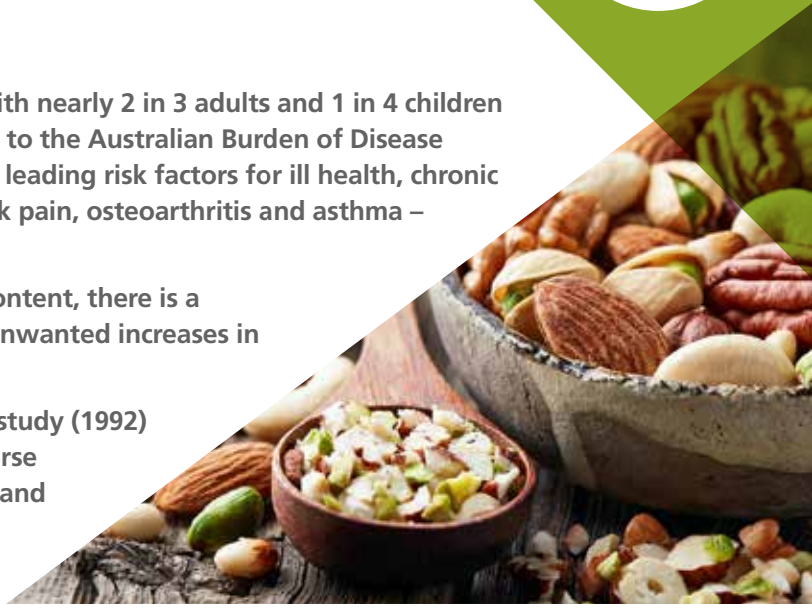
Nuts and Weight

A FACTSHEET FOR HEALTHCARE PROFESSIONALS



Overweight and obesity is a major public health issue, with nearly 2 in 3 adults and 1 in 4 children in Australia considered overweight or obese[1]. According to the Australian Burden of Disease Study (ABDS) 2011, overweight and obesity is one of the leading risk factors for ill health, chronic diseases – including cardiovascular disease, diabetes, back pain, osteoarthritis and asthma – and death.

Because nuts are an energy dense food with a high fat content, there is a widespread perception that their consumption leads to unwanted increases in body weight.

This is despite two very large studies – Adventist Health study (1992) and Nurses' Health Study (1998) showing significant inverse associations between the frequency of nut consumption and body mass index (BMI).

What the research says

Subsequent publications have continued to support the findings that nuts can help manage weight.

Evidence from a systematic literature review and meta-analysis of 3 prospective cohort studies and 62 randomised controlled trials shows that nuts are associated with reduced overweight/obesity and that a diet enriched with nuts reduces body weight, body mass index and waist circumference[2].

This is further supported by a recent review which found non-significant reductions following nut consumption for all anthropometric outcomes, except waist circumference where significant reductions were found[3]. In other words, nut consumption did not cause adverse effects on body weight.

Key results

Risk of overweight/obesity

Each increased increment of 30 gram serving/week in nut consumption was associated with a 3% reduced risk of overweight/obesity.

Changes in body weight parameters

A nut-enriched diet was associated with significant reductions in body weight parameters compared to a controlled diet in randomised trials:

- **Decrease in body weight** (-0.22 kg)
- **Decrease in BMI** (-0.16 kg/m^2)
- **Decrease in waist circumferenc**e (10.51 cm).

How many nuts and for how long?

- The duration of clinical trials varied from 2 to 336 weeks.
- The median dose of tree nuts ranged from 10 to 120 grams per day.

Potential mechanisms of action

There are several ways that nuts can help manage weight:

Nuts can enhance satiety and reduce appetite

- Protein and fibre in nuts help satisfy hunger and reduce appetite[4, 5].
- Healthy fats in nuts help release satiety hormones cholecystokinin (CCK) and peptide YY (PYY), which help to tell you when you're full[6, 7].

Increasing resting energy expenditure

- Metabolism increases immediately after eating nuts, and this increase can account for up to 10% of the energy the nuts contain[8].

Poor bioaccessibility of the energy they provide, leading to inefficient energy absorption

- The digestion and absorption of the kilojoules (energy) in nuts is incomplete. It has been suggested that up to 15% of the energy in nuts is not absorbed and is excreted.

The energy provided by nuts is offset by spontaneous adjustments in the total diet

- Nut consumers ate significantly less energy at their next meal (by up to as much energy as the nuts provided)[9] which may be due to the abundance of healthy fats, protein and fibre.

Prebiotic effects on the gut microbiome that could be important for weight management

What does all this mean?

Despite the widely held perception that nuts can lead to weight gain due to their high fat and high energy content, the research shows otherwise. Decades of research has shown that regular nut consumption does not lead to weight gain.

The misconception amongst the general public and health professionals that nuts are high in fat and therefore "fattening" is simply not true.

In addition to supporting a healthy weight, there is also strong evidence for nuts in reducing the risk of heart disease[10], diabetes[11], supporting brain health and reducing the risk of cancer[12].

What your clients need to know

A 30g serve of nuts per day has no adverse effects on body weight and should be enjoyed as part of a healthy diet.

A 30g serve also aligns with the Australian Dietary Guidelines serve size guidelines. The Australian Dietary Guidelines recognise nuts as being highly nutritious, and in playing an important role in a healthy balanced diet[13].

For good health,
enjoy a healthy handful
of nuts every day.

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