

Nuts and heart health

How do you halve your risk of developing heart disease? By eating a handful of nuts (30g) five or more times a week! Tree nuts such as **almonds, Brazil nuts, cashews, chestnuts, hazelnuts, macadamias, pecans, pine nuts, pistachios** and **walnuts** are packed full of beneficial nutrients for heart health. Eating nuts regularly, as part of a diet low in saturated fat and a lifestyle that includes exercise, is one tasty prescription to help lower blood cholesterol levels and maintain a healthy heart. Here's how...



Eat nuts regularly

Studies show enjoying a handful of nuts every day can significantly reduce your risk of developing heart disease or dying from it.¹⁻⁵ Even those who eat nuts once a week have less heart disease than those who don't eat any nuts.¹ It seems frequent nut consumption is associated with lower levels of inflammatory markers,^{6,7} which may partially explain the lower risk of both heart disease and diabetes.^{1-5,8} In general you can achieve an 8.3% reduction in risk of death from coronary heart disease with each weekly serving of nuts.⁹ A daily handful of nuts also reduces mortality by 20% adding more years to your life.^{10,11}

Why nuts are so heart healthy

Nuts contain a variety of nutrients and other bioactive substances that contribute to lowering the risk of heart disease and controlling cholesterol:

- **Rich source of healthy fats**¹² – Nuts are a healthy high-fat food in a fat-phobic world, but there's no need to avoid all fats in the diet. Eating a variety of nuts will help provide the right balance of healthy fats in your daily eating plan.

Healthy fats are monounsaturated or polyunsaturated fats which can help regulate blood cholesterol.¹³ Nuts high in monounsaturated fat include macadamias, hazelnuts, pecans, almonds, cashews and pistachios. Nuts high in polyunsaturated fat include walnuts, pine nuts and Brazil nuts.¹²

- **Contains plant omega-3s**¹² – Plant omega-3s are a type of polyunsaturated fat found in walnut, pecans, hazelnuts and macadamias. These nuts are one of the few plant sources of omega-3s. This short chain omega-3, called alpha-linolenic acid (ALA), has heart health properties.¹⁴ Long chain omega-3s are mostly found in fish and seafood and are also required for heart health.
- **Regulates cholesterol** – A meta analysis combining the results of 25 nut and cholesterol-lowering studies found that around two handfuls of nuts – 67g on average each day – significantly reduced total and LDL cholesterol by 5% and 7% respectively.¹⁵ This is supported by two other meta analyses specifically on almonds and walnuts which also support eating at least a handful a day to

significantly lower total and LDL cholesterol.^{16,17}

- **Natural source of plant sterols**¹² – These are substances which can help to lower cholesterol levels in the blood by reducing cholesterol re-absorption in the intestine.¹⁸ Mixed nuts in general contain around 126mg plant sterols per 100g.¹²
- **Reduces cholesterol oxidation** – A traditional Mediterranean diet (TMD) including 30g per day of nuts has been shown to reduce LDL cholesterol oxidation when compared to a lower-fat diet.¹⁹⁻²¹ Oxidation of LDL cholesterol is a key step in atherosclerosis – the blocking and hardening of arteries. Another study found this effect particularly with almonds, Brazil nuts and pistachios.²²
- **Reduces inflammation** – Studies have shown that eating nuts has anti-inflammatory effects.^{6,7} Antioxidants and other phytochemicals play an important role in reducing inflammation. Chronic inflammation is thought to cause many chronic diseases such as heart disease and diabetes.^{6,7,23}

Tips for including a handful of nuts every day

To obtain maximum heart health benefits from nuts, enjoy a 30g handful everyday. Try the following to include a variety of nuts in your heart healthy eating plan:

- Mix nuts with dried fruit for a healthy snack.
- Sprinkle cashews or dry roasted almonds through a stir fry or curry.
- Crush hazelnuts or Brazil nuts and mix with breadcrumbs and your favourite herbs to make a crunchy topping for fish or chicken.
- Roast macadamias or pine nuts and toss them through a salad.
- Include pecans and walnuts in home-made muffins.
- Add chopped pistachios or pine nuts to your favourite pasta sauce.
- Crush nuts over fresh fruit and yoghurt.
- Roast chestnuts for a delicious winter treat. They also make an excellent poultry stuffing.

