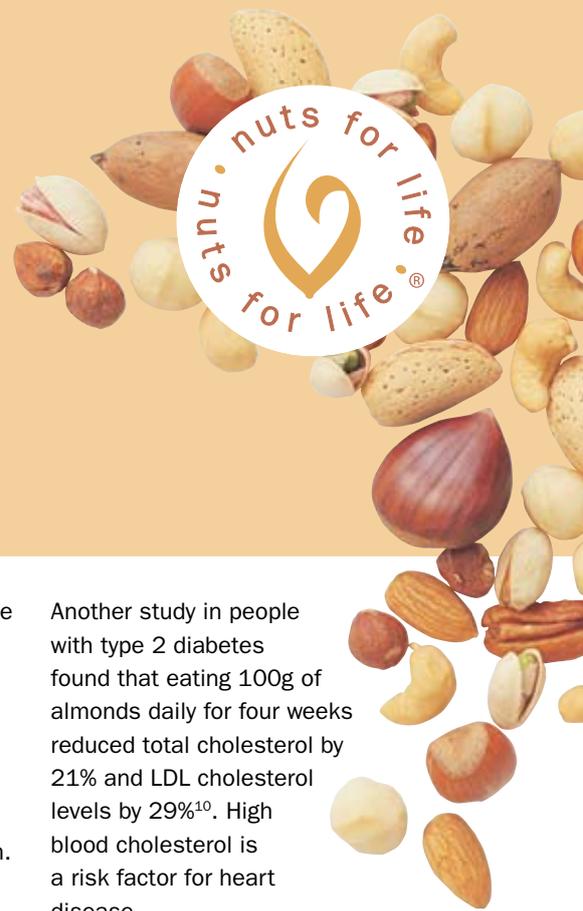


Nuts and diabetes

Almost 1 in 4 Australians 25 years and over has either diabetes or pre-diabetes¹. Tree nuts such as **almonds, Brazil nuts, cashews, chestnuts, hazelnuts, macadamias, pecans, pine nuts, pistachios** and **walnuts** have a wide variety of nutritional benefits which are not only important for those with diabetes, but also those wanting to reduce the risk of developing type 2 diabetes.



Got diabetes or at risk of it? Here's why you should eat nuts regularly:

Reduce your risk of diabetes – a significant study of almost 84 000 women found that eating nuts can reduce the risk of developing type 2 diabetes². Women who ate a 28g serve of nuts (a handful) five or more times per week had a 27% lower risk of diabetes compared to those who never or rarely ate nuts².

Improve blood glucose levels – studies have found that including nuts in meals can reduce the rise in blood glucose levels following the meal³⁻⁵. High blood glucose after eating is common in people with diabetes and contributes to diabetes-related complications (involving damage to eyes, kidneys, nerves and blood vessels).

Prevent heart disease – people with diabetes are more than twice as likely to

die from cardiovascular disease than those with normal blood glucose⁶. Studies have shown that eating a handful of nuts most days can reduce the risk of heart disease by 30–50%. This can be attributed to the healthy fats, dietary fibre, plant sterols, arginine and antioxidant vitamins and minerals (including vitamin E) nuts contain. One study found women with type 2 diabetes who ate at least five serves of nuts per week reduced their risk of heart disease by almost half⁷.

Improve blood fats – people with diabetes are more likely to have abnormal blood fat levels, including higher 'bad' LDL cholesterol and triglycerides, and lower 'good' HDL cholesterol¹. Eating nuts regularly can improve blood fats, particularly by lowering LDL cholesterol⁸. Incorporating walnuts into the diet of those with type 2 diabetes improved their HDL cholesterol significantly more than a low fat diet or a modified fat diet without nuts⁹.

Another study in people with type 2 diabetes found that eating 100g of almonds daily for four weeks reduced total cholesterol by 21% and LDL cholesterol levels by 29%¹⁰. High blood cholesterol is a risk factor for heart disease.

Lower blood pressure risk (BP) – an important Australian study of people with diabetes found that compared to those with normal blood glucose levels, people with diabetes were more than three times as likely to suffer from high BP¹. In another study young adults who were followed for 15 years found that those who ate the most nuts reduced their risk of developing high blood pressure by 15%¹¹.

