

6th – Components of Food I



Food is essential for all animals, including human beings. The food we eat come from different components.

Components of Food:

The food that we eat consists of different components or nutrients. Nutrients are substances that are needed by our body for proper growth and healthy body function. There are six main components present in food:

1. Carbohydrates
2. Fats
3. Proteins
4. Vitamins
5. Minerals
6. Roughage or dietary fibres

All these nutrients fulfill the different needs of our body.

1. Carbohydrates:

They provide energy to your body, which keeps it going throughout the day. There are two major types of carbohydrates in food:

- a) Sugar: sugar is also called simple carbohydrate. It has a sweet taste. Fruits, honey, and table sugar, sugarcane are some sources of sugar.
- b) Starch: Starch is also called complex carbohydrate. It is tasteless, colourless and white powder. Plants store energy in the form of starch. Rice, wheat, corn, potato and bread are sources of starch.

When we eat plant products containing sugar and starch, our digestive system breaks them down into glucose. This glucose is the simplest form of sugar which is absorbed into the blood and provides us energy.

2. Fats:

- Fats are made up of carbon, hydrogen and oxygen. Butter, ghee, milk, egg-yolk, nuts and cooking oils are the major sources of fat in our food.
- An adult needs about 35 g fat every day. Our body stores the excess energy in the form of fat.
- This stored fat is used by the body for producing energy as and when required so fat is considered as energy bank in our body.
- Fats are essential for the absorption of vitamins A, D, E and K in the body.
- Fat in our body also prevents heat loss from the body surface.

3. Proteins:

- Proteins are needed by our body for muscle building and repairing worn out tissues.
- Our muscles, organs and blood are made up of mostly proteins. Proteins in our diet come from both plants and animals sources.
- When the body is building new tissues, more proteins are required, so growing children need more protein.
- Meat, fish, egg and milk are some animal sources of proteins. Pulses, soybeans, grams and nuts are some plant sources of proteins.

4. Vitamins:

- They are needed for the proper functioning of our body. They help in keeping our eyes, bones, teeth and gums healthy.
- There are 13 vitamins each of which has a specific function. Vitamins are of two types:



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a. Fat soluble vitamins: Vitamin A, D, E and K are fat soluble. These are stored in the fat tissues of our body and are used when the body needs them.

b. Water soluble vitamins: Vitamin B1, B2, B3, B6, B12 and folic acid (together known as Vitamin B complex) and Vitamin C are water soluble. They are not stored in the body and are needed to be regularly supplied through citrus fruits and green vegetable.

- Our body prepares Vitamin D in the presence of sunlight.

5. Minerals:

They perform important functions like formation of bones. They are needed in the diet in small quantities. These are obtained from table salt, green vegetables and fruits. Iron, Iodine, calcium, phosphorus, sodium and potassium are common minerals. Most food items have more than one nutrient, however one particular nutrient is present in much larger quantity than others.

6. Dietary Fibers:

They are also known as roughage. Roughage is mainly produced by plant products in our food. Whole grains and pulses, potatoes, fresh fruits and vegetables are main source of roughage. It does not provide any nutrient, but is an essential component of our food and adds to its bulk. This helps our body to get rid of undigested food. Water helps our body to absorb nutrients from food. It also helps in throwing out some wastes from body as urine and sweat. We get most of the water needed by the body through the liquids we drink and from the water in cooked food.

