



**National Institutes of Health**  
*Office of Nutrition Research*

# **Food is Medicine Networks or Centers of Excellence**

## **Revised Concept**

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## **Concept Clearance: NEW (revised)**

**Title: Food is Medicine Networks or Centers of Excellence (Other Transaction Authority)**

**Objective/Purpose:** *Comprehensive Networks or Centers of Excellence aimed at reducing the burden of diet-related diseases and nutrition disparities through Food is Medicine research, patient care, education, and community outreach and engagement. Research includes interventional, health quality, implementation and behavioral science studies on the efficacy and health care economics of Food is Medicine services.*

**Funds Available and Anticipated Number of Awards:** Contingent upon NIH appropriations of at least \$20 million/year and submissions of highly meritorious applications.

**Award Project Period:** Phased award competition. Phase 1 planning/pilot: up to 10 awards for 3 years; leading to competition for Phase 2 study: up to 8 awards for 5 years.

**Council Action:** Vote for approval of the concept for Food is Medicine Networks or Centers of Excellence

## How we have addressed reviewers' comments.

*Comment: There is a need to engage macrolevel strategies to support these activities from multiple perspectives.*

- White House (WH) Nutrition Interagency Policy Council meetings are ongoing to coordinate Food is Medicine activities as part of the WH National Strategy on Hunger, Nutrition, and Health; ONR participates.
- Applicants will be asked how proposed research, outreach and engagement strategies could lead to effective changes in policy and health outcomes.

*Comment: Some agencies currently engaged in community efforts related to nutrition and food security are not involved in the concept (e.g., HRSA).*

- Concept presented at interagency meetings related to WH Conference. Helpful feedback incorporated into revised concept.
- HRSA's Maternal and Child Health Nutrition Program to train 30,000 nutrition professionals over next five years dovetails with this concept.
- ONR coordinating a Food is Medicine RFI with NIH ICOs and other federal agencies, i.e., ACL, CMS, FDA, HRSA, OASH, USDA, and VA – along with collaboration on this initiative.

*Lack of clarity about what would occur in health care systems, clinics, and hospitals where so many individuals receive their care and health education.*

The revised concept further delineates what would occur:

- Food insecurity and nutritional status assessments at patient touchpoints and community events
- Improved utilization of Food is Medicine and clinical nutrition services
- Increased interactions with health professionals with nutrition expertise and social workers
- Better communication about importance of diet in disease prevention and treatment outcomes
- Expansion of student and staff training in nutrition, food is medicine, food insecurity and social determinants of health

*Comment: More specificity is needed about how training will be expanded.*

- Applicants must describe how they will enhance training of health professionals in nutrition, food insecurity, diet-related chronic diseases, social determinants of health, and DEIA.
- Applicants required to include at least two of the following training components: culinary medicine, teaching kitchen programs, or fellowship programs in lifestyle medicine, nutrition specialties or obesity medicine.
- Inherent research training opportunities are expected from the proposed research projects.

# Background - What is “Food is Medicine?”

Food is Medicine is an umbrella term for programs that respond to the critical link between diet and health involving:

- **The provision of Food is Medicine Services**
- **A nexus of the health care system** (often deploying other nutrition and lifestyle medicine care to their communities)