Control your weight – carrying extra weight is a major risk factor for type 2 diabetes and can make managing your diabetes more difficult. A major Australian study also found that almost three times as many people with diabetes were obese compared to those with normal glucose levels¹. The good news? Eating nuts may help with weight management. A study of nearly 9,000 Mediterranean University graduates found that over a 28 month period those who ate a 50g portion of nuts two or more times per week were 31% less likely to gain weight than those who never

Tips for including nuts in your diet

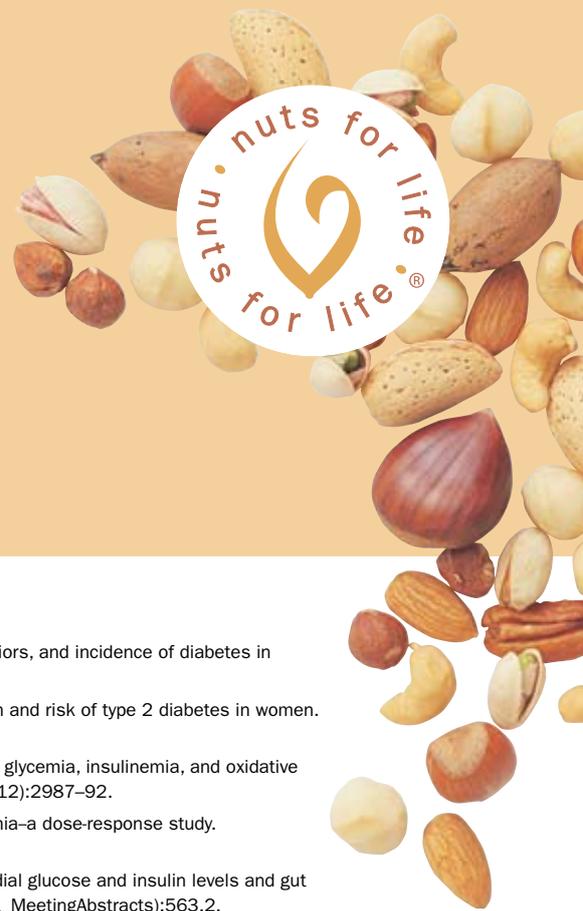
To obtain maximum benefits from nuts, enjoy them everyday. Try the following for variety in your diabetes-friendly, heart-healthy eating plan!

- Unsalted mixed nuts make a portable healthy snack that won't raise blood glucose levels like most snack foods do.
- Toss almonds or cashews through your favourite stir fry.
- Top fish with a mixture of crushed hazelnuts or Brazil nuts and fresh herbs.
- Puree roasted hazelnuts or macadamias as a tasty alternative to peanut butter.
- Toss pistachio kernels in a salad.
- Combine pecans and walnuts with rolled oats, sunflower and pumpkin seeds, sultanas and chopped dried apricots to make your own muesli, free of added sugar and fat.
- Combine pine nuts or pistachios with fresh basil, garlic and olive oil to make a tasty pesto to use with pasta.
- Crush almonds, macadamias or walnuts over fresh fruit and yoghurt for dessert.
- Replace potatoes with roasted chestnuts or stuff chicken with chestnut stuffing.

For further information on nuts and health refer to www.nutsforlife.com.au email admin@nutsforlife.com.au or phone **02 9460 0111**

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Nuts and diabetes

or almost never ate nuts¹². Other studies have also shown a trend towards a lower body mass index (BMI) in those who eat more nuts^{2, 13-16}.

Why are nuts so good for diabetes?

- **Low glycaemic index (GI)** – while not a high carbohydrate food, nuts have a GI-lowering effect – they reduce the overall GI of a meal³⁻⁵. A low-GI diet has been shown to reduce the risk of type 2 diabetes and help in its management¹⁷.
- **Rich source of healthy fats**
– nuts contain mostly healthy monounsaturated and polyunsaturated fats, plus are low in saturated fat and free of trans fats¹⁸. Like other plant foods, they also contain no cholesterol.
- **A good source of fibre** – diets high in fibre may help manage diabetes and weight and can reduce the risk of developing type 2 diabetes¹⁹.
- **A natural source of plant sterols** which can help to lower cholesterol levels by reducing cholesterol reabsorption in the intestine²⁰⁻²¹.
- **High in potassium and low in sodium**, providing benefits for blood pressure and heart health¹⁹.
- **A good source of arginine** – this amino acid helps keep blood vessels elastic and helps prevent blood clotting²². Hardening of the arteries and blood clotting can lead to heart disease.
- **A rich source of magnesium** – a higher intake of magnesium is linked with a reduced risk of type 2 diabetes²³⁻²⁴.
- **High in vitamin E** – an essential vitamin and antioxidant which can help protect against heart disease. Some studies suggest that vitamin E may protect against diabetes complications such as nerve, eye and kidney disease²⁵⁻²⁷.

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