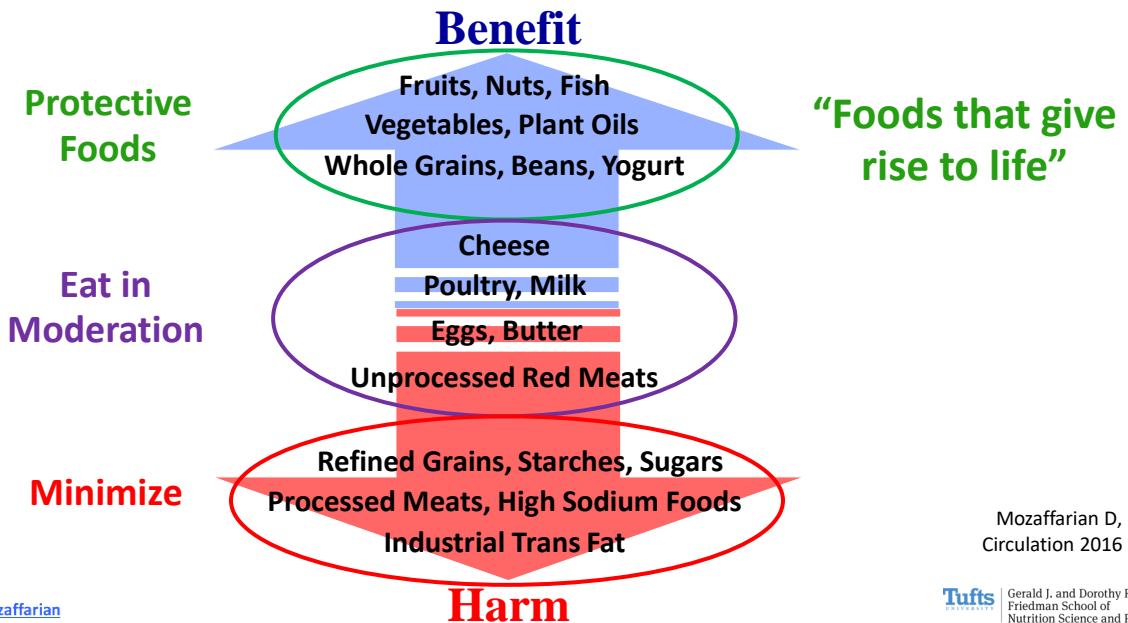
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Source: Pubmed/Medline

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## Dietary Priorities: A Time for Foods



Mozaffarian D, Circulation 2016

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## Food and Obesity – More Than Calories

- Hunger, fullness
- Glucose, insulin, other hormonal responses
- Liver *de novo* fat synthesis (conversion of starch and sugar to fat)
- Brain reward, craving
- Gut microbiome (bacteria) responses
- Body's metabolic rate (*energy out*)

**Cannot judge  
a food by its  
calorie count  
alone**

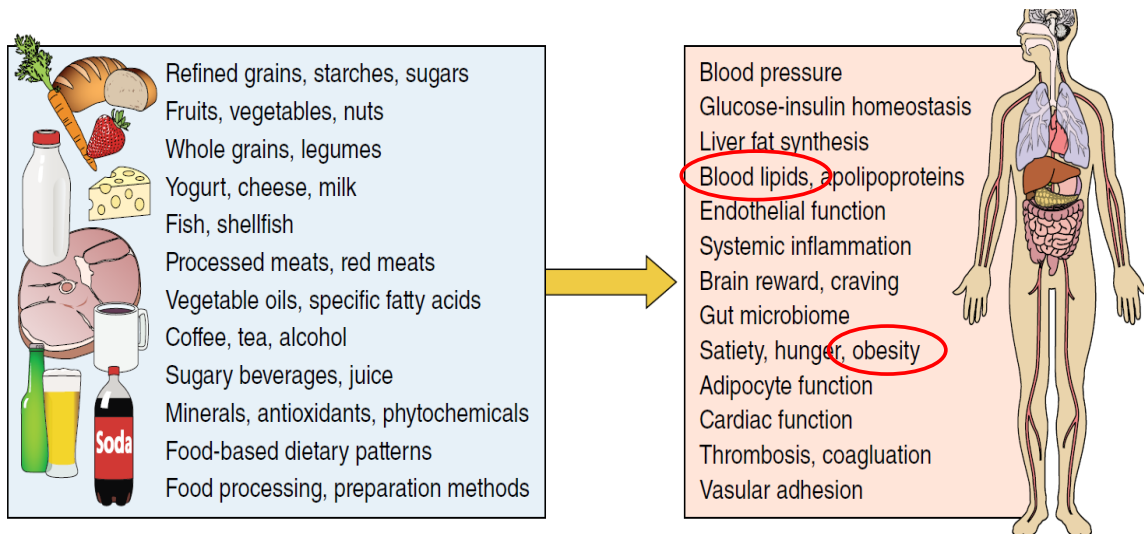
e.g., Mozaffarian NEJM 2011; Browning AJCN 2011; Ebbeling JAMA 2012; Poutahidis Plos ONE 2013; Lennerz AJCN 2013; Ludwig JAMA 2014; Bazzano Ann Intern Med 2014; Hallberg Diabetes Therapy 2018; Gardner JAMA 2018; Ebbeling BMJ 2018; Hall Cell Metab 2019; Mozaffarian AJCN 2022; more

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## Food and Health – Complex Pathways



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Mozaffarian D, Braunwald's Heart Disease, 2021

