



## Boost your metabolic health with nuts

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*Did you know that more than ¼ of Australian adults have the Metabolic Syndrome?<sup>1</sup>*

If a number of cobras is called a quiver and a group of hens a brood then what would be the collective noun for a group of serious health conditions? *It* has many disguises - Syndrome X, Insulin Resistance Syndrome, The Deadly Quartet. Officially known as Metabolic Syndrome, *it* is the leading health concern today because it can lead to so many other illnesses and it's largely preventable.

### **What is Metabolic Syndrome?**

The World Health Organisation defines Metabolic Syndrome as the term to describe a cluster of health indicators:<sup>2</sup>

- § Abdominal obesity (excess body fat over the stomach region – an apple shape)
- § High triglycerides levels (a type of blood fat)
- § Low HDL or “good” cholesterol levels
- § High blood glucose levels or impaired glucose tolerance
- § High blood pressure

Nuts are not only an energy dense food, but nutrient dense too - rich in nutrients and other bioactives such as antioxidants with important metabolic benefits.<sup>3</sup>

Here's how nuts can help combat the various health conditions linked with the Metabolic Syndrome:

**Abdominal obesity:** Nuts are high in fibre and protein; both nutrients have a satiating effect. Plus nut oils have been shown to boost the release of satiety hormones in the gut - meaning they make you feel fuller for longer and help limit kilojoule or energy intake.<sup>4</sup> Valuable for weight loss or weight maintenance.

**High blood pressure (hypertension):** Nuts are high in arginine – an amino acid and building block of protein, plus a precursor to nitric oxide which helps relax the smooth muscles in blood vessels controlling blood pressure.<sup>5</sup> Eating nuts daily can reduce the risk of developing high blood pressure by nearly 20%.<sup>6</sup>

**High blood triglycerides:** Tend to be associated with low levels of high density lipoproteins (HDL) cholesterol – the good or protective cholesterol. Overweight and obesity is also a risk factor for high triglyceride levels (see abdominal obesity and low levels of HDL).

**Low levels of high density lipoproteins (HDL):** The healthy unsaturated fats in nuts actually work to lower total and LDL cholesterol while preserving the (good) HDL cholesterol levels and reducing triacylglycerol levels.<sup>7</sup> A review article on nuts and metabolic health reports that in addition to the beneficial fats, other components of nuts including phytosterols and dietary fibre may also contribute to blood lipid improvements.<sup>3</sup>

**Impaired fasting glucose (IFG):** The Nurses Health Study reviewing the health of 83,818 nurses reported a beneficial effect of regular consumption of nuts on insulin sensitivity. They found an inverse association between nut consumption and the risk of developing Type 2 diabetes - with women who consumed a handful of nuts at least five times per week having the greatest benefit.<sup>8</sup>

**Follow the Mediterranean style diet:** A diet based around natural wholegrain foods, vegetables and fruit, olive oil, and fish, supplemented with a daily handful of mixed nuts has been found to improve the overall prevalence of the Metabolic Syndrome when compared with those following general low-fat dietary advice.<sup>9</sup>

Other ways to boost your metabolic health include:

- Reducing consumption of alcohol and saturated fats
- Increasing your physical activity level
- Quitting smoking

For more information on the health benefits of nuts and tasty nut recipes for all occasions please visit [www.nutsforlife.com.au](http://www.nutsforlife.com.au)

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