

VITAMINS AND MINERALS



WHAT IS VITAMINS

- Vitamins are **substances that our bodies need to develop and function normally**. They include vitamins A, C, D, E, and K, choline, and the B vitamins (thiamin, riboflavin, niacin, pantothenic acid, biotin, vitamin B6, vitamin B12, and folate/folic acid).
- Vitamins are the micronutrients required by the body to carry out a range of normal functions. However, these micronutrients are not produced in our bodies and must be derived from the food we eat. Vitamins are **organic substances that are generally classified as either fat soluble or water soluble**.

WHY VITAMINS ARE IMPORTANT?

Vitamins have different jobs to help keep the body working properly. **Some vitamins help you resist infections and keep your nerves healthy, while others may help your body get energy from food or help your blood clot properly.** By following the Dietary Guidelines, you will get enough of most of these vitamins from food.

VITAMIN A

FOOD SOURCES

Leafy green vegetables (kale, spinach, broccoli), orange and yellow vegetables (carrots, sweet potatoes, pumpkin and other winter squash, summer squash) tomatoes.

Red bell pepper.

Cantaloupe, mango.

Beef liver.

Fish oils.

Milk.

Eggs.



VITAMIN B

Meat.

Fish.

Milk.

Cheese.

Eggs.

cereals.



VITAMIN D

Vitamin D helps regulate the amount of calcium and phosphate in the body. These nutrients are needed to keep bones, teeth and muscles healthy. A lack of vitamin D can lead to bone deformities such as rickets in children, and bone pain caused by a condition called osteomalacia in adults. sources include egg yolks, red meat, and liver.



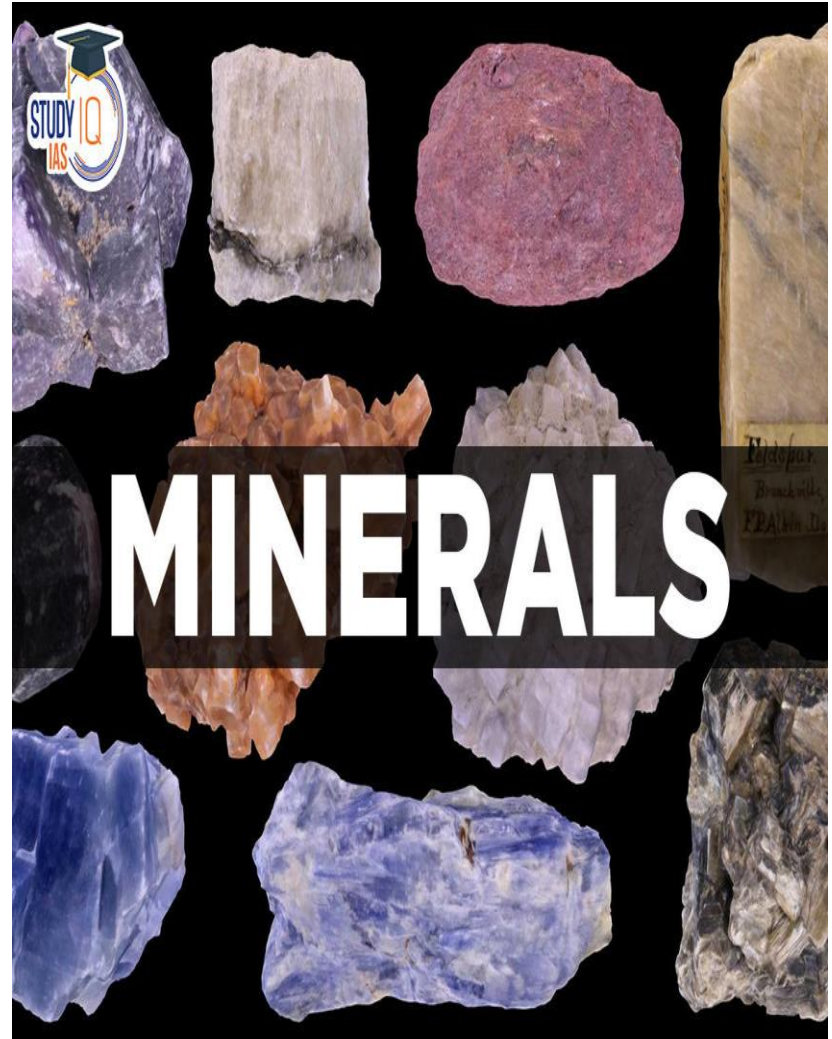
VITAMIN D

Vitamin E is a fat-soluble nutrient found in many foods. In the body, it acts as an antioxidant, helping to protect cells from the damage caused by free radicals. Free radicals are compounds formed when our bodies convert the food we eat into energy.



MINERALS

Minerals are **those elements on the earth and in foods that our bodies need to develop and function normally**. Those essential for health include calcium, phosphorus, potassium, sodium, chloride, magnesium, iron, zinc, iodine, chromium, copper, fluoride, manganese, and selenium.



WHAT IS THE FUNCTION OF MINERALS

Minerals are vital components of our food. They fulfil a wide variety of functions, such as **building materials for our bones, influencing muscle and nerve function, and regulating the body's water balance.** They are also components of hormones and enzymes and other biologically active compounds.

WHAT ARE MINERALS IN FOOD

Minerals are found in foods like **cereals, bread, meat, fish, milk, dairy, nuts, fruit (especially dried fruit) and vegetables**. We need more of some minerals than others. For example, we need more calcium, phosphorus, magnesium, sodium, potassium and chloride than we do iron, zinc, iodine, selenium and copper.