

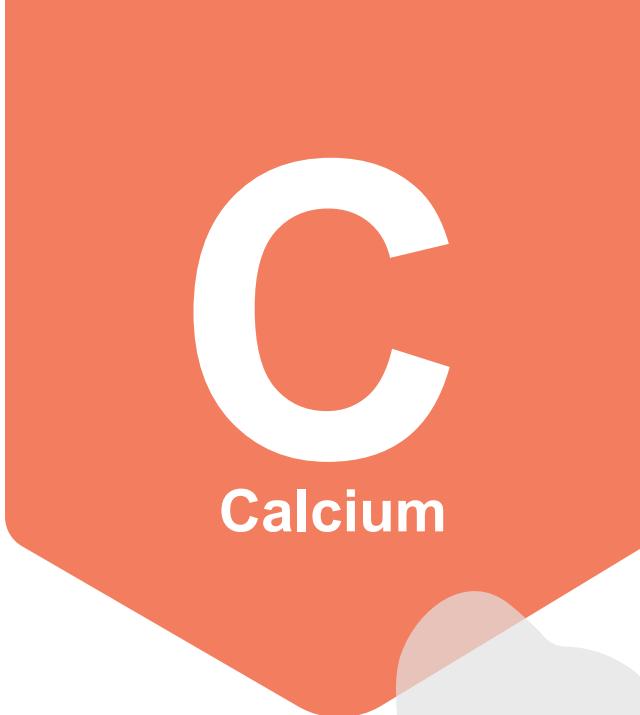
What breakfast foods provide calcium?



What is Calcium?

Calcium is a mineral that is needed by the body to ensure that our bones and teeth are strong and healthy. Most calcium in our body is found in our bones. Calcium also helps our heart, nerves, digestion and blood clotting work well so it is very important to our bodies. A lack of calcium can lead to issues such as osteoporosis which means that our bones are more fragile and are more likely to break.

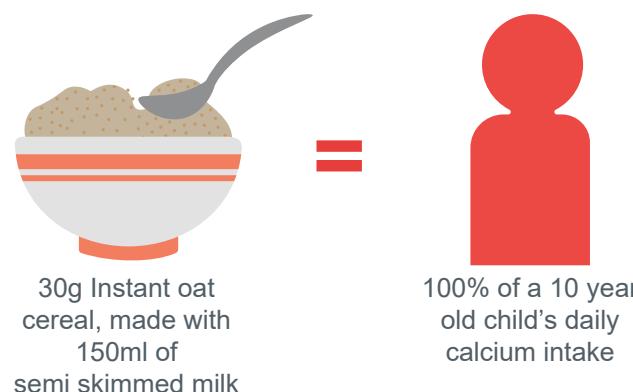
“On average UK school children aged 5-12 eat over 30% of their daily calcium at breakfast time ,
Gaal et al., 2018



Did you know ?

As a teenager (especially 11-18 years) you need extra calcium when your bones are developing to make sure you have strong bones for life.

School children who eat breakfast have higher intakes of calcium than those who skip breakfast. (Coulthard, 2017)



Test your knowledge with our mini quiz

1. Only women get osteoporosis (weakened bones)?
2. You can find calcium in vegetables?
3. You lose calcium from your body every day?
4. You need vitamin C to help the absorption of calcium?
5. Your bones make up around 50% of your body weight?
6. Missing breakfast could mean you miss out on vital calcium?

Answers

1. **False.** Men and women can get osteoporosis although more women than men develop it.
2. **True.** You can find calcium in green leafy vegetables such as broccoli and kale. Soya beans are also a source. In the UK dairy products such as cheese, yoghurt and fortified dairy replacements such as soya milk, provide much of our calcium.
3. **True.** It is important to eat foods containing calcium every day, whatever your age.
4. **False.** You need vitamin D to help the absorption of calcium.
5. **False.** Bones make up around 15% of your body weight.
6. **True.** A bowl of cereal with milk can contain from 30% to as much as 80% of your daily calcium needs (depending on your age and cereal). That is a lot of calcium!



What breakfast foods contain B vitamins?

Why are B vitamins important?

