

# Lesson 2.Components of food

## EXERCISE

### QUESTION 1.Fill in the blanks.

- A ) Iodine solution is used to test presence of starch in any food item.
- B) Potato, rice and wheat are rich in starch.
- C) Citrus fruits are main source of Vitamin C.
- D) Anaemia is caused due to deficiency of Iron.
- E) Goitre is caused due to deficiency of IODINE.

### QUESTION 2.True or false:-

- A) Vitamin D is produced in human body with the help of sunlight.  
(true)
- B) We get calcium from milk and milk products.(true)
- C) Pulses are rich source of fats .                      (false).
- D) Rice alone can give all nutrients to our body.(false)
- E) Night blindness is caused due to deficiency of Vitamin A.(True)

### QUESTION 3.Match COLUMN A With COLUMN B.

#### COLUMN A

- 1. Deficiency Of Protein
- 2. Vitamin A
- 3. Vitamin B
- 4. Vitamin C
- 5. Vitamin D

#### COLUMN B

- A) Rickets
- B) Beri-Beri
- C) Scurvy
- D) Night Blindness
- e) kwashiorkor

Ans.	Column A	Column B
	1.Deficiency Of Protein	E)Kwashiorkor
	2.Vitamin A	D)Night Blindness
	3.Vitamin B	B) Beri- Beri
	4.Vitamin C	C)Scurvy
	5.Vitamin D	A)Rickets

#### **QUESTION 4.CHOOSE THE CORRECT OPTION:-**

A)Which of the following is rich source of protein?

A) Potato      B) Mango      C) Rice      D) Moong Dal

Ans.d) Moong Dal

B)Which of the following is required for proper functioning of thyroid?

A) Vitamin      B) Calcium      C) Iodine      D) Iron

Ans.c)Iodine

C)Anaemia is caused due to deficiency of.....

A)Vitamin      B)Calcium      C)Iron      D)Iodine.

Ans.c)Iron

#### **QUESTION 5.VERY SHORT ANSWER TYPE QUESTIONS:-**

A)What is balanced food or balanced diet?

Ans.A diet which contains adequate amount of all nutrients ,roughage and water is called balanced diet or balanced food.

B)What are the main sources of carbohydrates?

Ans.potato,wheat,rice,mango,banana e.t.c.

C) Why protein is called body building foods?

Ans. Because protein is needed for growth and repair of cells in our body.

D) What is importance of roughage for human body?

Ans. Roughage helps in the digestion of food and helps to prevent constipation.

E) Name two food items which are rich in fats.

Ans. butter, vegetable oil, dry fruits egg e.t.c.

## **QUESTION 6.SHORT ANSWER TYPE QUESTIONS:-**

A) Why water is essential for life?

Ans. 1. water helps to transport digested food to the body cells.

2. water helps to get rid of waste products from the body.

B) Name the five important nutrients required by our body.

Ans. 1. carbohydrates 2. fats 3. protein 4. vitamin 5. minerals

C) From where do we get vitamin C ? Name the disease caused due to deficiency of vitamin c.

Ans .We get vitamin c from citrus fruits like orange, lime, lemon, Amla e.t.c.

Scurvy is caused due to deficiency of vitamin C.

D) Why carbohydrates and fats are called energy giving food? Explain.

Ans .Because both carbohydrates and fats provide energy to our body so these are called energy giving foods.

## **QUESTION 7.LONG ANSWER TYPE QUESTIONS.**

A) What are deficiency diseases? Briefly explain the diseases caused by deficiency protein and carbohydrates in human body.

Ans. DEFICIENCY DISEASES:- A disease which arises due to lack of nutrients in in our diet over a long period of time, is called deficiency disease.

1.The deficiency of proteins in the diet of small children causes a disease called kwashiorkor. Due to this disease growth of child becomes slow,

Swelling of face and and feet takes place,child become weak,skin of child becomes rough.

2.The deficiency of protein as well as carbohydrates in diet of very small children causes a disease called Marasmus. Due to this disease child becomes very lean and thin,ribs of child look very prominent.

B) Write down the importance of Minerals in human body.

Ans.Our body needs minerals for its proper functioning ,normal growth and good health.

1.Iron is needed to make haemoglobin present in the blood.

2.Calcium is needed for making bones and teeth.

3.Phosphorus is needed for formation of teeth and bones.

4.Iodine is essential for proper functioning of thyroid gland.

C)What are vitamins?Write down the importance of different vitamins in human body.

Ans.Vitamins are chemical substances which are needed by our body in very small quantity.

#### FUNCTIONS OF VITAMINS:-

1.Vitamin A :- It protects eyes ,skin and hair.

2.Vitamin B:- Essential for growth and proper functioning of digestive system  
Heart ,nerves and muscles.

3.Vitamin C:- Helps to fight diseases.

4.Vitamin D:- Normal growth of bones and teeth.

5. Vitamin E :- needed for good health

6.Vitamin K:- helps in clotting of blood.

## Lesson 2.Components of food

### ACTIVITY 1.To test the presence of starch in food item.

Material required: Iodine solution, watch glass, dropper, food item to be tested.

Procedure: Put a drop of iodine solution on the food item to be tested.

Observation: Colour of food item changes to dark blue or black.

Questions based on activities:

Q.1. When we put drops of iodine solution on raw potato, what happens to its colour?

Ans. Its colour changes to dark blue or black.

Q.2. What is the colour of iodine solution?

Ans. Orange to light brown.

Q.3. Name the food items which can be used to test the presence of starch other than raw potato.

Ans. Boiled rice, wheat flour, sugarcane e.t.c.

### ACTIVITY 2:- To test the presence of protein in any food item.

Material required:- Test tube, dilute sodium hydroxide solution,

Copper sulphate solution, food item to be tested.

Procedure:- 1. Take 2ml of milk in a test-tube.

2. Add a little of dilute sodium hydroxide solution.

3. Then add 2 or 3 drops of copper sulphate solution

and shake the test tube.

**Analysis:-**A violet colour appears in the solution.This shows that milk contains proteins.

### **ACTIVITY BASED QUESTIONS:-**

**Q.1.Name the chemicals used to test the presence of protein in any food item.**

**Ans.**Copper sulphate solution and sodium hydroxide solution.

**Q.2.Name two food items rich in protein.**

**Ans:-** Soyabean,pulses,egg e.t.c.

### **ACTIVITY 3.To test the presence of fats in any food item.**

Material required:-Paper ,food item to be tested.

Procedure:-1.Rub the food item on the paper.

Analysis:-Paper becomes translucent.

### **QUESTIONS BASED ON ACTIVITY:-**

**Q.1.When we rub cashew on paper,why does paper become translucent?**

**Ans.**Fats present in cashew make paper translucent.

**Q.2.Name two food items rich in fats.**

**Ans.**Butter,vegetable oil,dry fruits etc.

**ਤਿਆਰ ਕਰਤਾ :- ਸਾਇੰਸ ਟੀਮ ਬਲਾਕ ਕਮਾਗੀ ਦੇਵੀ ਜ਼ਿਲ੍ਹਾ ਹੁਸ਼ਿਆਰਪੁਰ**