What are nutrients?



Energy is provided by carbohydrate, protein and fat. Alcohol can also provide energy.

Carbohydrate

Function:

Provides energy for the body.

Sources:

Cereal and cereal products, potatoes, fruit and vegetables, sugar, preserves and confectionery.



Vitamin B_2 (Riboflavin)

Function:

Releases energy from protein, carbohydrate and fat. It is also involved in the transport and metabolism of iron in the body and is needed for the normal structure and function of body linings and skin.

Sources:

Milk, eggs, rice, fortified breakfast cereals, liver and green vegetables.



Vitamin C

Function:

Important for normal structure and function of body tissues and the healing process. It also helps the absorption of iron from fruit and vegetables, as well as acting as an antioxidant.

Sources:

Fresh fruits especially citrus fruits and berries; green vegetables and tomatoes. Also found in potatoes (especially new potatoes).





Iodine

Function:

Used to make thyroid hormones which control many metabolic processes.

Sources:

Milk, seafood, seaweed and iodised foods such as salt.

Selenium

Function:

Acts as an antioxidant and is also necessary for the use of iodine in thyroid hormone production and for immune system function.

Sources:

Cereals, meat, fish, brazil nuts, cheese and eggs.

Protein

Function:

Needed for growth and repair of the body.

Sources:

Meat, fish, eggs, dairy foods, cereal products, nuts and pulses.

Vitamin B3 (Niacin)

Function:

Releases energy from food, and is important for the normal structure of the skin and body linings and for the nervous system.

Sources:

Most foods, particularly meat.

Vitamin D

Function:

Important for absorbing calcium and phosphorus from foods, and for healthy bone structure.

Sources:

Oily fish, eggs, butter and meat. Most is obtained through the action of sunlight on the skin.





Vitamin E

Function:

Acts as an antioxidant and protects the body's cells against damage.

Sources:

Vegetable oils, seeds and vegetables.

Zinc

Function:

Essential for cell division and, therefore, for growth and tissue repair. It is also necessary for normal reproductive development, the immune system and healing of wounds.

Sources:

Milk, cheese, meat, eggs and fish, wholegrain cereals and pulses.

Fluoride

Function:

Contributes to the maintenance of bone health by supporting bone mineralisation and it protects teeth against dental decay (caries).

Sources:

Fluoridated water, tea, fish and toothpaste.





Function:

Provides essential fatty acids, as well as energy. It also carries important fat soluble vitamins and is important for their absorption.

Sources:

Meat and meat products, dairy products, oily fish, nuts, cakes, biscuits, crisps, chocolate, fats and oils.





Vitamin B₆

Function:

Involved in the use of protein,

Sources:

Beef, white fish, poultry, eggs, whole grains and some vegetables.

Calcium

Function:

Important for bones and teeth, and also nerves and muscles. It is also involved in blood clotting.

Sources:

Milk, cheese and other dairy products, green leafy vegetables, soya bean products, and bread.





Potassium

Function:

Essential for water balance and for nerves.

Sources:

Milk, fruit (especially bananas), vegetables, fish, shellfish and meat.





Magnesium

Function:

Important for metabolism and water balance. It is also important for muscles, bones and teeth.

Sources:

Widespread in foods, particularly green leafy vegetables, grain and nuts.

Vitamin A

Function:

Important for the normal structure and function of the skin and body linings e.g. in lungs; normal growth and development; normal vision and for the immune system.

Sources:

Liver, whole milk, cheese, butter, margarine, carrots, dark green leafy vegetables and orange coloured fruits, e.g. mango and apricots.





Vitamin B₁₂

Function:

Important for the blood, nerves and helps to release energy from food.

Sources:

Milk, meat, fish, eggs, yeast extract and fortified breakfast cereals.

Function:

the heart.

Sources:

Food provides a range of different nutrients. Some nutrients provide energy,

while others are essential for growth and maintenance of the body.



Folate / Folic acid

Vitamin B₁ (Thiamin)

Needed to release energy from

carbohydrate. It is also involved

in the nervous system and

Whole grains, nuts and meat

(especially pork), fruit and

vegetables and fortified

breakfast cereals.

Function:

Essential for the formation of blood cells. It is also needed for the nervous system and specifically for a developing embryo (pregnant women).

Sources:

Green leafy vegetables and fortified breakfast cereals.

Phosphorous

It is essential for bone and tooth

structure, for the structure of

cell membranes and for energy

It is found in many foods and is

unlikely to be in short supply in

Function:

metabolism.

Sources:

UK diets.

Vitamin K

Essential for the clotting of blood and is required for normal bone structure.

Sources:

Green leafy vegetables, meat, vegetable oils and cereals.

Helps regulate body water content and electrolyte balance, and is involved in energy utilisation and nerve function.

Sources:

Very small amounts in raw foods. Often added during processing, preparation, preservation and serving.





Water

Function:

Not a nutrient in the classical sense, but is essential for our bodies to work properly.

Sources:

Water, milk, juices, all drinks, fruit and vegetables.





Fibre

Function:

Not a nutrient, but helps to prevent constipation, and helping to lower blood cholesterol and/or glucose levels.

Sources:

Cereal foods, beans, lentils, fruit and vegetables.

and is important for transporting iron in the body.

Function:

Sodium

Function:



Iron

Function:

Needed for red blood cells, which transport oxygen around the body. It is also required for normal metabolism and removing substances from the body. The immune system also requires iron.

Sources:

Liver, meat, beans, nuts, dried fruits, poultry, fish, whole grains, soya bean flour and dark green leafy vegetables.