

YOUR NUT FAQs ANSWERED

Can eating nuts help with weight maintenance or weight loss goals?

Yes! In fact, regular nut consumption is linked with a reduced body weight, body mass index (BMI) and waist circumference. (i) Replacing less-healthy foods (like processed meats, crisps or a chocolate bar) with a handful (30g) of nuts daily significantly improves diet quality, and supports brain and heart health, without weight gain. (ii iii iv)

Nuts help by:

- Satisfying and reducing hunger, as they are rich in healthy unsaturated fats (including omega-3 and omega-6), dietary fibre and plant protein, and also contain fibre.
- Releasing satiety hormones after consumption, signalling to our brain that we are full.
- Trapping some of the naturally-occurring fats in their fibrous cell walls - meaning our bodies don't absorb or digest up to 30% of the energy from nuts. (v)
- Slowing digestion when eaten with carbohydrate-rich foods, giving us sustained energy for longer. (vi)
- Reducing overall daily energy intake by reducing dietary compensation at other meals or snacks.

Are nuts a suitable food option during ultra-endurance sport?

During prolonged exercise (such as ultra-endurance running, swimming or cycling), when exercise intensity is relatively low (45-60% of VO2 max), training your body to use fat as fuel can be beneficial.

Consumption of foods rich in healthy fats, such as nuts, may be useful before and during a race, in combination with carbohydrates, electrolytes and fluid. (vii) This can help spare glycogen during steady-state exercise, for times when the intensity is higher, and ultimately enhance ultra-endurance performance. (viii)

Trial this during training, rather than racing, and work with an Accredited Sports Dietitian for specific advice.

Can I get enough protein if I eat predominately plant-based foods, including nuts?

Yes. The key is to include a variety of foods, in adequate amounts, over the day to ensure you get all the essential amino acids (EAAs), especially if you rely solely on plant-based foods. (ix)

This is because most plant-based proteins are usually missing one of the 20 amino acids that make up the proteins found in muscles, bones, skin and blood. Our body can't make nine of these amino acids, called essential amino acids so they must be obtained through our diet.



Nuts typically have the highest plant protein content, at 15-20g per 100g compared with other plant-based food sources, including soybeans (14g), tofu (12g), chickpeas (6g) and oats (2.5g). (x xi xii)

To maximise recovery, aim to pair nuts with another protein-rich food (such as dairy, cereals, beans or rice). This can be beneficial when you have another hard exercise session within eight hours or a high training volume, or if you're trying to maximise lean muscle mass gains.

What types of nuts should I eat: Raw, roasted, salted or activated?

All nuts supply an array of health benefits – whether raw, roasted or salted.

Each nut type has a slightly different nutrient profile. (xiii)

For instance:

- Walnuts, pecans and macadamias are richer in plant-based omega-3 fatty acids
- Almonds are highest in vitamin E
- Brazil nuts contain higher levels of selenium and magnesium
- Pistachios have the highest amount of melatonin
- Pine nuts are highest in manganese
- Cashews have the most iron and zinc
- Chestnuts and hazelnuts are highest in dietary fibre
- All nuts provide a significant amount of plant-based protein:
 - Between 4-5g in a 30g handful or 15-20g per 100g
 - Almonds and pistachios contain the most, at 6g protein/30g serve.

What about salted nuts?

On average, a handful of salted nuts contains far less sodium than many common, highly-processed foods. After exercise, salt (or sodium) may help to replenish hydration by driving thirst and providing electrolytes. (xiv xv) But keep in mind that, on the whole, Australians eat too much salt, so be mindful of your overall intake of sodium by limiting less nutritious, highly-processed foods.

What about activated nuts?

Despite the hype, activated nuts offer no added benefit in the context of a varied diet. So, unless you prefer activated nuts, stick to raw or roasted and eat a variety of nuts to gain all the benefits. (xvi)

What if I can't eat whole nuts?

