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## UNIT

# 2

# HEALTH AND HYGIENE

## LESSON-5

## FOOD AND DIGESTION

### BEFORE WE PROCEED

- ❖ Why do we eat food ?
- ❖ Do all foods provide energy for us ?
- ❖ What happens to the food that goes into the mouth ?
- ❖ What are nutrients ?
- ❖ What is digestion ?



### SAY ALOUD

provides, carbohydrates, proteins, fats, vitamins, minerals

### Let us find out more about food and digestion

All living things need food. Food provides us energy to perform all the activities. It helps us to grow and stay fit and healthy.

The food we eat contains substances that keep our body healthy. These substances are called nutrients.

#### Nutrients

The nutrients that our body needs are :

carbohydrates, proteins, fats, vitamins and minerals. Most foods contain the nutrients in different amounts.

#### 1. Carbohydrates

Foods such as rice, wheat, potatoes, bananas which give us energy, contain carbohydrates. Carbohydrates provide us energy to do our work.



Rice

Potatoes



Bananas



Sugar



Honey



Bread



Wheat

Sugar and starch are also common carbohydrates.

## 2. Fats

Fats are also energy-giving foods. They are the richest source of energy in our diet. They give us more heat and energy than carbohydrates. They also help to keep us warm. Butter, ghee, cooking oil, nuts etc are rich in fat.

Excess of fats is harmful. It makes us fat and leads to many diseases.



Pea nuts



Almonds



Butter



Ghee



Cashew nuts



Oil



Fish



Meat



Milk



Nuts



Pulses



Beans

## 3. Proteins

Proteins are body-building foods. These foods make us grow tall and strong. Milk, milk-products, pulses, peas, beans, nuts, soybeans, meat, fish, egg etc are rich sources of proteins.

Babies and young children need more proteins than adults.



Vegetables



Eggs



Chicken



Fruits

## 4. Vitamins

Vitamins help us to keep healthy. They help us in many ways. Food rich in vitamins gives us protection from eye diseases, skin diseases, body ache etc. Vitamins are known as protective foods. We get vitamins by eating leafy vegetables, fruits, cereals, chicken, eggs and by playing in the evening sun.

## Do you know?

Milk is considered superior to other foods. It is the best and wholesome food.



### 5. Minerals

Minerals are substances that help our body function normally. They are necessary for growth and development of bones, teeth and new blood cells. We get minerals from fresh vegetables, milk, cereals etc.



Vegetables



Milk



Cereals

### 6. Roughage

Roughages are food items from plants that contain fibres. Most of the fruits, vegetables and seeds have fibres.

It is an important part of our diet because it helps for easy digestion and to remove waste material out of the body.



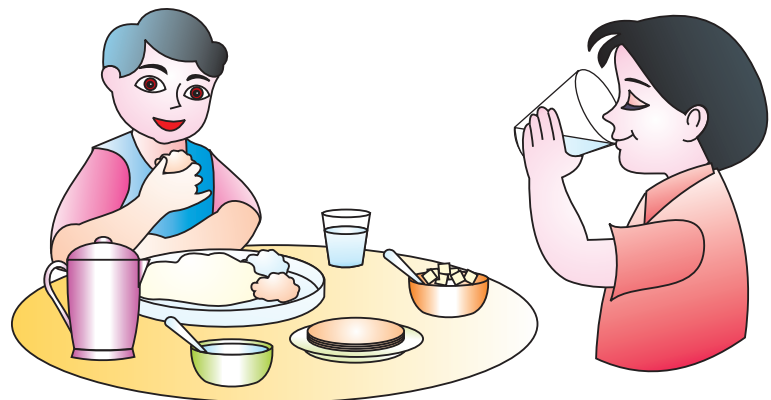
Vegetables and Fruits



Seeds

### 7. Water

Water makes up 60-70% of the human body. It also forms an important part of our diet. It is necessary for all the functions of our body and proper digestion. We should drink 8-10 glasses of water every day.





Balanced diet

### Balanced diet

The food we eat daily is called our diet. A diet that contains the proper amount of all the nutrients, roughage and water required for good health is called balanced diet.

Our daily meal should consist of rice, chapatis, dal, vegetables, curd, salad, milk and water. It will give all the nutrients required for our body.

### Remember

Food is not meant to satisfy your taste buds alone. A meal should have a balanced amount of all important nutrients - fats, carbohydrates, minerals, proteins and vitamins.

