Eating more protein may not benefit older men

2 April 2018

Regardless of whether an adult is young or old, male or female, their recommended dietary allowance (RDA) for protein, set by the Institute of Medicine, is the same: 0.8-g/kg/day. Many experts and national organizations recommend dietary protein intakes greater than the recommended allowance to maintain and promote muscle growth in older adults. However, few rigorous studies have evaluated whether higher protein intake among older adults provides meaningful benefit. A randomized, clinical trial conducted by Brigham and Women's Hospital investigator Shalender Bhasin, MD, and colleagues has found that higher protein intake did not increase lean body mass, muscle performance, physical function or other well-being measures among older men.

The results of their study are published in the April issue of JAMA Internal Medicine.

"It's amazing how little evidence there is around how much protein we need in our diet, especially the value of high-protein intake," said corresponding author Bhasin, director of the Research Program in Men's Health in the Division of Aging and Metabolism at BWH. "Despite a lack of evidence, experts continue to recommend high-protein intake for older men. We wanted to test this rigorously and determine whether protein intake greater than the recommended dietary allowance is beneficial in increasing muscle mass, strength and wellbeing."

The clinical trial, known as the Optimizing Protein Intake in Older Men (OPTIMen) Trial, was a randomized, placebo-controlled, double-blind, parallel group trial in which men aged 65 or older were randomized to receive a diet containing 0.8-g/kg/day protein and a placebo injection; 1.3-g/kg/day protein and a placebo injection; 0.8-g/kg/day protein and a weekly injection of testosterone; or 1.3-g/kg/day protein and a weekly injection of testosterone. All participants were given prepackaged meals with individualized protein and energy contents and supplements. Seventy-eight participants completed the six-month trial.

The team found that protein intake greater than the RDA had no significant effect on lean body mass, fat mass, muscle performance, physical function, fatigue or other well-being measures.

"Our data highlight the need for re-evaluation of the protein recommended daily allowance in older adults, especially those with frailty and chronic disease," the authors concluded.


Provided by Brigham and Women's Hospital