B vitamins are generally needed to keep the nervous system running in tip top condition. Some B vitamins help to release energy from foods. Other B vitamins are needed for healthy blood (B6, folic acid and B12). Folic acid is also known as vitamin B9, and is particularly important in the early stages of pregnancy as it helps to ensure the baby grows healthily.



On average breakfast in the UK provides children with 25-45% of their total daily vitamin B doses

Gaal et al., 2018

B Vitamins

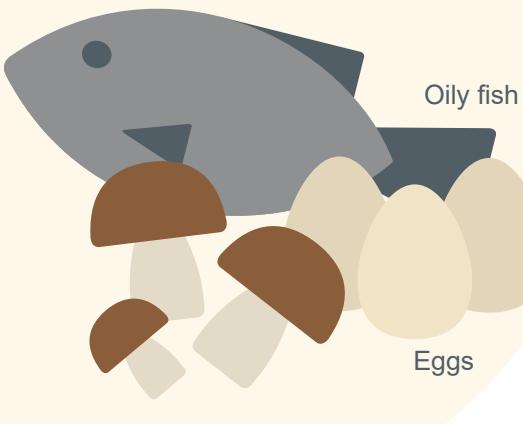
Test your knowledge with our mini quiz

1. Breakfast cereals are not a good source of B vitamins?
2. The bacteria in your bowel make some B vitamins?
3. A lack of some B vitamins can cause anaemia?
4. Most B vitamins are stored in the body so you do not need them every day?
5. Vitamin B12 is only available from animal products?

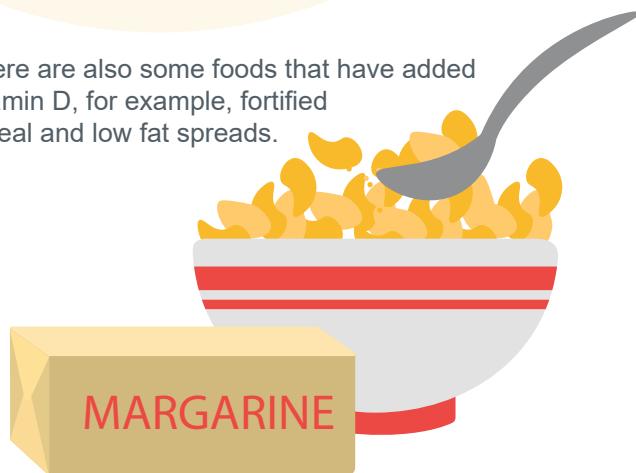
Answers

1. **False.** Many breakfast cereals are fortified with B vitamins. If you add fruit, milk or yoghurt to your cereal, you will also boost the vitamin B content. Other breakfast products such as wholemeal bread, eggs, milk, yoghurt, seeds, oats, citrus fruits, avocado, bananas, meat and nuts are sources of B vitamins.
2. **True.** The bacteria in your bowel ferment to make vitamin B6 and B7, and that is a good thing! That is why it is important to eat fibre to help keep the good bacteria growing in your gut.
3. **True.** Folic acid and B12 are both important in making sure that we have healthy blood. A lack of either of these can cause a form of anaemia (where you produce wrongly shaped blood cells that cannot work as efficiently).
4. **False.** B vitamins are generally not stored in the body so we need a constant supply of them every day.
5. **True.** B12 is only found naturally in food products such as milk, cheese, eggs, meat and fish. For vegans, sources of B12 include fortified cereals and plant milks, and yeast extracts such as marmite. In one study, around half the people who were vegan were found to be deficient in B12.

What breakfast foods contain vitamin D ?



There are also some foods that have added vitamin D, for example, fortified cereal and low fat spreads.



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Research shows that Vitamin D intake is higher amongst people who eat breakfast ,
(Ayuso et al., 2017)

Vitamin

D

Do most people get enough vitamin D?

20% of us do not get enough vitamin D!

What happens if I do not get enough?

Vitamin D has a very important job – it aids the absorption of calcium and phosphorus which help us to develop strong bones, teeth and muscles. It also boosts our immune system.

It is important to both eat foods that contain vitamin D, and to get outside in the sun to top up your vitamin D levels.

