



Fat and happy?

Fat is the enemy. That's what we're told, even if we're not racers. It's bad for you and on you. Or is it? **Joe Beer** looks at different fats

Use fat. Trim fat off foods. Choose low-fat options. You know the tune from countless television health programmes. However, this simplistic approach ignores the functions and usefulness of fats. You have to consume a certain amount of fat – although not all fats are equal.

Fat or lipids, as they are also known, are organic substances that are insoluble in water. They comprise, on average, 35 to 45% of the calories in the average UK diet. This may be visible intake such as butter, vegetable oils and margarines, or invisible such as in meats or processed foods.

Fat occurs in almost all foodstuffs. It is impossible to eliminate all fat from the diet and inadvisable to try. In fact, studies show that dropping fat consumption to less than 15% of the diet can reduce an athlete's fitness and endurance in just a matter of weeks.

FAT'S VITAL FUNCTIONS

You need fat in your diet because:

- It provides a store of energy far in excess of what can be provided by carbohydrate stores in the liver and muscle. For example, at rest over half the body's energy requirement comes from stored fat.
- It is a thermal blanket that keeps the body warm when temperatures drop. This may be the reason why the body has a propensity to gain weight in winter.
- Every cell in the body has a wall composed of fats. Nerves also have a sheath on them consisting of fats.
- Fat provides a cushion for internal organs, contact points with the ground (e.g. the feet and hands) and helps dissipate shockwaves during accidents.
- Hormones and other essential messengers and enzymes require

fats to be formed. There are certain fats called essential fatty acids that must be eaten for good health.

- It reduces feelings of hunger far more effectively than carbohydrate or protein. If you eat just a small amount of fat you feel satiated for many hours. (Which is why fatty foods feel 'filling'.)

"Saturated fats have been linked with heart disease"

TYPES OF FATS

Best expert guesses suggest we should get less than 30% of our diet from fat and less than 10% from *saturated* fats, which have been linked with heart disease.

Saturated fats come primarily from animal sources such as beef, dairy and poultry, as well as from eggs, coconut and palm oils. The much better *non-saturated* fats come from olives, linseeds, walnuts and avocados.

There is a relatively new fat, called a trans-fat, which is man-made, usually in the process of hydrogenation where liquid fats are made harder for ease of use. These hydrogenated fats are not good for human health in high doses, with expert guidelines suggesting an intake of less than 4g per day. Other experts say you should aim to avoid these 'Frankenstein fats' completely and eat none.

Hydrogenated fats usually occur in processed foods, but it's worth scanning the labels of food – they occur in some surprising places. Labelling laws are likely to get tighter on trans-fats. In the meantime, cut back on the less desirable fats and switch to good fat sources (see below).

TAKE AWAY TIPS

DAILY INTAKE – approx 30% of energy intake, which is around 60g of fat in a 2,000-calorie diet, rising to around 100g in a 3,000-calorie diet.

✓ **PREFERRED FATS** (20% of daily energy)
Extra virgin olive oil, linseeds/linseed oil, nuts (walnuts, peanuts, brazils), avocado, oily fish (herring, mackerel, Atlantic salmon). Target: 50-60g per day in a 2,500-calorie diet.

✗ **LESS DESIRABLE FATS** (<10% of energy)
Hydrogenates in processed foods (pies, pastries, confectionary, biscuits), saturates in beef, full-fat dairy produce. Target: less than 25g per day (<4g of trans fats) in a 2,500-calorie diet.