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BALANCED DIET

Food is important to live and grow. But it should be balanced. Unbalanced food will not help for over all development. It may also be the reason for various diseases. Therefore, its important to learn about the food essential for development and growth and their perfect ratio.



OBJECTIVES

After studying this lesson, you will be able to:

- Explain various functions of food;
- Know functions or different nutrients;
- explain nutritive components of various foods and
- describe the process to choose different food rich in a nutrient.

11.1 FOOD IN OUR LIFE

It is dinner time. Let us have a look at what these three families are eating. Ramu's family is having Rajmah, Bhindi, Subji, Boiled

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rice and Curd. At Velu's house, they are having Rasam, Lemon, rice, Curd, Pachadi (veg).

Hmm.....delicious food. What is being cooked in your house today?

We all eat food. We may eat food of many varieties-roti, rice or dosa, meat or vegetables, but food is important for all of us.

Let us try and understand the reasons why all human beings eat food. Can you list the reasons?

11.2 FUNCTIONS OF FOOD

The food that we eat performs three important functions, These are :

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

(I) PHYSIOLOGICAL FUNCTION

All living beings whether man or animal, require food for their growth and development. Without food, there would be no life. Thus, the primary function of food is physiological. This is fulfilled in the following ways.

Energy : When we work we need energy. Even when we rest, we need some amount of energy to carry out the basic body functions. Food provides energy to the body.



Body building and maintenance : A young child needs food to grow. Even when we are healthy, our body tissues need to be built and old tissues need replacement. Food provides nutrients for the growth and regulation of the body.

Protection : Food provides us the resistance to fight against the diseases.

(II) SOCIAL FUNCTION

Food has always been a means of extending hospitality, good will and friendship amongst people in all cultures. Exotic dishes are prepared and served to guests on special occasions. During festivals, it is seen in communities that each household prepares similar special foods which are shared. Thus, food brings people together and binds them in a special way, thus giving food a very important social value.

(III) PSYCHOLOGICAL FUNCTION

Food also performs an important psychological function. It is seen that we use food as a means of expressing our emotions. For example, Gandhiji's hunger strikes effectively communicated his disagreement with the British policies. They also touched the hearts of millions of Indians and motivated them to actively join the freedom struggle.

Food also gives us a sense of well being the security. Eating habits of people have been known to vary in different psychological conditions. For example, when nervous or under

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stress, some people keep eating continuously while others turn away from food.

Thus, food has many more functions other than supplying nutrients for health.

**INTEXT QUESTIONS 11.1**

1. List the functions of food,
 - (i)
 - (ii)
 - (iii)
2. Fill in the blanks with suitable words.
 - i. Sharing food with friends is a function of food.
 - ii. Many people need to eat a sweet dish after their meals. It is a function of food.

11.3 NUTRITIVE VALUE OF FOODS

Besides being tasty, food must also be nutritious. In different foods, certain substances known as "nutrients" are found in varying degrees. There are five main nutrients found in all food stuffs. These are - Carbohydrates, Proteins, fats, mineral and vitamins. In order to make food nutritious, there must be a balanced consumption of all these. Such a diet is known as a "Balanced Diet" and is essential for healthy living.

Do you remember Ramu. Velu and Rahim? Let us go to their houses today and see what is cooking.

Ramu's mother is a very good cook. Let us see what she has cooked today. Dal, Gobi Aloo Sabzi. Parantha, Curd and Kheer too! Seems to be a special occasion ! What could it be?

Velu's mother has made Rasam, Boiled rice, Sambhar, Kuttu, Sweet Curd and Mysorepak. All are Velu's favourite dishes he is coming back from the hostel today.

Everyone today seems to be cooking delicious mouth watering food. But food must not only be tasty, it must also be nutritious.

Nutrients in Foods

Do you remember the five nutrient components of food which make the food nutritious? Yes, they are :

- (a) Carbohydrates
- (b) Proteins
- (c) Fats
- (d) Minerals and
- (e) Vitamins

All foods have the above nutrients but in varying amounts. Certain foods are very rich in one or two of the above. Hence, they form rich sources of these nutrients in our diet. For example : Milk and meat are rich sources of protein. Each nutrient performs an important physiological function. Hence, our diet must be a balanced mix of all these nutrients. Following functions are performed by each nutrient :



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A. CARBOHYDRATES :

These make the bulk of our diet & are our chief source of energy.

Main sources are :

- (a) Cereal grains - wheat, rice, bajra.
- (b) Tubers - potato, sweet potato.
- (c) Sugar, Jaggery, etc.

B. PROTEINS :

These serve as the major source of body building material. Proteins are found both in animals and plants. Main vegetarian sources of protein are-Soyabean, pulsee, dals, cereals. milk, paneer, gound-nuts, Non-vegetarian sources of protein are - meat, fish, eggs.

C. FATS :

These are energy rich foods. Nuts such as groundnut, butter and ghee form milk, vanspati, vegetable oils are all rich sources of fat.

D. VITAMINS :

They are required for the maintenance of good health. Vegetables and fruits are good sources of vitamins.

E. MINERALS :

They are required for protection. Rich sources are vegetables and fruits.

We need to drink water because it is of great importance to the body. It is used to transport all other nutrients to various parts of the body. 80% of the human body is actually water.

The following diagram summarizes the functions of various nutrients.

**Notes****INTEXT QUESTIONS 11.2**

1. Fill in the functions of nutrients.

(Protective, Energy source, Body building)

- a) Minerals
- b) Protein
- c) Fats
- d) Carbohydrates
- e) Vitamins

2. Match the following foods with their nutrients :

- a) Groundnut oil * Carbohydrate
- b) Cows Milk * Fat
- c) Moong Dal * Protein
- d) Palak * Minerals & Vitamins
- e) Atta * Protein

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**WHAT HAVE YOU LEARNT**

- various functions of food;
- Their nutritious value;
- Their importance in life;
- Functions or different nutrients;
- explain nutritive components of various foods and
- describe the process to choose different food rich in a nutrient.

**TERMINAL QUESTIONS**

1. What are the important functions of food?
2. List the five nutrient components of food.