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Whey Protein Improves Body Composition

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New research demonstrates the ability of whey protein to help improve body weight and composition, when compared to consuming an equal amount of calories from carbohydrates. The study, which was conducted by the USDA-ARS Beltsville Human Nutrition Research Center, is available ahead of its print publication on the *Journal of Nutrition* website here.

Researchers tracked body weight, body composition and waist circumference data from 73 overweight and obese adults, who were assigned to consume a 200-calorie beverage, consisting of 28 grams of whey or soy protein plus carbohydrate or carbohydrate alone, twice a day for 23 weeks. No other dietary direction was given. While there were no significant differences at the start of the trial between groups, at the end of the trial, the whey protein group's body weight was approximately 4 pounds lower than the carbohydrate group, and their body fat was 5 pounds less than the carbohydrate group. Additionally, the whey protein group's waist size was nearly an inch smaller than both the carbohydrate and soy protein groups. Those who consumed soy protein did not exhibit significant differences from the carbohydrate group.

"This study adds to the growing body of research showing a benefit of higher protein diets, and whey protein in particular, on weight management and body composition," said Gregory Miller, PhD, president of the Dairy Research Institute, Rosemont, IL. "While a majority of the previously published work has shown this benefit with concurrent energy restriction or routine exercise, this study is unique in demonstrating the gradual benefit of added whey protein without these other lifestyle changes. Certainly, to elicit significant changes in body weight over the short term requires exercise or diet adjustments. However, this study provides early evidence that whey protein may play a significant role in weight management over the long term."

Study data indicate that all groups compensated for the additional 400 calories per day by cutting back on other foods, as none gained a significant amount of weight during the 23-week period. However, the whey protein group likely made up for the added calories from the beverage more effectively, since they showed improvements in body weight and composition compared to the carbohydrate group. This could be related to enhanced satiety with whey protein, as participants in the whey protein group showed significantly lower levels of the hunger-stimulating hormone, ghrelin, compared to the other two groups.

While more research is needed to fully understand this effect, these results do help to shed light on specific benefits of whey protein, which could lead to unique marketing claims in the future, Miller said.

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