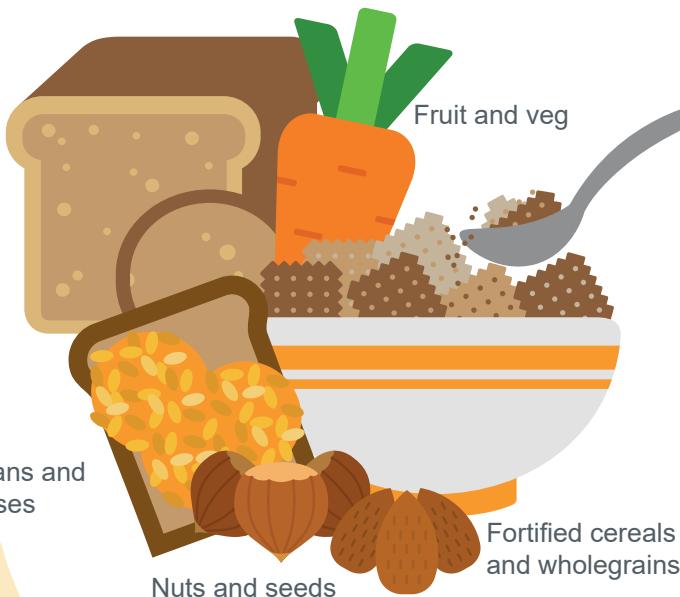
Test your knowledge with our mini quiz

1. Vitamin D is the only vitamin the body can make itself?
2. Sweets are a good source of vitamin D?
3. Vitamin D deficiency is rare in the UK?
4. Breakfast cereal can be a source of vitamin D?
5. Our bones are renewed all the time?

Answers

1. **False.** It is made by the body but so is vitamin K and vitamin B3.
2. **False.** Eggs, mushrooms, fish and fortified foods such as some cereals contain vitamin D, but sweets do not!
3. **False.** It is thought that 20% of us may not have enough vitamin D in our bodies. This figure is even higher for teenage girls aged 11-18 where 39% are thought to have low vitamin D (Roberts et al., 2018). In the 1930s up to 80% of children did not have enough vitamin D, so things have improved. We now fortify breakfast cereals and fat spreads.
4. **True.** For example, one portion of breakfast cereal with milk can contain around a quarter of your recommended daily portion of vitamin D, and one omelet could contain all your vitamin D! An average 25% of our daily vitamin D comes from our breakfast (Gaal et al., 2018).
5. **True.** This is why calcium and vitamin D are important for everyone at every age. Did you know your peak bone mass is reached at age 18-19?

Main sources of fibre at breakfast



Why is fibre important?

Fibre cannot be broken down and digested by the body, so it helps to keep our insides healthy & makes sure everything keeps moving along in our gut! It also makes you feel fuller for longer so fewer rumbling tums during lessons!

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On average breakfast in the UK provides school children with around 20% of their daily fibre needs ”

Gaal et al., 2018

Test your knowledge with our mini quiz

1. Fibre helps to increase the amount of bacteria in our gut?
2. The whole digestive system from beginning to end is 3m long?
3. Wholemeal bread has twice the amount of fibre as white bread?
4. It takes around half a day for food to pass through your gut?
5. If oats are eaten regularly they can help to reduce the amount of cholesterol in our bodies?

Answers

1. **True.** The fibre that we eat helps the growth of good bacteria (yes, there is such a thing as good bacteria!) in the gut. Good bacteria then helps with our general health as well as the health of our insides. They may also help our immune system and our bones.
2. **False.** Our digestive system which starts at the mouth, and covers the stomach and small and large intestine, is over 9m long if you stretched it out! That is about the height of an average two storey house in the UK!
3. **False.** Wholemeal bread has three times the amount of fibre as white bread. It is good to eat a variety of foods including wholemeal versions of foods such as bread, pita, bagels and muffins.
4. **False.** In the UK, it takes around 1-1.5 days (2 days for adults) for food to travel from your mouth to its final destination!
5. **True.** Oats help lower the amount of cholesterol absorbed by your gut into your bloodstream. Certain fruits and vegetables are also good at this too—in particular apples, beans, strawberries and prunes!

Does my breakfast contain fibre?

