# Dietary fibre & Water

# **Learning objectives**

- To understand the functions and sources of dietary fibre.
- To know the benefits of dietary fibre.
- To understand the functions and sources of water.
- To understand the principles of water balance.

## **Dietary fibre**

Dietary fibre is a type of carbohydrate found exclusively in plants.

Unlike other types of carbohydrate, it is not absorbed in the small intestine to provide energy. However, it is fermented by the bacteria in the colon (large intestine) and provides a small amount of energy.



### Sources of dietary fibre

Dietary fibre is found in **plant foods**, such as:

- wholegrain cereals and cereal products;
- · oats;
- · beans;
- · lentils;
- fruit and vegetables;
- · nuts and seeds.



### Fibre in the diet

Dietary fibre helps to:

- prevent constipation;
- increase the feeling of fullness and control energy intake;
- reduce blood cholesterol levels.



### How much fibre do we need?

Most people do not eat enough dietary fibre.

The recommended average intake for dietary fibre is 18g per day for adults. Children need proportionately less.

### Did you know?

A diet rich in dietary fibre is usually lower in fat and contains more starchy foods, fruit and vegetables.



# Can you think of ways to increase fibre in your diet?

Here are some ideas.

Eat a bowl of **wholegrain** cereal in the morning with a handful of dried fruit.

Switch from white to **wholemeal** or granary bread.

Add oats to fruit crumble toppings.

Serve a side salad with a sandwich or pasta dish.

Add beans and pulses to casseroles and soups.

### Water

Our body is nearly **two-thirds water**, so drinking enough fluid to stay **hydrated** is very important.

Water is **essential for life** and it is very important to get the right amount of fluid to be healthy.

### Did you know?

Humans can survive for a few weeks without food, but they cannot go without fluids for more than two to three days.



#### Water in the diet

Water is the major component of body fluid and has many functions in the body:

- it acts as a lubricant for joints and eyes;
- it is the main component of saliva;
- it helps get rid of waste;
- it helps regulate body temperature.

The body loses water all the time, when we go to the toilet, from sweat and also evaporation from skin. If we do not consume enough water, we become dehydrated.



### Sources of water

Water is provided by food and drinks.

20% of water consumed is from food (e.g. soups, yogurt, fruit and vegetables), while 80% is from drinks (water, milk and fruit juice).

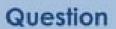


### How much water do we need?

The amount of water and other fluids that we need to drink each day varies from person to person.

On average, we are recommended to drink 6 to 8 glasses of fluid a day to prevent dehydration, more when the weather is hot or when we are active.



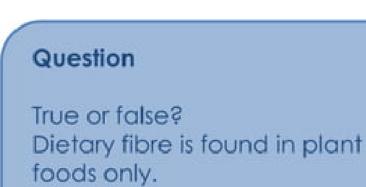


True or false?
Dietary fibre is not digested in the small intestine.

True

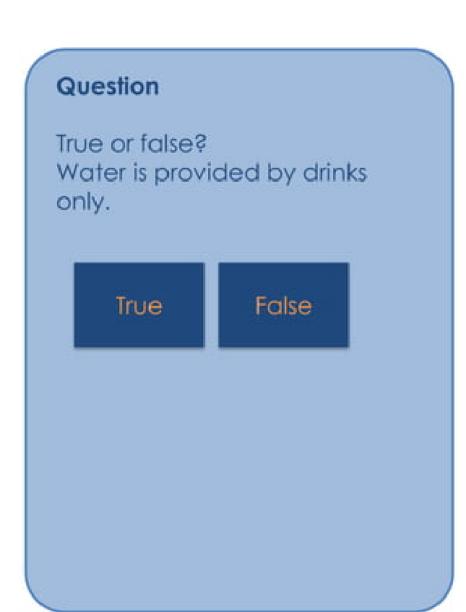
False

**True**. Dietary fibre is not digested in the small intestine but may be fermented in the colon.



True False

**True.** Dietary fibre is a type of carbohydrate found exclusively in plants.



False. Water is provided by both food and drinks.