
HNRCA: Research with Impact

The Jean Mayer United States Department of Agriculture (USDA) Human Nutrition Research Center on Aging at Tufts University is the largest research center in the world devoted to studying the role of nutrition in the prevention of age-related chronic and infectious diseases.

Named for Jean Mayer, former President of Tufts University and global nutrition leader, the HNRCA is one of only six human nutrition research centers in the United States supported by the Agricultural Research Service (ARS), the intramural research branch of the USDA. Located on the Tufts health sciences campus, the HNRCA is uniquely positioned to contribute to both human nutrition

and aging research and the life sciences leadership of the University.

Structure and Organization

The HNRCA's 270 researchers, trainees and staff, support the efforts of 20 research laboratories, each investigating the impact of multiple facets of nutrition on specific health outcomes. The HNRCA's laboratories are directed by leaders in the nutrition and health fields. The HNRCA also has nine Core Units, six scientific and three non-scientific, which provide technical and administrative support to the research laboratories.

Research Laboratories

Antioxidant	Nutritional Epidemiology
Body Composition	Nutritional Immunology
Bone Metabolism	Neuroscience
Carotenoids and Health	Nutrition and Neurocognition
Cardiovascular Nutrition	Nutrition and Vision
Energy Metabolism	Obesity Metabolism
Lipid Metabolism	Vascular Biology
Nutrition and Cancer Biology	Vitamins and Carcinogenesis
Nutrition, Exercise, Physiology and Sarcopenia	Vitamin K
Nutritional and Genomics	Vitamin Metabolism

Core Units

Biostatistics	Nutrition Evaluation
Comparative Biology	Administration
Dietary Assessment	Scientific Computing
Mass Spectrometry	Physical Plant/Facilities
Metabolic Research	

Research Expertise

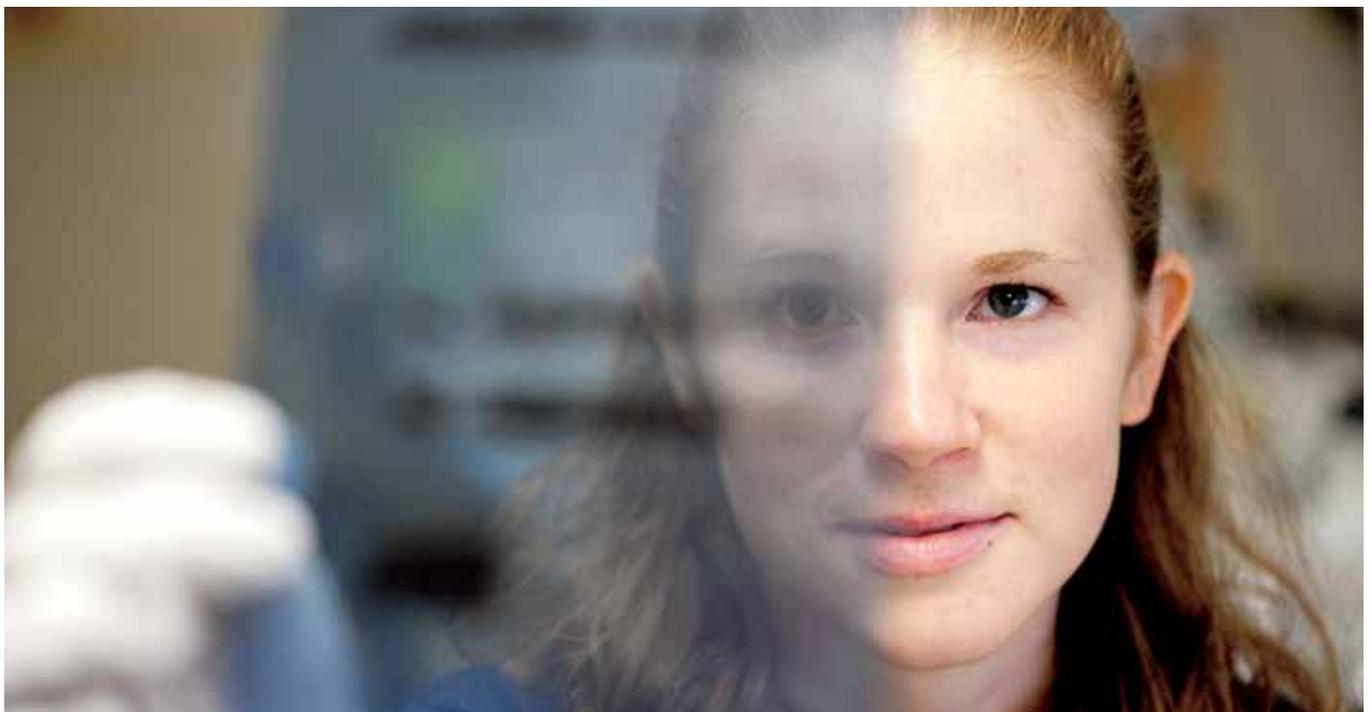
The HNRCA's diverse and expansive research expertise enhances its ability to study complex health outcomes in various areas. To investigate complex conditions, scientists pursue an array of research methods including cellular and molecular studies, animal studies, human metabolic studies, and epidemiological research.