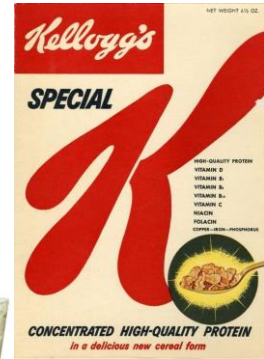
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## Single Nutrients, Fat, Calories – Misleading



- Low calorie = “Less weight gain”
- Fat free = “Healthy”
- Low saturated fat = “Healthy”
- Vitamin fortified = “Good for you”



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## Nutrition Complexities and Uncertainties

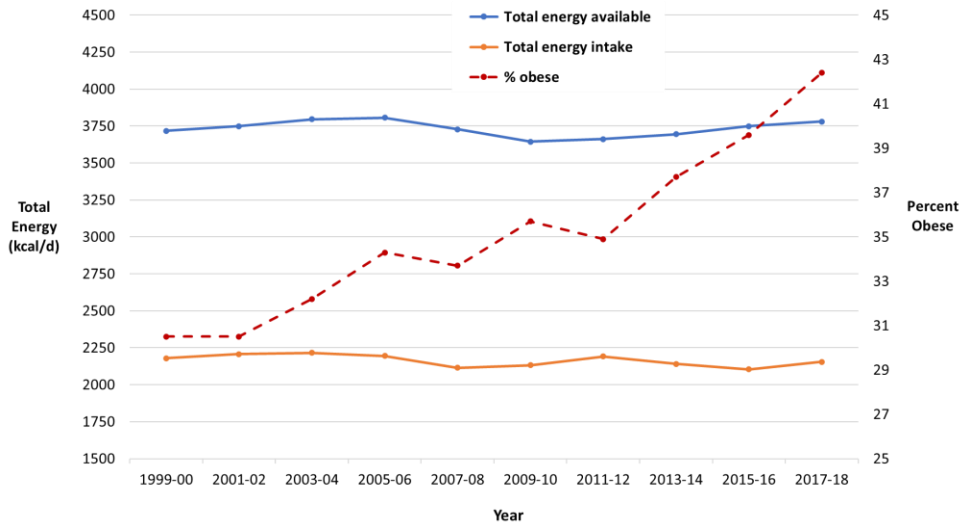
- Obesity, Energy Balance
- Phenolics/Phytonutrients
- Food Processing
- Gut Microbiome
- Personalized Nutrition
- Fermented Foods
- Protein Intake
- Timing of Meals
- Additives
- Brain Health
- Mood, Anxiety
- Immunity
- Allergies
- Cancers

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## Obesity – An Unexplained Epidemic



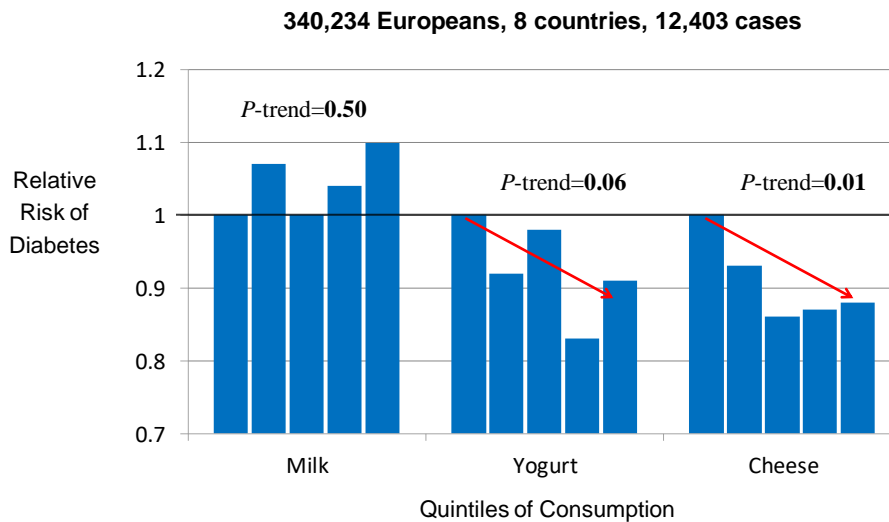
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Mozaffarian D, AJCN 2022

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## Fermented Dairy Foods and Risk of Diabetes



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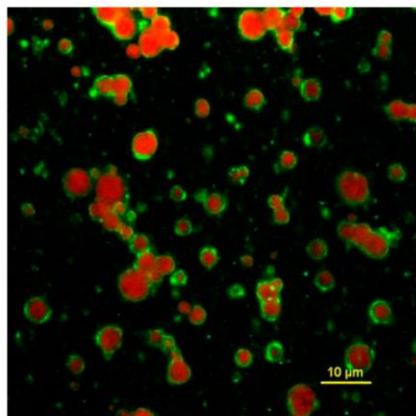
Sluijjs et al., AJCN 2012

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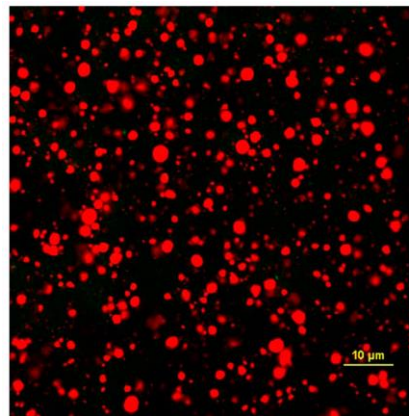
## Milk Fat Globule Membrane

### Whipped Cream



**FIGURE 1** Confocal laser scanning microscopy micrograph of milk fat globules from whipping cream (40% fat) stained with Alexa WGA 488 (Invitrogen) and Nile red (Sigma-Aldrich) fluorescent dyes; fat appears red, and milk fat globule membrane appears green. Images were captured at magnification  $\times 2.58$  with an objective lens  $\times 60$ . Scale bar =  $10 \mu\text{m}$ .

