

# Kellogg's<sup>®</sup> Sheet Facts

## Grains & Cereals

Grains are the edible seeds of grasses, commonly called 'cereals' after Ceres the ancient Roman goddess of tillage and corn. They play a very important part in our history as the cultivation of cereal crops marked the transition from nomadic existence to permanent settlements.

### The global importance of grains

Grains which make a significant contribution to the human diet on a world scale include wheat, rice, maize (corn), barley, rye and oats. These grains provide more than half of the world population's intake of carbohydrate and protein and are usually the staple part of the diet, supplemented by a protein source such as fish, meat, chicken or legumes (such as beans, lentils etc).

#### Wheat

- Wheat cultivation began around 7000BC in the Euphrates Valley and today, wheat crops cover more of the Earth's surface than any other crop.
- Wheat cultivation has a long history in Australia and continues to make a major contribution to the Australian economy. Two-thirds of our grain production is wheat.
- Wheat bran is a particularly good source of insoluble fibre, which helps with bowel regularity and prevention of bowel diseases, including cancer.

#### Corn (Maize)

- Cultivation of corn dates back to 5000BC in Mexico.
- Yellow maize is the only grain with significant amounts of carotenes – these act as antioxidants and are converted to vitamin A in the body.

#### Rice

- Rice cultivation began in 3000BC in China.
- Today, rice is the staple food of over half the world's population and remains particularly important in Asian populations.
- Australia is one of the most efficient rice-producers in the world.
- Rice bran has been shown to have a cholesterol-lowering effect and its main component – oryzanol - is used in Japan for medicinal purposes.

### Nutritious grains

- Grains can be an important source of carbohydrate, protein, fibre, vitamins (particularly B-group vitamins and the antioxidant vitamin E), minerals (including iron, zinc and magnesium) and other beneficial food components, including phytochemicals.
- Grains are mostly low in fat, with the small amount of fat being primarily polyunsaturated.
- Most grain-based foods – such as breakfast cereals - play an important part in healthy diets.

### Breakfast cereals

- Breakfast cereals are a favourite grain-based food for most Australians, second only to bread<sup>1</sup>. Rice and pasta are also popular foods made from grain that are eaten regularly.
- Breakfast cereals in Australia are made mostly from wheat, rice, corn and oats, and to a lesser extent from other grains, including rye, barley and psyllium.
- Breakfast cereals contributed more riboflavin (B2) and iron to the Australian diet than breads even though bread consumption is higher than breakfast cereals<sup>2</sup>. Some breakfast cereals are also now an important source of the B-group vitamin, folate, which is needed for normal growth and development of cells and is especially important for women in their child-bearing years.

### Grain foods – do we eat enough?

- The average intake of grain-based foods in Australia is inadequate. The Dietary Guidelines for Australians recommend we eat plenty of cereals (including breads, rice, pasta and noodles), preferably wholegrain. The average diet should contain between 4-12 cereal serves everyday, depending on your age, gender and activity levels (1 serve = 2 slices bread ; 1 cup cooked rice).

### Grain-based foods

- Breads, muffins, crumpets
- Semolina, burghul
- pita bread
- Risotto, Pilaf
- Breakfast cereals
- Porridge
- Cereal bars
- Couscous, polenta
- Pasta - spaghetti, noodles
- Tortillas, burritos, enchiladas

#### References:

1. Australian Bureau of Statistics and Commonwealth Department of Aged Care (1999). National Nutrition Survey. Foods Eaten. Australia 1995. ABS Catalogue No. 4804.0
2. Australian Bureau of Statistics and Commonwealth Department of Aged Care (1998). National Nutrition Survey. Nutrient Intakes and Physical Measurements. Australia 1995. ABS Catalogue No. 4805.0

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

Kellogg (Aust) PTY LTD, 41-51 Wentworth Ave, Pagewood NSW 2019. Telephone 1800 000 474.

Or in New Zealand contact Kellogg's Nutrition Advisory Service, PO Box 9598 Newmarket, Auckland. Telephone 0800 881 889.

© Registered trade marks. Kellogg (Aust) Pty Ltd authorised user.