

Studies show that in addition to its established role in supporting overall health, higher dietary fiber consumption may play a significant role in weight loss and obesity.

Higher dietary fiber intake linked to reduced body weight

Dietary fiber plays many important roles in the body and intake has been linked to cardiovascular health and a lower risk of certain cancers. Additionally, evidence from observational studies has linked fiber intake to body weight, showing that obese men and women are likely to consume significantly less dietary fiber than lean individuals.

One particular cohort study, published in the *American Journal of Clinical Nutrition*, included 89,432 European participants, aged 20–78 years, who were initially free of cancer, cardiovascular disease, and diabetes. Participants were followed for an average of 6.5 years. Results indicated that total dietary fiber intake was inversely associated with weight and change in waist circumference during the study period. At 10 gram/day higher total fiber intake, there was an estimated 39 grams/year weight loss and waist circumference decreased by 0.08 cm/year. A 10 grams/day fiber intake from cereals alone results in 77 grams/year weight reduction and 0.10 cm/year reduction in waist circumference. Fruit and vegetable fiber was not associated with weight change but had an effect similar to total and cereal fiber intake on reduced waist circumference.

In another study, a review article published in the journal *Nutrition* suggests that dietary fiber helps prevent obesity in several different ways. It promotes satiation by slowing gastric emptying, altering glycemic or insulin response, decreasing absorption of macronutrients, and by altering the secretion of gut hormones linked to hunger.

Over the last decade many the most popular weight-loss diets have trended towards high-protein and low-carbohydrate intakes to lose weight. Unfortunately, in an effort to lower carbohydrate intake, these diets often have very low fiber intake as well. Analysis of low carbohydrate diets reveal that in some cases dietary fiber intake is as low as 1.6 g/day and is almost always less than 10 g/day.

The author of this review suggests that regardless of dieting method that individuals choose to follow, they should consider the addition of fiber to aid their weight-loss. Dietary fiber can be increased through increasing consumption fruits, vegetables, whole grains, legumes, or through a fiber supplement.

Huaidong Du et al. Dietary fiber and subsequent changes in body weight and waist circumference in European men and women *Am J Clin Nutr* Vol. 91, No. 2, 329-336, February 2010.

Slavin J. Dietary fiber and body weight. *Nutrition* 21(2005);411-418.