If you are concerned about eating whole nuts, try pure nut butters or pastes (look for those without added oil, sugar, salt or other flavours), nut meals or flours, or use nut milks (ideally products that contain more than 4% nuts - compare the labels for the nutrient content, including protein and calcium content).

What does a serve (30g) of nuts look like

As a guide, use your hand to judge, as a 30g serve fits roughly in a single handful. (xvii)

A serve is equivalent to:

- 20 almonds
- 10 Brazil nuts
- 15 cashews
- 4 chestnuts
- 20 hazelnuts
- 15 macadamias
- 15 pecans
- 2 tablespoons of pine nuts
- 30 pistachio kernels
- 10 whole walnuts
- 1-1 ½ tablespoons nut butter or nut meal

How can I include nuts in my diet?

- At **breakfast**: Add nuts to breakfast cereal, make your own 'nutty' muesli, add nuts to smoothies (especially if you have trouble chewing/swallowing), or top pancakes or yoghurt with nuts.
- At **lunch and dinner**: Add nuts to salads for a great crunch and to improve satiety (so you won't be hungry again and crash in the afternoon), or make pesto, where nuts are a star ingredient.
- For **desserts/snacks**: Make energy/protein balls, try yoghurt and berries topped with crushed nuts, make homemade ice-cream with frozen bananas and nuts, blend nuts into homemade dips, or use nuts in homemade muffins/cakes.
- Use **nut butter**: To top rice cakes/bread/wraps, spread on fruit (e.g. banana, apple) or try a date filled with nut butter (you won't regret it!), dip vegetables into (e.g. raw celery), or make satay sauce.
- In **cooking**: Use nut meal in cooking as a substitute for flour. For example, in frittatas, for baking or as breadcrumbs (such as for schnitzels or crispy fish dishes, or in fritters/patties/burgers).

Can nuts affect digestion?

Yes! Nuts (particularly nut skins) can enhance digestion. They contribute valuable fibre towards your daily fibre requirements (25g for women and 30g for men). (xviii) This helps to lower your risk of gut problems, such as constipation, haemorrhoids and diverticular disease. Emerging evidence suggests that nuts may enrich our gut microbiome. They provide prebiotic fibres, phytochemicals and unsaturated fats which all support gut health.

Can I eat nuts if I'm following a low FODMAP diet?

Yes, you can still enjoy the benefits of most nuts on a low FODMAP diet by limiting intake to no more than:

- 10 almonds, hazelnuts, Brazil nuts, pecans or walnuts, or
- 20 chestnuts or macadamias, or
- 1 tablespoon of pine nuts.

Remember, it's the overall FODMAP load of a meal that may trigger symptoms – so consider what else you're eating. And portion sizes can be individual, so work out what you can tolerate.

Can I eat nuts if I have diverticular disease?

Yes. Evidence suggests there are no negative effects of consuming nuts. Avoiding them may, in fact, be counter-productive as they're an important source of dietary fibre – which plays a key role in helping to manage diverticular disease. (xix)

How do I store nuts and how long do they stay fresh?

The good news is nuts stay fresh for a lot longer than some other wholefoods! It's best to store them in an airtight container in the refrigerator (for up to four months) or freezer (for up to six months). Bringing nuts back to room temperature before eating them will enhance their taste.



References:

