



Pharmaceutical
Society of Australia



Fibre and Bowel Health

Dietary fibre is necessary for good digestion and a healthy bowel. It also helps control weight, blood cholesterol level and blood sugar level and may protect against bowel cancer. Good sources of dietary fibre include wholegrain breads and cereals, fruits, vegetables, legumes, nuts and seeds.

What is fibre?

Dietary fibre is the part of plant foods that is not digested in the stomach or small intestine. It passes relatively unchanged into the large intestine or colon, where bacteria partly break it down by fermentation. Some types of fibre produce a lot of gas (wind) in the bowel when fermented.

Both soluble and insoluble fibre are important for bowel health. Foods higher in soluble fibre include oats, fruits, vegetables, dried beans and lentils. Foods higher in insoluble fibre include wholegrain foods, the skins of fruits and vegetables, nuts and seeds.

Dietary fibre is also called 'roughage' or 'bulk'.

Fibre and health

Fibre is important for a healthy digestive system.

- Dietary fibre adds bulk to faeces (bowel motion) and helps soften it, making it easier to pass.
- High fibre foods can help with weight control as they are filling and often low in fat.
- Soluble fibre slows sugar absorption and may help control blood glucose level.
- Soluble fibre may help to lower blood cholesterol level.

In addition, high fibre foods usually contain many vitamins, minerals and essential nutrients.

Fibre, resistant starch and bowel cancer

Starch is often present with fibre in plant foods and a type of starch, called resistant starch, also helps keep the bowel healthy. Foods containing resistant starch include unprocessed cereals and grains, underripe bananas, lentils, slightly undercooked ("al dente") pasta and cooked and cooled potato.



Resistant starch is also added to some breakfast cereals and fibre supplement products.

Like fibre, resistant starch is broken down by fermentation in the large intestine. When bacteria in the bowel ferment fibre and resistant starch, the bacteria in the bowel grow and multiply. This increases the bulk of the faeces, so it passes more quickly and easily through the bowel. The faster faeces passes through the bowel, the less time any cancer-causing substances will be in contact with the bowel.

Fermentation of resistant starch also produces short-chain fatty acids, which may protect against cancer.

Effects of low fibre

A diet that is low in fibre may contribute to:

- Constipation
- Haemorrhoids (piles)
- Bowel cancer
- Diverticular disease
- Irritable bowel syndrome
- High blood cholesterol
- Being overweight.

Some high fibre foods

Breads, cakes, biscuits

- Wholemeal, wholegrain, multigrain, white with added fibre, soy and linseed breads.
- Cakes, biscuits, scones and muffins made with wholemeal flour (some may be high in fat).
- Wholegrain and wholemeal crackers (e.g., *Ryvita*, *Vita Wheat*).

Breakfast cereals

- Rolled oats, wholemeal porridge.
- Bran cereals (e.g., *All-Bran*, *Sultana Bran*).
- Unprocessed wheat bran, oat bran, rice bran.
- Whole wheat breakfast cereals (e.g., *Weetbix*, *Weeties*, *Vita Brits*).
- Muesli (toasted muesli is often high in fat – check the label).

Grains and grain foods

- Oats, rye, barley, buckwheat, cracked wheat.
- Brown rice, polenta, couscous.
- Pasta - spinach or wholemeal.

Vegetables

- Legumes such as chick peas, lentils.
- Beans (e.g., baked, broad, butter, kidney, lima, soy beans).
- Potatoes, carrots, beetroot, parsnips, sweet potatoes, turnips, yams.
- Broccoli, brussels sprouts, cabbage, cauliflower, mushrooms, leeks, peas, snow peas, spinach.

Note: Salad vegetables such as celery, lettuce and cucumber are **not** good sources of fibre.

Nuts and seeds

- All kinds (some nuts are also high in fat).

Fruit

- All fresh and dried fruit, especially with skin, seeds, pith.
- Apples, apricots, bananas, pears, plums, oranges and berries are particularly high in fibre.

Note: Fruit juices provide less fibre than eating the whole fruit.

Self care

- Eat a wide variety of high fibre foods. Aim to eat at least 3 serves of vegetables, 2 serves of fruit and some whole grain and cereal foods every day. Limit foods high in fat, sugar or salt.
- Increase fibre in diet gradually, to avoid gas, bloating and cramping.
- Eat regular meals to stimulate bowel movement.
- Never ignore the urge to open bowels.
- Drink at least two litres (eight glasses) of water daily, unless a doctor advises not to. Fibre absorbs water, so it is important to make sure you drink plenty of fluid.
- Exercise at a moderate level for at least 30 minutes on most or preferably all days of the week.

Fibre supplements

The best sources of fibre are high fibre foods. Dietary fibre can be supplemented with fibre supplement products if needed.

Psyllium (e.g., *Metamucil*, *Nucolox*), inulin (e.g., *Metamucil Fibresure*), guar gum (e.g., *Benefiber*), ispaghula (e.g., *Fybogel*) and sterculia (e.g., *Normacol Plus*, *Normafibe*) are common ingredients of fibre supplement products. They may produce less wind than high fibre foods.

Note: Some fibre supplements must be taken with plenty of fluid. Always follow label instructions carefully.

Your **Self Care** Pharmacist

Related fact cards

- *Constipation*
- *Haemorrhoids*
- *Irritable Bowel Syndrome*

For more information

Dietitians Association – listed under 'D' in the white pages of the phone book or website www.daa.asn.au

HEALTHInsite – website www.healthinsite.gov.au

The Gut Foundation – phone (02) 9382 2749 or visit www.gut.nsw.edu.au

Consumer Medicine Information (CMI) leaflets – your pharmacist can advise on availability.

NPS Medicines Line – phone 1300 888 763 Monday to Friday, 9am to 6pm EST.

The Poisons Information Centre – in case of poisoning phone 131 126 from anywhere in Australia.

Pharmacists are medicines experts. Ask a pharmacist for advice when choosing a medicine.

Sponsored by

Procter & Gamble

makers of



and



www.metamucil.com.au