

# 8 Nutrition and obesity

## Scrub up

1 Work with a partner. How many of these foods can you name? Can you find them in the lists below?



2 Look at the lists, and answer the questions.

- Find two good sources of protein.
- Find two good sources of carbohydrate.
- Find two dairy products.
- Find two pulses.
- Find seven ways of cooking food.
- Which foods on the list are high in fat?
- Which foods contain high levels of vitamin C?
- Which foods are low in vitamins?
- Which items on the list are junk foods?
- Which food do you think is highest in calories?

3 With your partner, use the lists to create

- the most nutritious meal possible
- the most unhealthy meal
- a meal for an athlete
- a meal for a diabetic
- a meal for somebody who needs to lose weight.

### Main course

- A** (choose one)
- two grilled burgers
  - tuna fish pie
  - a cheese pizza
  - lentil soup
  - egg noodles
  - two slices of roast beef
  - two fried eggs
  - tofu curry
  - a lamb kebab

- + B** (choose two)
- fried rice
  - boiled potatoes
  - salad
  - baked beans in tomato sauce
  - tinned tomatoes
  - stir-fried mushrooms
  - fried onion rings
  - steamed broccoli

### Dessert

- chocolate pudding
- a banana
- a doughnut
- yoghurt

### Drink

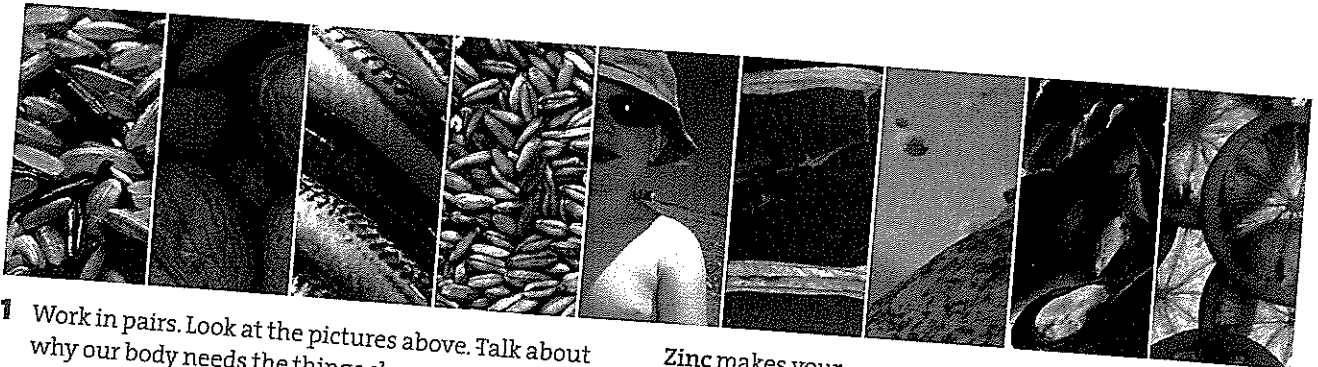
- a bottle of cola
- a glass of orange juice
- a glass of wine
- a glass of milk

**In this unit**

- nutritional value of different foods
- vitamins and minerals
- diabetes
- body measurements and bmi
- giving advice
- eating disorders

**Body bits**

**Nutrition**



1 Work in pairs. Look at the pictures above. Talk about why our body needs the things shown. What does each one contain? Which part of the body is each one especially good for?

2 Complete the descriptions of vitamins, minerals, and oils with the words below. Some words are used more than once.

- |       |         |         |                       |
|-------|---------|---------|-----------------------|
| teeth | organs  | enzymes | nervous system        |
| brain | eyes    | skin    | immune system         |
| blood | muscles | bones   | cardiovascular system |
| cells |         |         |                       |

Vitamin C is needed to help the \_\_\_\_\_<sup>1</sup> repair itself when it is cut or damaged. It is found in fruit, especially citrus fruit like oranges and grapefruit.

The B-vitamins keep the \_\_\_\_\_<sup>2</sup> healthy and help reduce stress. They are found in foods like wholegrain bread and cereals.

Vitamin A keeps the \_\_\_\_\_<sup>3</sup> healthy and is important for good vision. It is found in fatty foods like butter, cheese, whole milk, and yoghurt.

Vitamin D is needed for healthy bones and \_\_\_\_\_<sup>4</sup> because it helps the body absorb calcium. Our body makes Vitamin D when our \_\_\_\_\_<sup>5</sup> is exposed to sunlight.