# Food is Medicine Services:

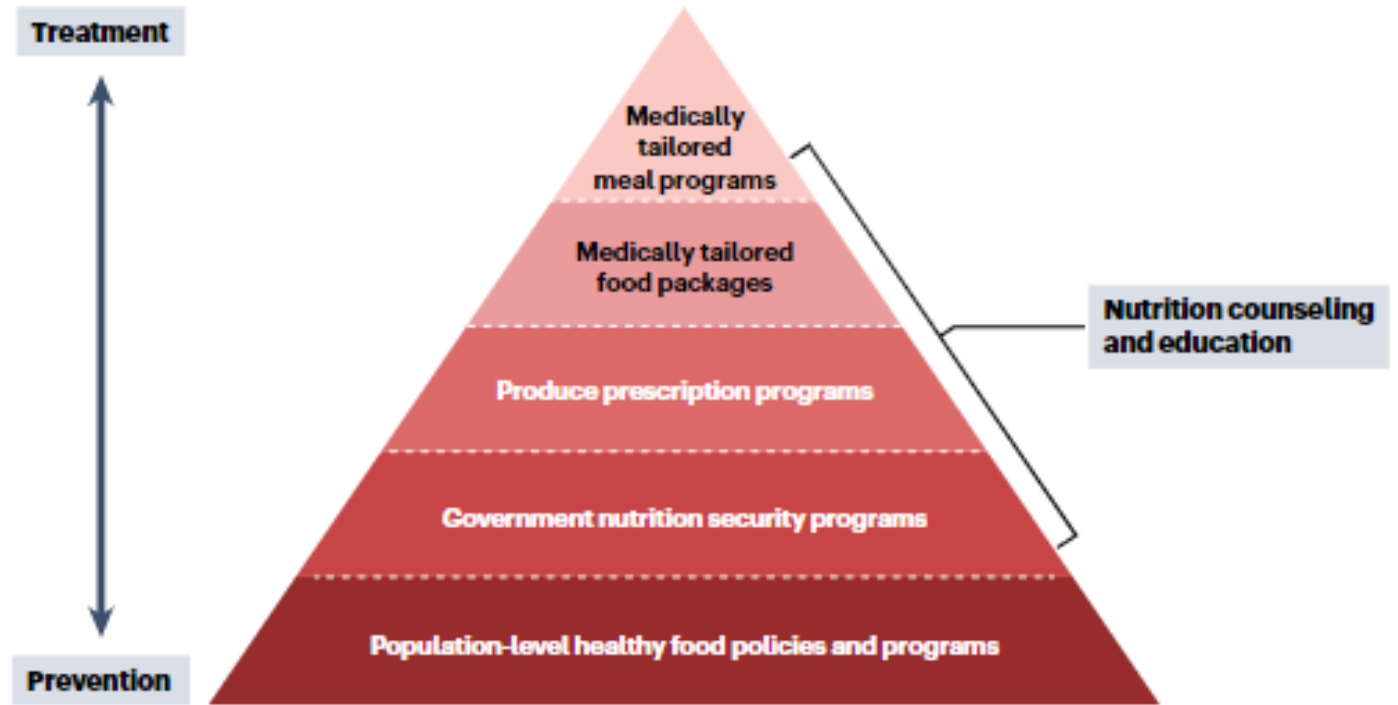
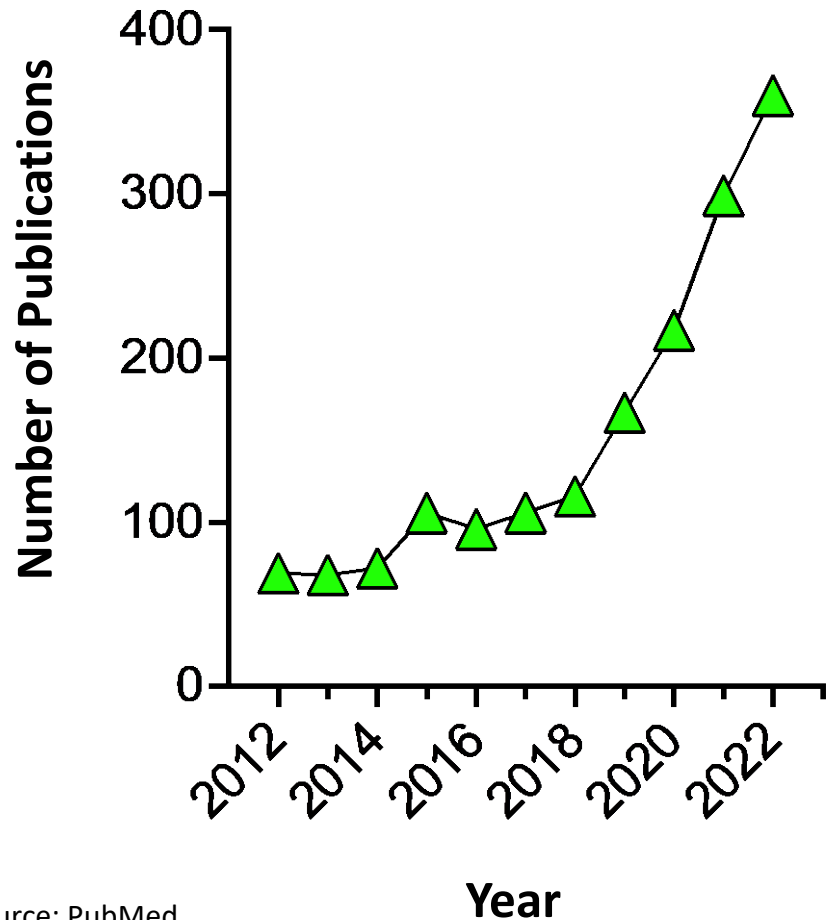
- Medically Tailored Meals
- Medically Tailored Groceries
- Nutritious Food Referrals
- Produce Prescriptions
- Culinary Medicine Programs
- Teaching Kitchens





