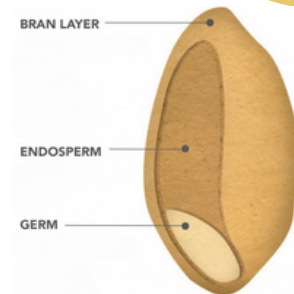


# What are Whole Grains?

## What are whole grains?

A 'whole grain' refers to an intact grain. It contains all three components of a grain - the bran, endosperm, and germ. Each component has unique nutrients that fuel and support positive health.

- **Bran** – the outer layer of the grain, which contains fibre, omega-3 fatty acids, vitamins and minerals.
- **Endosperm** – the main part of the grain mainly contains starch, carbohydrates and protein.
- **Germ** – the smallest part of the grain, which contains vitamins E and B, protein, and healthy fats.



## What is the difference between whole grains and refined grains?

Refined grains have been stripped of one of the layers during processing, removing some of the essential nutrients. As a result, refined grains are less nutritious than whole grains.

### Examples of whole grains include:

- Brown rice
- Oats
- Wheat

### Examples of refined grains include:

- White bread
- White flour
- White pasta

## What are the benefits of whole grains?

- **Vitamins and minerals** - whole grains contain more than 26 essential nutrients.
- **Dietary fibre** - whole grains are a great source of dietary fibre, helping to regulate digestion, prevent constipation and improve overall gut health.
- **Increased energy** - the high fibre and vitamin content in whole grains provide a steady stream of energy to the brain and muscles.
- **Improved focus** - whole grains can improve concentration, creativity and focus.
- **Reduced chronic disease risk** - whole grains can reduce the risk of chronic diseases, including type two diabetes and cardiovascular disease.

## What is the recommended intake of whole grains?

The Australian Dietary Guidelines recommend most adults consume between 4 to 6 serves of grains a day, with a focus on whole grains.

Children and adolescent recommendations vary depending on sex and age.

### A standard serve is:

- 1 slice (40g) whole grain bread
- ½ medium (40g) whole grain roll
- ½ cup (75–120g) cooked brown rice
- ½ cup (75–120g) whole grain pasta
- ½ cup (120g) cooked porridge
- ¼ cup (30g) muesli
- 3 (35g) whole grain crispbreads or crackers
- 1 (60g) whole grain crumpet
- 1 small (35g) whole grain English muffin or scone