### Butter



**FIGURE 2** Confocal laser scanning microscopy micrograph of milk fat globules in an emulsion made from butter oil, purified water, and sodium dodecyl sulfate (15% fat) stained with Nile red (Sigma-Aldrich) and Alexa WGA 488 (Invitrogen) fluorescent dyes; fat appears as red, and milk fat globule membrane appears as green. Images were captured at magnification  $\times 2.58$  with an objective lens  $\times 60$ . Scale bar =  $10 \mu\text{m}$ .

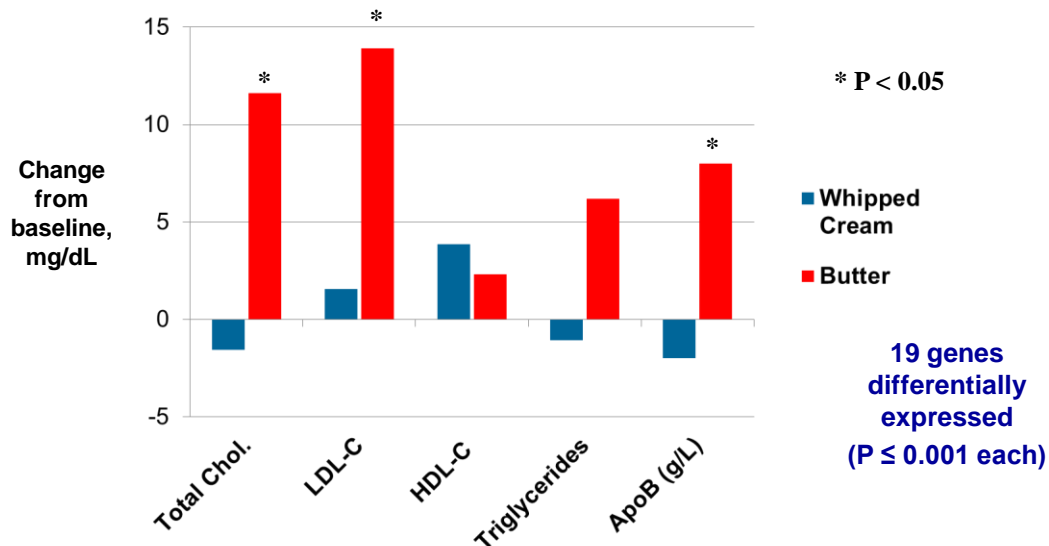
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Rosqvist et al., AJCN 2016

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## Milk Fat Globule Membrane



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Rosqvist et al., AJCN 2016

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## Phenolics and Other Bioactives

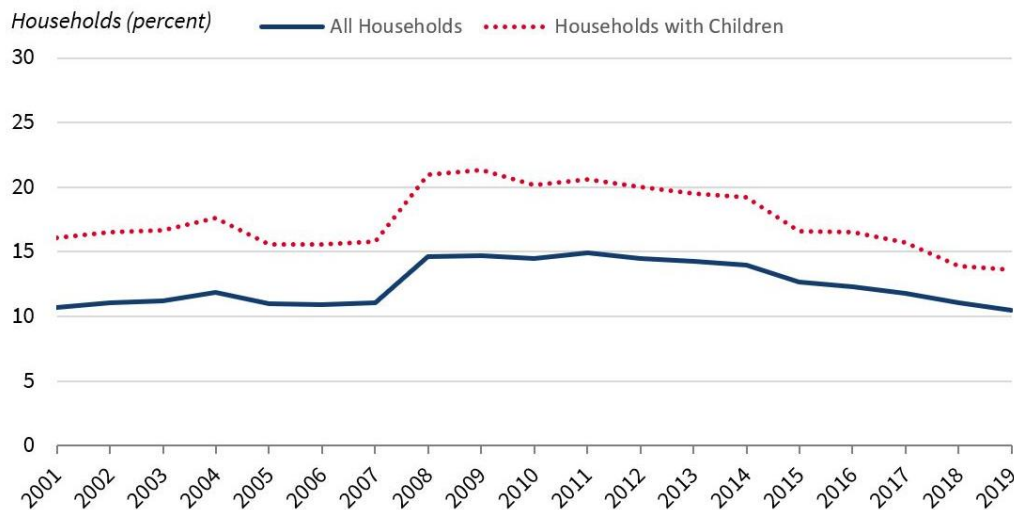


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## Trends in US Food Insecurity, 2001-2019



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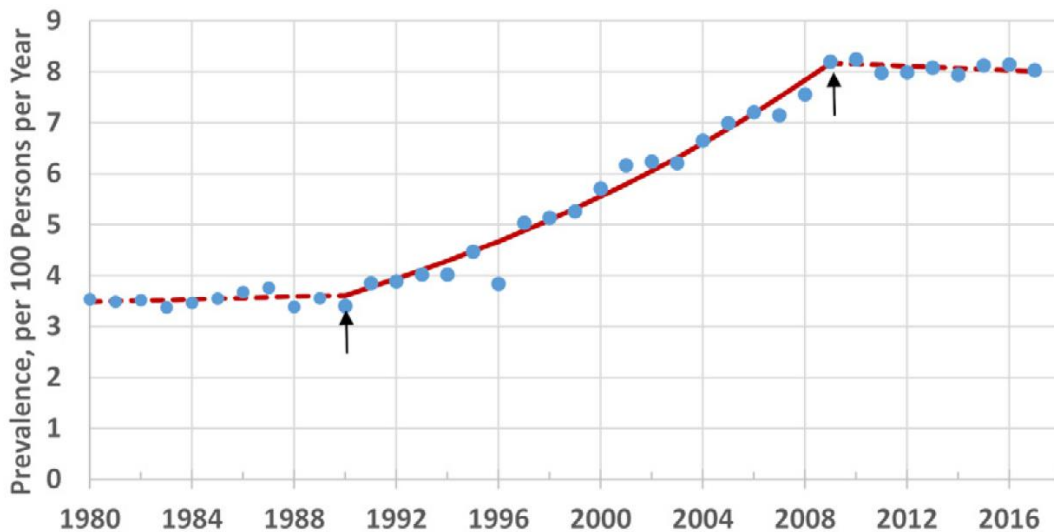
Source: USDA ERS – Interactive Charts and Highlight

