Science



# Food and Health

# The students learn about nutrients of food and their need in the body balanced diet and its variations the need of exercise, rest and sleep to the body names of different vitamins and minerals, their functions and sources

## TEACHING AIDS

**Pictures/charts/animations** of food items containing carbohydrates – wheat, rice, glucose, potatoes, etc., proteins – milk, eggs, fish, pulses, cheese, etc., fats – butter, ghee, oil vitamins, minerals – milk, fruits, vegetables; balanced diet; children doing exercise, taking rest and sleeping; vitamins and minerals, their functions and sources.

#### LESSON PLAN

- O The teacher will start the chapter with 'Warm Up' section by asking some general questions on healthy food based on previous knowledge of students and help them to fill in the blank.
- O Now, teacher will discuss the need of food that it gives energy to perform all life activities.
- O Teacher will define the term nutrients and their role. With the help of teaching aids, teacher will discuss about five main nutrients of the food, their sources and role (as given in the chapter).
  - Carbohydrates are energy-giving foods. Glucose is the source of instant energy.
  - Proteins are body-building substances. They are obtained from plants and animals.
  - Fats are energy-giving foods that give twice the amount of energy as compared to carbohydrates. But they do not give instant energy.
  - Vitamins and minerals are protective foods. They get destroyed on heating. Vitamins A, D, E and K are fat-soluble vitamins while vitamins B and C are water-soluble vitamins.
  - Roughage is the fibre part of the food that helps in bowl movement.
- O Now, teacher will discuss the role of water that it provides a medium for dissolving food nutrients and transporting the substances within the body.
- O To check the understanding of students about the topics, teacher will ask them to solve 'Checkpoint 1'.

- O Now, with the help of teaching aids, teacher will discuss about balanced diet. Teacher will also discuss that the balanced diet for all the persons is not same. It depends on the person's age and working style.
- O With the help of teaching aids, teacher will discuss the need and benefits of exercise, rest and sleep to the body.
- O With the help of teaching aids, teacher will discuss about the types, functions and sources of vitamins and minerals (as given in chapter).
- O Now, teacher will ask students to solve 'Checkpoint 2'.
- O At last, teacher will sum up the chapter by going through the points given under the head 'At One Go' and make students revise the new terms introduced in the chapter and given under the head 'Remember These Terms'.
- O Teacher will help students to solve all the questions given under the head 'Check Your Study'.

# BOOST UP

- O Teacher should ask students to prepare their daily diet chart and write its all the nutrients.
- O Students should be encouraged to assess their diet as healthy or unhealthy based on the nutrients present in it.
- O Students should be encouraged to take healthy food for their proper growth.

## EXPECTED LEARNING OUTCOMES

The students

- O know about different types of nutrients of food and understand their need in the body.
- O know about a balanced diet and its variations.
- O understand the need and benefits of exercise, rest and sleep to the body.
- O know the names of different vitamins and minerals, their functions and sources.

# EVALUATIVE QUESTIONS

The teacher may ask the following questions for evaluating the understanding of students.

- 1. What are nutrients?
- 2. Name the five nutrients of the food.
- 3. Which type of foods are called energy-giving foods?
- **4.** What is the difference between carbohydrates and fats?
- **5.** What are protective foods?
- **6.** Name the fat-soluble vitamins.
- 7. Which nutrient does the water contain?
- **8.** What is a balanced diet?
- 9. Is the amount of diet for a child and an old person same?
- **10.** What is the good source of sodium in food?