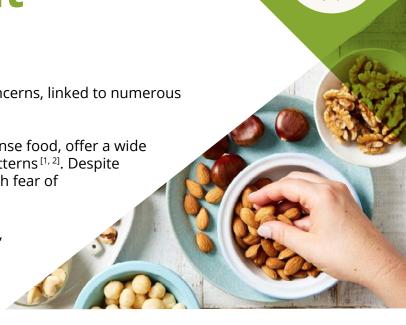
Nuts and Weight Management

Overweight and obesity are major public health concerns, linked to numerous chronic conditions and higher mortality rates.

Decades of research shows that nuts, a nutrient-dense food, offer a wide range of health benefits within balanced dietary patterns [1,2]. Despite this, most Australians don't eat enough nuts [3] – with fear of weight gain a common barrier to consumption [4].

However, extensive research, spanning many years, shows that regular nut consumption does not lead to weight gain – and in fact, may instead support weight management ^[5, 6].



What the research says

Observational studies report that people who eat nuts tend to have a lower risk of overweight and obesity, and nut consumers are also less likely to gain weight over time. And intervention studies consistently show that nut consumption does not adversely affect weight.

A major review of the evidence, published in 2021, concluded that nut consumption does not lead to increased body fatness^[6].

- The systematic literature review (SLR) and meta-analysis, of six prospective cohort studies and 86 randomised controlled trials (RCTs), involved more than half a million people.
- Nuts were linked with a 7% lower rate of overweight/obesity in long-term prospective cohorts.
- The RCTs showed a 'high certainty' of no adverse effect of nuts on body weight.

A 2018 systematic review and meta-analysis of three prospective cohort studies and 62 RCTs, found nut consumption was linked with reduced risk of overweight and obesity. In the randomised trials, a diet enriched with nuts reduced body weight (-0.22kg), body mass index (BMI) (-0.16kg/m2) and waist circumference (-0.51cm), compared to controls ^[5].

And as far back as the 1990s, two very large, well-regarded studies – the Adventist Health Study $^{\tiny{[7]}}$ and the Nurses' Health Study $^{\tiny{[8]}}$ – found significant inverse associations between the frequency of nut consumption and BMI.

Did you know?

Weight management diets that include nuts are considered more palatable and enjoyable, and as a result, those following these diets are more likely to comply with their eating plans for longer [14].

Potential mechanisms of action

Enhanced satiety and reduced appetite

- The protein and fibre in nuts help satisfy hunger and reduce appetite ^[9,10], and the healthy fats in nuts help release satiety hormones in the gut ^[11-13].
- The chewing needed to eat nuts activates signalling systems in the body that modify appetite [14].

Increased metabolism

 The predominant type of fat in nuts (unsaturated fat) is thought to be more readily oxidised than saturated fat and has a greater thermogenic effect, leading to less fat accumulation [15, 16].

Spontaneous dietary adjustments

 Studies suggest the kilojoules (energy) provided by nuts is offset by spontaneous adjustments in the overall diet – meaning a reduction in total energy intake at later meals [17].

Lower metabolisable energy

- Not all the fat in nuts is digested and absorbed by the body, with research suggesting up to 26% of the kilojoules in nuts is not absorbed [18].
- The fat is contained or 'trapped' within the complex plant cell walls of the nuts, and instead excreted – without ever being used as a source of energy by the body.

Delayed gastric emptying

 The fibre in nuts delays gastric emptying and subsequent absorption, which helps suppress hunger [19]. Nut fibre also supports a healthy gut microbiome – leading to improved energy metabolism.

What does all this mean?

A significant body of evidence shows nut consumption to be linked with a reduced risk of overweight and obesity, and that regularly eating nuts, as part of a healthy diet, does not adversely affect weight – and in fact, may help with weight management.

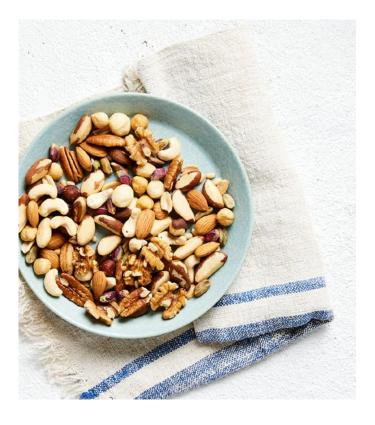
Health professionals can be confident in recommending at least 30g of nuts, every day, for good health, without stipulations or concern of an adverse effect on weight control.

What your clients need to know

- Nuts are a nutrient-rich plant food
- They are considered a core food within healthy dietary
- Eating a 30g serving of nuts a day has many health benefits
- Nuts play an important role in weight management.

Did you know?

Australian Health Survey data shows that nut intake is chronically low. Only 2% of Australians consume 30g of nuts a day, with the average daily intake just under 5g [3].



"Research suggests that up to 120g of nuts can be eaten daily without weight gain [5]"

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