

# Kellogg's<sup>®</sup> Sheet Facts

## Benefits of whole grains

### What are whole grains?

- A '**grain**' is the edible seed of a grass. Other types of seeds are also considered grains, such as soy beans, linseed and buckwheat.
- '**Whole grains**' include all the parts of the natural grain.
- The whole grain incorporates:
  - The germ - at the centre of the grain and the embryo of the seed
  - The endosperm - which is the layer around the germ, contains carbohydrates and protein and is there to nourish a new plant
  - The bran layer - surrounds the endosperm.
- Many different types of grains are used in modern cereal foods, including wheat, rice, corn, barley, oats and rye. The extent to which the whole grain is used varies with different foods.

### Health benefits

- Scientific studies in recent years show that people who eat more whole grains have a lower risk of cancer and heart disease than people who eat a very small quantity of whole grains
- These findings have renewed interest in the health benefits of whole grain foods. A health claim for wholegrains has been approved in the US that communicates that wholegrain foods may help reduce the risk of heart disease and certain cancers.

### How do whole grains protect against disease?

- Whole grains can be a good source of carbohydrate, fibre, protein, and contain some vitamins and minerals.

- Whole grains also contain a number of additional components that are beneficial for health. These beneficial components are called 'phytochemicals' or 'phytonutrients' because they are naturally occurring plant substances with a biological effect or benefit. Examples of these protective elements include plant lignans, phytic acid, minerals and other compounds
- Phytochemicals are mainly located in the outer layers of the grain (the bran and the germ) and hence products containing wholegrains are more likely to contain these components. Sometimes the bran layers are added back into a product - for instance in some breakfast cereals and breads.
- Although it is not known yet exactly how eating whole grains protects against disease, beneficial effects include:
  - Lowering of cholesterol (e.g. by the soluble fibre found in oats, barley and psyllium)
  - Producing lower blood glucose and insulin responses
  - Antioxidant effects
  - Protective effect of bran fibre in the intestine.
- Plant lignans, such as those found in linseed, wheat bran and rye, are phytoestrogens and are known to help protect against hormone-related cancers such as breast and prostate cancer.

### Whole grains - what is recommended?

- The Dietary Guidelines for Australians recommends people eat plenty of cereals, (including breads, rice, pasta and noodles), preferably whole grain.
- Go Grains Health and Nutrition recommend Australians should eat at least 2 serves of whole grain foods every day.

**For further information, please contact Kellogg's Nutrition Advisory Service.**

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