Calcium is needed for children's \_\_\_\_\_<sup>6</sup> and teeth to grow. It is found in foods like milk, cheese, and yoghurt.

Iron helps your \_\_\_\_\_<sup>7</sup> carry oxygen. If you do not get enough iron, you will be pale and tired and you may get anaemia. Iron is found in red meats, especially liver.

Zinc makes your \_\_\_\_\_<sup>8</sup> stronger so that you can fight colds and infections. It is found in shellfish, nuts, and seeds.

Omega-3 is an essential fatty acid which helps your \_\_\_\_\_<sup>9</sup> function well. It is found in oily fish like mackerel, sardines, salmon, and tuna.

Protein builds up, maintains, and replaces the tissues in your body. Your \_\_\_\_\_<sup>10</sup>, your \_\_\_\_\_<sup>11</sup>, and your immune system are made up mostly of protein.

Carbohydrates are sugars which are broken down by \_\_\_\_\_<sup>12</sup> then stored in the \_\_\_\_\_<sup>13</sup> as a source of energy. Grain products such as rice, bread, and pasta are sources of carbohydrate.

Fats fuel the body and help absorb some vitamins. They are also the building blocks of hormones, and they insulate nervous system tissue in the body. Unsaturated fats, found in oils and nuts, for example, are believed to protect the \_\_\_\_\_<sup>14</sup>.

**Project**

Research two of the following substances, and write about why our body needs them, and what they are found in. Try to use some of the language in *Body bits*.

- Vitamin E
- Vitamin K
- Potassium
- Selenium
- Folic acid

194 million people worldwide suffer from diabetes. In the USA, it is the sixth most common cause of death.

## Vocabulary

### Diabetes



- 1 Discuss with a partner what you know about diabetes.
- 2 Match these words with their definitions.
 

|  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1 balance</li> <li>2 childhood</li> <li>3 diet</li> <li>4 glucose</li> <li>5 active</li> <li>6 obesity</li> <li>7 overweight</li> <li>8 snacks</li> </ol> | <ol style="list-style-type: none"> <li>a taking regular exercise</li> <li>b small amounts of food that you eat between meals</li> <li>c sugar that the body uses for energy</li> <li>d the time of your life when you are a child</li> <li>e the correct amount of different things</li> <li>f the type of foods that you usually eat</li> <li>g the condition of being very fat, in a way that is not healthy</li> <li>h too heavy and fat</li> </ol> |
|--|--|

- 3 Put the words into the spaces in this text about diabetes.

Diabetes occurs when your body does not produce enough insulin, a hormone that controls the level of \_\_\_\_\_<sup>1</sup> in the blood. One type of diabetes appears in \_\_\_\_\_<sup>2</sup>, and the other type appears after the age of eighteen.

It is very common for very \_\_\_\_\_<sup>3</sup> people to get diabetes, so the illness is linked to \_\_\_\_\_<sup>4</sup>.

For this reason, it is important to get the right \_\_\_\_\_<sup>5</sup> between food and exercise. It is important to be \_\_\_\_\_<sup>6</sup>, and to eat a healthy \_\_\_\_\_<sup>7</sup>, containing plenty of fruit and vegetables. Nutritionists say \_\_\_\_\_<sup>8</sup> are better than big meals.

## Listening 1

### A diabetic patient

- 1 Listen to a student nurse discussing a patient with a hospital nutritionist, and answer the questions.
  - 1 How long has the patient had diabetes?
  - 2 Which type of diabetes does the patient have?
  - 3 Is the patient obese?
  - 4 What does the patient's 'special machine' do?
  - 5 Can the patient eat sugar?
  - 6 Why should the patient not have big meals?
  - 7 What is hypoglycaemia?
- 2 Try to complete the missing verbs. Then listen again to check.
  - 1 Does he i \_\_\_\_\_ himself with insulin?
  - 2 He's o \_\_\_\_\_ a special diet, is he?
  - 3 Type one diabetes is not l \_\_\_\_\_ to obesity.
  - 4 This patient has a special machine to ch \_\_\_\_\_ levels of glucose ...
  - 5 He needs to c \_\_\_\_\_ the calories in his meals ...
  - 6 ... he should h \_\_\_\_\_ snacks, not big meals ...