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## Trends in US Diabetes, 1980-2016



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Source: USDA ERS – Interactive Charts and Highlight

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## Nutrition Security

**Nutrition security: Consistent access, availability, and affordability of foods and beverages that promote well-being and prevent (and if needed, treat) disease.**

- A focus on “food insecurity” has helped address problems of food access and affordability over the last 25 years.
- Yet, food quality – rather than quantity – has been underemphasized, with large and rising disparities in diet-related diseases.
- A shift to a broader, more holistic focus on “nutrition insecurity” is the next natural evolution to help us promote equitable well-being for all.
- This should build upon – not replace – current metrics and usage of food security.

Mozaffarian, Fleischhacker, & Andres, JAMA 2021

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## USDA: Nutrition Security



Dr. Sara Bleich, USDA Director of Nutrition Security and Health Equity



Join U.S. Department of Agriculture Secretary Vilsack at Teachers College, Columbia University where he will deliver an address about USDA Actions on Nutrition Security

**“Our nation suffers from nutrition insecurity. We must do more to ensure access to the nutritious foods that can protect and promote health.” - Sec. Tom Vilsack**

**“It’s a very large problem we have to address,” Vilsack said. “We cannot have the levels of obesity, diabetes and chronic disease that we have. It will literally cripple everything we’re trying to do as a country.” It is incumbent upon the USDA to “modernize our nutrition security and food security systems.”**

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Senate Confirmation Hearing, Feb 3, 2021; National Press Foundation Address, Mar 5, 2021  
Food Bank News, Mar 5, 2021; Columbia U. Address, Mar 17, 2022

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## Measuring Nutrition Security: Screening

*The next questions are about healthy foods - foods that support your health and well-being. These foods include, for example, fruits, vegetables, whole grains, beans, nuts, yogurt, and fish. These foods can be fresh, frozen, or canned; and don't have to be organic. Less healthy foods can include foods that are highly processed, packaged, and high in salt, starch, sugar, and unhealthy fats.*

**Thinking about the last 12 months, how hard was it for you or your household to regularly get and eat healthy foods?**

- Very hard [continue to q2]
- Hard [continue to q2]
- Somewhat hard [continue to q2]
- Not very hard
- Not hard at all

**People have different reasons for eating or not eating healthy foods. Please tell me which, if any, of the following reasons were true for you or your household in the last 12 months.**

*Answer options: Often true, Sometimes true, Never true*

- Healthy foods are too expensive
- I or my family don't like the taste of healthy foods
- There aren't a lot of healthy food choices at the stores where I usually shop
- I don't know enough about which foods are most healthy
- Stores or food pantries with healthy foods are too far away or hard to reach
- I don't have enough time to shop for and cook healthy foods
- My cooking equipment or storage space is not enough to prepare healthy foods
- I don't know how to cook many healthy foods
- Some of the traditional foods in my family are not very healthy
- I'm not sure I qualify for government assistance programs like SNAP (food stamps) or WIC that help me buy healthy foods
- Other - please specify: \_\_\_\_\_

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## Food is Medicine: “Best Buy” Policies

Healthcare Systems	Govt. Nutrition Programs	Science & Research	Public Health & Education	Business Innovation	National Coordination
<ul style="list-style-type: none"> <li>• Medically tailored meals</li> <li>• Produce Rx</li> <li>• RD counseling</li> <li>• MD nutrition education</li> <li>• Electronic health record</li> <li>• Billing &amp; quality metrics</li> </ul>	<ul style="list-style-type: none"> <li>• Leverage nutrition in school meals, SNAP, WIC</li> <li>• Summer meals</li> <li>• Fresh F&amp;V programs</li> <li>• School garden programs</li> </ul>	<ul style="list-style-type: none"> <li>• NIH: National Institute of Nutrition (NIN)</li> <li>• USDA: nexus of production, health, sustainability</li> <li>• Public-private partnerships</li> <li>• OSTP</li> <li>• PCAST</li> </ul>	<ul style="list-style-type: none"> <li>• Limits on salt, sugar</li> <li>• Front-of-pack, menu, and warning labels</li> <li>• U.S. Dietary Guidelines</li> <li>• Marketing to children</li> <li>• Qualified health claims</li> <li>• CDC DNPAO</li> <li>• Surveillance</li> </ul>	<ul style="list-style-type: none"> <li>• Market expansion</li> <li>• Tax policy for food/nutrition innovation</li> <li>• ESG investor metrics</li> <li>• BIPOC food entrepreneurs</li> <li>• B Corp status</li> <li>• Opportunity zones</li> </ul>	<ul style="list-style-type: none"> <li>• National Director of Food &amp; Nutrition</li> <li>• White House Conference</li> <li>• National strategy (e.g. NEPA)</li> <li>• Interagency Task Force</li> </ul>

