

## Chapter-2

### Components of Food

Notes:-

#### 1) COMPONENTS OF FOOD

The main components of our food are nutrients (carbohydrates, proteins, fats, vitamins), roughage (dietary fibres) and water.

#### 2) NUTRIENTS

Nutrients are the substances that an organism needs for growth, repair and maintenance of its body.

##### a) Carbohydrates:-

Carbohydrate are the main source of energy for our body. Therefore, they are called energy-giving foods. For example:- wheat, rice, potato etc.

##### b) Proteins:-

Food rich in proteins are called body-building foods. These are necessary for the growth and the repair for body. For example:- pulses, eggs, milk etc.



### c) Fats:-

Fat give us more energy than carbohydrates.  
For example:- Ghee, oil, butter etc.

### d) Vitamins:-

Vitamins are essential nutrients required in small quantities for normal functioning of the body. It is also called protective foods. Different kinds of vitamins are- vitamin A, B, C, D, E & K.

### e) Roughage (Dietary Fibres)

The fibrous indigestible material present in our body are called roughage. For example- apple, porridge, dalia etc.

## 3) BALANCED DIET

The diet that contains proper amount of all the essential nutrients, roughage and water for the proper growth and development of the body is called a balanced diet.

## 4) LOSS OF NUTRIENTS DURING COOKING

The food should also be cooked properly so that its nutrients are not lost.



- 1) Washing of peeled and cut vegetables wash again and again nutrients are lost.
- 2) Repeated washing of dal and rice also causes loss of water-soluble vitamins and minerals.
- 3) When food is done at a high temperature many proteins and vitamins are destroyed.

S.No	Vitamins	Deficiency disease	Symptoms
1.	vitamin A	Night blindness	Poor vision and loss of vision in darkness (night)
2.	vitamin B <sub>1</sub>	Beriberi	Extreme weakness, swelling of legs, loss of appetite and weight
3.	Vitamin C	<del>Sc</del> Scurvy	Spongy and bleeding gums, loosening of teeth, wounds take longer time to heal
4.	Vitamin D	Rickets	Softened and bent bones (soft bones are more susceptible to fracture), bowed legs due to malformation of leg bones, pain in bones



S.No	Minerals	Deficiency diseases	Symptoms
1.	Iron	Anaemia (less haemoglobin produced in blood)	Weakness and fatigue, loss of weight, pale skin, loss of appetite.
2.	Iodine	Goitre	Abnormal enlargement of the thyroid gland (Thyroid gland is present in the neck region), retarded growth, mental disability.
3.	Calcium	Bone and tooth decay	Weak bones, excessive bleeding of gums, stunted growth, tooth decay, weakness.
4.	Fluorine	Dental caries	Pain in teeth, sensitivity to hot and cold food or drinks.



Chapter 2Components of FoodShort answer questions:-

Que-1- Give two cooking practices that lead to the loss of nutrients in food materials.

Ans- In notes.

Que-2- Name the disease caused by the deficiency of dietary iodine and give its symptoms.

Ans- In notes.

Que-3- How do we get most of the water needed by our body?

Ans- We get most of the water needed by our body comes from plain drinking water and beverages like tea and coffee.

Que-4- Differentiate between the two types of carbohydrates found in food.

Ans- ~~Sugars~~: Sugars are simple carbohydrates while starch is a complex carbohydrate.



Ques- Why is roughage is important for us?

Ans- Roughage is important for us because it retain water in the body.

Long answers:-

Ques- What is marasmus? What are the symptoms of marasmus?

Ans- The deficiency of proteins, carbohydrates and fats in the diet of children leads to a disease called marasmus. The symptoms of marasmus are:- the body becomes very lean, thin weak, skin becomes dry, thin and wrinkled, ribs become prominent, sunken eyes, unable to digest and absorb food, suffer from diarrhoea.

Ques- What are deficiency diseases? Name three deficiency diseases and also write their causes and symptoms.

Ans- Diseases that are caused due to the lack of nutrients in our diet over a long period of time are called deficiency diseases.

Deficiency disease	Causes	Symptoms
1) Night blindness	Vitamin A	Poor vision, loss of vision in night.
2) Dental caries	Fluorine	Pain in teeth, sensitivity to hot and cold, food or drinks.
3) <del>Anemia</del> Anaemia	Iron	Weakness and fatigue, loss of weight, pale skin, loss of appetite.

