

Food And Digestion

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We all eat food to live. All food stuffs contain substances to our body. These are known as nutrients. These nutrients are carbohydrates, fats, proteins, minerals and vitamins and roughage and water.

Nutrients keep us alive and healthy. Roughage is the fibre in our food. Roughage cannot be digested by us, but it is necessary to throw out the wastes from the body.



Eating fruits

DIFFERENT KINDS OF FOODS

Energy-Giving Foods



Potato



Rice



Butter



Ghee



Honey

Sugar and starch are different forms of carbohydrates. They give us heat and energy to do work. Carbohydrates are obtained from wheat, rice, potato, sugarcane and honey. Fats give us more energy than starch and sugar. Butter, ghee and oils are the examples of fats. All the food mentioned above are known as energy-giving foods, because they provide us with energy to carry out various activities in life.

Body-Building Foods

Proteins provide material for building and repairing the wear and tear of bones, muscles and organs of the body. Therefore, the foods containing proteins are called body-building foods. Proteins foods are obtained from animal foods, such as milk, cheese, eggs, meat and fish. Vegetable foods like pulses, beans and nuts also contain proteins. These foods help us to grow.



Milk



Cheese



Fish



Egg

Protective Foods

Minerals like calcium and iron keep us fit and healthy. Vitamins also keep us healthy. They help our body to fight against diseases. Therefore, the foods containing minerals and vitamins are called protective foods. These are usually found in fresh fruits, vegetables, milk, liver and eggs.



Fruits



Milk

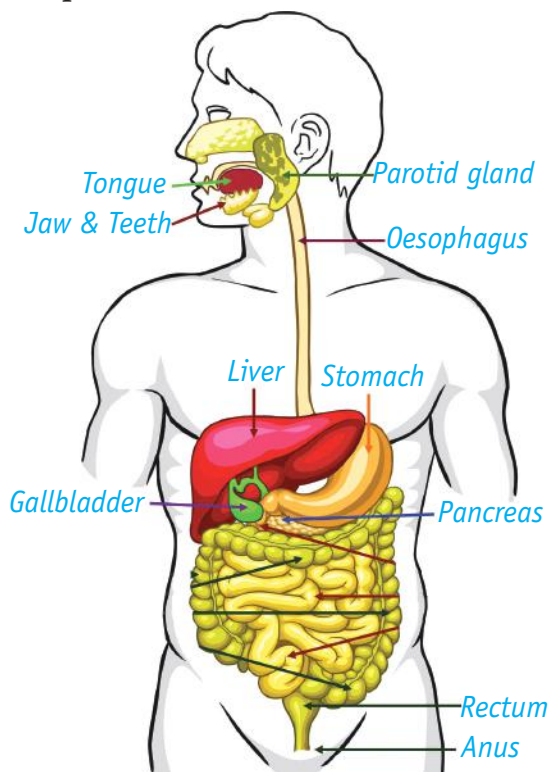
BALANCED DIET

A balanced diet is a set of food items containing all the nutrients required by the body. Each item of food in a balanced diet contains one or more of the nutrient. Eating a balanced diet is necessary for healthy growth of body and disease prevention. A balanced diet must also contain roughage and water.



DIGESTION

Digestion is the process by which food is converted into a substance suitable for absorption and assimilation into the body.



Digestion begins, when we eat something, we place it in our mouth. In the mouth, our teeth crush the food into fine pieces. As we crush the food it becomes soft. This is because the saliva in the mouth mixes with the food. The saliva contains a digestive juice which changes the starch of the food into a simple form of sugar.

The chewed food mixed with the saliva is then rolled into a ball by the tongue and swallowed. The swallowed food first goes into the food pipe (gullet). From the food pipe it passes down into the stomach, where it is stored for sometime. Here more digestive juices are added in it. The juices in the stomach break down the proteins in the food. Now, the food is pushed into the small intestine.

Digestion converts the food into a liquid form. The liquid food passes into the blood through the walls of small intestine. The blood vessels carry the absorbed food to all the parts of the body.

The undigested food goes into the large intestine. Large intestine is also called the rectum. The blood vessels in the walls of the rectum absorb the extra water and carry it to the kidneys. The semi-solid waste is then passed out of the anus as when we go to the toilet.

SOME HINTS FOR PROPER DIGESTION

- Wash your hands before eating.
- Do not rush. Eat slowly.
- Do not overeat.
- Chew food well before swallowing.
- Wash your mouth after eating.

