Fat is an essential part of our diets, and has a number of important roles in the body. However, there are different types, and there are health concerns surrounding eating too much of some types of fat. Here, we look at what distinguishes different types of fat, and their effects on the body.

### TRIGLYCERIDES & FATTY ACIDS

Triglycerides account for around 95% of the fat in our diet, and are formed from the combination of glycerol and three fatty acid molecules. The three fatty acids are often different, and the chemical structures of these fatty acids defines the type of fat. Cholesterol is made in the liver, and transported around the body by low density lipoproteins (LDL) and high density lipoproteins (HDL). Different fats affect LDL and HDL differently.

### SATURATED FATS

Contain no carbon-carbon double bonds. Saturated fats are solids at room temperature. They increase levels of LDL in the bloodstream. They have previously been associated with heart disease, though more recent studies and reviews have called this association into question.

### MONOUNSATURATED FATS

Contain one carbon-carbon double bond. They are liquids at room temperature, but solidify when chilled. They reduce levels of LDL in the bloodstream, thereby decreasing the total cholesterol to HDL ratio (HDL helps take cholesterol back to the liver where it can be disposed of).

### POLYUNSATURATED FATS

Contain two or more carbon-carbon double bonds. They are liquids at room temperature, but they start to solidify when chilled. They are split into omega-3 and omega-6 fatty acids. Polyunsaturated fats help reduce LDL levels, decreasing the total cholesterol to HDL ratio.

### TRANS FATS

Contain carbon-carbon double bonds in a trans rather than cis configuration. Formed artificially, via a process called hydrogenation; also found naturally in small amounts in meat and dairy products. They raise LDL, and are associated with heart disease. Many countries are phasing them out.