

Dietary Fibre

August 2006

• What is Fibre?

Dietary fibre is a type of carbohydrate from plant foods which passes through the body undigested. The main sources of dietary fibre are cereals, fruits, vegetables and legumes.

There are three main types of fibre;

- **Soluble fibre** is fermented in the large intestine. This process produces substances beneficial for the health of the lower digestive tract. Good sources of soluble fibre include whole grains such as oats and barley, as well as fruits and vegetables.
- **Insoluble fibre** adds bulk to faeces and helps prevent constipation. Good sources include whole grain foods, legumes, nuts, seeds and the skin of fruit and vegetables.
- **Resistant starch** while not technically a fibre, resistant starch avoids digestion and acts in a similar way. Resistant starch is found in coarsely ground grains such as wheat, green bananas, potato salad, rice salads and some varieties of corn.

A healthy digestive tract

High fibre diets benefit the entire digestive system. Fibre relieves constipation and promoting regular bowel movements by increasing the bulk of the stool and absorbing water so that faeces pass through more easily. To avoid constipation it is also important to drink plenty of water also to balance that which is absorbed by fibre.

Lower blood cholesterol

High blood cholesterol is a major risk factor for heart disease. Soluble fibre may help lower blood cholesterol by binding with it during digestion preventing it from being absorbed. Rice bran, oat bran and barley bran have all been shown to lower cholesterol ^{1,2,3}.

Weight control

High fibre foods generally require more chewing, take longer to eat, are more bulky and filling, and tend to be lower in fat, which may all assist with weight and appetite control.

Good for diabetes

Eating a diet high in fibre slows the absorption of glucose into the blood stream which is beneficial for people with diabetes.

Cancer fighting

Fibre may also help prevent some forms of cancer. It decreases the time that food residues take to pass through the body, and in doing so also shortens the time potentially harmful toxins are in contact with the bowel.

Scientists have also discovered that the fermentation of

resistant starch in the large bowel produces short-chain fatty acids which are thought to have a direct slowing effect on cancer cell growth.

How much fibre do I need?:

The current intake recommended in Australia is 30g per day. Most people only consume between half and two thirds of this.

How to choose high fibre foods:

The Code of Practice for nutrient claims in Australia defines the minimum fibre content required to make fibre claims on food labels:

High Fibre Foods

Source > 1.5g per serve	Good source > 3.0g per serve	Very good source > 6.0g per serve
Potato, 1 medium	Sweetcorn, 1 cob	½ cup kidney beans
Avocado, ½	Apple, with skin	½ cup mixed beans
Brown rice, ½ cup	Banana	½ cup lentils
Orange, medium	Strawberries, ½ punnet	½ cup bran
Carrots, medium	Almonds, 1tbs	
	Whole grain bread, 2 slices	

Tips to increase your fibre intake

Breakfast

- Try muesli, porridge, bran cereal or wheat biscuits.
- Add fresh, canned or dried fruit to cereal.
- Toast wholegrain bread with baked beans or grilled tomato.

Lunch

- Try a thick vegetable soup with a wholegrain roll.
- Add four bean mix to a salad.
- Try a wholemeal pita stuffed with salad and vegetables.

Dinner

- Add kidney beans to mince meat for a bolognaise sauce, taco filling or chilli con carne.
- Serve the main meal with jacket potatoes.
- Add lentils or chick peas to curries.
- Use a variety of vegetables in stir-fries.

Tip

If you plan to increase your fibre intake, do so gradually to avoid any digestive discomfort.

1. Truswell AS, Eur J clin Nutr.: 56(1):1-14. 2002 Jan.
 2. Mc Intosh et, al. Am. J. Clin. Nutr. 1991;53:1205-1209
 3. Kestin M, et, al. Am. J. Clin.Nutr. 1990; 52:661-666.