

## Very Short Answer Questions

**Q.1. Which of the following food items does not provide any nutrient?**

**Milk, Water, Orange juice, Tomato soup**  
Exemplar]

[NCERT

**Ans.** Water

**Q.2. Define the term nutrient.**

**Ans.** The components of food that are needed for proper working of body are called nutrients.

**Q.3. Name two complex carbohydrates.**

**Ans.** Cellulose and starch.

**Q.4. List the water-soluble vitamins.**

**Ans.** Vitamin B and C.

**Q.5. Name fat-soluble vitamins.**

**Ans.** Vitamin A, D, E and K.

**Q.6. What causes obesity?**

**Ans.** Eating more food than required by the body causes obesity.

**Q.7. What does PEM stand for?**

**Ans.** Protein Energy Malnutrition

**Q.8. What is roughage?**

**Ans.** Roughage is the fibrous indigestible material that adds to the bulk of food.

**Q.9. Which vitamin needs sunlight for its preparation?**

**Ans.** Vitamin D

**Q.10. Raghav puts a food sample on a piece of paper and crushes it. The paper becomes translucent. In which nutrient/supplement is the food rich in?**

**Ans.** The food is rich in fat.

**Q.11. What is a balanced diet?**

**Ans.** A balanced diet contains all the nutrients in appropriate proportions.

**Q.12. Sunil took some egg white in a test tube. He added 2-3 drops of Benedict solution to it and heated it. It turned red-orange in colour. Which nutrient is it rich in?**

**Ans.** Proteins

**Q.13. Which chemical reagent is used to test bread and rice?**

**Ans.** Iodine solution

**Q.14. What do you mean by vitamins?**

**Ans.** The substances which are essential for the proper growth and nutrition but required in small quantity are called vitamins.

**Q.15. Give two methods of cooking that destroy nutrients in food.**

**Ans.** Boiling in excess water and frying destroy nutrients in food.

## Short Answer Questions

**Q.1. Read the items of food listed below. Classify them into carbohydrate rich, protein rich and fat rich foods.**

Moong dal, fish, mustard oil, sweet potato, milk, rice, egg, beans, butter, buttermilk (chhachh), cottage cheese (paneer), peas, maize, white bread

**Ans.**

<b>Carbohydrate Rich FoodItem (A)</b>	<b>Protein Rich FoodItem (B)</b>	<b>Fat Rich FoodItem (C)</b>
Sweet potato	Moong dal	Mustard Oil
Rice	Fish	Milk
Maize	Milk	Egg
White bread	Egg, Beans, Buttermilk, Cottage cheese, Peas	Butter

**Q.2. Tasty food is not always nutritious and nutritious food may not always be tasty to eat. Comment with examples.**

**Ans.** Potato chips are tasty but they are not very nutritious. Boiled vegetables are nutritious but they are not very tasty.

**Q.3. While using iodine in the laboratory, some drops of iodine fell on Paheli's socks and some fell on her teacher's saree. The drops of iodine on the saree turned blue-black while their colour did not change on the socks. What can be the possible reason?**

**Ans.** The saree of Paheli's teacher might have been starched, and starch turns blue-black with iodine solution. Paheli's socks did not have starch on it therefore it did not show any change.

**Q.4. Paheli and Boojho peeled some potatoes and cut them into small pieces. They washed and boiled them in water. They threw away the excess water and fried them in oil adding salt and spices. Although the potato dish tasted very good, its nutrient value was less. Suggest a method of cooking potatoes that will not lower the nutrients in them.**

**Ans.** Wash, peel, cut and cook the potatoes. Cooking in a small amount of water and then frying in a small quantity of oil preserves the nutrients.

**Q.5. Paheli avoids eating vegetables but likes to eat biscuits, noodles and white bread. She frequently complains of stomach ache and constipation. What are the food items that she should include in her diet to get rid of the problem? Give**

**reason for your answer.**

[NCERT Exemplar]

**Ans.** Paheli must include whole grains, whole pulses, fresh fruits and vegetables in her diet as she seems to lack roughage.

**Q.6. Answer the following questions.**

**(i)** List all those components of food that provide nutrients.

**Ans.** Components of food that provide nutrients are carbohydrates, proteins, fats, vitamins and minerals.

**(ii)** Mention two components of food that do not provide nutrients. [NCERT Exemplar]

**Ans.** Components of food that do not provide nutrients are water and roughage/dietary fibres.

**Q.7. 'Minerals and vitamins are needed in very small quantities by our body as compared to other components, yet, they are an important part of a balanced diet.' Explain the statement.**

**Ans.** Vitamins and minerals are very important because they help in

- i. protecting our body against diseases.
- ii. growth of our body.
- iii. maintaining good health.

**Q.8. 'Water does not provide nutrients, yet it is an important component of food.' Explain.** [NCERT Exemplar]

**Ans.** Water helps our body to absorb nutrients from food and also helps in removing wastes in the form of urine and sweat.

**Q.9. What is a balanced diet?**

**Ans.** A balanced diet is the diet which contains all the nutrients our body requires and that too in required quantities. In other words, it is a diet which contains a proper amount of each nutrient.

