

Study results may help people with type 2 diabetes

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Findings from a new study (i) published in *Nutrition, Metabolism & Cardiovascular Diseases* show that the fatty acids in nuts have the potential to help reduce the risk of coronary heart disease (CHD) in people with type 2 diabetes.

Researchers from the University of Toronto and St. Michael's Hospital in Toronto, Canada, found that incorporating about two ounces of tree [nuts](#) (almonds, Brazils, cashews, hazelnuts, pecans, pine nuts, pistachios, macadamias and walnuts) and peanuts into the diet of people with

[diabetes](#), was inversely associated with CHD risk factors and 10-year CHD risk. According to Cyril Kendall, Ph.D., co-investigator of the study, "While a number of studies have shown that nuts can help reduce the risk of CHD and diabetes, no research to date has looked at the how nuts alter the fatty acid profile in people with diabetes and how this relates to cardiovascular health."

This study is a secondary analysis of the 2011 nuts and diabetes study (ii) by the same researchers. The original study was a 3-month parallel design with 117 non-insulin dependent adults with diabetes (men and women with a mean age of 62 years) who were all being treated with oral hypoglycemic medications. The subjects were randomized to one of three diets for three months. The first diet included a supplement of 75g (~2½ ounces or ½ cup) of mixed nuts; the second diet included 38g (~1⅓ ounces or ¼ cup) of mixed nuts and half portion of muffins; and the third diet contained a full portion of muffins. Each supplement provided approximately 475 calories per 2,000 calorie diet. All of the diets contained roughly the same number of calories but the nuts provided more unsaturated (i.e. healthy) fat and less carbohydrate.

"The results of our current study indicate that by incorporating nuts into a [diabetes diet](#), one can modify the fatty acid profile of adults with [type 2 diabetes](#) by modestly increasing the unsaturated fatty acid content of blood lipids," explained Dr. Kendall. "This in turn has the potential to contribute to the total reduction of CHD risk in those same individuals."

Numerous studies have shown that consuming tree nuts may reduce the risk of heart disease. In 2003 tree nuts received a qualified health claim from the U.S. Food and Drug Administration (FDA) which states, "Scientific evidence suggests but does not prove that eating 1.5 ounces per day of most nuts, as part of a diet low in saturated fat and cholesterol, may reduce the risk of heart disease." Interestingly, individuals with Type 2 diabetes have a 2-4 fold higher risk of

[cardiovascular disease](#) (CVD) compared with nondiabetic individuals of similar age, sex and ethnicity.

According to Maureen Ternus, M.S., R.D., Executive Director of the International Tree Nut Council Nutrition Research & Education Foundation (INC NREF), "While we've known for years that eating a handful of nuts every day can help reduce the risk for [heart disease](#) in the general population, these new findings show that consuming nuts may also be helpful for those with type 2 diabetes."

More information: Funding Source: The study was funded by the International Tree Nut Council Nutrition Research & Education Foundation.

(i) Nishi, S.K., C.W.C. Kendall, R.P. Bazinet, B. Bashyam, C.A. Ireland, L.S.A. Augustin, S. Blanco Mejia, J.L. Sievenpiper, D.J.A. Jenkins. Nut consumption, serum fatty acid profile and estimated coronary heart disease risk in type 2 diabetes, *Nutrition, Metabolism & Cardiovascular Diseases* (2014), [dx.doi.org/10.1016/j.numecd.2014.04.001](https://doi.org/10.1016/j.numecd.2014.04.001)

(ii) Jenkins, D.J.A., C.W.C. Kendall, M.S. Banach, K. Srichaikul, E. Vidgen, S. Mitchell, T. Parker, S. Nishi, B. Bashyam, R. de Souza, C. Ireland, R.G. Josse, 2011. Nuts as a replacement for carbohydrates in the diabetic diet. *Diabetes Care*. 34(8):1706-11.

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