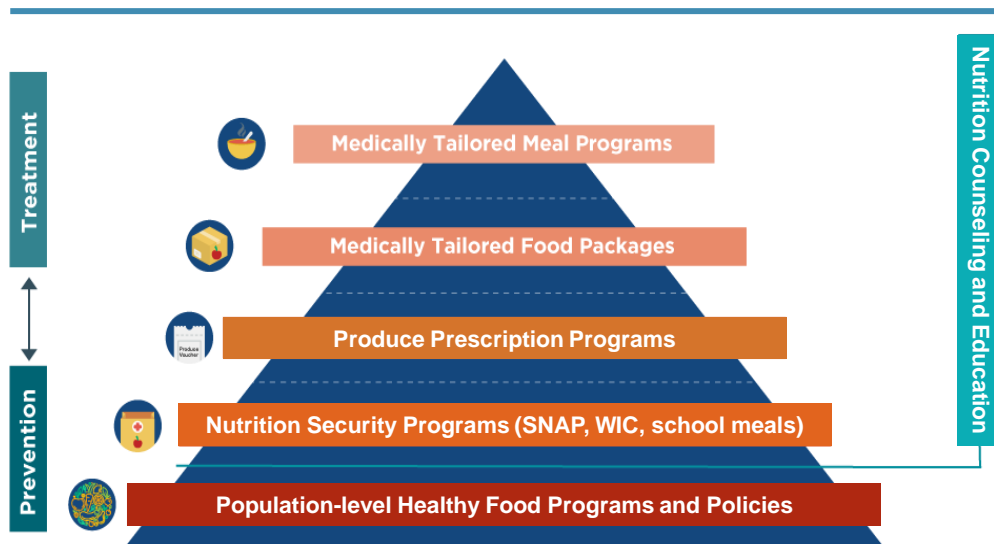
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[www.food-price.org](http://www.food-price.org)


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## Food is Medicine: Healthcare Systems



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## Food is Medicine: Medically Tailored Meals (MTMs)



- Providing **home MTMs** to chronically ill, food insecure patients **reduces hospitalizations, ER visits, nursing home admits, and costs.**
- Using the 2011-2015 Massachusetts All Payers Database, MTMs:
  - Hospital admissions: **↓ 49%**
  - Nursing home admits: **↓ 72%**
  - **Net savings: \$9,036/year** per patient
  - Number needed to treat (NNT):
    - **2.0** per saved hospital admission
    - **1.1** per saved nursing home admit



<http://www.fimcoalition.org>,  
Berkowitz et al., JAMA Int Med 2019  
Mozaffarian et al., JAMA Int Med 2019

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## Food is Medicine: Produce Prescriptions

### Meta-analysis of 13 Produce Rx interventions:

- Vouchers, subsidized food boxes, cash-back rebates
- Some targeted food insecurity, most did not
- Most targeted patients with diabetes
- Most lasted 3-6 months, a few up to 18 months
- Nearly all in USA, also in UK and France



### Outcomes:

- F&V intake: **↑ 0.8 servings/day**
- Body mass index (BMI): **↓ 0.6 kg/m<sup>2</sup>**
- Hemoglobin A1c: **↓ 0.8 %**



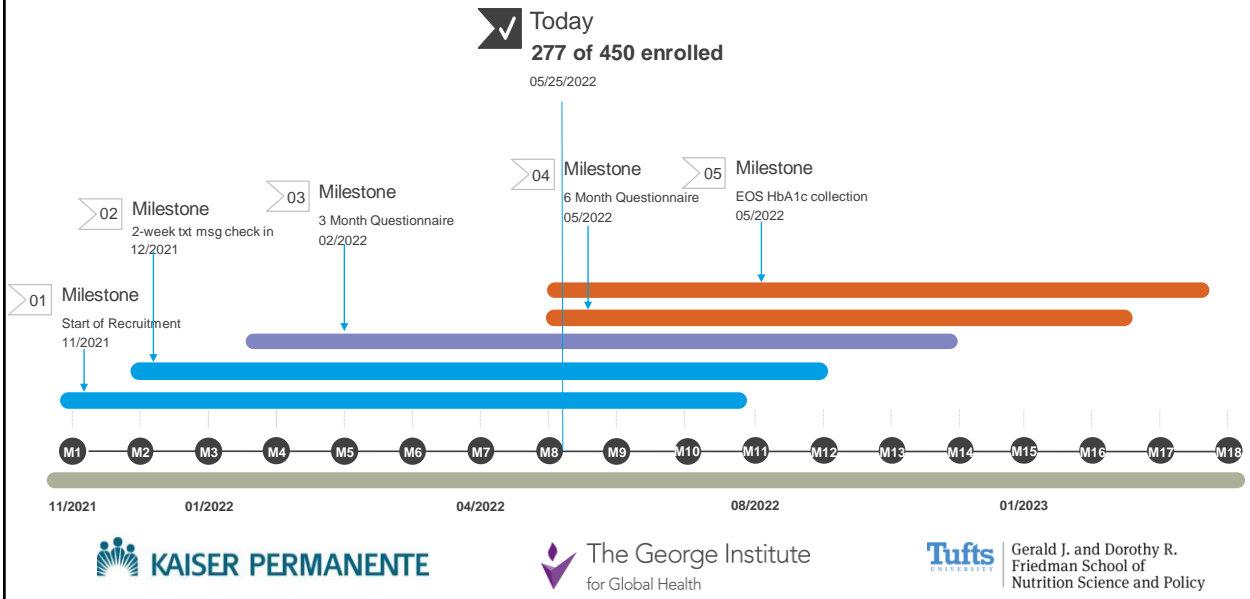
Bhat et al., Adv Nutr 2021

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# Produce Rx in Diabetes – a large Randomized Controlled Trial