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For further information on the nutritional benefits of nuts and for recipes visit

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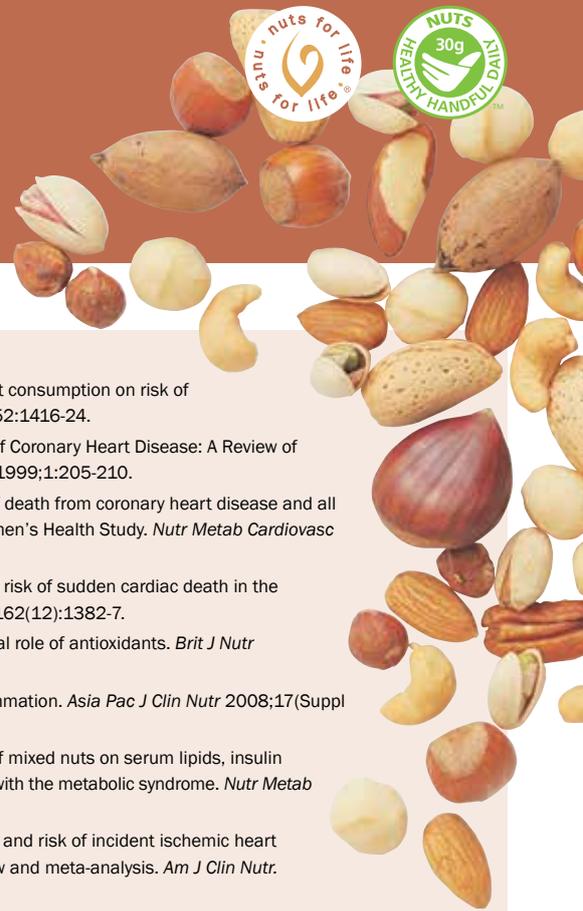
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Go Nuts for Life.
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- **Rich source of antioxidants and phytochemicals** – Nuts contain a variety of antioxidants including vitamin E, selenium, copper, manganese plus phytochemicals such as flavonoids, resveratrol and ellagic acid.^{12, 24-26} These protective plant compounds maintain the health of blood vessels, reduce the risk of congested arteries and have an anti-inflammatory action.²⁴⁻²⁷ Just like fruits and vegetables, the specific content of plant antioxidant compounds varies from nut to nut especially nuts with skins – so eating a variety of nuts is key.
- **A source of arginine**¹² – Nuts contain arginine, an amino acid building block of protein which is converted to nitric oxide in the body. Nitric oxide causes blood vessels to relax and remain elastic. Hardening of the arteries and blood clotting can lead to heart disease.^{20, 28}
- **Contains fibre**¹² – All nuts contribute fibre to the diet. There are two types of fibre in foods – soluble and insoluble fibre. Soluble fibre helps reduce blood cholesterol by reducing cholesterol reabsorption in the intestine, excreting it from the body.²⁹ Insoluble fibre helps maintain a healthy bowel function. Nuts with skins are particularly high in fibre.
- **Helps those with overweight and diabetes** – Eating a daily serve of nuts as part of a healthy diet does not lead to weight gain as once thought. Nut protein, fat and fibre are thought to play a role in appetite control. Nuts are also good for those with pre-diabetes, insulin resistance and Type 2 Diabetes. Adding nuts to a meal with carbohydrates can slow the rise in blood glucose after the meal and improve insulin sensitivity.³⁰
- **Part of a Mediterranean Diet** – A daily handful of nuts was incorporated into the five year PREDIMED Mediterranean diet study which found benefits for heart health, Type 2 diabetes, metabolic syndrome, brain health among other conditions, in the 7500 older people studied.³¹

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