- i Nikodijevic, C, Probst, Y, Batterham, M, Tapsell, L & Neale, E 2020, 'Nut consumption in a representative survey of Australians: A secondary analysis of the 2011-2012 National Nutrition and Physical Activity Survey, Public Health Nutrition, vol. 23, no.18, pp.3368-3378.
- ii Jackson, C & Hu, F 2014, 'Long-term associations of nut consumption and body weight and obesity', American Journal of Clinical Nutrition, vol. 1, no. 1, pp.408S-4011S.
- iii Li, H, Li, X, Yuan, S, Jin, Y & Lu, J 2018, 'Nut consumption and risk of metabolic syndrome and overweight/obesity: a meta-analysis of prospective cohort studies and randomized trials', Nutrition and Metabolism, vol. 15, p. 46.
- iv Tey, S, Brown, R, Gray, A, Chisholm, A & Delahunty, C 2011, 'Nuts improve diet quality compare to other energy-dense snacks while maintaining body weight', Journal of Nutrition and Metabolism, vol. 2011, no. 357350, p.2011.
- v Ellis, P, Kendall, C, Ren, Y, Parker, C, Pacy, J, Waldron, K & Jenkins, J 2004, 'Role of cell walls in the bioaccessibility of lipids in almond seeds', American Journal of Clinical Nutrition, vol.80, no. 3, pp. 604-13.
- vi Afshin, A, Micha, R, Khatibzadeh, S & Mozaffarian, D 2014, 'Consumption of nuts and legumes and risk of incident ischemic heart disease, stroke, and diabetes: a systematic review and meta-analysis', American Journal of Clinical Nutrition, vol. 100, no. 1, pp. 278-88.
- vii Nikolaidis, P, Veniamakis, E, T, Rosemann, T & Knechtle, B 2018, 'Nutrition in Ultra-Endurance: State of the Art', Nutrients, Vol.10, no.12, p.1995.
- viii Costa, R, Hoffman, M & Stellingwerff, T 2019, 'Considerations for ultra-endurance activities: part 1 – nutrition', Research in Sports Medicine, vol. 27. No.2, pp. 166-181.
- ix Boye J, Wijesinha-Bettoni, R & Burlingame, B 2012, 'Protein quality evaluation twenty years after the introduction of the protein digestibility corrected amino acid score method', British Journal of Nutrition, vol. 108, no. 2, pp. 183-211.
- x Food Standards Australia New Zealand. Australian Food Composition Database (Release 1). Available at: <https://www.foodstandards.gov.au/science/monitoringnutrients/afcd/Pages/default.aspx>
- xi Loveday SM. Food proteins: Technological, nutritional, and sustainability attributes of traditional and emerging proteins. Annu Rev Food Sci Technol, 2019. 10:311-39.
- xii Zhao ,H, Song, A, Zheng, C, Wang, M & Song, G 2020, 'Effects of plant protein and animal protein on lipid profile, body weight and body mass index on patients with hypercholesterolemia: A systematic review and meta-analysis', Journal of Acta Diabetologica, vol.57, no. 10, pp.1169-11180.
- xiii Food Standards Australia New Zealand (FSANZ) 2019, Australian Food Composition Database, FZANZ, viewed 6th June 2021, <<https://www.foodstandards.gov.au/science/monitoringnutrients/afcd/Pages/default.aspx>>.
- xiv Nuts for Life 2021, Audit of the energy, fat and salt content of nuts, Horticulture Innovation Australia, viewed 2nd June 2021, <https://d131k5wuh4trw5.cloudfront.net/uploads/Nuts_CategoryAuditReport_2021_FIN AL.pdf>.
- xv Tey, S, Robinson, T, Gray, A, Chisholm, A & Brown, R 2017, 'Do dry roasting, lightly salting nuts affect their cardioprotective properties and acceptability?', European Journal of Nutrition, vol.56, no.3, pp.1025-1036.
- xvi Kumari, S, Gray, A, Webster, K, Bailey, K, Reid, M, Han Kelvin, K, Tey, S, Chisholm, A & Brown, R 2020, 'Does 'activating' nuts affect nutrient bioavailability?', Food Chemistry, vol.319, p. 126529.
- xvii Nuts for Life 2019, What does a serve of Nuts look like?, Nuts for Life, viewed 7th June, <<https://d131k5wuh4trw5.cloudfront.net/uploads/2019/08/NFL545-What-30g-looks-like-LR.pdf>>.
- xviii National Health and Medical Research Council 2019, 'Nutrient Reference Values: Dietary Fibre', accessed 23rd June, <<https://www.nrv.gov.au/nutrients/dietaryfibre>>. xix Peery, A, & Sandler, R 2013, 'Diverticular disease: reconsidering conventional wisdom', Clinical Gastroenterology and Hepatology, vol.11, no.12, pp/1532-1537.