Using different research models allows investigators to study nutrition's impact on diseases from the cellular level to the population level in order to contribute to dietary recommendations and health policies. The HNRCA's translational capacity, in combination with its breadth of expertise, allows for collaborative and cross-disciplinary approaches to addressing complex health problems.

HNRCA research has added to preventative nutrition and physical activity solutions for health problems such as

- obesity,
- sarcopenia,
- coronary artery disease,
- cancer,
- infection, and
- neurocognitive impairment.

Pioneering work by HNRCA scientists has advanced the understanding of nutrient bioavailability and nutrient requirements. This research has influenced public health by providing the foundation for establishing nutrition and physical activity policy and guidance such as the Recommended Dietary Allowances and the Dietary Guidelines for Americans.



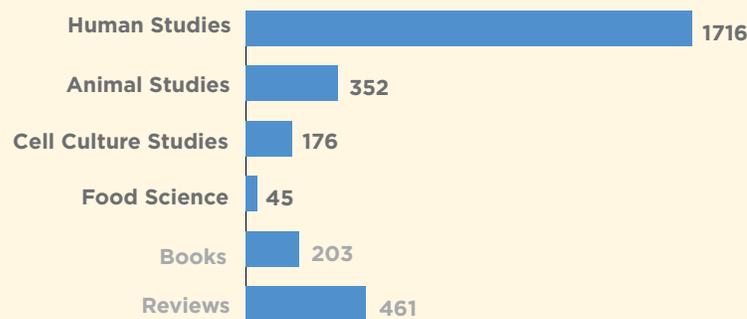
Publications

The HNRCA is dedicated to communicating its significant findings to the scientific community and the public. In July of 2009, *Times Higher Education* ranked Tufts as the agricultural sciences institution with the greatest global impact based on papers published and citations, which is largely attributable to HNRCA research. HNRCA findings have been cited in papers and articles published in *American Journal of Clinical Nutrition*, *Cancer*, *JAMA*, *Journal of the American Geriatric Society*, *Journal of Biological Chemistry*, *Journal of Nutrition*, *Lancet*, *Nature*, *New England Journal of Medicine*, and many other prominent peer-reviewed journals. In fact, HNRCA scientists produced almost 3,000 scientific

journal publications between 2000 and April 2010, adding up to one new article every business day.

HNRCA research findings are regularly quoted in the popular press as well. Between July 2009 and June 2010, the HNRCA was cited almost 2,000 times by national and global media outlets including *Associated Press*, *The Today Show*, *The New York Times*, *Agence France Press*, *The Los Angeles Times*, *The Boston Globe*, *El Pais (Spain)*, *Time Magazine online*, *The Washington Post*, *The Wall Street Journal*, *USA Today*, *Good Morning America Weekend* and *National Public Radio*. These publications and press outlets are essential to educating constituents and the general public on the importance of nutrition for healthy aging.

HNRCA Publications 2000 - April 2010



Financial Support

Funding for the HNRCA's annual budget comes from several sources including the USDA, the National Institutes of Health (NIH), private corporations and foundations, non-profit organizations, restricted contributions, and state and foreign entities. Grant funding is imperative to supporting the research of the HNRCA as well as providing resources to continuously develop its technologies, training, talent and facilities.

2009 Revenue