Depending upon your age, you need 20-30g fibre every day. Breakfast can provide around a quarter to a half of your daily fibre needs!

A bowl of porridge (50g porridge oats with 250ml milk) can contain 3-4g fibre. Add a handful of fruit to this and that will increase to 5-6g fibre.

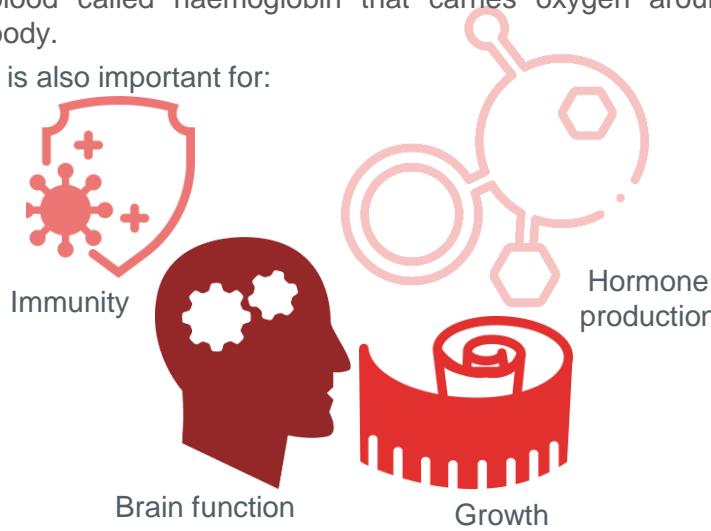
One slice of wholemeal toast contains around 1.5g fibre. Add 100g baked beans to this and that will take the fibre content to 6.5g fibre.

In general, in the UK, we all need to eat more fibre.

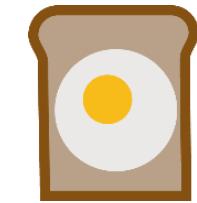
What is iron ?

Iron is a mineral needed by the body. It makes up a part of the blood called haemoglobin that carries oxygen around the body.

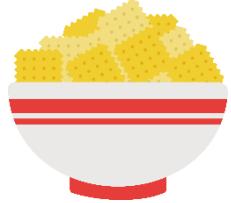
It is also important for:



What breakfast foods provide iron?



eggs on
wholemeal toast



fortified breakfast
cereals



Beans on
wholemeal toast

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If you skip breakfast, you are more likely to be anaemic”

IRON

Why is breakfast important ?

Your breakfast provides you with iron. A bowl of fortified cereal could provide you with over half of your daily iron needs. On average in the UK, breakfast provides children and teenagers with over a third of their daily iron needs.

Every meal will help you to top up iron levels as well as helping to top up other vitamins and minerals too. A missed meal, is a missed opportunity to top up of your essential vitamins and minerals.

Did you know that adding fruit to your cereal will help your body absorb more iron?

Test your knowledge with our mini quiz

1. You are more likely to have iron deficiency if you are vegetarian?
2. Iron deficiency is rare in the UK?
3. Blood is red due to the iron in it ?
4. An adult can have around 2 litres (5 pints) of blood in their body ?
5. The President of the US carries blood in the boot of his presidential car?
6. Anaemia (a lack of iron) can cause you to feel tired?

Answers

1. **It can be true.** The iron from meat is better absorbed by your body than iron from vegetable sources. If you are vegetarian, it is important to make sure you have lots of iron rich foods such as beans, eggs, lentils, tofu, quorn, chickpeas ...
2. **False.** It is fairly common in this country. In fact, it is thought that around 3 girls per class of 30 may not have enough iron—a lack of iron particularly affects girls as they need more iron than boys.
3. **True.** Did you know that crabs have blue blood ? This is because of the amount of copper in their blood.
4. **False.** It is more like 3.5 to 5.5 litres (6-10 pints)!
5. **True.** He leaves nothing to chance and carries around a fridge with his type of blood as well as other medical supplies. Did you know there are 4 main blood groups?
6. **True.** This is one of the signs of iron deficiency. Other signs can include being out of breath when exercising, getting more illnesses such as colds or infections, having cold hands and feet or looking pale.

