

The Science Behind Protein and Satiety

Looking to fill up and not fill out?

A growing body of research suggests that protein foods such as eggs keep appetites satisfied longer, aid in weight management and fat loss, and help preserve healthy lean muscle mass.

Eggs provide some of the highest-quality protein available at just 75 calories per egg. In fact, the quality of egg protein is so high that scientists frequently use eggs as the standard for measuring the protein quality of other foods. One egg provides 6 grams of protein, or 12% of the Recommended Daily Value. While many people think the egg white has all the protein, the yolk actually provides nearly half of it.

The Research Says...

Beat Hunger with Eggs

A randomized cross-over study found that an egg breakfast helped overweight and obese individuals feel more full over 24 hours than a bagel-based breakfast of equal calories and weight. Further, those who ate the egg breakfast ate about 330 calories less for the remainder of the day.

Vander Wal JS et al. Short-term effect of eggs on satiety in overweight and obese subjects. *J Am Coll Nutr.* 2005;24(6):510-515.

Maintain Muscle and Lose More Fat with Protein

A research review of studies concluded that increasing intake of high-quality protein (found in eggs, low-fat dairy and lean meats) and decreasing intake of carbohydrates is an effective way to preserve lean muscle and increase fat loss during weight loss, while helping to stabilize blood glucose levels.

Layman DK. Protein quantity and quality at levels above RDA improves adult weight loss. *J Am Coll Nutr.* 2004;23(6):631S-636S.

The Powers of Protein

In a matched, controlled clinical study, a group of women who consumed higher amounts of protein from foods such as eggs, meat and milk lost slightly more weight, had better blood lipid profiles (including measurements of cholesterol), reported higher satiety, and had lower blood glucose levels than a group of women who consumed the same amount of calories on a high-carbohydrate diet.

Layman DK et al. A reduced ratio of dietary carbohydrate to protein improves body composition and blood lipid profiles during weight loss in adult women. *J Nutr.* 2003;133:411-417.

Protein Promotes Satiety

Individuals in a clinical trial who increased their intake of dietary protein from 15 percent of calories, as recommended by U.S. Dietary Guidelines, to 30 percent of calories while maintaining a constant carbohydrate intake, substantially decreased their at-will intake of calories and reported a significant decrease in hunger.

Weigle DS et al. A high-protein diet induces sustained reductions in appetite, ad libitum calorie intake, and body weight despite compensatory changes in diurnal plasma leptin and ghrelin concentrations. *Am J Clin Nutr.* 2005;82:41-48.

