## 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. 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

#### 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<sup>10</sup> – 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.<sup>11</sup> 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.<sup>10</sup>
- Contains plant omega-3s<sup>10</sup> 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 alphalinoleic acid (ALA), has heart health properties. Long chain omega-3s are mostly found in fish and seafood and are also required for heart health.
- enallysis 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. 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. L14, 15
- 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 low-fat diet. 16-18
  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. 19
- **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. 6,7,20
- Natural source of plant sterols<sup>10</sup> –
   These are substances which can help to lower cholesterol levels in the blood by reducing cholesterol re-absorption in the intestine.<sup>21</sup> Mixed nuts in general contain around 126mg plant sterols per 100g.<sup>10</sup>
- Cholesterol free Because nuts are a plant food, they are naturally free of dietary cholesterol. However dietary cholesterol does not have as much

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

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### Tips for including a handful of nuts every day

To obtain maximum heart health benefits from nuts, enjoy them five or more times a week. 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.

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influence on blood cholesterol levels as the amount of saturated fat you eat.<sup>11</sup> Nuts have a lower proportion of saturated fat and a higher proportion of healthy fats which helps explain their heart health effects. This is good news for people who already have high blood cholesterol levels and need to monitor their saturated fat intake.

- Rich source of antioxidants and phytochemcials Nuts contain a variety of antioxidants including vitamin E, selenium, copper, manganese plus phytochemicals such as flavonoids, resveratrol and ellagic acid. 10, 22–24 These protective plant compounds maintain the health of blood vessels, reduce the risk of congested arteries and have an anti-inflammatory action. 22–25 Just like fruits and vegetables, the specific content of plant compounds varies from nut to nut so eating a variety of nuts is key.
- A source of arginine<sup>10</sup> 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.<sup>17, 26</sup>
- Contains folate Folate is a B vitamin that helps reduce high levels of an amino acid called homocysteine, which is a risk factor for heart disease.<sup>27, 28</sup> Most tree nuts contain small amounts of folate as one of a number of heart healthy nutrients.<sup>10</sup>
- **Contains fibre**<sup>10</sup> 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.<sup>29, 30</sup> Insoluble fibre helps maintain a healthy bowel function. Nuts with skins are particularly high in fibre.

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