

Egg Nutrition Center



Protein Research

Paddon-Jones D, Westman E, Mattes RD, Wolfe RR, Astrup A, Westerterp-Plantenga M. Protein, weight management, and satiety. *Am J Clin Nutr* 2008;87:558S-61S.

Obesity, with its comorbidities such as metabolic syndrome and cardiovascular diseases, is a major public health concern. To address this problem, it is imperative to identify treatment interventions that target a variety of short- and long-term mechanisms. Although any dietary or lifestyle change must be personalized, controlled energy intake in association with a moderately elevated protein intake may represent an effective and practical weight-loss strategy. Potential beneficial outcomes associated with protein ingestion include the following: 1) increased satiety—protein generally increases satiety to a greater extent than carbohydrate or fat and may facilitate a reduction in energy consumption under ad libitum dietary conditions; 2) increased thermogenesis—higher-protein diets are associated with increased thermogenesis, which also influences satiety and augments energy expenditure (in the longer term, increased thermogenesis contributes to the relatively low-energy efficiency of protein); and 3) maintenance or accretion of fat-free mass—in some individuals, a moderately higher protein diet may provide a stimulatory effect on muscle protein anabolism, favoring the retention of lean muscle mass while improving metabolic profile. Nevertheless, any potential benefits associated with a moderately elevated protein intake must be evaluated in the light of customary dietary practices and individual variability.