



Lipids

Foods High in Lipids

olive oil

butter

cream

cheese

nuts

oily fish

There are two types of lipids: fats, which are solid at room temperature, and oils, which are liquid. These are a **source of energy** in our diets. Lipids are used to **make cell membranes** and they are also found in some **hormones**. We store energy in our bodies as lipids.

There is a layer of fat under our skin which provides insulation to keep us warm. Lipids also help the body to absorb some fat-soluble vitamins.

Foods Tests

Solid Food:

- Rub the food onto a piece of filter paper.
- Hold the paper up to the light – if the food contains lipids, the paper will appear translucent.

Ethanol Test:

- Add a few drops of ethanol to the food sample in a test tube.
- Add a few drops of water and gently shake the solution.
- If lipids are present, the solution will turn cloudy.

Sudan III Test:

- Add equal amounts of food and water to a test tube.
- Add a few drops of Sudan III and gently shake.
- If lipids are present, a red stained layer forms on the surface.

Consequences of Imbalances in the Diet

A lack of fat in the diet can cause scaly skin and reduced growth because fats are needed to absorb some important vitamins. However, you are more likely to have too much fat in your diet. Too much saturated fat can lead to high cholesterol levels in the blood, increasing the risk of heart disease.

