

Health and Diseases

SPECIFIC OBJECTIVES

The students learn about

- good health and unhealthy condition of body
- causes and types of diseases and their prevention
- immunity and vaccination
- diseases due to nutrient deficiency, over-nutrition and wrong food habits

TEACHING AIDS

Pictures/charts/models/animation on different types of disease-causing bacteria, how different types of microorganisms cause disease and various diseases caused by them (as given in chapter); how communicable diseases spread (as given in chapter); prevention of communicable diseases (as given in chapter); vaccination chart; deficiency diseases and related nutrients (as given in chapter); an obese child showing difficulty in sitting, standing, walking and running, etc.; people showing some wrong food habits (as given in chapter); picture of microscope

LESSON PLAN

- The teacher will start the chapter with 'Warm Up' section by asking some questions based on the general knowledge and personal experience of the students regarding the picture given in the section. Teacher will help students to fill in the blank.
- Teacher will define the terms 'good health' and 'disease'.
- Now, teacher will define that disease-causing microorganisms are called germs and with the help of teaching aids, will explain how these germs cause diseases.
- Teacher will also show the picture/chart/animation on different types of disease-causing bacteria.
- Teacher will also explain that these germs are so tiny that we cannot see them with naked eye. We can see them with the help of a microscope only.
- With the help of teaching aids, teacher will discuss about some diseases and their respective microorganisms (as given in the chapter).
- Now, teacher will discuss about types of diseases:
 - Communicable or infectious diseases
 - Non-communicable or non-infectious diseases

- With the help of teaching aids, teacher will explain that communicable diseases spread through air, contaminated food and water, animal bites and insects. Teacher will also discuss about agents that spread communicable diseases (as given in the chapter).
- With the help of teaching aids, teacher will discuss how communicable diseases can be prevented (as given in the chapter).
- Teacher will discuss the terms 'immunity', 'vaccine', 'vaccination' and will explain that some communicable diseases such as polio, tetanus, can be prevented by vaccination.
- With the help of vaccination chart (as given in chapter), teacher will discuss some vaccines and the age at which they are given.
- Now, to check the understanding of students about the topic, they will be asked to solve 'Checkpoint 1'.
- Next teacher will discuss that non-communicable diseases are caused due to nutrient deficiency, over-nutrition, wrong food habits or poor functioning of some body part.
 - Deficiency diseases
 - Teacher will explain that deficiency diseases are caused mainly due to vitamin and mineral deficiency. With the help of teaching aids, teacher will discuss about diseases due to deficiency of vitamins A, B, C, D, E, K and minerals iron, calcium, iodine, phosphorus, sodium and potassium (as given in chapter).
 - Teacher will also discuss the various sources of these vitamins and minerals so that deficiency diseases can be prevented.
 - Diseases due to over-nutrition
 - Teacher will discuss the term 'over-nutrition' and explain that obesity is due to excess of carbohydrates and fats in the body.
 - Teacher will also discuss how obesity can be cured.
 - Diseases due to wrong food habits
 - Teacher will discuss that some diseases such as obesity are due to wrong food habits also.
 - Teacher will define hypervitaminosis and explain it is due to excess of vitamin A, D, E and K (fat-soluble vitamins).
- Now, teacher will ask students to solve 'Checkpoint 2'.
- 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'.
- Teacher will help students to solve all the questions given under the head 'Check Your Study'.

BOOST UP

- Teacher should encourage students to write some more ways to prevent themselves from communicable diseases.
- Teacher should encourage students to learn names of different vaccines given in chapter and the diseases for which they are given.
- Students should learn the names of infectious and non-infectious diseases.

EXPECTED LEARNING OUTCOMES

The students

- can differentiate between healthy and unhealthy conditions of the body.
- can differentiate between communicable and non-communicable diseases.
- know how to prevent communicable diseases.
- understand immunity and know about vaccination programmes.
- know about non-communicable diseases, their causes and remedies.

EVALUATIVE QUESTIONS

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

1. What is good health?
2. What is a disease?
3. What are germs?
4. What is a microscope?
5. Why can germs not be seen with naked eye?
6. What is a vector? Name the most common vectors.
7. Which is a natural disinfectant?
8. What is a vaccine? Which diseases is DPT vaccine given for?
9. What is scurvy? How it is caused?
10. What is obesity?