

PRESS RELEASE

Pistachios can help lose weight and decrease the risk of cardiovascular disease and diabetes

The study “Nutrition attributes and health effects of pistachio nuts” reviews most of the research studies and clinical trials regarding pistachio consumption and health



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A varied and balanced diet and a healthy lifestyle is key to good health and pistachios contribute to both. They have many nutrients such as fiber, potassium, magnesium, zinc and vitamins (B6, E, K...) that make pistachios a healthy and satisfying snack.

In the context of the World Pistachio Day, celebrated on February 26th, the International Nut and Dried Fruit Council summarizes the scientific review “Nutrition attributes and health effects of pistachio nuts”¹ which analyzed more than 100 research studies and clinical trials regarding the effects of nuts with a special focus on pistachios in human health, specifically in cardiovascular disease, blood pressure, insulin resistance and body weight.

Pistachios and obesity

Studies have shown the inclusion of pistachios on a healthy diet does not increase body weight. Fiber is important for weight management and to lower the risk of cardiovascular disease as several studies have consistently demonstrated^{2,3}. Pistachios are rich in fiber (containing 10% by weight of insoluble form).

Many studies have provided strong evidence that nut consumption is associated with neither weight gain nor increased risk of obesity^{4,5}. Specially, the study of Dr. Li and her team at the University of California, Los Angeles Center for Human Nutrition (USA), showed strong evidence that the intake of pistachios as a snack may lead to a higher reduction of body mass index compared with a refined carbohydrate snack⁶.

Pistachios and cardiovascular disease

Pistachios are a good source of L-arginine, an amino acid is involved in the cardiovascular system as a key regulator of vascular tone. L-arginine is also involved in numerous pathological conditions such as hypertension, cardiovascular disease and neurodegenerative disorders^{7,8}. Pistachios deliver a broad range of nutrients and bioactive compounds that have been shown to reduce the risk of heart disease such as fiber, healthy fats, phytosterols and antioxidant compounds including polyphenols.

Also, pistachios are high in fiber and have potassium to help maintain normal blood pressure and muscle function; chromium to help maintain normal blood glucose levels, and copper to help support normal function of the immune system. Pistachios are also high in unsaturated fats. Replacing saturated fats with unsaturated fats in the diet can help maintain normal blood cholesterol levels.^{9,10}

Pistachios and type 2 diabetes

Studies have shown the frequency nut intake is inversely related to the risk of type 2 diabetes (or the higher the consumption of nuts the lower the risk of diabetes), mainly attributed to anti-inflammatory compounds. Pistachios have a low glycemic index which contributes to lower post-prandial blood glucose levels and maintaining satiety longer. It also may be a factor in maintaining glycemic control.^{11,12,13}

Another benefits

Among all this benefits, pistachios also provide energy to help muscle maintenance. Pistachios have magnesium to support normal functioning of the nervous system; iron for normal oxygen transport in the body; folate to help reduce tiredness and fatigue; zinc which supports the maintenance of normal vision; thiamin, riboflavin and vitamin B6 which contribute to normal energy metabolism; vitamin E, selenium and zinc which contribute to protection of cells from oxidative stress.

About the International Nut & Dried Fruit Council

The International Nut & Dried Fruit Council (INC) members include nearly 700 nut and dried fruit-sector companies from over 70 countries. INC is the international organization of reference regarding health, nutrition, statistics, food safety, international standards and regulations relating to nuts and dried fruit.

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- ¹ M Bulló, M. Juanola-Falgarona, P. Hernández-Alonso, J. Salas-Salvadó, Nutrition attributes and health effects of pistachio nuts, *Br J Nutr* (2015), 113, 879-893.
- ² Ye QE, Chacko SA, Chou, EL, et al. Greater whole-grain intake is associated with lower risk of type 2 diabetes, cardiovascular disease, and weight gain. *J Nutr* (2012) 142, 1304-1313.
- ³ Kaczmarczyk MM, Miller MJ & Freund GG. The health benefits of dietary fiber: beyond the usual suspects of type 2 diabetes mellitus, cardiovascular disease and colon cancer
- ⁴ Bes-Rastallo M, Sabaté J, Gómez-Gracia E, et al. Un consumption and weight gain in a Mediterranean cohort: the SUN study. *Obesity (Silver Spring)* (2007) 15, 107-116.
- ⁵ Bes-Rastrollo M, Wedick NM, Martínez-González MA, et al. Prospective study of nut consumption, longterm weight change, and obesity risk in women. *Am J Clin Nutr*(2009), 89, 1913-1919.
- ⁶ Li Z, Song R, Nguyen C, et al. Pistachio nuts reduce triglycerides and body weight by comparison to refined carbohydrate snack in obese subjects on a 12-week loss program. *J Am Coll Nutr* (2010) 29, 198-203.
- ⁷ Localzo J & Welch G, Nitric oxide and its role in the cardiovascular system. *Prog Cardiovasc Disc* (1995) 11, 417-440.
- ⁸ Jaffrey SR & Snyder SH, Nitric oxide: a neural messenger. *Annu Rev Cell Dev Biol* (1995) 11, 417-440.
- ⁹ Juanola-Falgarona M, Salas-Salvadó J, Martínez-González MÁ, et al. Dietary intake of vitamin K is inversely associated with mortality risk. *J Nutr* (2014) 144, 743-750.
- ¹⁰ Gentile C, Tesoriere L, Butera D, et al. Antioxidant activity of Sicilian pistachio (*Pistacia vera* L., var. Bronte) nut extract and its bioactive components. *J Agric Food Chem* (2007) 55,643-648.
- ¹¹ Kendall CWC, West SG, Augustin LS, et al. Acute effects of pistachio consumption on glucose and insulin, satiety hormones and endothelial function in the metabolic syndrome. *Eur J Clin Nutr* (2014) 68, 370- 375
- ¹² Gulati S, Misra A, Pandey RM, et al. Effects of pistachio nuts on body composition, metabolic, inflammatory and oxidative stress parameters in Asian Indians with metabolic syndrome: a 24-w, randomized control trial. *Nutrition* (2014) 192-197
- ¹³ Kendall CWC, Josse AR, Esfahani A, et al. The impact of pistachio intake alone or in combination with highcarbohydrate food on post-prandial glycemia. (2011) 65, 696-702
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