

Why Pasta Is Healthy: Scientists Explain in Plain Language

Evidence of Pasta's Health Benefits

There is a consistent and mounting accumulation of scientific evidence for the healthfulness of pasta and the pasta meal. The following pages include summaries of recent scientific studies. These findings make clear that not only is the pasta itself a healthful and nutritious food, but that when it is paired with other healthy ingredients like olive oil, vegetables, beans, fish, or meat — pasta is a perfect meal.

Pasta meals help lower the glycemic index of a meal — more nutrition benefits!

Scientists find when pasta is combined with other foods, such as cheese, chili con carne, beans or tuna fish, these added ingredients may lower the glycemic index of a pasta-based meal. Pasta-based meal + other healthy ingredients = a lower GI index of the meal = more nutritious and filling!

Henry CJ, Lightowler HJ, Kendall FL, et al. The impact of the addition of toppings/fillings on the glycaemic response to commonly consumed carbohydrate foods. *European Journal of Clinical Nutrition*. 2006; 60: 763-69.

Pasta can be beneficial for those with diabetes.

A study published by *Diabetes Care* concluded grain-based foods (especially whole grain varieties) with a low glycemic index, such as pasta and oats, are beneficial for people with diabetes.



McKeown NM, Meigs JB, Liu S, et al. Carbohydrate Nutrition, Insulin Resistance, and the Prevalence of the Metabolic Syndrome in the Framingham Offspring Cohort. *Diabetes Care*. 2004;27:538-46.

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Pasta may reduce the risk of breast cancer.

A study from the *Annals of Oncology* reported that high glycemic index foods may increase the risk of breast cancer, while the intake of pasta, a low glycemic index food, seemed to have no influence.

Augustin LS, Dal Maso L, La Vecchia C, et al. Dietary glycemic index and glycemic load, and breast cancer risk: a case-control study. *Annals of Oncology*. 2001; 12: 1533-8.

Pasta may lower the risk of Type 2 diabetes.

In 2008, a study published in the *American Journal of Clinical Nutrition* concluded that a low GI diet filled with low GI foods, like pasta, may be preferred for the dietary management of type 2 diabetes.

Wolever TMS, Gibbs AL, Mehling C, et al. The Canadian Trial of Carbohydrates in Diabetes (CCD), a 1-y controlled trial of low-glycemic-index dietary carbohydrate in type 2 diabetes: no effect on glycosylated hemoglobin but reduction in C-reactive protein. *American Journal of Clinical Nutrition*. 2008;87(1):114-25.

In 2002, Finnish researchers found that consumption of pasta-based carbohydrates and rye bread can lower the risk of developing Type 2 Diabetes.

Laaksonen DE, Toppinen LK, Juntunen KS, et al. Dietary carbohydrate modification enhances insulin secretion in persons with the metabolic syndrome. *American Journal of Clinical Nutrition*. 2005;82(6):1218-27.

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Alzheimer's and the Mediterranean diet.

Researchers concluded that following a Mediterranean diet, in which pasta is one of the cornerstone foods, may reduce the risk for developing Alzheimer's disease. Researchers also found that following the Mediterranean diet may increase lifespan in those who do develop Alzheimer's disease.



Scarmeas N, Stern Y, Tang MX et al. Mediterranean diet and risk for Alzheimer's disease. *Annals of Neurology*. 2006;9(6):912-21

Scarmeas N, Luchsinger JA, Mayeux R, et al. Mediterranean diet and Alzheimer's disease mortality. *Neurology*. 2007;69(11):1084-93

Pasta meals with tomato-based sauces may reduce the risk of prostate cancer.

Lycopene, a potent antioxidant found in tomatoes, acts to repair damaged cells in the body. This positive effect of lycopene is thought to help prevent prostate cancer since prostate cancer risk is lower in men who frequently eat tomato products.

