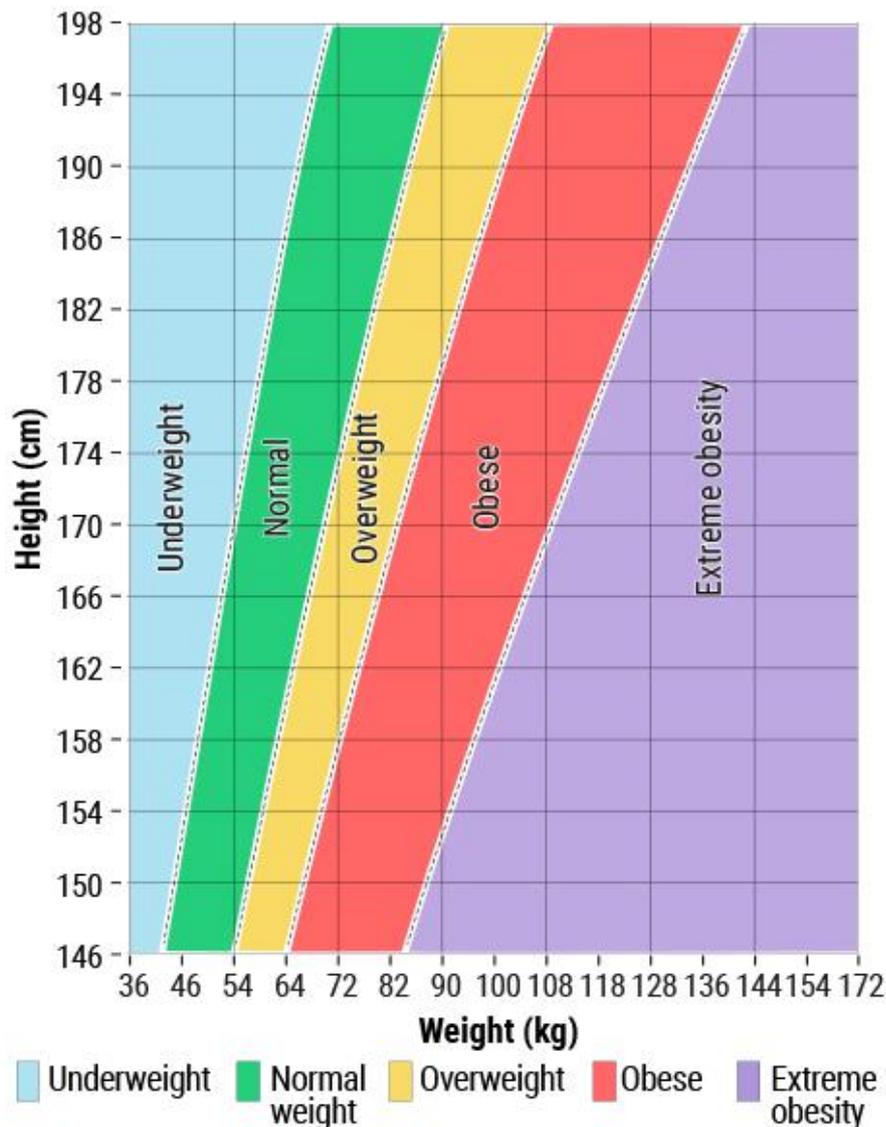


Key Stage 4 Science home learning term 3 week 2 - Britain's Big Problem

Let's get fitter - We are getting bigger and bigger in the UK. Too much food and not enough exercise means that we are getting more overweight every year. People who are very overweight are called obese. Being overweight puts a strain on the heart, the muscles and bones. It can also lead to cancer and diabetes. People who are underweight are also at risk. They can have less energy and have weaker bones. Their immune system may not work as well, which means they may become sick more easily than other people.