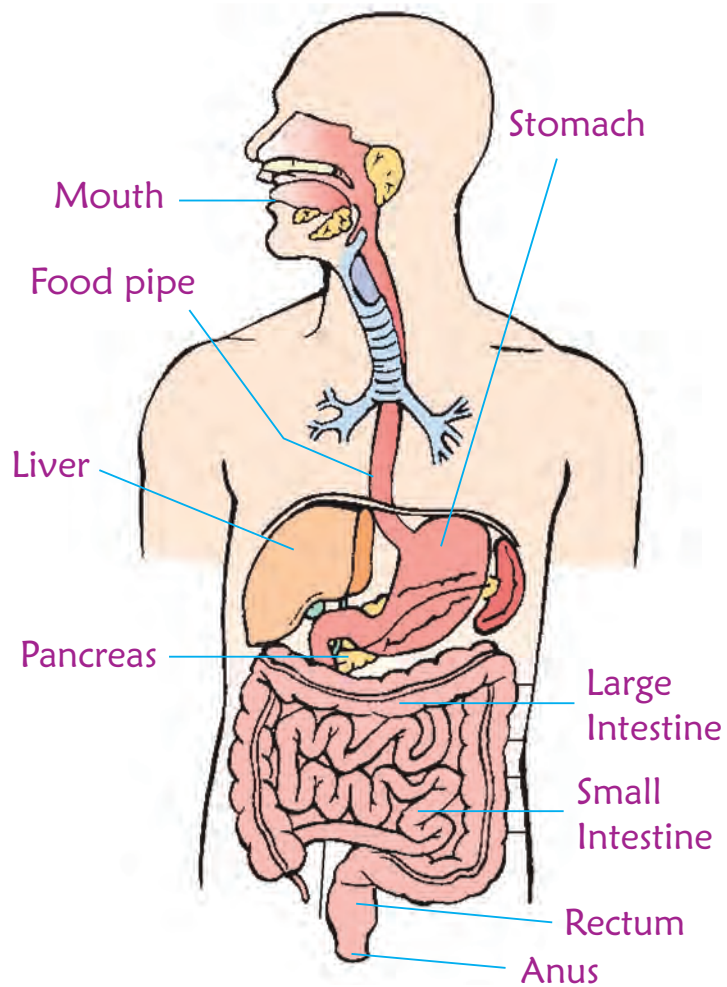
### Digestion of food

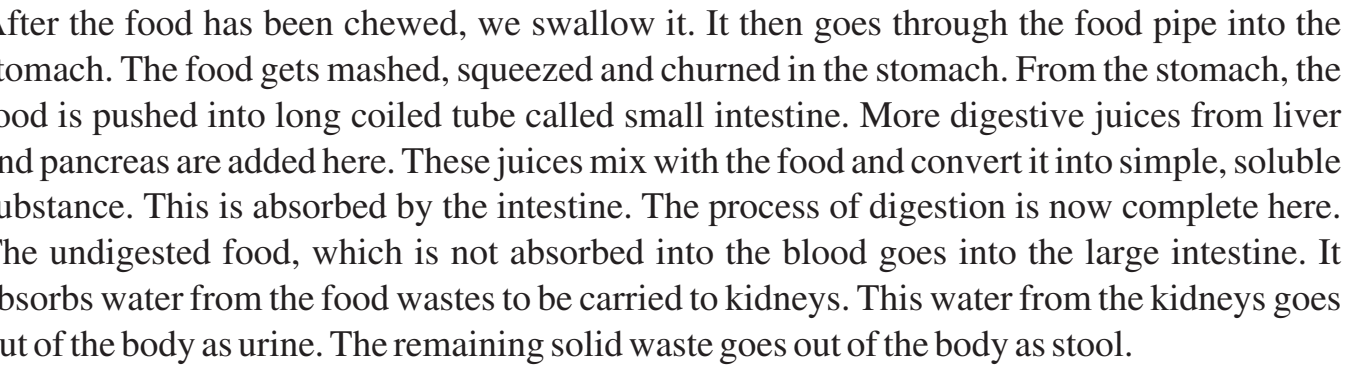
The food we eat cannot be directly taken by our body to give energy. It must be broken down into a simpler form before it can be used.

The pieces of food are too big to pass into the tiny cells of our body. The food must therefore be broken down into smaller pieces.

The process of breaking down food into simpler form is called digestion.

As soon as the food enters the mouth, the teeth chew the food. As we chew the food, it mixes with saliva which makes the food soft and moist.