## Reading

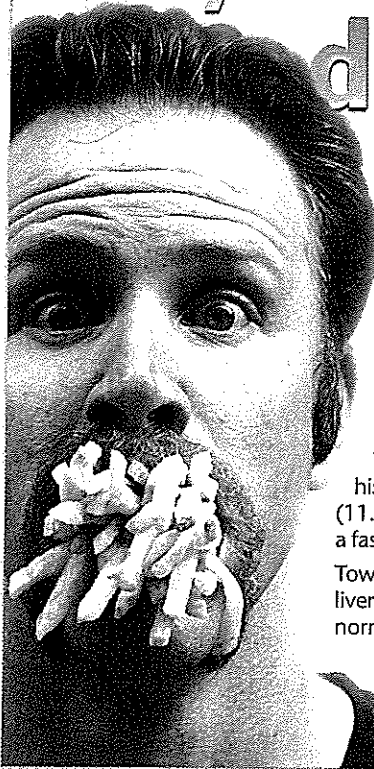
- 1 Do you like fast food? How often do you eat it? Do you think it is addictive?
- 2 Read the article and decide if these sentences are true (T) or false (F).
  - 1 The two girls in the article said fast food is 'nutritious and good for you'. \_\_\_\_\_
  - 2 Fast food changed Morgan Spurlock psychologically. \_\_\_\_\_
  - 3 The film proved that fast food is good for you. \_\_\_\_\_
  - 4 Morgan Spurlock was overweight when he started filming. \_\_\_\_\_
  - 5 Morgan Spurlock became a fast food addict. \_\_\_\_\_
  - 6 Morgan Spurlock died from liver failure. \_\_\_\_\_

**BMI (n)** BMI means **Body Mass Index**. It is used to assess whether a person's weight is healthy or not. To calculate a patient's BMI you use the formula:

$$\frac{\text{weight in kilograms}}{\text{height in metres}^2}$$

- BMI of 18.5 to 24.9 is the right weight
- BMI of below 18.5 is underweight
- BMI of 25 to 29.9 is overweight
- BMI of over 30 is obese

# Eat yourself to death



3 Discuss these questions with a partner or in a group.

- Is obesity a choice or an illness?
- Do you think fast foods should be limited like cigarettes (for example health warnings, high price, special places for eating, etc.)?
- Should overweight people pay more for health care, plane tickets, etc.?

In 2003, American film maker Morgan Spurlock made a film about the effects of eating only hamburgers, pizzas, and fries for a month. The idea came to him when two overweight American girls took legal action against a famous fast-food company. The girls accused the company of making them fat. The company said that it was not the food that made them fat, but eating too much. The company also said their food was 'nutritious and good for you'.

The girls' legal action failed, but Morgan Spurlock decided to test what the company said about their food. For a month he ate only fast food, three times a day, and took the daily exercise of an average American. He filmed himself during this month and the film he made records the changes that happened to him.

When Spurlock started making the film, he was healthy and slim. On the second day, he had his first 'fast-food stomach ache', and vomited. Over the following thirty days, he gained 24.5 lb (11.1 kg). He also had other problems – depression, headaches, and lethargy. He had cravings for a fast-food meal – only this would relieve the symptoms. A doctor told Spurlock he was addicted.

Towards the end of the month, doctors warned him that the food was causing life-threatening liver damage, and said he should stop. It took five months on a vegetarian diet to get back to a normal weight.

The film he made is called *Super size me*. It was nominated for an Academy Award for best documentary in 2005. The film's message was that the fast-food industry was probably as bad as the tobacco industry – it made a lot of money by encouraging illness.

## Speaking

1 Work in pairs. Which person on the right do you think these statistics refer to?

- 1 1.80 m
- 2 95.7 kg
- 3 5'11"
- 4 211 lbs
- 5  $1.8 \times 1.8 = 3.24$
- 6  $95.7 \div 3.24 = 29.54$



Walter Hudson

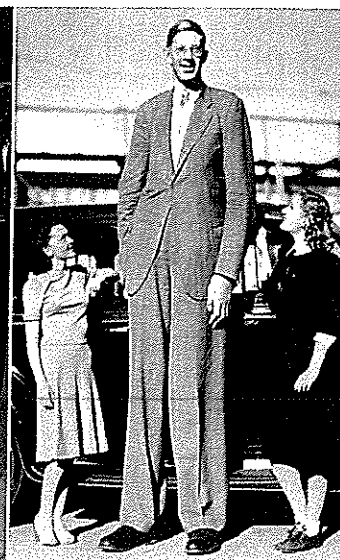
2 How do you say them? Listen and check.

3 Work in pairs. You are going to exchange information about the other three pictured people. Student A go to p.110. Student B go to p.113.

4 Calculate the BMI of the three people.



George Clooney



Heidi Klum

Robert Wadlow