



## Kinds of Nutrients

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Nutrients are essential substances that our body needs to function properly. They help in growth, repair, energy production, and overall well-being. The major types of nutrients include carbohydrates, fats, proteins, vitamins, minerals, water, and fibre.

#### 1. Carbohydrates

##### Function:

- Carbohydrates are the primary source of energy for the body, particularly for the brain and nervous system.
- They are essential for performing daily activities like walking, dancing, writing, and jumping.
- Due to their role in energy production, they are commonly referred to as energy-giving foods.

##### Sources:

- Naturally occurring sugars in fruits (apples, bananas, grapes), vegetables (potatoes, pumpkins), and milk.
- Whole grain products such as wheat, maize, rice, and cereals.
- Starchy vegetables, legumes, and refined sugar.

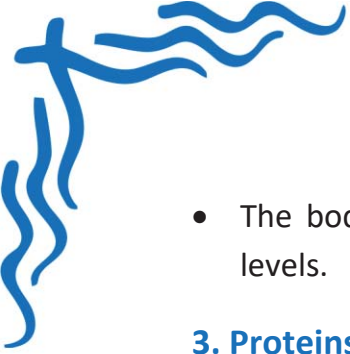
#### 2. Fats

##### Function:

- Fats provide an alternative energy source when carbohydrates are unavailable.
- They serve as an energy reserve and aid in the absorption of fat-soluble vitamins (A, D, E, and K).
- Essential for maintaining body warmth and regulating body temperature.
- Excessive consumption of fatty foods can lead to obesity and health problems.

##### Sources:

- Oils, butter, ghee, nuts, coconut, cheese, cream, and fatty foods.



- The body's energy needs vary depending on age, gender, and physical activity levels.

### 3. Proteins

#### Function:

- Proteins are essential for the maintenance, repair, and growth of body tissues.
- Referred to as body-building foods.
- Crucial for children's growth.
- Important for healthy hair, skin, eyes, muscles, and organs.
- Haemoglobin, the oxygen-carrying component of blood, is a protein.

#### Sources:

- Meat, fish, cheese, beans, lentils, yogurt, nuts, and seeds.
- Yogurt is especially rich in calcium and is a nutrient-dense food commonly consumed for longevity.

### 4. Vitamins

#### Function:

- Essential for healthy teeth, bones, and skin.
- Help in the formation of red blood cells and support the nervous system.
- Play a vital role in boosting immunity and fighting infections.
- Foods rich in vitamins and minerals are known as protective foods.

#### Types of Vitamins:

Vitamin A, B, C, D, E, and K are the key vitamins required by the body.

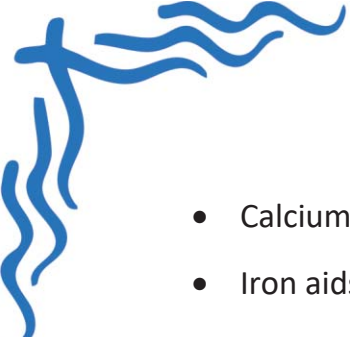
#### Sources:

Found in broccoli, papaya, almonds, sunflower oil, spinach, carrots, pumpkins, oranges, beans, and green leafy vegetables.

### 5. Minerals

#### Function:

- Minerals like calcium, iron, sodium, potassium, and others are essential for various bodily functions.

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- Calcium strengthens bones and teeth.
  - Iron aids in the formation of blood and prevents anemia.

#### Sources:

Mineral-rich foods include nuts, dark leafy greens, beans, seeds, shellfish, fish, mushrooms, whole grains, dairy products, red meat (lamb), avocados, cheese, dried fruits, and tofu.

- **Iron-rich foods:** Red meat, dried fruits, green leafy vegetables.
- **Calcium sources:** Milk and dairy products.

## 6. Water and Fibre

#### Function:

- Dietary fibre (roughage) is obtained from fruits, vegetables, cereals, and pulses and aids in digestion.
- Water and fibre help in removing waste from the body and cleansing the digestive system.
- Water is vital for regulating body temperature and preventing dehydration.

#### Did You Know?

- Sprouted pulses are highly nutritious but require proper hygiene to prevent foodborne illnesses, as warm and humid conditions promote bacterial growth.
- Nutrients play an indispensable role in ensuring a healthy body and mind. A balanced diet, containing the right proportion of carbohydrates, fats, proteins, vitamins, minerals, water, and fibre, is essential for overall well-being. Understanding the function and sources of these nutrients helps us make informed dietary choices for a healthier life.