# Food is Medicine: Research is Increasing

## Food is Medicine Research Publications



## Food is Medicine Pyramid

Mozaffarian et al., 2022 Nat Med 28, 2238-2240  
<https://doi.org/10.1038/s41591-022-02027-3>

# Food is Medicine: Increasing Government Interest

- White House Conference topic and included in the Administration's National Strategy "[Call to Action](#)"
- [Congressional Interest](#)
- Activities and interest from multiple agencies
  - ACL
  - CDC
  - CMS
  - FDA
  - HRSA
  - NIH
  - OASH
  - USDA
  - VA
- Trans-agency Food is Medicine RFI



VA Teaching Kitchen Program

# Food is Medicine

## Networks or Centers of Excellence Cores

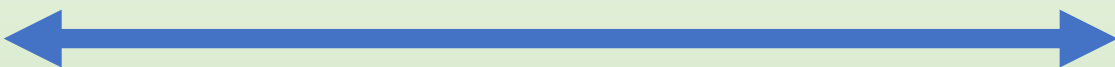
Research

Community Outreach & Engagement

Administrative Core

Education & Training

Patient Services



## Research

# Food is Medicine

- Develops innovative and transformative research to reduce malnutrition and diet-related chronic diseases
- Types of research: interventional, behavioral, implementation science, health quality, economic, and pragmatic studies
- Produces health care quality, efficacy, and medical economics evidence to support inclusion of Food is Medicine in health care

Education and Training proposed could include:

- Adding or expanding nutrition science or culinary medicine education in medical school and health professions education
- A teaching kitchen program for students, staff, and the community
- New nutrition, lifestyle medicine, or American Board of Obesity fellowships
- Additional training opportunities arising from the proposed research

# Food is Medicine

## Community Outreach & Engagement

- Advance mission by engaging and partnering with those in catchment area to address hunger, food insecurity, social determinants and health
- Organizing community health screenings and “pop-up” teaching kitchens
- Engage community in setting a research agenda and increasing diversity
- Communications
- Identify opportunities to impact policy locally and nationally to advance nutrition and Food is Medicine as viable options to improve health and importance of SDOH in increasing obesity and diet-related disease risk

# Example Planning/Pilot Phase Activities



- Research: research planning, IRB approvals, and vanguard studies for Phase 2
- Education: establishing curricula and programs for different audiences
- Patient services: plan and pilot Food is Medicine services, nutrition focused physical exams and food insecurity assessments
- COE: develop description of catchment area, and establish community partnerships and advisory groups



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# Food is Medicine Networks or Centers of Excellence

## Program deliverables

- Reduction of diet-related chronic diseases and nutrition disparities
- Evaluation metrics to accurately measure effects of food is medicine interventions
- Profiles of people who will benefit from different types of food is medicine interventions
- Evidence base to inform policy changes by the health care industry, insurers, and policymakers
- Annual meetings convened by ONR to showcase study investigators'
  - Innovations within health systems and communities
  - Regionally appropriate and culturally sensitive Food is Medicine best practices





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