

Advancing Nutrition Science



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The Burden of Poor Diets: Devastating Health Harms and More

Poor nutrition is a top driver of diet-related diseases such as heart disease, type 2 diabetes, obesity, hypertension, and certain cancers,¹ and contributes to many other conditions including poor gut health, declining brain and kidney function, subpar immunity, and allergies. This poses multiple societal challenges, including negative health outcomes, preventable healthcare spending, and adverse effects on the economy, military readiness, and national security. For example:

- **1 in 2** U.S. adults have diabetes or prediabetes,² and more than **7 in 10** have overweight or obesity.³ Adding in blood pressure and blood cholesterol levels, **14 in 15** U.S. adults have suboptimal cardiometabolic health.⁴
- U.S. teens are now developing the diet-related diseases of adults: **1 in 3** have prediabetes;² **1 in 5** have obesity;⁵ and **1 in 8** have fatty liver disease.⁶
- These rising rates of disease and healthcare spending are harming the productivity and bottom lines of U.S. businesses and families. The combined healthcare spending and lost productivity from suboptimal diets cost the U.S. economy **\$1.5 trillion each year.**⁷
- **77 percent** of U.S. young adults ages 17-24 do not qualify for military service, with excess weight as the leading medical disqualifier.⁸

Nutrition science has advanced considerably during the past several decades, helping the nation define the broad contours of a healthful diet. Yet many critical questions remain—and the science is not advancing far enough or fast enough to meet the fundamental challenges facing the country. **But despite rising rates of diet-related chronic diseases and their multi-faceted human, economic, and societal impacts, National Institutes of Health (NIH) funding for nutrition research and training has been flat or even declining for nearly 50 years.** By the most optimistic estimates, total funding for nutrition research represents only 4% of annual NIH spending,⁹ even with diet-related illnesses causing the majority of death and disability in the nation.

The Need for Cutting-Edge Nutrition Research

Although nutrition science has advanced in recent years, so much is left to learn. Robust nutrition research is essential to inform the daily decisions that people make about food, shape the nutrition guidance that health professionals offer patients, form the foundation of federal food assistance programs and policies, and guide food industry decisions about product innovation that shape the broader food supply. A major new investment in NIH nutrition research is needed to grow the evidence base, including, as examples, on the following critical topics:



Mechanisms underlying the health harms of ultra-processed foods



The effects of different foods on mothers and their children, including for fertility and child development



The effects of different foods and dietary patterns on mood, sleep, and mental health



How food interacts with the gut microbiome to influence health



Mapping the “dark matter” of food, including thousands of trace bioactive nutrients



Optimal diets for extending both lifespan and healthspan



How foods interact with other medical treatments, such as medications for obesity



Cost-effectiveness and efficacy of Food is Medicine interventions



Personalized nutrition, based on gut microbiome and epigenetic profile



The effects of contaminants such as microplastics and heavy metals in foods

Policy Solutions

These solutions for advancing nutrition science draw from various consensus reports developed by leading experts^{10,11} and priorities supported by key organizations.¹²

Congress should increase federal investment for nutrition research across NIH to at least \$4 billion per year to better support high-impact research on topics related to food and chronic disease prevention and management.

Congress should fund the NIH Office of the Director to launch Food is Medicine (FIM) Centers of Excellence, a concept that has already received clearance at NIH, combining cutting-edge research with patient care and community outreach to advance FIM interventions in healthcare including medically tailored meals, medically tailored groceries, and produce prescriptions.

Congress should ensure sufficient funding for the Office of Nutrition Research in the NIH Office of the Director for leadership and coordination of nutrition science efforts.

Expanded funding for ONR should supplement efforts at other **NIH Institutes and Centers (ICs)** to address diet-related diseases. Nutrition research occurs across ICs focused on different diseases and conditions, like research on nutrition and cancer at the National Cancer Institute, and research on nutrition and heart disease at the National Heart, Lung, and Blood Institute. Adequate ONR funding will help **coordinate and advance such efforts**, not replace them.

Increased funding for ONR will also allow it to provide **training to the next generation** of nutrition scientists and coordinate a broader portfolio of research across diseases and conditions.

Congress and the Administration should consider a new NIH National Institute of Nutrition. This new institute could:

- Coordinate and harmonize nutrition science, reducing duplication of efforts and waste across the NIH ICs and other federal agencies that conduct and utilize nutrition research.*
- Inform and support the Dietary Guidelines for Americans, including currently missing nutritional guidance for individuals with diet-related conditions.
- Guide and support training of healthcare professionals for clinical care and basic and translational science in nutrition.
- Guide the food industry to promote evidence-based innovations that improve health and advance U.S. jobs and businesses.

**Examples of other federal entities that conduct and utilize nutrition research include the U.S. Department of Agriculture, Department of Health and Human Services, Department of Defense, and Department of Veterans Affairs.*

Prioritizing the advancement of nutrition science will help to improve health outcomes for all Americans, manage healthcare spending, and improve military readiness and national security.

¹ JAMA. 2018;319(14):1444–1472. doi:10.1001/jama.2018.0158

² CDC. (2026) National Diabetes Statistics Report, 11 Mar 2026. Available at <https://usdss.cdc.gov/diabetes/report.html>. (Accessed: 07/27/2026).

³ CDC. (2026). Prevalence of Obesity. <https://www.cdc.gov/nchs/data/hestat/hestat111.htm>

⁴ J Am Coll Cardiol. 2022 Jul 12;80(2):138–151. doi: 10.1016/j.jacc.2022.04.046

⁵ JAMA. 2025;333(12):1082–1084. doi:10.1001/jama.2024.27676

⁶ Hepatol Commun. 2021;5:1676–1688. <https://doi.org/10.1002/hep4.1760>

⁷ <https://www.rockefellerfoundation.org/reports/true-cost-of-food-measuring-what-matters-to-transform-the-u-s-food-system/> (the \$1.1T figure from this report has been updated for healthcare inflation)

⁸ <https://strongnation.s3.amazonaws.com/documents/1541/aab5fcd2-74e4-4b76-b260-010a5d9afcc9.pdf>

⁹ NIH Nutrition Research Report 2022–2023. <https://dpcpsi.nih.gov/onr/nihi-nutrition-report>

¹⁰ Am J Clin Nutr. 2020 Sep 1;112(3):721–769. doi: 10.1093/ajcn/nqaa179. PMID: 32687145

¹¹ https://tuftsfoodismedicine.org/wp-content/uploads/2026/07/Informing_White_House_Conference_Task_Force_Report_Aug22.pdf

¹² https://tuftsfoodismedicine.org/wp-content/uploads/2026/07/FY27-FIM-Appropriations_Organizational-Sign-On-Letter_July-2026-FINAL.pdf