

ALL ABOUT CARBOHYDRATES



WHAT ARE CARBOHYDRATES?

Carbohydrates (often called 'carbs') are one of the four major food groups (see *Understanding the eatwell plate*). Our body breaks carbohydrates down into a sugar source of fuel for the body. They are an important part of a balanced diet. There are two categories of carbohydrates: **complex** and **simple**.

COMPLEX CARBOHYDRATES

Complex carbohydrates are found naturally in vegetables, and wholegrain foods such as wholemeal bread, brown rice and pasta. Grains, such as wheat, oats, rice and rye, have three parts to them: the endosperm, germ and bran. When these grains are refined, the germ and bran are removed, leaving only the endosperm. When they are unrefined, the bran and the germ are left intact. These unrefined grains are called 'wholegrains'.

Wholegrains are a better source of nutrients, especially fibre. Because fibre is not absorbed by the body during digestion, it is good for digestive health. Scientific studies have also shown that people who eat more wholegrain foods tend to have a healthier heart and may be protected against coronary heart disease.

The complex carbohydrates found in vegetables and wholegrain foods are broken down into glucose. Our bodies send that glucose to our cells, which then turn it into energy. Because this process takes a while to happen, these types of carbohydrates are known as 'slow-releasing carbohydrates'. A diet packed with complex carbohydrates can help with weight balance and help improve concentration. These foods will keep you feeling full for longer, and give you energy over a long period of time, so you're less likely to have the urge to graze on snack foods.

3 PARTS OF A WHOLEGRAIN

BRAN

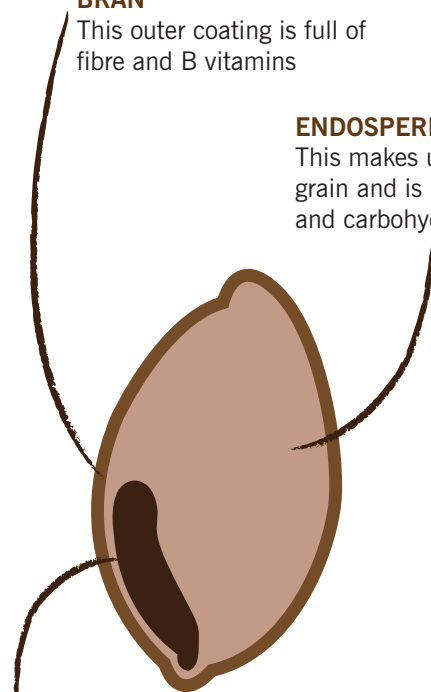
This outer coating is full of fibre and B vitamins

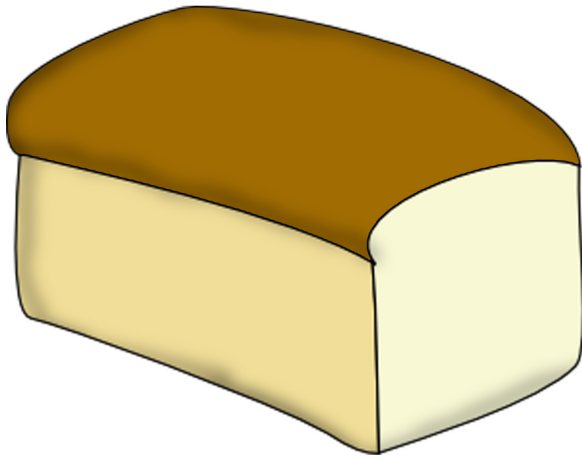
ENDOSPERM

This makes up most of the grain and is made of protein and carbohydrates

GERM

The germ feeds the rest of the seed. It is full of antioxidants and vitamins





SIMPLE CARBOHYDRATES are found in fruit, dairy products, white bread and lots of processed and sugary foods. Because the sugar in these carbohydrates is readily available, our bodies can break them down really quickly, so they are known as ‘fast-releasing carbohydrates’.

Eating simple carbohydrates will raise blood sugar levels very quickly, giving you an instant energy kick, but then all that energy will be used up, sugar levels will

drop, and the body will have to work hard to stabilise those fluctuating energy levels. This fluctuation in energy and blood sugar levels can cause health problems including fatigue, headaches, irritability and poor concentration.