Van Breemen RB, Xu X, Viana MA, et al. Liquid chromatography-mass spectrometry of cis- and all-trans-lycopene in human serum and prostate tissue after dietary supplementation with tomato sauce. *Journal of Agriculture and Food Chemistry*. 2002;50(8):2214-9.

Chen L, Stacewicz-Sapuntzakis M, Duncan C, et al. Oxidative DNA damage in prostate cancer patients consuming tomato sauce-based entrees as a whole-food intervention. *Journal of the National Cancer Institute*. 2001;93(24):1872-9.

*"Life is a combination of magic and pasta."
Federico Fellini*

Pasta Fits Into A Weight Loss and Management Program

Pasta meals can help people maintain or lose weight.

Carbohydrate-containing foods, like pasta, may aid weight loss and management efforts. Studies in the *New England Journal of Medicine* and the *Journal of the American Medical Association* report there are no significant differences in weight loss between low-carbohydrate diets and conventional weight loss plans. The studies attribute weight-loss to a reduction in calories, not carbohydrates.



This means that a delicious pasta meal, when eaten in healthy portions, can be part of a successful weight loss plan.

Shai I, Schwarzfuchs D, Henkin Y, et al. Weight Loss with a Low-Carbohydrate, Mediterranean, or Low-Fat Diet. *New England Journal of Medicine*. 2008;359:229-41.

Hu F. The Mediterranean Diet and Mortality. *New England Journal of Medicine*; 2003;348 (26):2595-96.

De Lorenzo A, Andreoli A, Sorge RP, et al. Modification of Dietary Habits (Mediterranean Diet) and Cancer Mortality in a Southern Italian Village from 1960 to 1996. *Annals of the New York Academy of Science*. 1999;889:224-9.

Pasta does not lead to abdominal obesity.

The *Nutrition Journal* reported in its December 2006 issue that eating vegetable oil, pasta and low-fat milk are associated with a healthier distribution of body fat around the hips, rather than around the waist.

Krachler B, Eliasson M, Stenlund H, et al. Reported food intake and distribution of body fat: a repeated cross-sectional study. *Nutrition Journal*. 2006;5:34.

Pasta does not cause food cravings.

The findings of a study looking at the long-term changes in food cravings in a calorie-restricted research program suggested that cravings are actually for calories, not foods high in carbohydrates like pasta, as is widely assumed. What is commonly called “carbohydrate addiction” should probably be relabeled as calorie addiction.

Gilhooly CH, Das SK, Golden JK, et al. Food cravings and energy regulation: the characteristics of craved foods and their relationship with eating behaviors and weight change during 6 months of dietary energy restriction. *International Journal of Obesity*. 2007; 31:1849–58.

“Pasta is architecture designed for the taste buds. Every single shape is a brick, different in form, consistency and color, to create an extraordinary construction, both physical and mental, a true expression of taste...”

L’Enciclopedia della Pasta

Pasta and whole grains: a delicious, healthy relationship

For extra health benefits, try a whole grain pasta variety of pasta for dinner. Whole grains provide a healthy mix of nutrients proven to be beneficial in the fight against heart disease, strokes, type 2 diabetes, even obesity. Pasta is a delicious and family-friendly way to add more whole grains to any diet.

There are a wide range of whole grain pasta options, from gluten-free to 100% whole wheat. Some manufacturers have even created pastas that blend traditional refined semolina flour with whole grain ingredients. The taste of these pastas range from nutty and rich to smooth and mild and can be a great way to introduce whole-grain pastas to even the most discerning palate.

As with regular refined flour pastas, it is always a good idea to prepare whole-grain pastas according to package directions. However, whole grain varieties tend to dry out a bit faster once removed from boiling water, so try to add sauces or coatings as quickly as possible.

Newby P, Maras J, Bakun P, et al. Intake of whole grains, refined grains, and cereal fiber measured with 7-d diet records and associations with risk factors for chronic disease. *American Journal of Clinical Nutrition*. 2007;86(6):1745–53.