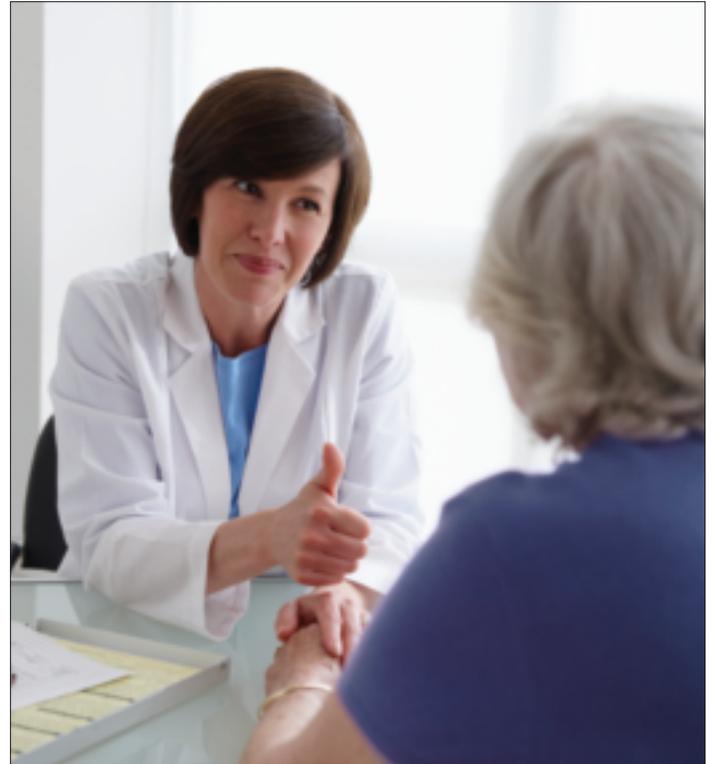


Ideal Protein Needs for Americans

Identifying Favorable Protein Needs for Americans

Current dietary protein recommendations are based on providing the minimum amount of protein building blocks, also known as essential amino acids, for the body to make new protein structures such as enzymes, bones or muscles. New research shows that there is reason to recommend dietary protein levels that would provide more than the minimum amount of essential amino acids. Research also shows that diets with increased protein intake can improve adult health and provide benefits for treatment or prevention of diseases including obesity, osteoporosis, type 2 diabetes, metabolic syndrome, heart disease and sarcopenia.¹⁻⁵

Protein needs for adults correlate to an individual's body weight; however, current dietary protein recommendations are often represented as a percentage of energy intake. For example, the Dietary Reference Intakes (DRI) indicate an acceptable protein range for adults of 10 percent to 35 percent of total energy.⁶ No guidelines are provided about how to select a protein intake across all energy intake levels, though representing protein intake as a percentage of energy means that some individuals with low energy intakes may not be getting enough protein. Research shows that 25-30 grams of protein consumed at each meal may be most favorable to maintain healthy muscles and bones for adults.^{7,8,9}



The Important Role of Dietary Protein in Human Health

More than 40 percent of the body's protein is found in skeletal muscle and more than 25 percent is found in organs. Protein is required for a healthy diet because it provides amino acids, which allow the body to synthesize its own proteins and nitrogen-containing molecules that make life possible.

Dietary protein quality is determined by the amino acid composition of a protein and its digestibility. High-quality protein foods – which include animal sources such as eggs, lean beef and pork, skinless poultry, fish and low-fat dairy products – contain optimal levels of all nine essential amino acids. Plant sources of protein, such as beans, nuts, seeds and legumes, also provide protein, but they often have inadequate amounts of one or more of the nine essential amino acids.¹⁰ Some plant proteins provide all nine essential amino acids, but plant protein has lower digestibility compared with animal proteins.



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Research Round-Up: The *Incredible* Benefits of High-Quality Protein

Muscle Maintenance

Older adults gradually lose muscle mass and strength as part of the aging process. This loss of muscle, known as sarcopenia, can lead to weakness, frailty and a higher risk of falls and injury. But research suggests that getting adequate dietary protein can help prevent or slow sarcopenia. A study of older men and women found that those who ate the most protein-rich foods lost approximately 40 percent less muscle mass over three years compared to those who ate the least amount of protein.¹ Research shows that 25-30 grams of high-quality protein per meal may be optimal to maintain healthy muscles and bones for adults.^{2,3}



Weight Loss

When people on a calorie-restricted diet ate protein foods for breakfast, like eggs, they reported that their appetite was satisfied longer.⁶ Also, eating an egg breakfast versus a bagel breakfast helped dieters lose more weight.⁷ In addition, a decreased ratio of dietary carbohydrate to protein may improve blood lipid profiles during weight loss.⁸

Energy for the Day

Several studies have demonstrated the cognitive benefits of eating breakfast, such as improved memory recall time, improved grades and higher test scores.¹⁰ In a recent study, eating eggs for breakfast helped dieters feel more energetic than those who ate a bagel breakfast of equal calories.¹¹



Egg Nutrition Center, 2010

Better Blood Sugar Level Maintenance

High-quality protein provides steady and sustained energy because it does not cause a surge in blood sugar or insulin levels,



which can lead to a rebound effect or energy "crash" as levels drop.^{4,5}

Weight Maintenance

Following weight loss, adults who consumed diets higher in protein were better able to manage their weight than adults on a lower protein diet. In fact, the group that consumed a diet with a greater percent of total calories from protein had smaller waist circumferences and were better able to maintain weight loss.⁹

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¹¹ Vander Wal JS, et al. Egg breakfast enhances weight loss. *Int J of Obesity.* 2008; 32:1545 - 1551.