

Wholegrains

the whole truth

FACT SHEET

Health gains from wholegrains

The many health benefits of wholegrains are well known – they are good for your heart¹ and digestive system², and can help maintain blood glucose control³. People who eat wholegrain foods regularly are more likely to have better long term weight control⁴ and less likely to develop some types of cancers⁵.

To reap these health benefits, Go Grains Health & Nutrition (Go Grains) recommends Australian adults aim to eat 48g of wholegrains each day⁶. This Daily Target Intake (DTI) is based on review of scientific research studies and wholegrain recommendations around the world^{7,8}.

Why are wholegrains so special?

The term ‘wholegrain’ refers to grains that contain all parts of the grain - the bran (fibre-rich outer layer), the germ (nutrient rich inner core) and the endosperm (middle starch and protein layer)⁹. The bran and germ contain many beneficial nutrients such as vitamins, minerals and fibre, together with antioxidants and other protective components.

Wholegrains can be ‘whole’ visible grains, or can be milled, cracked or ground⁹. Milled wholegrains are called ‘wholemeal’. They are wholegrains – just milled to finer pieces. Processing wholegrains (by breaking or milling them into finer pieces) can make it easier for the body to use the important nutrients they contain^{10,11}.

In Australia, commonly eaten wholegrain foods include wholemeal and mixed grain breads, wholegrain breakfast cereals, oats, muesli, wholemeal pasta, brown rice, wholegrain crispbreads, popcorn, and whole barley. ‘Pseudo-cereals’ such as amaranth, buckwheat, quinoa and wild rice are less commonly eaten, but generally recognised as wholegrains due to their similar structure and nutritional composition. Look for them in the ‘health food’ aisle of the supermarket.

Why eat wholegrains?

Australian Dietary Guidelines encourage adults, adolescents and children to “eat plenty of cereals (including breads, rice, pasta and noodles), preferably wholegrain”¹². Retaining the nutritious bran and germ, wholegrains contain essential nutrients such as B vitamins, Vitamin E, fibre, iron, magnesium, phosphorus and zinc¹¹. They also contain protective substances like antioxidants and phytonutrients¹¹. Wholegrains are low in saturated fat, cholesterol free (as are all natural plant foods), full of long-lasting energy and a good source of protein¹¹. It’s a bonus that foods made with wholegrains are also filling¹¹, which means you will be more satisfied on smaller portions - great news if you are watching your weight!

Wholegrain foods are not only good for you, but they also add taste and texture to any meal. The more complex, rich flavours of wholegrains - often described as nutty or earthy - are very satisfying. If you are not convinced about the great taste of wholegrains, incorporate them into your diet gradually.

Did you know:



Wholemeal foods contain wholegrains - just milled to finer pieces.

WHOLEGRAIN FOODS	Approx. amt of w'grains
Wholemeal bread, 2 slices	30 - 40g
Multi-grain bread, 2 slices	5 - 30g
Wheat-flake breakfast biscuits, 2 biscuits	30g
Wholegrain breakfast cereal, 30-45g serve	15 - 30g
Muesli, natural, ½ cup	30 - 40g
Porridge, using 1/3 cup raw rolled oats	30g
Brown rice, 1 cup cooked	65g
Wholegrain pasta, 1 cup cooked	55 - 65g
Wholegrain crispbreads, 2-4 slices	20 - 35g
Wholemeal crumpets, 2 crumpets	20g
Rice Cakes, 4 thin	20g
Popcorn, plain, 20g serve	15g
Muesli bar, 1 bar	10 - 15g

Wholegrain values are based on average values, the actual amount of wholegrain ingredients will vary from product to product.



Foods like rice, pasta and sandwiches can be prepared using half wholegrain and half refined varieties. Try introducing wholegrain foods into your child's diet in the early years, to increase their acceptance of these super foods as they get older.

The whole truth

Scientific studies consistently show that people who eat about 48g of wholegrains (2-3 serves of wholegrain foods) every day have a 20 - 40% lower risk of heart disease¹ and type 2 diabetes³. There is also scientific evidence to support improved weight management⁴, better blood glucose control¹³ and up to a 40% lower risk of some cancers⁵ in people who regularly eat wholegrains.

Thus far, no single component of wholegrains has been identified which accounts for its beneficial effects. It appears that the complete package of fibre, vitamins, minerals, antioxidants and phytonutrients found naturally in wholegrains works together to protect against many of the diseases that plague our society¹¹.

