

Improving the Health of Older Adults

American adults ages 60 years and older face many barriers to optimal health and wellness, including chronic disease, poverty, inadequate food and nutrition, physical impairments, and reduced social interaction.

Researchers are working together to assess the health needs of older adults and develop diet and exercise strategies that support healthier, longer, more productive lives. Improving the quality of life for the nation's fastest growing age group could also help reduce healthcare costs and strain on the system.

This project brings together experts from multiple disciplines to examine a wide range of genetic, cellular, environmental, individual, and social factors that influence the health of aging adults. Collaboration makes research more efficient by spreading the workload, reducing redundancy, and facilitating the sharing of research tools, funding, and other resources. With members in multiple states, the project is able to reach aging adults from various socioeconomic classes, ethnicities, and rural, suburban, and urban areas.

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Project Highlights

Project members developed tools and conducted assessments to provide a better understanding of the nutrition and physical activity needs of aging adults. This information will help target and guide interventions that support healthy aging.

- Project members standardized assessment tools and procedures and established large, reliable datasets.
- Researchers identified biomarkers, such as dietary selenium insufficiency, fatty acid intake, and cellular factors, that can indicate or predict aging and related health conditions.
- [Studies](#) showed that examining molecules in stool samples could be a cost-effective, non-invasive way to see how dietary interventions affect the gut.
- A large-scale assessment examined nutrition and physical activity needs of 1,250 adults ages 40 years and older in seven states (University of the District of Columbia, University of Illinois, Iowa State University, University of Maryland, University of Rhode Island, South Dakota State University, and West Virginia University).
- Food insecurity research provided evidence that healthy eating can decrease the risk of physical disabilities and mental health issues.
- Researchers collected pilot data from aging adults in New York City regarding brain health variables such as diet, sleep, physical activity, stress, and sense of belonging (City University of New York).
- Project members examined cultural, personal, environmental, and accessibility barriers to healthy lifestyles.

To address the dietary and physical activity needs of aging adults, project members developed, tested, and implemented interventions. For example, researchers:

- Made discoveries about macrophages (a type of white blood cell) and brain receptors involved in appetite regulation and other metabolic functions. These discoveries will help develop targeted therapeutics to slow or prevent inflammation and age-related chronic conditions, including obesity.
- Explored dietary approaches to reducing age-related inflammation and obesity.
- Identified community supports that can increase produce consumption among older adults.
- Showed that fortifying diets with high quality oils rich in linoleic acid supports healthier muscle mass in aging adults.
- Identified exercises that could help lower the risk of muscle wasting. In particular, an online muscle wasting prevention program empowered women (University of Arkansas, University of the District of Columbia, Iowa State University, New York University, University of Rhode Island, South Dakota State University, and West Virginia University).
- Identified physical activity interventions that improve immune response and vaccine efficacy among older adults.
- Developed programs and other outreach materials that have reached thousands of older adults in multiple states, increasing their awareness of healthy diet and exercise and resources.
- Developed a new screening tool that helps the USDA get a more complete picture of food insecurity among older adults by including the inability to access food due to physical limitations or disabilities.
- Developed a tool that helps home-delivered meal programs determine which clients are eligible, prioritize crucial services, and develop waitlists. This tool is mandated for use in Maryland, and other states have adapted the tool.



Teaching & Training

Project members showed healthcare and nutrition professionals working with older adults how to conduct focus groups and needs assessments.

Trainings for nutrition students, dietetic interns, and Extension personnel covered topics including the nutritional needs of older adults, communication skills, and ageism (University of Tennessee).

Project members have taught and mentored numerous undergraduate and graduate students as well as post-doctoral associates, preparing them for success in the workforce and supporting the next generation of scientists, nutritionists, and healthcare professionals.

Participating in the multistate project has provided professional development opportunities for project members, including development and refinement of data collection and analysis skills and opportunities to collaborate on research and publications, which has assisted in the tenure and promotion of several project members.