

DOON PUBLIC SCHOOL, BHUJ

HOME ASSIGNMENT

Dear students

This is your home assignment which you have to complete in your Science notebook. Write both the chapters very neatly in the notebook and learn the same. Even you should learn all definitions and main extra facts which are given in your textbook. I wish you to have great time with your family during this vacation. Take care and stay safe!

Chapter 1- Sources of Food

Definitions

1. **Food** : the material or substance which we eat
2. **Ingredients** : Materials which are used to prepare food items
3. **Herbivores** :The animals which eat only plants
4. **Carnivores** : The animals which eat only animals
5. **Omnivores** : The animal which eat both plants and animals
6. **Edible parts** : The plant parts which are eaten
7. **Sprouts** : Germinated seeds
8. **Poultry** : Animals which provide meat and egg

Answer Briefly

1. **Mention the variety of food products obtained from animals.**

Ans: Following are the variety of food products obtained from animals

- a. Dairy products – Chees, Milk, Ghee
- b. Poultry products – Meat, Egg
- c. Honey

2. **Name the ingredients in the following cooked food items.**

Ans :

Food items	Ingredients
a. Vegetable rice	Vegetable, salt, oil, spices, water and rice
b. Chapati / Roti	Atta (flour) and water

c. Vegetable curry	Vegetable, salt, oil, spices, and water
d. Egg curry	Egg, oil, spices, vegetables and water

Answers in Detail

1. Why do we need food?

Ans: The materials that we eat are called food. Food contains materials which provide us energy required for:

- Various activities to stay alive
- growth and development of body
- Protection from diseases
- Repair and reproduction

2. Do all living beings need the same kind of food? Give reasons.

Ans: No, all living beings do not need the same kind of food. Some animals eat only animals called carnivores. Some animals eat only plant products. They are herbivores and some animals eat both plants and animals they are called omnivores.

3. How are animals grouped on the basis of food eaten by them?

Ans: On the basis of food eaten by them animals can be classified into three groups

- Herbivores – eat only plants and plant products. Eg. Cow, Deer
- Carnivores – eat other animals. Eg. Lion, Tiger
- Omnivores – eat both plants and animals. Eg. Human beings, Cockroach

4. What food items do we obtain from plants? Give examples.

Ans: Following are the different food items obtained from plants

- Cereals – Wheat, Rice , Maize
- Pulses – Pea, Gram, Groundnuts
- Vegetables – Carrot, Radish, Potato, Spinach
- Fruits – Mango, Banana, Oranges
- Oil – Mustard, Coconut
- Spices – Turmeric, Ginger, Cardamom
- Sugar – Sugarcane

5. Differentiate between herbivores, carnivores and omnivores.

Ans:	Herbivore	Carnivore	Omnivore
	<ul style="list-style-type: none"> • animals that eat only plants and plants products • Eg. Deer, Goat 	<ul style="list-style-type: none"> • Animals that eat only animals • Eg. Lion, Tiger 	<ul style="list-style-type: none"> • Animals that eat both plants and animals • Eg. Human beings, Crow

Textbook Exercise

(Needs to be done in textbook only)

Answer in one word

C1.1. Radish – Root

2. Carrot – Root
3. Potato – Stem
4. Onion – Stem
5. Pea – Seed
6. Gram – Seed
7. Spinach – Leaf
8. Mango – Fruit
9. Apple – Fruit
10. Sugar cane – Stem
11. Wheat – Seed
12. Rice – Seed

C2. Give two examples of each

1. Poultry products – Meat, Egg
2. Dairy product – Milk, Butter

C3. State whether the following statements are true (T) or false (F)

1. True
2. True
3. False
4. False
5. False
6. True

C4. Fill in the blanks

1. Milk, Rice, Sugar
2. Four
3. Omnivores, Plant and Animals
4. Herbivores, Plants

5. Flesh
6. Leaf
7. Carrot, Radish
8. Nectar, Flower
9. Poultry
10. Stem, Sugarcane

C5. Give one word for each of the following

1. Herbivores
2. Omnivores
3. Carnivores
4. Carrot
5. Potato
6. Cabbage
7. Sprouts

C6. MCQ: Choose the correct answers

1. B) Plants only
2. A) Carnivore
3. C) Dog
4. B) Root
5. A) Honey

Chapter 2 – Components of Food

Definition

1. **Nutrition** : The chemical substances present in food which provide energy and materials needed by the body
2. **Balance diet** : A diet containing all the nutrients in adequate quantities
3. **Deficiency disease** : Disease which occur due to the deficiency of one or more essential nutrients in the diet
4. **Diet** : The food we normally consume in a day