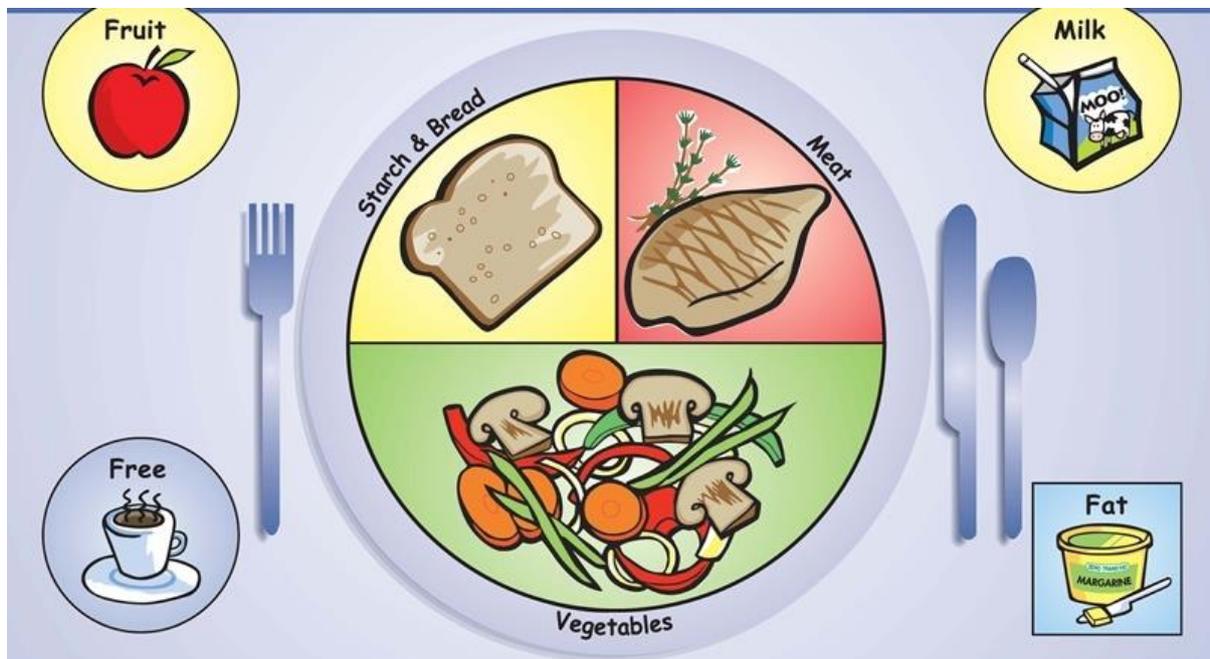
Task: 1. Write a sentence with the word 'obese' in it.

2. Chan is 185 cm tall and weighs 62 kg. Look at the graph. What advice would you give him about his weight? 3 Sophie weighs 90 kg and is about 152 cm tall. What are the health risks that she is facing?



What's in our food? Scientists sort the food we eat into five main groups. If we eat the right balance of these, and do enough exercise, we should be fit and a healthy weight. Which foods have the most fat? Which have the most protein?

▲ The main food types and how much of each we should eat.



3. State two foods you eat that have lots of protein.

4. List three foods that you eat with very little sugar - or no sugar at all!

6 Why should we try not to eat too much fat?

7. Why do weightlifters need to have lots of protein in their diet?

Why do we eat?

The body uses the chemicals in the food to:

- * give us energy
- * repair damaged body parts
- * build new body parts
- * make a store of energy for a time when food is not available.



Exercise Playing sports or doing other sorts of exercise can help someone be a healthy weight and avoid illnesses like type 2 diabetes. People who exercise regularly are usually fitter than people who do little exercise.

Diabetes

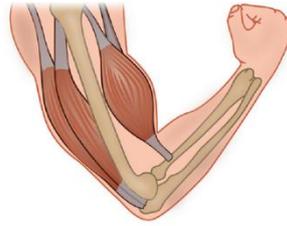
Diabetes is a disease that is becoming much more common in the UK. There are two types of diabetes. Type 1 diabetes is quite rare and is not linked to diet. Type 2 diabetes seems to be linked to diet. Obese people are much more likely to develop type 2 diabetes. Someone with diabetes does not produce enough insulin. Insulin is a chemical that helps the body to control sugar levels in the blood. Without enough effective insulin blood sugar levels can go out of control.

A healthy lifestyle will help a person with diabetes to control their illness.

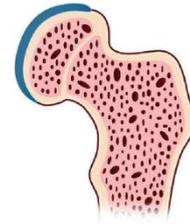
b



Lower blood Pressure



Improved muscle health, strength and function



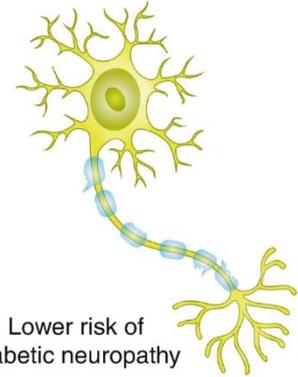
Improved bone health meaning lower risk of osteoporosis and fractures



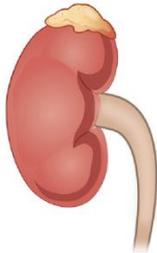
Improved insulin sensitivity and exercise-induced glucose uptake lead to lower insulin requirements



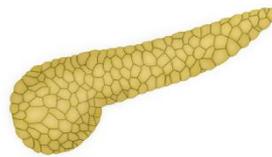
Benefits of regular exercise



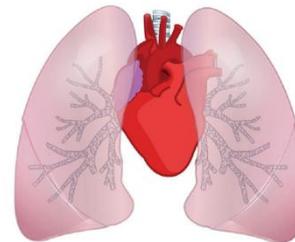
Lower risk of diabetic neuropathy



Lower risk of diabetic nephropathy



Possible β cell preservation



Greater aerobic capacity

You can email your completed work to me via office@ifield.kent.sch.uk so that I can mark your work and support you. I am very happy to answer any questions or just let me know how you are getting along.

Keep safe and well

Mrs Hargood 😊