

Egg Nutrition Center



Protein Research

Paddon-Jones D, Rasmussen BB. Dietary protein recommendations and the prevention of sarcopenia. *Curr Opin Clin Nutr Metab Care* 2009;12:86-90.

Purpose of review: To draw attention to recent work on the role of protein and the amount of protein needed with each meal to preserve skeletal muscle mass in ageing.

Recent findings: Ageing does not inevitably reduce the anabolic response to a high-quality protein meal. Ingestion of approximately 25–30g of protein per meal maximally stimulates muscle protein synthesis in both young and older individuals. However, muscle protein synthesis is blunted in elderly when protein and carbohydrate are coingested or when the quantity of protein is less than approximately 20g per meal. Supplementing regular mixed-nutrient meals with leucine may also enhance the muscle protein synthetic response in elders.

Summary: On the basis of recent work, we propose a novel and specific dietary approach to prevent or slow-muscle loss with ageing. Rather than recommending a large, global increase in the recommended dietary allowance (RDA) for protein for all elderly individuals, clinicians should stress the importance of ingesting a sufficient amount of protein with each meal. To maximize muscle protein synthesis while being cognizant of total energy intake, we propose a dietary plan that includes 25–30g of high quality protein per meal.