

Nutrition Research



HIGHLIGHTS

- Approximately \$190.2 billion is spent on obesity-related health issues each year, about 21% of annual medical spending.²
- The USDA and the National Institutes of Health fund more than 90% of nutrition-related research and training.¹

FULLY FUNDING NUTRITION RESEARCH WILL:

- Improve the health of Americans
- Reduce health care costs
- Provide safe, nutritious, affordable and sustainable food supply¹
- Preserve competitive position of U.S. agriculture and national security¹
- Provide jobs and revenue to support the U.S. economy¹

REAUTHORIZE USDA'S AGRICULTURE AND FOOD RESEARCH INITIATIVE AT A MINIMUM OF \$700 MILLION

Since its establishment in the 2008 farm bill, the Agriculture and Food Research Initiative (AFRI) has been the nation's premier competitive, peer-reviewed research program for fundamental and applied agricultural sciences. AFRI-funded science is vital to meeting food and nutrition demands and helps develop new technologies and a workforce that will advance the nation's health. This investment will provide the resources needed to ensure food, nutrition and agricultural research in the U.S. keeps pace in the 21st century, remains competitive in a global economy and provides training to the next generation of scientists to advance the safety, quality and nutritive value of food.

MAINTAIN SUPPORT FOR ALL HUMAN NUTRITION RESEARCH CENTERS

The USDA Agricultural Research Service (ARS) maintains six Human Nutrition Research Centers, which houses most of the ARS's nutrition and food safety research and development. A wide spectrum of human nutrition challenges is investigated, which helps inform USDA policies and programs and provides resources for other federal agencies. Each center focuses on a different life-cycle period: from the important window of birth to 24 months, up to the aging adult population.

These centers are critically important resources for the national and local economies, advancing cutting-edge research that directly benefits the U.S. population and supporting thousands of physician and scientist jobs in nutrition across the country. Their research addresses rising health care costs associated with nutrition by contributing the most comprehensive reference data available to support nutrition recommendations.

USDA ARS HUMAN NUTRITION RESEARCH CENTERS HIGHLIGHTS

- Age-related muscle loss can lead to over \$26 billion in annual health care costs. Due to the increasing at-risk U.S. population of adults aged 85 years and older, scientists developed simple tests to help doctors make diagnoses and implement treatment plans for loss of muscle mass and strength.
- The FDA's approval of a health claim for barley food products came from research that indicated barley fiber consumption lowers cholesterol levels.
- Heart disease is the leading cause of death in the U.S. Research discovered flavonoids may be an important component of a cardioprotective diet.
- Research discovered expanding the national crop production center has the potential to increase American's intake of fruits and vegetables by 1.7%–5.4%.
- Research identified a carotenoid found in sweet red peppers that may inhibit the spread of lung cancer tumors. This could help lead to dietary recommendations specific for patients with lung cancer.
- Obesity increases colorectal cancer risk by 30%. Research found the change of gut bacteria may play a major role in promoting intestinal inflammation, helping to further understand obesity-related colon cancer.

Nutrition research is essential in guiding federal food, agriculture and nutrition policies in:

- Food safety
- Food labeling
- Food assistance
- Food fortification
- Military rations
- Pesticide exposure
- Dietary guidance

NUTRITION-RESEARCH IS VITAL TO THE NATION'S HEALTH

Nutrition research addresses widespread health concerns such as excess weight, obesity, Type 2 diabetes, certain cancers and cardiovascular disease.¹ Nutrition research is critical to identifying solutions and preventing chronic disease.⁵ Billions of dollars in annual health care expenditures could be saved by preventing these diseases through better nutrition.¹

Agricultural and nutrition researchers play a key role in bridging the gap between disease prevention and disease treatment by fostering clinical research, providing innovative education and delineating best practices for medical nutrition in primary care settings. Understanding the link between behavior and food choices helps address obesity and other nutrition-related issues. Nutrition research also helps create the most effective, evidence-based, innovative nutrition programs and initiatives, such as the Supplemental Nutrition Assistance Program, Nutrition Education and Obesity Prevention Grant Program and the Expanded Food and Nutrition Education Program.

Endnotes

- 1 Ohlhorst S, Koo J. Science and Technology in Congress FY 2017. Intersociety Working Group. mcmprodaas.s3.amazonaws.com/s3fspublic/Intersociety%20Report%202016.pdf.
- 2 Cawley J, Meyerhoefer C. 2012. The medical costs of obesity: an instrumental variables approach. *Journal of Health Economics*. 31(1):219–230.
- 3 Trasande L, Chatterjee S. 2009. The impact of obesity on health service utilization and costs in childhood. *Obesity*. 17(9): 1749.
- 4 United States Department of Agriculture. Scientific Discoveries. The Impact of Agricultural Research Service Research – Fiscal Year 2017. January 2018.
- 5 Interagency Committee on Human Nutrition Research. National Nutrition Research Roadmap 2016–2021: Advancing Nutrition Research to Improve and Sustain Health. 2016. <https://www.nal.usda.gov/sites/default/files/>. Accessed March 5, 2018.