

NCERT SOLUTIONS

CLASS-VI SCIENCE

CHAPTER-2

COMPONENTS OF FOOD

Question 1:

Mention the major nutrients that are present in our food.

Answer:

The major nutrients that are in our food:

Minerals
Water
Vitamins
Fat
Protein
Carbohydrates



Question 2:

Name the following:

1. *Mention the nutrients that provide our body with the required energy.*
2. *For growth and the body to be well maintained, what are the nutrients that are required?*
3. *To maintain good eyesight, which of the vitamins are required?*
4. *To maintain healthy bones in the body, which is the mineral that is required?*

Answer:

1. Carbohydrates
2. Proteins
3. Vitamin A
4. Calcium

Question 3:

Mention any two foods that are rich in:

(1) Fats

(2) Starch

(3) Dietary fiber**(4) Protein****Answers:**

- (1) Cheese, Dark Chocolates
- (2) Peas, corn.
- (3) Split Peas, Black Beans.
- (4) Yogurt, eggs.

Question 4:

Fill the blanks with appropriate answers:

- 1) *Deficiency of Vitamin D causes _____*
- 2) *A disease known as beriberi is caused due to the deficiency of _____*
- 3) *_____ is caused due to the deficiency of Vitamin C.*
- 4) *Deficiency of _____ in our food causes night blindness.*

Answers:

Deficiency of Vitamin D causes Rickets.

A disease known as beriberi is caused due to the deficiency of Vitamin B₁.

Scurvy is caused due to the deficiency of Vitamin C.

Deficiency of Vitamin A in our food causes night blindness.

More Questions:**Question 1:**

Is it true that the same nutrients are present in all meals?

Answer: No, the same nutrients are not present in all meals

Question 2:

Mention why a meal must have food items that are different in their composition.

Answer: A meal must have food items that are different because different kinds of nutrients are required for our body to function properly.

Question 3:

Do all foods contain all the required nutrients?

Answer: No, all the nutrients that are required are not present in all types of food.

Question 4:

_____ and _____ are the two types of carbohydrates present in our daily food.

Answer: Sucrose and Fiber

Question 5:

Define carbohydrates.

Answer: The compounds of carbon, hydrogen and oxygen that provide the required amount of energy for our body are known as carbohydrates.

Question 6:

What will happen if three or more drops of iodine solution fall on starch substance?

Answer: There will be a change in the color of substance to blue-black.

Question 7:

A food item gives a blue-black color with iodine. What does this tell you about the composition of the food item?

Answer: If any food item gives blue-black color with iodine then, the nutrient that is present in the food is Starch.

Question 8:

Mention any two substances that provide carbohydrates.

Answer: The two substances which provide carbohydrates are Potato and Sugar

Question 9:

When an oily patch is present on a paper, what do you think is the food nutrient that is present in there?

Answer: The oily patch which appears on paper shows that fat is present.

Question 10:

Mention any two nutrients that provide energy.

Answer: the two energy providing nutrients are Carbohydrates and Fats.

Question 11:

When a body cell is damaged, what is the nutrient that helps to repair it?

Answer: The nutrient which helps in repairing the damaged body cells is Proteins.

Question 12:

_____ and _____ are the two nutrients that provide immunity against diseases.

Answer: Vitamins and Minerals are the two nutrients that protect the body from diseases.

Question 13:

Mention any two plant food items in which proteins are provided.

Answer: Dal(pulses) and Soybean are two well-known plant food items which provide proteins.

Question 14:

Mention any two protein sources that animals provide.

Answer: Milk and Eggs are two sources of proteins provided by animals.

Question 15:

What type of food is also known as body- building food?

Answer:Proteins rich foods are also known as body building foods.

Question 16:

Mention any two food items in which fats are abundant.

Answer: Oils and Ghee are two food items that have abundant fat.

Question 17:

What are the different types of Vitamins?

Answer: Various types of vitamins are:

1. Vitamin A,
2. Vitamin B-complex,
- iii. Vitamin C,
 1. Vitamin D,
 2. Vitamin E,
 3. Vitamin K.

Question 18:

What is the vitamin that represents a group of other vitamins?

Answer:The Vitamin that represents a group of other vitamins is 'Vitamin B-complex'

Question 19:

Mention any two sources that have Vitamin A.

Answer: Fish-oil and Milk are the two sources of Vitamin A.

Question 20:

Mention any two sources that have Vitamin B.

Answer: Liver and Beans are the two sources of Vitamin B.

Question 21:

Mention any two sources that have Vitamin C.

Answer: Orange or Lime and Amla are the two sources of Vitamin C.

Question 22:

Mention any two sources that have Vitamin D.

Answer: Fish and Butter are sources of Vitamin D.

Question 23: Explain the term roughage.

Answer: The foods containing plant fibers which are also known as dietary fibers are called roughage.

Question 24: What is the main function of roughage?

Answer: Roughage helps in getting rid of the undigested food from our body.

Question 25:

Mention the food items in which roughage is present.

Answer: The food items in which roughage is present are:

- (a) Whole grains,
- (b) Fresh fruits and
- (c) Vegetables.

SHORT ANSWER TYPE QUESTIONS

Question 1:

What are nutrients? Name the major nutrients.

