

Almonds

Almonds are a versatile tree nut. They come whole, blanched, slivered, flaked and ground, so make a useful ingredient adding texture and taste to meals. Plus, like fruit and vegetables, **almonds** are packed with vitamins, minerals, antioxidants and phytochemicals beneficial to health. Enjoying a handful of nuts (30g) regularly as part of a healthy diet may reduce your risk of heart disease and type 2 diabetes, and can help with weight management.¹⁻⁵ So eat two serves of fruit, five serves of veggies and a handful of nuts every day. A 30g serve of **almonds** is about 20 nuts. Have you had yours today?



Health benefits of almonds

Here's why almonds, like all nuts, are a worthwhile addition to your diet:

- **Rich source of healthy fats** – almonds contain healthy unsaturated fats, predominantly monounsaturated fat (66% of total fat), plus have a low proportion of saturated fat (7% of total fat).⁶ Like all other plant foods, they are also cholesterol free.
- **Excellent source of natural vitamin E** – almonds are high in vitamin E with a

30g serve providing over 70% of the RDI.^{6, 7} Vitamin E is an important fat-soluble vitamin and antioxidant which can help maintain a healthy heart.

- **Contains natural plant sterols**⁶ which can help to lower cholesterol levels by reducing cholesterol reabsorption in the intestine. Almonds contain 172mg of plant sterols per 100g.⁶
- **Source of plant protein particularly amino acid arginine** – almonds contain around 6g protein in every 30g handful.⁶ Arginine is converted to nitric oxide in the body. Nitric oxide causes blood vessels to relax and remain elastic, and helps prevent blood clotting. Hardening of the arteries and blood clotting can lead to heart disease.⁸
- **Improves blood cholesterol** – almonds lower total and 'bad' LDL cholesterol levels.⁹⁻¹³ One study found that a 73g serve of almonds each day reduced LDL cholesterol by almost 10% while 37g, or around a handful, reduced LDL by around 5%.⁹ The consumption of almonds as part of a vegetarian diet which was also low in saturated fat, and high in plant sterols, soy protein and soluble fibre, was found to reduce LDL cholesterol by a third.^{10, 11}
- **Prevents oxidation of LDL cholesterol** – one study found including almonds in the diet for a month led to a reduction in oxidised LDL cholesterol.⁹ Oxidised cholesterol is sticky and can block arteries. Almond skins are a rich source of antioxidants called polyphenols,¹⁴⁻¹⁵ which may help to prevent the oxidation of cholesterol, particularly in conjunction with antioxidant vitamin E.¹⁴ Almonds also have a high level of polyphenol antioxidants.¹⁶

- **Reduces oxidative stress** – a study of smokers found that eating 84g of almonds for 4 weeks reduced biomarkers of oxidative stress¹⁷ while another found that eating almonds with a meal reduced oxidative damage.¹⁸ Oxidation causes damage to the cells in our body and is believed to be an important factor in the development of diseases such as heart disease, cataracts and macular degeneration, as well as playing a role in ageing.
- **Anti-inflammatory effects** – Antioxidants and other phytochemicals play an important role in reducing inflammation. Chronic inflammation is thought to cause chronic diseases such as heart disease and diabetes. Consumption of 68g, or two handfuls, of almonds can reduce some biomarkers of inflammation.¹⁹

A combination of the healthy fats, antioxidants, fibre, plant sterol and arginine content of almonds and their antioxidant, anti-inflammatory and cholesterol reducing effects may explain why almonds promote heart health.

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Nutrient content of natural almonds⁶

Nutrient	Per 100g
Energy (kJ)	2503
Protein (g)	19.5
Arginine (g)	2.5
Fat, total (g)	54.7
Fat, saturated (g)	3.7
Fat, monounsaturated (g)	35.9
Fat, polyunsaturated (g)	12.8
Plant sterols (mg)	197
Carbohydrate, total (g)	4.8
Carbohydrate, sugars (g)	4.8
Dietary fibre (g)	8.8
Sodium (mg)	5.0
Potassium (mg)	740
Calcium (mg)	250
Magnesium (mg)	260
Phosphorus (mg)	480
Iron (mg)	3.9
Zinc (mg)	3.7
Copper (mg)	1.1
Manganese (mg)	2.5
Molybdenum (ug) (NUTTAB 2010)	24.7
Folate (ug)	29
Vitamin E (mg)	28.1
Total polyphenols (mg) ¹⁶	418

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

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Go Nuts for Life.
Go Nuts for Health.



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Almonds also ...

- **Contain calcium** – a 30g serve of almonds provides around 70mg, or 7% of your daily calcium needs.^{6,7} An important source of calcium for those that can't eat or don't like dairy.
- **Contain plant iron and zinc**⁶ – important minerals especially for anyone following a vegetarian diet. Increase the absorption of plant iron from nuts by combining with vitamin C rich foods such as citrus fruit or juices.
- **Benefit digestive health** – natural almonds are a source of dietary fibre which is important for a healthy digestive system – a 30g serve provides around 10% of the recommended dietary intake.^{6,7} Research has also shown that almonds may have potential as a prebiotic^{20,21} – these are non-digestible carbohydrates in a food which stimulate the growth of beneficial bacteria in the gut.
- **Improve blood glucose control** – researchers have found that the addition of almonds to a meal can reduce the rise in blood glucose which occurs after eating.^{18, 22-26} One study found that the more almonds that were added to the meal, the greater the effect on blood glucose levels. A 90g serve can reduce the glycemic index of the meal more than 50% compared to the 30g serve.¹⁸ A small pilot study found improvements in HbA1c levels with almond consumption of 60-90g, five days week for 12 weeks²³ and almonds also improve markers of inflammation in those with diabetes.²⁷
- **Help with weight loss** – although high in fat, research has found that eating almonds (and other nuts)¹⁻⁴ does not lead to weight gain and in fact can help with weight management.²⁸⁻³⁰ One study found a group consuming 56g almonds every day for 18 months, as part of a energy controlled diet, were able to lose weight as well as a nut free diet but had better cholesterol levels.²⁹ Recently it was found that almonds actually contain less energy than mathematically calculated using the energy factors.³¹ So a high-fat food helping to manage weight is not so strange after all.

8 ways to include almonds in your diet

- Team them with dried figs for a tasty calcium-rich snack.
- Sprinkle flaked almonds on your breakfast cereal.
- Toss a handful in your favourite stir-fry.
- Almond meal or ground almonds make a great flourless cake.
- Try almond butter as a tasty alternative to butter or margarine on toast and crackers.
- Home-made almond biscotti – a healthy alternative to commercial sweet biscuits.
- Mix natural yoghurt with berries and top with chopped almonds and mixed seeds.
- Slivered almonds make a great crunchy topping for salads.

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