

Summary from Session 3: Food Producers, Processors, & Retailers

Advancing Nutrition Science

- Mounting **diet-related health burdens** and the economic, health equity, national security, and sustainability implications
- **Opportunities for new nutrition-related discoveries** in basic, clinical, public health, agricultural, and implementation science
- Current **fragmented federal nutrition research landscape** and mechanisms for its coordination
- **Best options** to coordinate and advance federal nutrition science, with advantages, disadvantages, and paths forward

Americans Are Sick – Really Sick

- **More U.S. adults are sick than are healthy:**
 - **1 in 2** have diabetes or prediabetes
 - **3 in 4** have overweight or obesity
 - Only **1 in 15** (6.8%) are metabolically healthy
- **Sick American teenagers:**
 - **1 in 4** have prediabetes
 - **1 in 4** have overweight or obesity
 - **1 in 6** have fatty liver disease
- **A failing grade on nutrition:**
 - Average HEI score: **58** of out 100
 - No age, sex, racial, ethnic, or income subgroup has an HEI score > 65
 - Diet quality worst at **ages 5-18 years**
- **Poor nutrition, a horrific impact:**
 - Kills **10,000** Americans each week
 - Causes **21,000** new cases of diabetes each week
 - Causes **45%** of all cardiometabolic deaths

U.S. Burden of Disease Collaborators, JAMA 2018; O’Hearn et al., JACC 2022; O’Hearn et al., Nature Med 2023;
Centers for Medicare & Medicaid Services, 2018; The Milken Institute, *America’s Obesity Crisis*, 2018;
American Heart Association, *Heart Disease and Stroke Statistics*, 2018;

PCAST Draft Recommendations

- 1. Create and implement a long-term Federal Strategy on Nutrition and Health**
- 2. Provide equitable access to the benefits of nutrition research**
- 3. Strengthen the Interagency Committee on Human Nutrition Research**

Priority Nutrition Science Questions

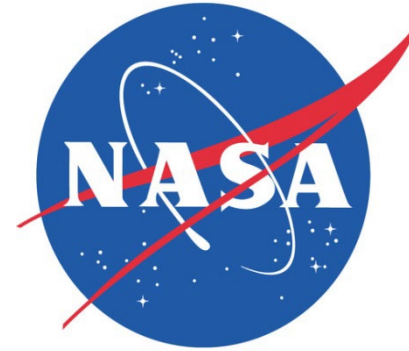
National Strategy: “PCAST will identify **scientific opportunities, gaps, and priorities** to continue to advance nutrition science, with a particular emphasis on ensuring equitable access to the benefits of research.”

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

Fragmented Federal Nutrition Research Landscape



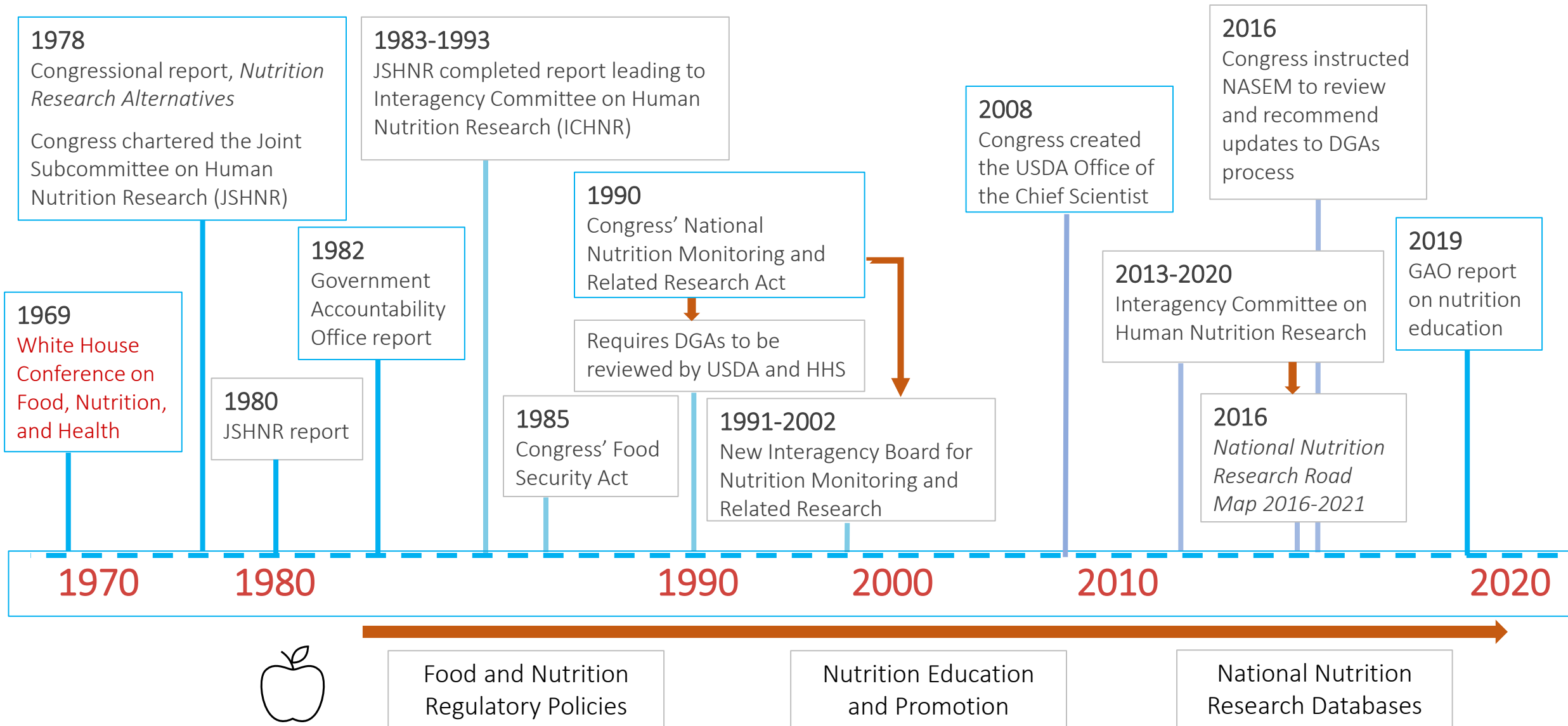
National Institutes
of Health



NIST
National Institute of
Standards and Technology
U.S. Department of Commerce



Many Calls for Greater Federal Nutrition Research Coordination



Government Accountability Office (GAO)

- Chronic diet-related health conditions are **costly, deadly, and preventable**.
- **200 different federal efforts (including 119 research efforts) are spread across 21 agencies** to improve Americans' diets. These 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), Federal Strategy Needed to Coordinate Diet-Related Efforts
<https://www.gao.gov/products/gao-21-593>

Strategic Options: Coordination, Authority, Investment

Cross-Governmental

- New *Office of the National Director of Food and Nutrition* (ONDFN)
- Strengthened *ICHNR*, with authority and budget
- New *Associate Director for Nutrition Science* within the White House OSTP
- New external *US Task Force on Federal Nutrition Research*

Within NIH

- *Office of Nutrition Research* (ONR) within the Office of the Director
- New cross-NIH initiatives and investments in nutrition research
- New *National Institute of Nutrition* (NIN)

Within USDA

- New *Assistant Secretary for Nutrition Science* within Research, Education, and Economics
- Prioritization of research that integrates agricultural production, human health, and sustainability across REE
- Major new investments in research on nutrition impacts of USDA programs, like the DGAs, SNAP, WIC, and school meals

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

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