How much?
The Australian Guide to Healthy Eating (1998) recommends that a healthy diet for adults should include at least 4 serves of grain-based foods every day.

1 serve is:
- 2 slices of bread
- 1 cup of cooked rice/pasta/noodles
- 1 cup of cooked porridge
- 1½ cups flaked breakfast cereal

At least half of these serves should be wholegrain, since the protective components (such as fibre, antioxidants and phytoestrogens) are found in the outer layers of grains.

Go Grains provides scientifically based information and about the nutrition and health benefits of grains and pulses.

For more information visit our website: www.gograins.grdc.com.au

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Cereal Grains and Coronary Heart Disease

The scientific evidence supports claims that wholegrain cereal foods and cereal fibre such as oat meal or oat bran, may reduce the risk of heart disease by as much as 30%.

Foods made from grains and pulses are rich in carbohydrates (starch and dietary fibre), protein, vitamins and minerals, but are low in fat and contain no cholesterol. They also contain many ‘phyto-chemicals’ (eg anti-oxidants and phytoestrogens) which may help to protect the body against disease.

Wholegrain cereal products such as breads and breakfast cereals – traditionally associated with bowel health – are emerging as nutritionally beneficial for the prevention of coronary heart disease. A number of large studies in the USA and Finland in the late 1990s – based on a combined total of over 65,000 men and 109,000 women – have each shown that as consumption of cereal fibre or whole-grain cereals increases, the incidence of coronary heart disease declines. This effect was seen with as little as 1 serve of wholegrain foods a day. A similar association between cereals and coronary heart disease was not seen for refined cereal products.

Only a minor part of this apparent protective effect can be explained by the cholesterol lowering effect of soluble fibre. From the available evidence it appears that the effect is the result of the many different protective factors present in grains, including folate and Vitamin E, rather than to any single factor.

The US Food & Drug Administration permits food manufacturers to make a health claim on wholegrain food products (with at least 51% wholegrain ingredients):

“Diets rich in wholegrain foods and other plant foods and low in total fat, saturated fat and cholesterol may reduce the risk of heart disease and some cancers”.

The majority of over 40 human trials of the effect of oatmeal or oat bran on blood fats have found a reduction of total and LDL cholesterol. The reduction is modest in those with normal cholesterol and greater in those with raised cholesterol.

Some ideas to help you include more WHOLEGRAIN foods in your diet

Try the following wholegrain ideas with your favourite toppings or accompaniments for healthy, tasty and convenient meals or snacks

**Breakfast:**
- wholegrain, wholemeal, mixed grain or kibbled toast or muffins
- high fibre or wholegrain breakfast cereals
- rolled oats
- muesli (plain muesli has less fat than toasted)
- rye bread or toast
- sweetcorn or baked beans on wholemeal or mixed grain toast

**Lunch:**
- wholemeal pita bread/Lebanese bread stuffed with your favourite filling
- wholegrain, wholemeal, mixed grain or kibbled sandwiches (plain/toasted) or rolls with your favourite filling
- salads made with grains including tabouli, brown rice
- vegetable soup with lentils and brown rice
- mini pizzas made with wholemeal or wholegrain English muffins as the base

**Dinner:**
- traditional casseroles go well with brown rice or pilaff
- wholemeal pasta topped with your favourite vegetable-based sauce
- serve corn as a vegetable
- wholegrain, wholemeal, mixed grain or kibbled bread or rolls
- stews and casseroles thickened with wholemeal flour, brown rice or bran

**Snacks:**
- high fibre or wholegrain breakfast cereal (as finger food)
- wholegrain cracker biscuits
- wholegrain, wholemeal, mixed grain or kibbled muffins
- cakes or biscuits made with wholemeal flour
- grain-based nutritious snack bars