Answer Briefly

1. **Mention the food items rich in the following nutrients (give five examples in each case)**

- Ans: a) Carbohydrates – potato, rice, sugar, fruits bread
 b) Fats – butter, ghee, chees, coconut oil, dry fruits
 c) Proteins – pulses, cereals, egg, paneer, meat
 d) Dietary fibre – carrot, cabbage, whole grains, apple

2. Mention two foods rich in starch.

Ans: Rice and Wheat are rich in starch

3. Name the three major food groups. Give three examples of each food groups.

Ans: The three major food groups are following:-

Energy-giving food	Examples
a) Carbohydrates b) Fats	Potato, Rice Chees, Ghee
Bodybuilding food a) Proteins	Milk, Egg, Pulses,
Protective food a) Vitamins b) Minerals	Papaya, Meat, Oranges, Paneer, Egg, Spinach Apple, Liver, Milk, Seafood

5. Why should you not eat only one type of food?

Ans: We should not eat only one type of food because this will lead to deficiency of one or more other nutrients in our food. It will result in poor health and can cause deficiency diseases in longer time. That is why everyone should take proper balance diet regularly.

Answer in Details

1. Why are following nutrients important to us?

- Ans: a) Carbohydrates – It provides energy
 b) Fats – It provides energy more than carbohydrates
 c) Proteins – Required for growth, repair and for the protection from infection
 d) Vitamins – Required for the protection and proper functioning of body
 e) Minerals – Required in small quantities and help our body to remain healthy
 f) Dietary fibre – Helps in preventing constipation and solves process of digestion
 g) Water – Helps in absorption of nutrients and regulate body temperature.

2. Give the symptoms and diseases caused by the deficiency of

Ans:

Components of food	Deficiency disease	Symptoms
Vitamin A	Night blindness	loss of vision in dark (night)
Vitamin B1	Beri - beri	Weak muscles and little energy to work
Vitamin C	Scurvy	Swelling and bleeding of gums
Vitamin D	Rickets	Weak bones, and bow shaped legs
Calcium	Bones and teeth decay	Brittle bones and tooth decay
Iron	Anaemia	Pale body colour, whitish nails and body weakness
Iodine	Goitre	Enlargement of thyroid gland in the neck and mental retardation in children

3. How will you test the presence of the following nutrients?

Ans: a) Fats

- Take a small amount of butter and rub it on a piece of white paper.
- Now allow the paper to dry for some time.
- We will observe the paper in front of a source of light.
- The portion of paper with the food item becomes oily and translucent. This shows the presence of fat in food piece.

b) Starch

- Take a small quantity of food items in small dish.
- Put 2-3 drops of dilute iodine solution on food the food item.
- We will see what happens to food item.
- If the blue-black colour develops, then this indicates the presence of starch in food.

c) Proteins

- Take food items in a test tube and add some water to it
- Shake the test tube well
- Then add 2-3 drops of copper sulphate solution and then 10-12 drops of sodium hydroxide (caustic soda) solution to test tube
- Shake well and allow it to stand for few moments
- If the colour of solution changes to purple or violet then the food contains proteins.

4. List the symptoms of kwashiorkor and marasmus.

Ans: Kwashiorkor

- Swelling face
- Swollen abdomen (protruding belly)
- Discolouration of hair
- Skin problems

Marasmus

- Loss of stamina
- Body weakness

Textbook Exercise

(Needs to be done in textbook only)

Answer in one word

C1. State true or false

1. False
2. False
3. False
4. False
5. True
6. True
7. True

C2. Fill in the blanks

1. Vitamins
2. Carbohydrates
3. Iodine
4. Minerals, Vitamins
5. Scurvy
6. Dietary fibre
7. Rickets

C3. Match the following

1. Seafood – Iodine
2. Vitamin D – Rickets
3. Proteins – Pulses
4. Starch – Potato
5. Fat – Butter
6. Vitamin B12 – Anaemia

C4. MCQ: Choose the correct answers

1. D) Both (b) and (c)
2. C) Water
3. C) Carbohydrates
4. A) Iron
5. C) Vitamin A