Answer:

The components of food which are needed by our body for growth and development are called nutrients. The major nutrients are:

- 1) Carbohydrates
- 2) Fats
- 3) Proteins
- 4) Vitamins

Question 2 :

What are the functions of carbohydrates?

Answer:

Carbohydrates have six major functions within the body:

1. Providing energy and regulation of blood glucose
2. Sparing the use of proteins for energy
3. Breakdown of fatty acids and preventing ketosis
4. Biological recognition processes
5. Flavor and Sweeteners
6. Dietary fiber

Question 3:

Describe a test for detecting the presence of starch.

Answer:

1. Take any food item.
2. Add 2-3 drops of dilute iodine solution on it.

If there is a change of color to blue-black of the food item then, starch is present.

Question 4:

What are the functions of proteins?

Answer: Proteins are the most important set of nutrients. They are also called body-building foods. They help in growth and repair of damaged cells and tissues of the body. They also help our body to fight against infections.

Question 5:

How can you test the presence of proteins in a given food item?

Answer:

1. Take a small quantity of the food items to be tested.
2. Put 2-3 drops of iodine solution on it.
3. Observe the color of the food item.
4. Blue-black color indicates the presence of starch in the tested food item

Question 6:

What are fats? Name some fat-containing substances.

Answer: The energy rich sources of food are called fats. They provide energy to the body. All types of nuts, mustard seeds, milk and butter are the major sources of fat. Like carbohydrates, fats also contain carbon, hydrogen and oxygen but, fats contain lesser oxygen than carbohydrates.

Question 7:

Describe a test for detecting the presence of fat.

Answer: Take a small quantity of the food item. Rub it on a piece of white paper. On observing carefully, you will find that the piece of white paper shows an oily patch on it which indicates that the food items contain fat.

Question 8:

What are vitamins? Mention the various kinds of vitamins.

Answer: They are protective compounds with no energy value. They help in proper body functioning and are required by the body in very small quantities. Various kinds of vitamins are:

Vitamin A
Vitamin B- complex
Vitamin C
Vitamin D
Vitamin E
Vitamin K

Question 9:

People who eat sea-food do not suffer from Goitre. Explain.

Answer: It is so because sea-food is a rich source of Iodine and Goitre is a deficiency disease caused due to lack of Iodine.

Question 10:

Excess intake of fats is harmful to the body because it causes obesity. Would it be harmful to the body if there is too much intake of proteins or vitamins in a diet plan?

Answer: Yes, excess intake of proteins and vitamins in the diet is harmful and may lead to other diseases.

Question 11:

Name the vitamins that our body prepares in the presence of sunlight.

Answer: The vitamin that our body prepares in the presence of sunlight is Vitamin D.

Question 12:

Name a vitamin that is not present in milk.

Answer: Vitamin C is a vitamin that is not present in milk. The Vitamins that are present in milk are vitamins A, D, E, and K.

Question 13:

A patient had stunted growth, swelling on face, discoloration of hair and skin disease. The doctor advised him to eat a lot of pulses, grams, albumin of the egg and milk. etc. What is wrong with the patient? Explain.

Answer: The intake of protein is not enough in his diet and all these symptoms are caused due to the deficiency of proteins.

Question 14:

A small child became very thin and lean and later he became so weak that he could not move. Which nutrients should he eat so as to improve his health?

Answer:

Both Carbohydrates and proteins.

Question 15:

What are the functions of minerals?

Answer: Minerals are the natural occurring type of food and are needed by our body in small amounts. Minerals are essential for proper growth of the body and to maintain good health. They do not provide any energy. Milk, salt, eggs and green leafy vegetables are the main sources of minerals.

Question 16:

Write the functions of water in our body.

Answer: Water helps our body to absorb nutrients from the food. It also helps in removing the waste from the body in the form of urine and sweat. We get water from various types of liquids, fruits and vegetables.

Question 17:

What is obesity?

Answer: When a person eats too much fat containing foods, then the fat gets deposited in his body and he may end up suffering from a condition called obesity.

Question 18:

What are deficiency diseases?

Answer: When a person eats a food continuously for a long time which may not contain a particular nutrient, then this condition is called deficiency of that nutrient. Deficiency of one or more nutrients can cause diseases or disorders in our body. Such types of diseases are known as deficiency diseases.

III LONG ANSWERS TYPE QUESTIONS

Question 1:

List various types of nutrients and write the functions of each.

Answer: The various types of nutrients are:

- (1) **Carbohydrates:** They are mainly energy- providing nutrients.
- (2) **Fats:** They provide energy to the body. They give much more energy than carbohydrates if consumed in the same amount.
- (3) **Proteins:** They are called body-building foods. Proteins help in the formation and repairing of body parts. Skin, hair, muscles, enzymes are made up of proteins.
- (4) **Vitamins:** Vitamins help in protecting our body against diseases. They also protect our eyes, bones, teeth and gums.
- (5) **Minerals:** Minerals are essential for proper growth of body and to maintain good health.

Question 2:

What is a balanced diet? Write the components of a balanced diet.

Answer: A diet which provides the right proportion of all the nutrients that our body needs along with roughage and water is called a balanced diet. The various components of a balanced diet are carbohydrates, fats, proteins, vitamins, minerals, roughage and water.

