



# Nutrient Guide



This document has been produced to accompany the menu page on [www.myschoollunch.co.uk/towerhamlets](http://www.myschoollunch.co.uk/towerhamlets). It contains a guide to nutrients found in food and how our body uses them to maintain our health.

All the menus produced by Tower Hamlets Education Contract Services comply with the current Government Guidelines and the Caroline Walker Trust Guidelines. If you would like more information about these then you can access the relevant websites by visiting: <http://www.myschoollunch.co.uk/towerhamlets/parents/links/>.

## Energy

Energy is needed by the body to function on an everyday basis. We need energy to grow, keep warm and for every muscle movement from breathing to running. Energy is found in the foods and drinks that we consume. How much energy we need depends on how active we are. The measurement for energy is kCal – kilocalories.

## Fat

Fat comes from a variety of foods in our diet. It is found in oily fish, seeds, nuts and oil, meat, cheese, butter and margarine, chocolate and cakes. We need fat for energy, to carry vitamins around the body and to provide insulation for our bodies to keep warm. When we digest fats they are broken down into fatty acids, which help the body with the regulation of blood pressure, blood clotting, and the immune system responses. Too much fat in our diet can lead to obesity, heart disease and high blood cholesterol.

## Saturated Fat

Some of the fat that we consume is saturated. Meat, butter, dairy products, cakes and confectionery contain high proportions of saturated fats. High intakes of saturated fats are linked to an increased risk of high blood cholesterol and heart disease.

## Carbohydrate

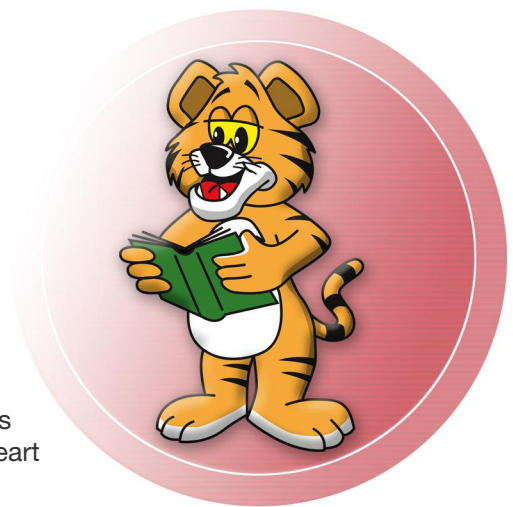
Carbohydrates are found in starchy foods, and this is where at least half of our body's energy should come from. Good sources of carbohydrate are bread, rice, pasta, potatoes and cereals.

## Sugar

Sugar is a type of carbohydrate. There are three main types of sugar: fructose (naturally found in fruit); sucrose (refined sugar) and lactose (naturally found in milk). When sugar is broken down in the body a simple sugar called glucose is produced and is let into the blood stream, which gives the body's cells energy (glycogen). This is normally stored in the muscles and the liver. When you consume too much sugar in the form of foods such as table sugar, confectionery, biscuits without regular tooth brushing, it will increase the risk of tooth decay.

## Fibre

Fibre is also another carbohydrate. It can be found in cereal (especially wholegrain), beans, fruit, and vegetables. Its main role is to keep the digestive system healthy.





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## Protein

Proteins are needed on a daily basis to build and repair tissues. They are also used by the body to form other essential substances such as hormones and enzymes. Proteins can be found in fish, meat, dairy products, nuts, seeds, beans, pulses and meat substitutes such as Quorn.

## Sodium

Salt is a chemical combination of sodium and chlorine. Most raw foods contain salt, but large amounts of salt in our diet may come from snacks, cured meats and processed foods. Studies have shown that there is a link between high salt intake and high blood pressure. High blood pressure may lead to strokes.

## Iron

Iron is a mineral, which helps build red blood cells. The red blood cells carry oxygen around the body to provide energy. Iron can be found in liver, meat, beans, nuts, dried fruits, whole grains and green leafy vegetables. If we do not eat enough iron this may cause anaemia.

## Calcium

Calcium is a mineral that gives strength to your bones and teeth. Calcium also helps the body with blood clotting and muscle contractions. It can be found in foods such as dairy products, fish and green leafy vegetables.

## Vitamin A (Retinol)

This is needed to maintain the health of the skin and muscle lining, strengthen immunity from infections and help vision in dim light. Vitamin A can be found in liver, cheese, eggs, oily fish and yoghurt.

Carotene can be converted by the body to retinol. Carotene is found in many fruits and vegetables, particularly those that are dark green, red, orange or yellow such as carrots and tomatoes.

## Folate – Folic Acid

Folic acid is needed for the production of red blood cells. This is found in small amounts normally in foods like wholemeal bread, brussels sprouts, broccoli, chickpeas, brown rice and some fruit. A deficiency of folate can cause a form of anaemia. Adequate supplies of folate are necessary for expectant mothers as deficiencies in the mother have been linked to neural tube defects in the newborn baby.

## Vitamin C

Vitamin C helps with healing wounds and aids the body to absorb iron from our food. Vitamin C is normally found in berries and citrus fruits, vegetables, potatoes and sweet potatoes.

## Zinc

Zinc helps in the healing of wounds, making new cells and enzymes and processing fats, proteins and carbohydrates in the foods that we eat. Zinc can be found in meat, shellfish, dairy products, bread and cereal products.

