



WHAT IS FOOD?

Essentially we eat to provide our body with the nutrients it needs to support health and growth. When we eat food it is broken down into smaller particles through the process of digestion. These particles, called nutrients, are absorbed into the bloodstream and used by the body to provide energy, build strong bones, support the immune system and much more. By choosing food that is not only high in energy but also 'nutrient-rich', the body is provided with a healthy foundation that will last a lifetime.

A balanced diet consists of the following different food groups:

- Fresh vegetables and fruit, which provide vitamins, antioxidants and phytonutrients (health-promoting compounds that give plants their colour, flavour and odour). See Appendix 5
- Complex carbohydrates, including wholegrains, bread, pasta, legumes (beans) and crackers.
- Protein, found in free-range eggs, fresh fish, poultry, red meat and dairy products such as cheese, milk and yogurt.
- Healthy fats, including extra-virgin olive oil, butter, nuts and seeds, avocados and coconut.
- Minimal empty-nutrient foods, such as cakes, biscuits, ice cream, snack foods, candy and fizzy drinks.

Balanced Diet Pyramid

The pyramid represents the quantities of food that make up a balanced diet. Water (at the bottom) is not usually included in food pyramids, but is in fact an essential part of a healthy diet.

Macronutrients

Carbohydrates, proteins and fats are all needed by the body in relatively large amounts (measured in grams), while micronutrients (vitamins, minerals and phytonutrients) are required in small (measured in milligrams) but vital amounts. Carbohydrates, proteins and fats make up the bulk of the food we eat, providing us with energy and helping to build a strong body. Vitamins and minerals, meanwhile, are needed in conjunction with macronutrients for such essential requirements as building bone, generating energy and strengthening the immune system.

Carbohydrates - Vegetables, fruit, bread, pasta, cereals, legumes and wholegrains all contain carbohydrates, which are the body's preferred source of energy and make up 50–60 per cent of our diet. Carbohydrates are broken down by the body into glucose, which, with the help of the hormone insulin, is transported to our cells. Once there, glucose is converted into energy to fuel the body.

There are two types of carbohydrate:

Complex 'slow-release' carbohydrates, which need to be broken down by digestion into glucose before they can be transported to the cells for energy. They supply a gradual release of energy, keeping us going longer on less.

Simple 'fast-release' carbohydrates, which are usually characterised by a sweet taste and are rapidly absorbed into the bloodstream, creating a sudden surge of energy. This energy spike is inevitably followed by a low – what goes up must come down – that leads to cravings for yet more simple carbohydrates. The cycle can eventually exhaust insulin production, and may contribute to such conditions as type 2 diabetes and hypoglycaemia (low blood sugar).

Although fruit is also classified as a simple carbohydrate, it is loaded with fibre, vitamins, minerals and phytonutrients. An apple may contain the same quantity of sugar as a fizzy drink, but it also contains the essential A, B group, C and E vitamins, while the fizzy drink contains none of these. In addition, fructose (the sugar found in fruit) is absorbed at a slower rate than sucrose, so it does not cause quite the same energy burst as sugar.

