

BIJENDRA PUBLIC SCHOOL

Class - 6

Subject - SCIENCE

Chapter - 2 COMPONENTS OF FOOD

A. Very Short Answer Questions : Answer in one word.

1. Which component of food is called the body building food?

Ans. Protein

2. Which type of carbohydrate is white, tasteless and insoluble in water?

Ans. Cellulose

3. From which source, we get unsaturated fats / oils.

Ans. Plants

4. Name the protein present in blood that carries oxygen from lungs to the cells.

Ans. Haemoglobin

5. Which disease causes swelling and redness of gums and tongue?

Ans. Pellagra

B. Short - Answer Questions : Answer in 10-15 words.

1. Name two sources of complex carbohydrates. Identify the constituents molecules present in them.

Ans. Starch and cellulose are two complex carbohydrates. Starch is obtained from wheat, rice, maize and potatoes.

Cellulose is present in wood , grass, cotton, etc. The constituents molecules of carbohydrates are carbon, hydrogen and oxygen.

2. Name the disease caused by the deficiency of iron. What are its symptoms?

Ans. The disease caused by the deficiency of iron is anemia. Its main symptoms are fatigue, loss of weight and appetite and pale look.

3. What is meant by balanced diet? What should be the composition of a typical balanced diet?

Ans. The diet which contains all the essential nutrients in the right proportion is called a balanced diet.

A typical balanced diet should contain

* Carbohydrate - 60%

* Fats - 15%

* Proteins - 25%

* Minerals

* Vitamins

* Roughage

* Sufficient water

} As per in the above mentioned components

4. Why are fats called energy - store in our body?

Ans. Fats are called energy - store in our body because our body stores the excess energy in the form of fat. This stored fat is used by the body for getting energy as and when required.

5. Name any two diseases caused by protein energy malnutrition in children.

What are their symptoms?

Ans. Two diseases caused by protein - energy malnutrition are :-

i. Kwashiorkor

ii. Marasmus

i. Kwashiorkor :- It is caused by the deficiency of proteins and carbohydrates in diet.

Symptoms of Kwashiorkor :-

* Irritable with pathetic facial looks

* Skin cracks and becomes scaly

* Swollen abdomen and weak legs

* Hair turn reddish

* Lower body weight and retarded growth

ii. Marasmus :- It is caused by the deficiency of proteins and carbohydrates.

Symptoms :-

* The child becomes so thin that loose folds of skin can be seen all over the body.

* Muscles get wasted.

* Loses body weight rapidly.

C. Long Answer Type Questions Answer in 20-25 words.

1. Describe the role of proteins in our body.

Ans. The role of protein in our body :-

i. Digestion

ii. Body growth

iii. Tissue repair and

iv. Catalysing certain biochemical processes.

2. Why is glucose called a source of instant energy?

Ans. Glucose directly enters the blood stream and produces energy through respiration immediately. Therefore, it acts as a source of instant energy.

3. Why is intake of more fat than carbohydrates in diet not advisable?

Ans. Excess of fat in the food get deposited in our body. Too much of fat deposited in our body leads to obesity.

4. Why is the presence of roughage in food essential?

Ans. i. Roughage help in retaining water in the body.

ii. It add bulk to the food and give a sense of filling after the meal.

iii. It prevents constipation and helps in the regular movement of the bowels system.

5. Name the symptoms, causes and remedies of night blindness.

Ans. Night blindness is a disease in which a patient is unable to see in dim light or may lose his / her vision. It is caused by the deficiency of Vitamin A. Its main symptoms are white deposition on conjunctiva and dryness of cornea. It can be cured by giving a diet rich of Vitamin A.

D. Tick (✓) The odd-one out giving reason.

1. Glucose, Potatoes, Roughage, Butter

Ans. Roughage :- Others are sources of carbohydrates.

2. Vitamin A, Vitamin C, Vitamin B, Vitamin B₉

Ans. Vitamin A :- Others are water - soluble vitamins.

3. Corn cob, Iron, Iodine, Calcium

Ans. Corn cob :- Others are minerals.

4. Glucose, Wheat flour, Sucrose, Jaggery

Ans. Wheat flour :- Others contain sugar.

5. Night blindness, Anaemia, Goitre, Beri - Beri

Ans. Night blindness :- Other diseases are caused by the deficiency of minerals.

E. Define the following terms.

1. **Nutrients :** The components of food which give energy and help to grow are called nutrients. The main nutrients of food are carbohydrates, fats, proteins, vitamins and minerals. In addition to these, dietary fibres and water are also categorised as nutrients.

2. **Malnutrition :** The unhealthy state of the body due to the lack of one or more nutrients in one's diet is termed as malnutrition.

3. **Obesity :** The over-weight and bulkiness of a person's body due to excessive accumulation of fat in it is called obesity.

4. **Scurvy :** The disease caused by the deficiency of Vitamin C is called scurvy. The symptoms of scurvy are : swelling and bleeding of gums, loosening of teeth, pain in the joints and general weakness.

5. **Anaemia :** The deficiency of iron in the food leads to anaemia.

A person suffering from anaemia:

- i. Looks pale
- ii. Tires easily
- iii. Loses appetite and
- iv. Loses weight

6. **Rickets :** The deficiency of Vitamin D leads to rickets.

A person suffering from Vitamin D :-

- i. Softening and weakening of bones in children
- ii. Twisted legs / bow legs
- iii. Delayed growth

HOTS (High Order Thinking Skills): Think and Answer.

1. From the following who needs more carbohydrates and fat - rich diet and why?

- a. Labourer
- b. An office clerk
- c. A player

Ans. A labourer needs more carbohydrates and fat - rich diet because he does more physical labour and hard work than any office clerk. For a player he needs only carbohydrate - rich food not fats as he requires more energy, which could be provided only by carbohydrates.

2. Which of the following give more nutrients?

- a. Chapatties of wheat flour or maida
- b. Dalia or noodles
- c. Fruit juices or aerated soft- drinks

Give reasons.

- Ans.
- a. Chapatties of wheat flour because chapatti is easy to digest as it contains roughage while maida is very fine.
 - b. Dalia because it contains protein, fibre, Vitamin B and other vitamins and antioxidants. Noodles are not rich in such nutrients.
 - c. Fruit juices because they contain many minerals and vitamins like phosphorus, zinc, potassium, magnesium and calcium and Vitamin A, C, E, K and Vitamin B. All these important nutrients cannot be found in aerated soft drinks which only have some amount of carbohydrates.

3. Mother's milk is recommended for infants up to the age of 8 - 10 months. Why is it so?

Ans. Mother's milk is recommended for infants up to the age of 8 - 10 months because Mother's milk contains double the amount of Vitamin C than the cow's milk. These help protect babies against all kinds of infections.