**Q.10. Is a balanced diet an expensive diet? Give reasons to support your answer.**

**Ans.** No. Pulses, groundnut, soyabean, sprouted seeds (moong), spinach, banana, sattu, jaggery, a combination of flours (missi roti, thepla made from cereals and pulses), available vegetables and other such foods provide many nutrients. Therefore, one can eat a balanced diet without expensive food materials.

**Q.11. Why are you advised to eat a variety of foods?**

**Ans.** Different nutrients are present in different foods. To get a balanced diet, a variety of foods is required.

**Q.12. Define obesity.**

**Ans.** It is a condition which arises due to eating too much food rich in fats than required.

**Q.13. What is the importance of roughage in our food?**

**Ans.** Roughage is a dietary fibre and helps the body to get rid of undigested food.

**Q.14. Give any two reason why one should not eat junk food.**

**Ans.** Junk food make the person obese and may loss of appetite.

## Long Answer Questions

**Q.1. Boojho was having difficulty in seeing things in dim light. The doctor tested his eyesight and prescribed a particular vitamin supplement. He also advised him to include a few food items in his diet.**

[NCERT

Exemplar]

(i) Which deficiency disease is he suffering from?

**Ans.** Night blindness

(ii) Which food component may be lacking in his diet?

**Ans.** Vitamin A

(iii) Suggest some food items that he should include in his diet. (any four)

**Ans.** Carrot, papaya, mango, milk, fish oil or any other (any four).

**Q.2. Write a short note on the importance of water for human body.**

**Ans.** Water is important for human body in the following ways:

- i. It helps in transporting food materials, gases, waste materials, enzymes and hormones from one part of the body to the other.
- ii. It assists in keeping the body temperature constant.
- iii. It is a medium in which a number of chemical reactions take place in the body.
- iv. It helps in the removal of wastes from the body in the form of sweat and urine.

**Q.3. 'More expensive the food, more nutritious it is.' Comment upon this statement. Give examples to support your answer.**

**Ans.** No, it is not necessary that only expensive food is more nutritious. For example, sugarcane, eggs, potatoes, soyabeans, green leafy vegetables are not too expensive and are good source of carbohydrates, fats, proteins, vitamins and minerals. If not very expensive food is taken in appropriate amount, it will act as a proper diet.

**Q.4. How can you detect the presence of proteins in a given food item?**

**Ans.** The presence of proteins can be detected by the Biuret test.

- i. Crush the food sample and put some of it into a clean test tube. Add some sodium hydroxide solution.
- ii. Cork the test tube and shake it to mix the food with the sodium hydroxide solution. Then add a little copper sulphate solution. Cork and shake it again.

If the solution turns blue, there is no protein in the food. But if it turns violet, there is protein in the food.

**Q.5. What is anaemia? Explain.**

**Ans.** If the quantity of iron is too less in a diet, one can suffer from deficiency disease called anaemia. Iron is essential for the formation of haemoglobin which is present in red blood corpuscles (RBCs) of the blood which is the oxygen carrier. Haemoglobin combines with oxygen and carries it to all parts of the body with blood circulation. Once haemoglobin synthesis is hampered, the oxygen carrying capacity of blood reduces, causing a condition called anaemia. Symptoms of iron deficiency are anaemia, fatigue, loss of appetite, pale skin, white nails, swelling of hands and feet.

**Q.6. Distinguish between the following:**

**(i) Malnutrition and Undernutrition**

**Ans.**

<b>Malnutrition</b>	<b>Undernutrition</b>
If a person eats sufficient amount of same type of food having one component only, he suffers from malnutrition.	If a person does not get sufficient amount of food as per his requirements, he suffers from undernutrition.

**(ii) Proteins (Function, Source) and Carbohydrates (Function, Source)**

**Ans.**

	<b>Proteins</b>	<b>Carbohydrates</b>
Function	These are body-building foods which help in growth and repair of body	These are energy-giving foods and act as fuels for body
Source	Milk, fish, meat, eggs, etc.	Rice, wheat, sugarcane, sugarbeet, etc.

## HOTS (Higher Order Thinking Skills)

**Q.1. Rohit was very tired when he came back home after school. His mother gave him a glass of water with glucose dissolved in it. Rohit felt refreshed. Does drinking only glucose water suffice all the nutrition demands?**

**Ans.** Glucose is the simplest form of carbohydrate and is a source of instant energy. But drinking only glucose water will not provide a balanced diet because it is only energy-giving. We also need to intake body-building and protective foods, along with roughage.

**Q.2. A family eats boiled eggs, bread toast and orange juice for breakfast. Is it a nutritious and healthy breakfast? Which nutrients are they taking in?**

**Ans.** Yes, the family is taking a healthy breakfast because it includes all the nutrients. The nutrients they are taking in are:

**Eggs** — Protein and fat

**Bread** — Starch and roughage

**Orange juice** — Vitamin and roughage

**Q.3. Sarthak advises his mother not to sieve wheat flour before making dough. Can you state why?**

**Ans.** This is because the husk in wheat flour is rich in carbohydrates.