

*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 a general term meaning complex carbohydrate substances in plant foods that are not digested or absorbed in the stomach or small intestine. Dietary fibre passes relatively unchanged into the large intestine or colon, where bacteria can at least partly break it down by fermentation. Some types of fibre produce a lot of gas (wind) in the bowel when fermented.*

*There are several different types of dietary fibre including soluble fibre, insoluble fibre and resistant starch.*

- *Foods higher in soluble fibre include oats, barley, rye, fruits, vegetables, dried beans and lentils.*
- *Foods higher in insoluble fibre include wholegrain foods, the skins of fruits and vegetables, nuts and seeds.*
- *Foods containing resistant starch include unprocessed wholegrain cereals, seeds and nuts, under-ripe bananas, lentils, slightly under-cooked ("al dente") pasta and cooked and cooled potato, rice and pasta. Resistant starch (as Hi-Maize) is also added to some breakfast cereals and fibre supplement products.*

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



Soluble fiber can be found in foods such as oatbran, barley, nuts, seeds, beans, lentils, fruits (citrus, apples), strawberries and many vegetables



Soluble fiber sources



Insoluble fiber is found in foods such as whole wheat and whole grain products, vegetables, and wheat bran



Insoluble fiber sources



***Important to note: A high-fibre diet may not prevent or cure constipation unless you drink enough water every day. Some very high-fibre breakfast cereals may have around 10 g of fibre per serve, and if this cereal is not accompanied by enough fluid, it may cause abdominal discomfort or constipation.***

## Fibre and health

**Fibre is important for a healthy digestive system. Benefits of dietary fibre include:**

- **Fibre increases the bulk of faeces (bowel motion) and absorbs water to enlarge and soften faeces. Large, soft faeces pass more quickly and easily through the bowel, reducing the likelihood of constipation**
- **High fibre foods can help with weight control. They are often slower to eat (they need more chewing), they are filling and they are often low in fat**
- **Fibre, especially soluble fibre, slows sugar absorption. A high fibre diet can help diabetics control their blood sugar levels and may also reduce the risk of developing type 2 diabetes**
- **Soluble fibre can help to lower blood cholesterol level**
- **Fibre may reduce the risk of bowel cancer. Fermentation of fibre, especially resistant starch, produces short-chain fatty acids, which may protect against cancer. Also, quick passage of faeces through the bowel reduces the time that cancer-causing substances are in the bowel.**
- **High fibre foods usually contain many vitamins, minerals and essential nutrients.**



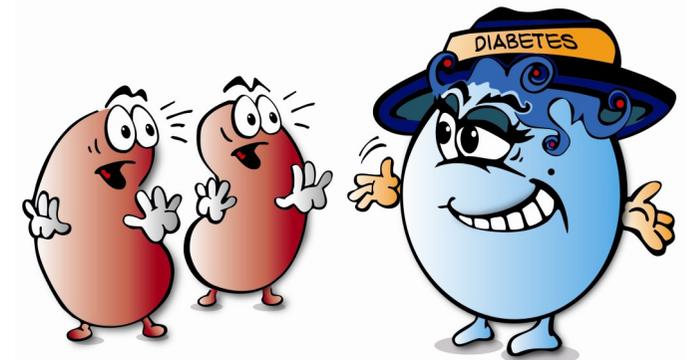
## Effects of low fibre

**A diet that is low in fibre may contribute to a variety of health problems including:**

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



**Irritable Bowel Syndrome  
(IBS)**



## Self Care

- *Eat a wide variety of high fibre foods. Adults should aim to eat 5 serves of vegetables, 2 serves of fruit and some wholegrain 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 enough water every day to satisfy your thirst and to keep your urine 'light-coloured' (unless a doctor advises not to). A high fibre diet needs to be combined with plenty of water.*
- *Exercise at a moderate level for at least 30 minutes on most or preferably all days of the week.*

## Fibre supplements available in the pharmacy

*The best sources of fibre are high fibre foods. Dietary fibre can be supplemented with fibre supplement products if needed. A pharmacist can advise on fibre supplements. Common ingredients of fibre supplement products include 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). 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.*



## **Fibre-rich 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, brussel 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.*

### **HIGH-FIBRE FILLERS to add to your diet**

	Fibre content
2 small wholemeal pita bread pockets	8.6g
1 cup frozen mixed veg	8.6g
½ cup baked beans	8.2g
½ cup creamed corn	8.1g
Handful of dried figs (about 7)	8.4g
1 cup roasted sweet potato	7.2g
1 avocado	7.1g
1 bran muffin	6.3g
2 Weetbix-style biscuits	5.0g
Handful of dried prunes	5.4g
1 cup cooked broccoli	5.2g



### **For More Information**

***Dieticians Association***

***Listed under 'D' in the white pages of the phone book Website: [www.daa.asn.au](http://www.daa.asn.au)***

***The Gut Foundation***

***Phone: (02) 9382 2749***

***Website: [www.gut.nsw.edu.au](http://www.gut.nsw.edu.au)***

***Healthdirect Australia***

***Phone: 1800 022 222***

***Website: [www.healthinsite.gov.au](http://www.healthinsite.gov.au)***

***Consumer Medicine Information (CMI)***

***Your pharmacist can advise on CMI leaflets.***

***National Prescribing Service (NPS) Medicines Information***

***Phone: 1300 MEDICINE (1300 633 424)***

***Website: [www.nps.org.au](http://www.nps.org.au)***

***The Poisons Information Centre In case of poisoning phone 13 11 26 from anywhere in Australia.***