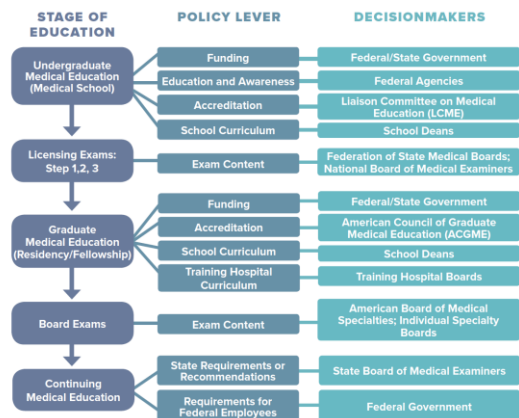


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# Food is Medicine: Medical Education

## Key recommended actions:

1. Update medical school accreditation standards to require nutrition education
2. Incorporate nutrition into USMLE, specialty board, and CME exams
3. Provide technical assistance and resources to support nutrition-curricula development
4. Tie federal funding for medical schools to nutrition education



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[www.chlpi.org/wp-content/uploads/2013/12/Doctoring-Our-Diet\\_-September-2019-V2.pdf](http://www.chlpi.org/wp-content/uploads/2013/12/Doctoring-Our-Diet_-September-2019-V2.pdf)

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## Food is Medicine: Medical Education

### U.S House resolution on nutrition education, passed May 17, 2022

117TH CONGRESS  
1ST SESSION

## H. RES. \_\_\_\_\_


Expressing the sense of the House of Representatives that the United States recognizes the mounting personal and financial burden of diet-related disease in the United States and calls on medical schools, graduate medical education programs, and other health professional training programs to provide meaningful physician and health professional education on nutrition and diet.

*Resolved*, That it is the sense of the House of Representatives that the United States should—

(1) provide Federal oversight to ensure that Federal funding of medical schools and graduate medical education programs, including funding provided through Medicare and Medicaid, goes to programs that incorporate substantive training in nutrition and diet sufficient for physicians and health professionals to meaningfully incorporate nutrition interventions and dietary referrals into medical practice;

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[https://mcgovern.house.gov/uploadedfiles/mcgoev\\_025\\_xml.pdf](https://mcgovern.house.gov/uploadedfiles/mcgoev_025_xml.pdf)

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## Food is Medicine: Rapidly Accelerating Actions

- **2016 John Hancock:** *Vitality*, first life insurance program to reward clients for buying healthy food, up to \$600/year + premium discounts
- **2018 U.S. Farm Bill:** \$25 million to test Produce Rx in healthcare
- **2019 Kaiser Permanente:** *Food for Life*, a major new focus on nutrition security including SNAP, MTMs, community interventions
- **2020 Massachusetts:** \$150 million for ACO Flexible Services on food and housing; new bill *Food and Health Pilot Program* (H.4278, S.2453)
- **2021 U.S. House:** New bill *Medically Tailored Home-Delivered Meals Demonstration Pilot Act* (H.R. 6774)
- **2022 North Carolina:** \$650 million in Medicaid pilots to test food, housing, transportation, and stress interventions
- **2022 California:** new 1115/1915b Medicaid waiver (“CalAIM”) to test whole person care in lieu-of services food and nutrition interventions

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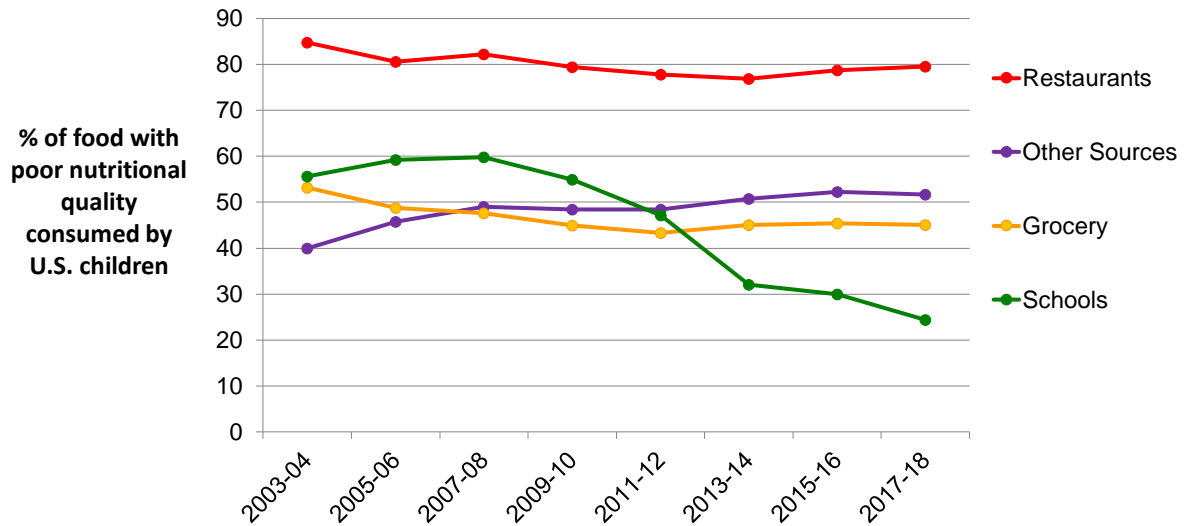
<https://theconversation.com/food-is-medicine-how-us-policy-is-shifting-toward-nutrition-for-better-health-107650>

