



# What Nutrients Does Your Body Need From Food

KS4 DESIGN & TECHNOLOGY

KS3 SCIENCE

Ages 11-14 ⌚ 3 min read

## The Six Essential Nutrients

Your body is like a complicated machine that needs the right fuel to work properly. Food gives your body everything it needs through **nutrients** – special substances that help you grow, give you energy, and keep you healthy. There are **six main types of nutrients** your body cannot live without.

### Energy Nutrients: Carbohydrates, Proteins and Fats

**Carbohydrates** are your body's main source of energy. They come from foods like bread, rice, pasta, potatoes, and fruit. Your body breaks them down into a simple sugar called **glucose**, which powers your brain, muscles, and every cell.

**Proteins** are the building blocks of your body. They help you grow, repair damaged muscles and skin, and make new cells. You find proteins in meat, fish, eggs, beans, nuts, and dairy products like cheese and milk.

**Fats** get a bad reputation, but your body actually needs them! Healthy fats help your brain develop, protect your organs, and help you absorb certain vitamins. Good sources include olive oil, fish, avocados, and nuts.

Think of it like this: **carbohydrates** are like the petrol in a car (instant energy), **proteins** are like the spare parts (building and fixing), and **fats** are like the engine oil (protection and support).

### Vitamins and Minerals

**Vitamins** are organic compounds that help your body use other nutrients and fight off illness. **Vitamin C** helps wounds heal, **Vitamin D** helps your bones grow strong, and **B vitamins** help turn food into energy. You find vitamins in fresh fruits, vegetables, and whole grains.

**Minerals** like **calcium**, **iron**, and **zinc** are essential too. Calcium builds strong bones and teeth, iron carries oxygen in your blood, and zinc helps your immune system fight

germs. Milk, leafy green vegetables, and lean meats are excellent mineral sources.

## **Water: The Most Important Nutrient**

**Water** is perhaps the most crucial nutrient of all. About **60 percent** of your body is water! It carries nutrients around your body, removes waste, regulates your temperature, and keeps your joints moving smoothly. You should drink about **6-8 glasses of water daily**.

Think of water like the delivery system in your body - it's the truck that carries everything where it needs to go.

## **Eating a Balanced Diet**

The key to good nutrition is eating a **balanced diet** - that means eating different foods from each nutrient group every day. This ensures your body gets everything it needs to function at its best and gives you the energy to learn, play, and grow!