

April 27-29 April • Barcelona, Spain

HIGHER QUALITY DIETS IN MID-LIFE IMPROVE PHYSICAL PERFORMANCE IN OLD AGE

BARCELONA, SPAIN, April 28, 2017.

A study of over 900 older adults whose dietary patterns had been assessed multiple times over more than two decades showed that those with higher quality diets across the lifespan performed better on measures of physical function and mobility. Sian Robinson, PhD, professor of nutritional epidemiology at the University of Southampton, UK, said these results indicate that better nutrition in mid-life could help people maintain their quality of life and independence as they age.

The data Robinson and colleagues analyzed were collected by the Medical Research Council's National Survey of Health and Development (NSHD), a longitudinal study of people born in England, Wales, or Scotland during one week in 1946. Participants kept detailed food diaries for at least three days at ages 36, 43, 53, and in their early 60s. These diaries allowed the researchers to identify dietary patterns defined by the participants' consumption of 45 food groups. A "healthy" pattern was characterized by high consumption of fruits, vegetables, and whole grains, combined with a low consumption of added sugar and processed meat.

"This is a really special study because it provides longitudinal dietary data," said Robinson. *"It's quite rare to have complete and consistent data like this."*

At age 60-64, participants also underwent a series of standardized tests that measured walking speed, time required to stand from a chair and sit down 10 times, and how long one could balance on one leg with eyes closed. *"These tests tell us a lot about the aging process and are powerful predictors of overall health, better outcomes, and the ability to remain independent. And more importantly, they are really important markers of morbidity and mortality,"* said Robinson. In the study, people with higher quality diets performed significantly better on these tests, even after accounting for factors such as gender, weight-for-height, smoking history, and physical activity.

The analysis also suggested that switching from a less healthy to a more healthy diet pattern later in life resulted in improved physical function. *"This suggests an opportunity to promote better health choices, including better diet, particularly in people nearing retirement age, when they are making changes in their lives,"* said Robinson. The ultimate test, she said, would be to prospectively study a group of people who switch to a healthier diet in mid-to-late life, and then follow them to see if their health and physical function improves. In the meantime, her team will continue to follow the people who participated in this study to assess the effects of diet in late life.