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## Food is Medicine: School Meals



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Liu et al., JAMA Network Open 2021

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## Food is Medicine: SNAP Plus

**SNAP Plus**  
 Healthy foods (30% subsidy)  
 Unhealthy foods (30% disincentive)

Prevent 940,000  
 lifetime CVD events

**Cost-savings**  
 \$10B at 5 years  
 \$63B lifetime

incentives



Fruits



Vegetables



Whole Grains



Nuts & Seeds



Seafood



Plant-based Oils

disincentives



Soda



Junk Food



Processed Meats

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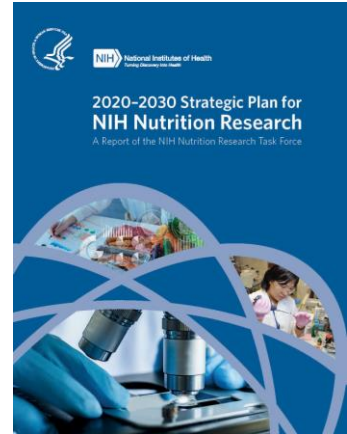
Liu et al, Plos Medicine 2018, www.food-price.org

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## Food is Medicine: Accelerating Scientific Discovery

- First NIH-wide **Strategic Plan for Nutrition Research**, May 2020
- New **Office of Nutrition Research (ONR)** in the NIH Office of the Director, Jan 2021
- Tremendous increase in \$\$ in the ONR, from \$1M in FY22 to **\$97M** (President's budget) in FY23
- **Nutrition for Precision Health**, in the NIH *All of Us* Research Program, \$34M/year x 5 years



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## Accelerating Scientific Discovery

Sheila Fleischhacker, Cathie Woteki, Paul Coates, Van Hubbard, Grace Flaherty, Dan Glickman, Tom Harkin, David Kessler, William Li, Joe Loscalzo, Anand Parekh, Sylvia Rowe, Patrick Stover, Angie Tagtow, Joon Yun, Dariush Mozaffarian

*Fleischhacker et al. AJCN 2020*

[sites.tufts.edu/nutritionadvisory](https://sites.tufts.edu/nutritionadvisory)

## NEW NATIONAL INSTITUTE OF NUTRITION (NIN)

### KEY CHARACTERISTICS

- ✓ Leads research, coordination, training, outreach on foundational and cross-cutting topics in nutrition and health
- ✓ Additive funding and focus areas to existing NIH and other federal nutrition research efforts
- ✓ Harmonizes and leverages other nutrition and related research at NIH and other agencies and departments
- ✓ Strong partner to inform, collaborate on, and help address joint research needs of other agencies and departments
- ✓ Promotes and supports training of a diverse 21st century nutrition research workforce
- ✓ Guides and supports training of healthcare professionals for clinical care and basic and translational science in nutrition
- ✓ Translates and disseminates sound nutrition science findings to the public
- ✓ Fosters innovative external collaborations and partnerships

### ADVANTAGES

- ✓ Strong leadership, robust infrastructure, and investment
- ✓ Can better address nutrition science that is cross-cutting rather than disease specific
- ✓ Includes extramural and intramural research, training, and outreach activities
- ✓ Long-term, leading to unforeseeable positive returns and evolving appropriately with changing science and needs of the population
- ✓ Meaningful external advisory mechanism to solicit diverse relevant insights and input
- ✓ Strong return on investment, in line with or exceeding other NIH research investments

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American Society for Nutrition



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## Food is Medicine: Public Health and Education

- Food and Drug Administration
- Centers for Disease Control and Prevention
- Dietary Guidelines for Americans
- Dietary surveillance and monitoring



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## Food is Medicine: Defining “Healthy” Foods

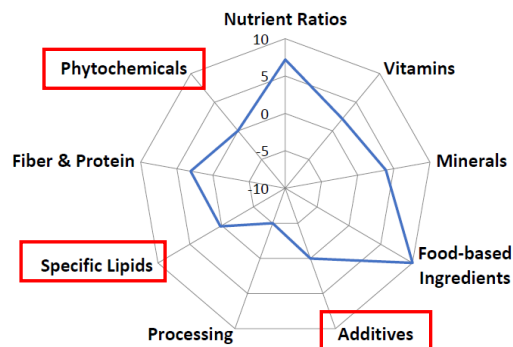


Government “Healthy” Icons

Nutrient Profiling Systems



Food Compass



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Mozaffarian et al., Nature Food 2021; sites.tufts.edu/foodcompass/  
www.fda.gov/food/food-labeling-nutrition/use-term-healthy-food-labeling


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## Food is Medicine: Catalyzing Business Innovation

- **Market expansion:** New efforts for greater public knowledge and understanding of the benefits and value of healthier foods.
- **Tax policy:** Tax strategies and other economic incentives across sectors (agriculture, retail, manufacturing, restaurant, healthcare, wellness) for R&D, marketing, and sales of healthier, more accessible foods.
- **Healthcare, life insurance, nutrition assistance:** Leverage healthcare, insurance, food assistance dollars to support effective nutrition products and interventions.
- **ESG, mission-driven investment:** Encourage and convene investment standards and vehicles for food-related companies centered on health and equity.
- **Catalyze entrepreneurship:** Develop and support a national strategy to build an ecosystem of evidence-driven innovation for a healthier food system.
- **B-corporations:** Encourage and highlight B corporation status across sectors to recognize and reward integration of social and environmental priorities.
- **Opportunity zones:** Expand and encourage opportunity zone incentives for food, nutrition, and wellness investments to improve equity and reduce disparities.

