

Background information for course leader

Fibre is the indigestible carbohydrate found on the outsides of foods. Although it contributes nothing in terms of nutrients to the diet, fibre is very important because it controls and regulates the process of food absorption and enables food to pass easily and smoothly through the body. Eating plenty of fibre:

- prevents constipation
- protects against hemorrhoids (piles)
- prevents stomach and bowel conditions
- prevents certain types of cancer
- reduces the risk of heart disease
- reduces the risk of type 2 diabetes
- reduces the risk of obesity, as it makes us feel fuller for longer, so we avoid snacking.

Fibre is even more important for older people and people who are less mobile. This is because the digestive system slows down with age and people who are less mobile, for example people in wheelchairs do not get enough physical activity to make their bowels move.

There are two main types of fibre, soluble and insoluble.

Insoluble fibre can't be digested and passes through the gut, helping other food and waste move through the gut more easily. Foods rich in this sort of fibre are more bulky and so help make us feel fuller for longer. The best sources are wholemeal bread, brown pasta and nuts.

Soluble fibre is partially digested in the body. It soaks up water like a sponge and contributes to helping the food waste move through the gut. It also helps to reduce the level of cholesterol in the blood. The best sources are oats, barley, seeds, peas, beans and lentils.

Good sources of fibre include:

- wholemeal or wholegrain bread*
- wholewheat pasta or brown rice
- wholegrain breakfast cereals
- multigrain or seeded crackers
- fruit and vegetables, especially ones with skins, for example pears, apples, oranges, cabbage, peas, mushrooms
- peas, beans, lentils.

*to simplify the message wholemeal and wholegrain bread is termed 'brown' bread in the teaching.

Reference intakes (RIs):

An average adult of healthy weight and average activity levels needs:

Each day	Women	Men
Fibre (g)	More than 30g	More than 30g

RIs are discussed more fully in the food labelling

session High-fibre food substitutes:

Food	Low fibre (g)	Food	High fibre (g)
1 cup puffed white cereal	0.4	2 whole-wheat cereal biscuits	3.8
2 slices white bread	1.5	2 slices wholegrain bread	2.8
100g mashed potato	1.5	Boiled potato with skin	2.8
2 plain biscuits	0.4	2 wholemeal biscuits	1.5

Fibre and fluids

A high-fibre diet needs to be accompanied by lots of water and other drinks to prevent and ease constipation.

Around 2 litres of fluid (8–10 glasses) a day is an average amount of fluid to aim for from all sources. Remember that foods like soup, melon, cucumber and tomatoes are also good sources of water for people who are unwilling to drink liquids.

How to increase intake of fibre:

- Choose a breakfast cereal which contains barley, wheat or oats.
- Choose wholegrain, whole-wheat or wholemeal bread, brown pasta and rice.
- Keep the skins on potatoes, other vegetables and fruit.
- Eat at least 5 portions of fruit and vegetables per day.
- Snack on dried fruit, nuts or whole-wheat crackers.