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YOU AND YOUR FOOD

19.1 Introduction

The word food brings to our mind countless images. We think of not only items that we eat and drink but also how we eat them and the places and people with whom we eat and drink. Food plays an important role in our lives and is associated with every feature of our existence. It is probably one of the most important needs of our lives. In this lesson we will study why food is essential, what are its functions and what is its relationship with nutrition and health.

19.2 Objectives

After reading this lesson, you will be able to:

- define "food";
- explain the functions of food;
- state the categories of food;
- categorise foods into various food groups;
- explain the meaning of "nutrition";
- elaborate the interrelationship of food, nutrition and health.

19.3 What is Food?

The term, 'food' refers to anything that we eat and which nourishes the body. It includes solids, semi-solids and liquids. Thus, two important features for any item to be called food are:

- (i) It should be worth eating, i.e. it should be 'edible'.
 - (ii) it must nourish the body
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Have you ever wondered why food is considered a basic necessity?

Food is essential because it contains substances which perform important functions in our body.

19.4 Function of Food

There are basically three important functions of food.

1. Social Function

Food and eating have significant social meaning. Sharing food with any other person implies social acceptance. Food is also an integral part of festivity anywhere in the world. Have you noticed that certain occasions such as birth of a child or a marriage or birthdays, are celebrated by having feasts and serving delicacies? Food also has a specific significance and meaning in the religious context.

2. Psychological function

We all have emotional needs, such as need for security, love and attention. Food is one way through which these needs are satisfied. For example, when Mother prepares your favourite food or dish how do you feel? That she loves you and cares for you. Food is often served as a reward also. Do you recall getting /giving a chocolate because your child has been good? Similarly, certain foods become associated with sickness, such as khichri and bland foods. Sickness is unpleasant hence even the food items served in this state may therefore be associated with unpleasant feelings.

3. Physiological Functions

There are four physiological functions performed by food. These are energy giving, body building, providing protection against diseases and regulating body processes. Let us see them in detail.

(i) Food provides energy

Everybody needs energy to do work. Energy is required for walking, eating, working in the house or outside. You get this energy from the food that you eat. You need energy even when you are resting. Can you tell why? Different organs inside your body are always working, for example, heart is pumping blood, stomach is digesting food, lungs are breathing in air, etc. All these organs need energy for their respective functions and food provides that energy.

(ii) Food helps in body building

Have you ever wondered how a small child grows into an adult? Our body is already made up of thousands of small cells. New cells are added to these to help the body to grow. Food is needed for the formation of new cells. Cells also die or are damaged due to injury. New cells need to be formed and this repair work is done with the help of food.

(iii) Food provides protection from diseases

The food that we eat gives us strength to fight against disease germs.

(iv) Food regulates body processes

Regulatory functions refer to the role of food in controlling body processes, for example, our body temperature is maintained at 98.4 degree F or 37 degree C. Similarly the heart beats are also maintained at 72 beats/minute. Excretion of waste products from the body is also regular. All these are regulated by the food that you eat.

Intext Questions 19.1

1. Define food.
2. List the three functions of food.
3. List at least ten items of food that you eat.

19.5 Food Groups

We all eat a variety of food items, e.g. roti, rice, dal, vegetables, fruits and papad, etc. We are sure if you made a list of all that you can eat it will run into pages. If you tried to list the names of dishes you prepare out of these items, the list would be even longer. If you examine all these items carefully, you will find that these can be grouped together.

We get our food from plants and animals. Plants give us cereals, pulses, vegetables, fruits, etc. Examples of animal food products are milk, meat, eggs, etc. Some of these foods give us energy to do work, some help in the growth and repair of the tissues in the body, while some others develop in us an ability to fight disease germs. Thus on the basis of the functions they serve in the body, foods can be categorized into three main groups.

- the energy giving foods
- the body building foods
- the protective foods.

Now let us see what are energy giving, body building and protective foods.

Food Group	Foods	Needed for/ Function
1. Energy giving group	(a) cereals; roots and tubers like potatoes, sweet potatoes (b) Sugars and fats and oils like ghee, butter and mustard oil etc.	Providing energy
2. Body building Group	(a) Meat, fish, eggs; (b) Pulses; (c) Nuts like groundnuts and seeds like til seeds.	Repair of tissues
3. Protective Group	(a) Green leafy vegetables like spinach, mint, methi etc.	Fighting disease germs.

