

# WHAT ARE NUTRIENTS?

At its most basic, a nutrient is a substance that provides nourishment essential for growth and the maintenance of life. Nutrients provide energy, or building material, for the survival and growth of a living organism.

There are six classes of nutrients:

1. Water
2. Protein
3. Carbohydrates
4. Fats
5. Minerals
6. Vitamins

Food provides a range of different nutrients. Carbohydrates, protein, and fat are needed in relatively large amounts in the diet as they provide our bodies with energy and the building blocks for growth and maintenance. Vitamins and minerals are only needed in small amounts, but are essential to keep us healthy.

NUTRIENT	FUNCTION	SOURCES
<b>Carbohydrate</b>	Carbohydrates provide energy for the body.	Can be found in all starchy foods such as: <ul style="list-style-type: none"><li>• Bread</li><li>• Rice</li><li>• Potatoes</li><li>• Pasta</li><li>• Cereal</li></ul> Can also be found in simpler forms as the sugars present in fruits, vegetables, and milk
	Dietary fibre is a term used for non-digestible carbohydrates. Fibre is important for our health and for reducing the risk of some diseases. It also helps with digestive health.	<ul style="list-style-type: none"><li>• Cereals</li><li>• Whole grain bread</li><li>• Whole wheat pasta</li><li>• Beans</li><li>• Pulses</li><li>• Fruit and vegetables</li></ul>



NUTRIENT	FUNCTION	SOURCES
<b>Protein</b>	Protein provides amino acids, some of which we can't make ourselves and therefore need to get from our diet. Protein is needed for normal growth and maintenance of health. It also provides energy.	<ul style="list-style-type: none"> <li>• Meat</li> <li>• Fish</li> <li>• Eggs</li> <li>• Dairy foods</li> <li>• Cereal products (such as bread)</li> <li>• Soya products</li> <li>• Nuts</li> </ul>
<b>Fat</b>	Fat provides essential fatty acids (that we can't make ourselves, but need in small amounts) as well as energy. It is required for a range of bodily processes and to maintain the normal structure of cells in the body.	<ul style="list-style-type: none"> <li>• Fats and oils</li> <li>• Meat and meat products</li> <li>• Dairy foods</li> <li>• Oily fish</li> <li>• Nuts</li> <li>• Seeds</li> <li>• Avocados</li> </ul>
<b>Vitamins</b>	<p>Water-soluble vitamins cannot be stored in our bodies. If you have more than you need, your body gets rid of the extra vitamins when you urinate.</p> <ul style="list-style-type: none"> <li>• Vitamin B1 (Thiamin) releases energy from food.</li> <li>• Vitamin B2 (Riboflavin) releases energy from food and helps maintain skin.</li> <li>• Vitamin B3 (Niacin) releases energy from food and helps maintain skin.</li> <li>• Vitamin B6 helps make red blood cells, which carry oxygen.</li> <li>• Vitamin B12 helps the nervous system function properly.</li> <li>• Folate/Folic acid helps the immune system work and helps reduce tiredness.</li> <li>• Vitamin C helps protect cells from damage and helps the immune system.</li> </ul>	<ul style="list-style-type: none"> <li>• Vitamin B1 (Thiamin) – bread, nuts and seeds</li> <li>• Vitamin B2 (Riboflavin) – milk, eggs, mushrooms</li> <li>• Vitamin B3 (Niacin) – meat, poultry, fish, brown rice</li> <li>• Vitamin B6 – meat, poultry, fish, egg yolks, sesame seeds, bananas, green peppers</li> <li>• Vitamin B12 – meat, fish, milk, cheese</li> <li>• Folate/Folic acid – leafy green vegetables</li> <li>• Vitamin C – fruit (especially citrus)</li> <li>• Vitamin A – liver, cheese, eggs, dark green and orange-coloured fruits and vegetables</li> <li>• Vitamin D – oily fish, eggs, cereal, fat spreads</li> <li>• Vitamin E – vegetable and seed oils</li> <li>• Vitamin K – green vegetables</li> </ul>



NUTRIENT	FUNCTION	SOURCES
	<ul style="list-style-type: none"> <li>• Vitamin A helps with vision and helps keep skin and the linings of some parts of the body, such as the nose, functioning normally.</li> <li>• Vitamin D helps the body absorb calcium and keep bones strong.</li> <li>• Vitamin E helps protect the cells from damage.</li> <li>• Vitamin K is needed for the normal clotting of blood and helps with normal bone structure.</li> </ul>	
<b>Minerals</b>	<p>There are certain minerals we need to keep our bodies healthy:</p> <ul style="list-style-type: none"> <li>• Calcium helps maintain strong bones and teeth.</li> <li>• Fluoride helps with the formation of strong teeth.</li> <li>• Iodine helps make thyroid hormones.</li> <li>• Iron helps make red blood cells, which carry oxygen to the body.</li> <li>• Magnesium helps release energy from food.</li> <li>• Phosphorous helps build strong bones.</li> <li>• Potassium helps regulate the water content in the body and maintain a normal blood pressure.</li> <li>• Sodium helps regulate water content.</li> <li>• Selenium helps protect the cells from damage.</li> <li>• Zinc contributes to mental skills and abilities and helps maintain hair, skin, and nails.</li> </ul>	<ul style="list-style-type: none"> <li>• Calcium – milk, cheese, yogurt</li> <li>• Fluoride – tap water, tea, toothpaste</li> <li>• Iodine – milk, yogurt, cheese, fish</li> <li>• Iron – red meat, beans, nuts and seeds</li> <li>• Magnesium – nuts and seeds, whole grain breakfast cereals</li> <li>• Phosphorous – red meat, poultry, fish, milk, cheese</li> <li>• Potassium – bananas, spinach, avocado, poultry</li> <li>• Sodium – some nuts and seeds, eggs, poultry, fish</li> <li>• Selenium – some nuts and seeds, eggs, poultry, fish</li> <li>• Zinc – meat, poultry, cheese, nuts and seeds</li> </ul>



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<b>Water</b>	Water is not defined as a nutrient in the classical sense, but essential for our bodies to work properly. Water helps regulate body temperature, transports nutrients around the body, and helps the brain function.	<ul style="list-style-type: none"> <li>• All drinks including water, milk, fruit juice, tea, and coffee</li> <li>• We also get water from fruits and vegetables, soups, stews, and sauces</li> </ul>

