

Eating nuts may reduce cardiovascular disease risk for people with diabetes

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Eating more nuts, particularly tree nuts, may reduce the risk of cardiovascular disease among people with type 2 diabetes, according to new research in *Circulation Research*, an American Heart Association

journal.

Type 2 [diabetes](#) is associated with an increased risk for high cholesterol, heart disease and stroke, and is a widespread public health problem affecting more than 30 million Americans. Nuts are chock full of [unsaturated fatty acids](#), phytochemicals, fiber, vitamins such as vitamin E and folate, as well as minerals including calcium, potassium and magnesium. However, little is known about the [health benefits](#), if any, that nuts might offer people with type 2 diabetes who face a greater risk for heart health complications.

In this latest study, researchers used self-reported diet questionnaires from 16,217 men and women before and after they were diagnosed with type 2 diabetes and asked them about their consumption of both peanuts and tree nuts over a period of several years. During follow-up, there were 3,336 cases of [cardiovascular disease](#) (including 2,567 coronary heart disease cases and 789 stroke cases) and 5,682 deaths (including 1,663 deaths from cardiovascular disease and 1,297 deaths from cancer).

"Our findings provide new evidence that supports the recommendation of including nuts in healthy dietary patterns for the prevention of cardiovascular disease complications and premature deaths among individuals with diabetes," said lead study author Gang Liu, Ph.D. a nutritional sciences researcher at the Harvard T.H. Chan School of Public Health in Boston, Massachusetts. Moreover, even when people were in the habit of eating nuts before their diabetes diagnosis, adding more nuts to one's diets proved beneficial probably at any age or stage. "It seems never too late to improve diet and lifestyle after diagnosis among individuals with type 2 diabetes."

Researchers found that eating all kinds of nuts offered some heart-healthy benefits, with tree nuts showing the strongest association. The

results also showed that eating even a small amount of nuts had an effect. Among their findings:

Compared to people with type 2 diabetes who ate less than a single 28-gram serving per month, eating five servings of nuts per week had a 17 percent lower risk of total cardiovascular disease incidence, a 20 percent lower risk of coronary heart disease, a 34 percent lower risk of cardiovascular disease death, and a 31 percent reduced risk of all-cause mortality.

Compared with people who did not change their nut-eating habits after being diagnosed with diabetes, those who increased their intake of nuts after being diagnosed with diabetes had an 11 percent lower risk of cardiovascular disease, a 15 percent lower risk of coronary [heart disease](#), a 25 percent lower risk of cardiovascular disease death, and a 27 percent lower risk of all-cause premature death.

Each additional serving per week of total nuts was associated with a 3 percent lower risk of cardiovascular disease and 6 percent lower risk of cardiovascular disease death.

The positive association with eating nuts continued independent of a person's gender, smoking habits or body weight.

Tree nuts such as walnuts, almonds, Brazil nuts, cashews, pistachios, pecans, macadamias, hazelnuts and pine nuts were strongly associated with reduced cardiovascular risk compared with peanuts, which are actually legumes because unlike tree nuts, peanuts grow underground.

While the exact biological mechanisms of nuts on heart health are unclear, researchers report that nuts appear to improve blood sugar control, blood pressure, metabolism of fats, inflammation and blood vessel wall function. Also, researchers explain that tree nuts may offer

more benefits because of they contain higher levels of these nutrients than peanuts.

"Cardiovascular disease is the leading cause of death and a major cause of heart attacks, strokes and disability for people living with type 2 diabetes," said Prakash Deedwania, M.D., a professor of medicine at the University of California-San Francisco School of Medicine in Fresno and a member of the Know Diabetes by Heart science advisory committee. "Efforts to understand the link between the two conditions are important to prevent cardiovascular complications of type 2 diabetes and help people make informed choices about their health."

Deedwania also stated that the study findings are very encouraging because the simple daily dietary habit of eating tree nuts like almonds, walnuts, pistachios, etc., can have such a profound effect on coronary events, cardiac death and total mortality. "These findings further add to the growing evidence that certain lifestyle changes, regular exercise and a prudent diet can have significant favorable impact on the risk of cardiovascular disease and risk of cardiac events in patients with diabetes," Deedwania said.

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