- (b) Yellow and orange coloured fruits and vegetables like ripe mango, papayas, carrots, etc.
- (c) Vitamin rich fruits and vegetables like oranges, lemons, guavas, amlas etc.
- (d) Other fruits and vegetables

In order to stay in good health, we must eat foods from all the food groups.

Intext Questions 19.2

1. List four functions of food in the body.
2. Name three food groups.
3. In column 1 are the names of some food items and in column 2 are the main food groups. Match each food item with the corresponding food group.

Column 1	Column 2
1. Spinach	(a) Energy giving group
2. Bengal gram	(b) Body building group
3. Curd	(c) Protective group
4. Apple	
5. Potatoes	
6. Guavas	
7. Wheat	
8. Soybean	
9. Sugar	
10. Lemon	
11. Butter	
12. Papaya	

19.6 Interrelationship of Food, Nutrition and Health

Earlier in this lesson we have learnt about the meaning and functions of food. Now let us understand the meaning of the terms *nutrition* and *health*.

Nutrition is a scientific discipline with food as a major focus of interest. The simplest definition of nutrition is *The study of what happens to food once it enters the mouth and thereafter*. A more formal definition of nutrition is study of processes by which the living organism receives and utilises the materials necessary for the maintenance of its functions and for growth and renewal of its components. All foods contain some essential substance which perform important functions in our body. These essential substances contributed by our food are called *nutrients*.

These nutrients help us to maintain our body functions, i.e. to grow and to protect our organs. There are six major nutrients which we will be studying in detail in the next lesson. Now let us see what is health.

World Health Organization (WHO) defines *health as the complete physical, mental and social well-being and not merely the absence of disease or infirmity.*

The health of a person depends on the type and quantity of food stuffs consumed. Good nutrition is essential for a person to grow and develop normally and to remain healthy throughout life. When a person does not eat proper food there are chances of the body not developing normally. There are chances that some organ of the body may start malfunctioning or there may be some disease. Poor nutrition may also influence the mental and social well-being.

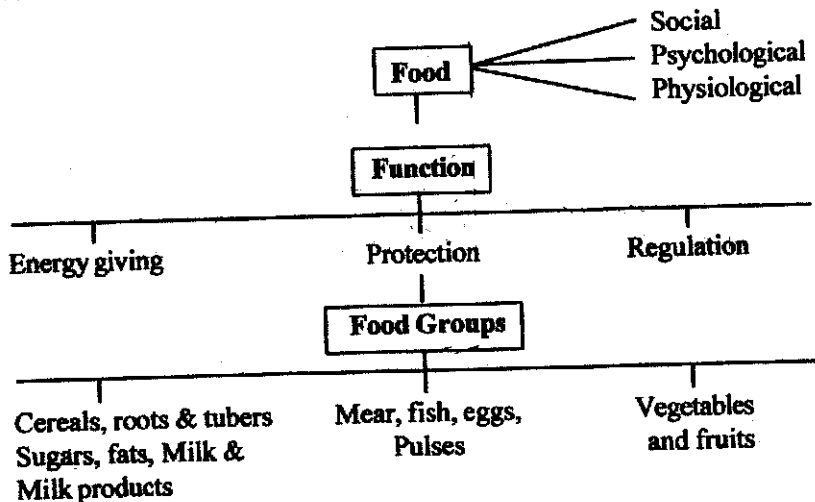
Good nutrition is a prerequisite for good health.

Intext Questions 19.3

Fill in the blanks:

1. The process by which food is taken in and utilized by the body is called
2. Good nutrition is necessary for good
3. Foods contain some essential substances known as
4. Nutrients help us to maintain our
5. There aremajor nutrients.

19.7 What You Have Learnt



Food → Nutrients → Nutrition → HEALTH

19.8 Terminal Exercise

1. What is food ? Give ten examples of foods you eat for lunch.
2. List functions of foods.
3. What are food groups ? Categories the ten foods you mentioned earlier into the various food groups.
4. What is nutrition ?
5. How are nutrition and health interrelated ?

19.9 Answers to Intext Questions

19.1 1. Refer text

2. (i) Social function
- (ii) Psychological function
- (iii) Physiological function

3.

19.2

1. (i) Providing energy
- (ii) Body building
- (iii) Protects from diseases
- (iv) Regulatory function
2. (i) Energy giving group
- (ii) Body building group
- (iii) Protection group

3. 1. c 2. b 3. c 4. c 5. a
 6. c 7. a 8. b 9. a 10. c
 11. a 12. c

- 19.3 (i) Nutrition
 (ii) Health
 (iii) Nutrients
 (iv) Health
 (v) 6