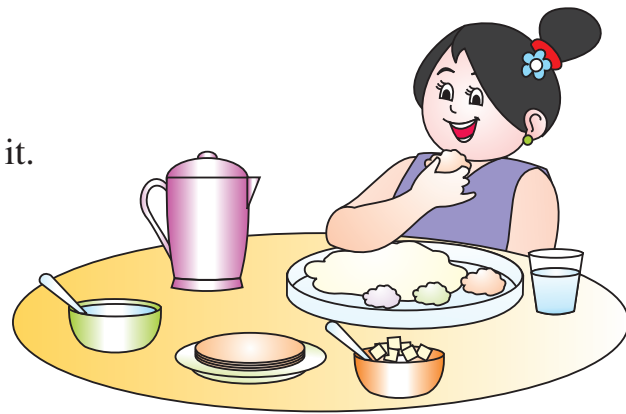


After the food has been chewed, we swallow it. It then goes through the food pipe into the stomach. The food gets mashed, squeezed and churned in the stomach. From the stomach, the food is pushed into long coiled tube called small intestine. More digestive juices from liver and pancreas are added here. These juices mix with the food and convert it into simple, soluble substance. This is absorbed by the intestine. The process of digestion is now complete here. The undigested food, which is not absorbed into the blood goes into the large intestine. It absorbs water from the food wastes to be carried to kidneys. This water from the kidneys goes out of the body as urine. The remaining solid waste goes out of the body as stool.

### Good eating habits

Here are some good eating habits :

- ◆ Wash your hands before and after eating.
- ◆ Eat your food at a fixed time.
- ◆ Chew your food properly before swallowing it.
- ◆ Do not talk while eating.
- ◆ Rest a while after eating.
- ◆ Eat lots of vegetables and fruits.
- ◆ Rinse your mouth thoroughly after eating.
- ◆ Eat enough but not less or too much.



### Think And Write

❁ How do you know that you are hungry ?

❁ Do you know why our mouth waters when we think of tasty food ?



### Key Ideas

- ★ *The process by which insoluble food is converted into soluble form is called digestion.*
- ★ *Food contains nutrients which are grouped as carbohydrates, proteins, fats, vitamins, minerals etc.*
- ★ *Carbohydrates and fats are energy-giving foods.*
- ★ *Proteins help in the growth and repair of the body.*
- ★ *Vitamins and minerals help to protect the body.*
- ★ *Water and roughage aid in digestion.*
- ★ *A balanced diet contains all the nutrients in the right proportion.*



# LET'S WRITE TOGETHER



## A. Answer these questions :

1. What are the nutrients needed by the body ?
2. What is roughage ? Name two rich sources of roughage.
3. What nutrients does our food contain ?
4. What is balanced diet ?
5. Write any four good eating habits.

## B. Complete the sentences :

1. \_\_\_\_\_ provide us energy to perform all activities.
2. \_\_\_\_\_ are known as protective foods.
3. \_\_\_\_\_ helps to remove waste material out of the body.
4. \_\_\_\_\_ and \_\_\_\_\_ give energy to our body.
5. \_\_\_\_\_ build our muscles, bones and glands.

## C. Write one use for each of the following :

1. Carbohydrates : \_\_\_\_\_
2. Proteins : \_\_\_\_\_
3. Fats : \_\_\_\_\_
4. Vitamins : \_\_\_\_\_
5. Minerals : \_\_\_\_\_
6. Roughage : \_\_\_\_\_

## D. Match the following :

- |                          |         |              |
|--------------------------|---------|--------------|
| 1. Carbohydrates         | [     ] | (i) Fibres   |
| 2. Fats                  | [     ] | (ii) Fish    |
| 3. Proteins              | [     ] | (iii) Potato |
| 4. Vitamins and minerals | [     ] | (iv) Butter  |
| 5. Roughage              | [     ] | (v) Spinach  |

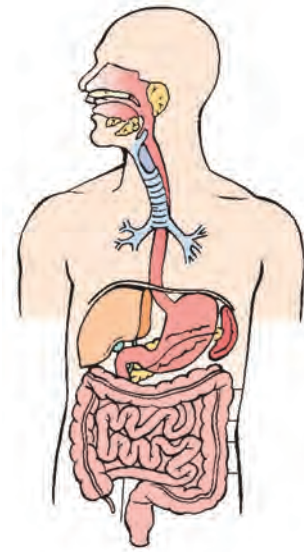


## LET US DO

Put these parts of the digestive system in the correct order :

*stomach, anus, food pipe, large intestine, mouth, small intestine*

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_



## Fun Activity



1. Take some balanced diet to school. Arrange it on the table neatly. Show it to your teacher before you eat.
2. Prepare a model of digestive system and place it in your class.

## GLOSSARY

Substance - a type of solid, liquid or gas that has particular qualities

Nutrient - a substance that is needed to keep a living thing alive and to help it to grow

Gland - an organ in a person's or an animal's body that produces a substance for the body to use

Saliva - the liquid that is produced in your mouth that helps you to swallow food

Swallow - to make food, drink etc go down your throat into your stomach

Intestine - a long tube in the body between the stomach and the anus