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Food Companies		Retailers	Ingredient/ Supply Chain	Supplements/Wellness
				
<b>Clinical/Research Non-Profits</b> 		<b>Restaurants</b> 	<b>Non-Profits</b> 	<b>Nutrition Innovation</b> 
<b>Healthcare/Insurance</b> 			<b>Investors</b> 	


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## 2021 U.S. Government Accountability Office (GAO) report: *“Chronic Health Conditions: Federal Strategy Needed to Coordinate Diet-Related Efforts”*

- Chronic diet-related health conditions are **costly, deadly, and preventable**
- **200 different federal efforts, spread across 21 agencies**, to improve Americans' diets. But, efforts are **fragmented**, keeping the government from meeting its goals.
- Conclusion: **“A federal strategy for diet-related efforts could provide sustained leadership and result in improved, cost-effective outcomes for reducing Americans’ risk of diet related chronic health conditions.”**
- Recommendation: **“Congress should consider identifying and directing a federal entity to lead development and implementation of a federal strategy for diet-related efforts aimed at reducing Americans' risk of chronic health conditions.”**

U.S. Government Accountability Office (GAO)  
<https://www.gao.gov/products/gao-21-593>

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## Federal Policy Coordination

### NEW OFFICE OF THE NATIONAL DIRECTOR OF FOOD AND NUTRITION (ONDFN)

#### KEY CHARACTERISTICS


- ✓ President-appointed, Senate-confirmed Director of National Nutrition, serving as the Principal Nutrition Advisor to the White House, heads of executive branch departments and agencies, senior military, and Congress
- ✓ Modeled after the Office of the Director of National Intelligence, created after September 11 to coordinate fragmented national intelligence efforts
- ✓ Coordinate and harmonize the work of the 10+ US departments and agencies that comprise the federal food and nutrition community, including NIH, USDA, USAID, DoD, VA, CDC, FDA, DoE, CMS, CMMI, NASA, and more
- ✓ Assess and improve effectiveness and synergies of federal food and nutrition research and policy
- ✓ Ensure that timely and objective national nutrition information is provided to the White House, federal agency leaders, military commanders, and Congress

#### ADVANTAGES

- ✓ Tested, effective model
- ✓ Dedicated leadership, staff, and funding
- ✓ Builds on the ICHNR, with much stronger coordination and synergies across departments and agencies and a stronger dissemination platform
- ✓ Can be mobilized to advise on urgent situations (e.g., COVID-19) which require pre-existing robust leadership and coordination across agencies and departments
- ✓ Broader than solely nutrition research, intersects with food assistance

Fleischhacker et al. AJCN 2020  
[sites.tufts.edu/nutritionadvisory](https://sites.tufts.edu/nutritionadvisory)

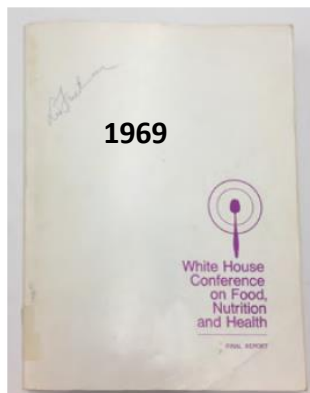
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## White House Conference on Food, Nutrition, Hunger, & Health



<https://sites.tufts.edu/nutritionandvisory/white-house-conference/>  
<https://sites.tufts.edu/foodnutritionandhealth2019/>

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Dr. Jean Mayer presents President Nixon with the three volume report on the 1969 Conference



Senators George McGovern and Bob Dole

### FY22 Appropriations – White House Conference on Food, Nutrition, Hunger, and Health

- \$2.5M for the White House to convene a whole-of-government conference and develop a roadmap to end hunger, improve nutrition, and reduce diet-related illness by 2030.
- Led by HHS in partnership with the Executive Office of the President, USDA, and other Federal agencies, in consultation with State, territories, local, and Tribal officials, and diverse stakeholders including anti-hunger, nutrition, and health experts; the private sector; and people with lived experience of hunger and nutrition insecurity.
- The conference shall produce a final report detailing its findings and proposed solutions to end hunger and improve nutrition security in the US by 2030.

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INFORMING THE WHITE HOUSE CONFERENCE ON  
**Hunger, Nutrition, and Health**

<https://informingwhc.org/>

About ▾ History ▾ 2022 WHC ▾ Events ▾ News [Submit Document](#)



## Informing the White House Conference on Hunger, Nutrition, and Health

Generating actionable recommendations for the country's next food and nutrition moonshot

[About Our Work](#)



Supported by the Bia-Echo Foundation, the HAND Foundation, and World Central Kitchen

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# Questions?

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## Upcoming Webinars

September 20, Food Shelf

Save the date: September 20, 2022 Time: 12:00-1:30 pm

Objectives

- Discuss how food shelves, pantries and other hunger relief resources are an important resource for supporting healthy eating for food insecure people who live with diabetes and other chronic conditions.
- Increase awareness of Minnesota's SuperShelf partnership and methods, and how this approach it is helping to increase access to healthy, appealing and culturally relevant foods across the state.
- Deepen understanding of the food needs, preferences and health concerns of people who are food insecure in Minnesota, through the results of the Statewide Food Shelf client survey, a unique data set of perspectives from food shelf clients.

7/6/2022

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## Evaluation and Certificate of Attendance

[Evaluation Link](#)

Certificate of Participation –  
upon completion of Evaluation

[Recording](#) - [Recording can be found at the Performance Improvement Project - Diabetes Page on the Stratis Health Website](#)

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## Thank you!

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WWW.HEALTH.MN.GOV

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