How do I know if a food product is 'wholegrain'?

Growing awareness of the health benefits of wholegrains means that an increasing number of products are displaying a wholegrain statement on the pack. There is no legislation in Australia to specify a minimum quantity of wholegrains a product must contain in order to feature a wholegrain claim, but there are several ways you can find out if a product is wholegrain:

- Check the ingredient list. Choose products with wholegrain ingredients at the beginning of the list (ingredients are listed from highest to lowest).
- Look out for the words 'whole', 'wholegrain', 'mixed grain', 'cracked', 'flaked' or 'kibbled' next to the name of the grain.
- Check to see if the manufacturer states the amount of wholegrains the product contributes towards the Go Grains 48g daily target intake.

References

1. I Flight and P Clifton. Cereal grains and legumes in the prevention of coronary heart disease and stroke: a review of the literature. *Eur J Clin Nutr* 2006, 60:1145-1159.
2. J Slavin. Why whole grains are protective: biological mechanisms. *P Nutr Soc* 2003, 62:129-134.
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4. P Williams et al. Cereal grains, legumes, and weight management: a comprehensive review of the scientific evidence. *Nutr Rev* 2004, 66(4):171-182.
5. GH McIntosh. Cereal foods, fibres and the prevention of cancers. *Nutr Diet* 2001, 58 Suppl2:S35-S48.
6. T Griffiths. Towards an Australian 'daily target intake' for wholegrains. *Food Aust* 2007, 59(12):600-601.
7. T Griffiths & P Nestel. Developing a target for daily wholegrain intake for Australians. *Food Aust* 2006, 58(9):431-433.
8. The Whole Grains Council (www.wholegrainscouncil.org)
9. Australia New Zealand Food Standards Code. Standard 2.1.1 - Cereals and Cereal Products.
10. J Slavin et al. Grain processing and nutrition. *Crit Rev Food Sci Nutr* 2000, 40(4):309-326.
11. J Slavin et al. The role of wholegrains in disease prevention. *J Am Diet Assoc* 2001, 101(7):780-785.
12. National Health and Medical Research Council. *Dietary Guidelines for Australian Adults*. Canberra: Commonwealth of Australia, 2003.
13. NR Sahyoun et al. Whole-grain intake is inversely associated with the metabolic syndrome and mortality in older adults. *Am J Clin Nutr* 2006, 83:124-131.

Wholegrain Meal Ideas

Try these meal suggestions to help reach your 48g daily target!

Breakfast

- Wholegrain, wholemeal or mixed grain toast, English muffins or crumpets
- Wholegrain breakfast cereal, rolled oats/porridge or natural muesli
- Sweet corn, creamed corn or baked beans on wholegrain toast
- Muesli or crushed wholegrain cereal flakes with yoghurt

Lunch

- Sandwich made with wholegrain, wholemeal or mixed grain bread or crispbreads
- Brown rice salad, wholemeal pasta salad or tabouli (made with burghul/cracked wheat)
- Mini pizza - use wholemeal/mixed grain English muffins or pita bread
- Wholemeal lavash or mountain bread
- Vegetable soup with a wholegrain, wholemeal or mixed grain roll

Dinner

- Soup made with unpearled barley, brown rice, wholemeal pasta or wholegrain croutons

- Stews, gravies and sauces thickened with wholemeal flour
- Coat foods with wholemeal breadcrumbs or oats
- Use brown rice as a base for savoury pies or quiches
- Cracked wheat, oats, crushed wholegrain breakfast cereals added to homemade patties or rissoles

Dessert

- Fruit crumble topped with oats
- Wholemeal flour in cakes, muffins, puddings and slices

Snacks

- Wholegrain or wholemeal crispbreads/crackers/rice cakes with nutritious hummus or white bean dip
- Wholegrain breakfast cereal bar or muesli bar
- Popcorn (plain or lightly salted is best)
- Trail mix (make your own with wholegrain cereal, popcorn, roasted chickpeas, dried fruit and nuts)



Aim for '4+ serves a day' of grain-based foods such as breads, breakfast cereals, rice, pasta and crispbreads, preferably wholegrain.

For further information:

To learn more about the benefits of grain-based foods and health, or to order additional copies of this fact sheet, visit the Go Grains website at www.gograins.com.au or contact the Go Grains 'Information Line' by calling 1300 GRAINS (1300 472 467)

For delicious recipes using wholegrains, visit the 'Wholegrains Recipe' section of the Go Grains website – www.gograins.com.au.