Preparing Food

We eat raw as well as cooked food. Fruits and some vegetables are eaten raw. The fruits and raw vegetables must be washed well before eating. It will free them from dust and germs. Some foods are cooked before eating. Cooking is the preparation of food by application of heat. Cooking makes the food soft, tasty and digestible. It also makes the food safer by destroying harmful germs.



Cutting vegetables

There are many methods of cooking the food. These are boiling, roasting, baking, steaming and frying.

Food like pulses, rice, potatoes are cooked by boiling. While boiling take just enough water so that water containing nutrients need not be thrown away. Chapati is cooked by roasting. Roasting improves the taste of the food. Brinjal and meat are also roasted. Bread is cooked by baking.



Boiling



Roasting



Baking



Steaming



Frying

Dried eggs, vegetables and puries are cooked by frying in hot oil or ghee. Frying improve the taste. Fried food is generally difficult to digest. Idli and rice are cooked by steaming, it makes the food light and easy to digest.

THINGS TO REMEMBER WHILE COOKING

While cooking food, some food value is lost due to faulty cooking.

- Over-cooking should be avoid. Most vitamins are lost due to excessive heat.
- Do not throw away the water in which gram of vegetables are soaked, as it contains vitamins.
- While boiling, proper amount of water should be added so that the water containing nutrients like minerals and vitamins should be used properly.
- Do not over roast or fry. Too much of roasting and frying destroys the nutrients.



Making food

FOOD PRESENTATION

Food stuffs can be preserved by keeping them in a "hot pack" or "Igloo box". If food is kept in a moist humid condition, fungal growth occurs spoiling the taste of food. You would have come across people becoming sick after eating milk sweets or other food stuff from the street vendor. This is due to food poisoning. Food poisoning takes place because of eating spoilt food.



Shop

Food can be preserved in air-tight containers in dry places. Certain food stuffs can be preserved only at a low temperature in a refrigerator.

We take different steps to preserve the food items.

1. Storing at low temperature

If food is stored at a low temperature, it can be kept for a longer period and its natural qualities do not change.

The refrigerator is based on this principle. It is a modern device for the preservation of food. we can keep our cooked and uncooked foods such as vegetables, milk, eggs and fruits in the refrigerator without any spoilage.

2. By storing in air-tight container

An air-tight container prevents the food from being spoilt through moisture. Air tight containers are used in canning. Jam, fish and butter are preserved by this method.

3. By boiling

Milk is commonly boiled in homes to preserve it. By boiling, the temperature of the milk is raised very high. Thus, bacteria are destroyed.

4. By keeping in sugar-syrup

The growth of bacteria is prevented in the sugar-syrup. Various jams are prepared by taking water in vessel, adding sugar to it and then boiling it for some time to prepare sugar-syrup. Then add pieces of mangoes or amlas or apples after washing them. Boil them again for some time. They are then collect and stored in glass or plastic jars as morabbas or jams.

5. By drying

Some food stuffs are preserved in dried form. Raw mangoes, cauliflowers, cabbage, brinjals, peas, chillies or potatoes can be preserved by drying.



Mango pickle

6. By adding salt (salting)

Some food stuffs are preserved by salting them. Salt absorbs water and forms thick solution. Bacteria cannot live in this solution. Pickles of mangoes, cauliflowers, lemons, chillies are also prepared by this method.



Know the Keywords :

Swallowed : Cause pass down one's throat.

Anus : Through which faces are discharged.

Fungal : Substance that destroys fungus.



Point to Remember

- All food stuffs contain substances are necessary to our body.
- Sugar and starch are different forms of carbohydrates.
- The foods containing minerals and vitamins are called protective foods.
- A balance diet is a set of food items containing into a substance suitable for required by the body.
- Digestion is the process by which food is converted into a substance suitable for absorption and assimilation into the body.

EXERCISE TIME

A. Multiple choice questions (MCQs).

Tick (✓) the correct option :

- _____ are obtained from wheat, rice, potato and sugarcane.
a. vitamins b. minerals c. carbohydrates
- _____ is the fibre in our food.
a. fats b. roughage c. proteins
- We should wash our hands before _____.
a. eating b. drinking c. chewing
- Bread is cooked by _____.
a. baking b. steaming c. frying
- Too much of cooking destroys the _____.
a. minerals b. vitamins c. nutrients

B. Fill in the blanks :

1. Nutrients keep us alive and _____.
2. _____ are obtained from wheat, rice, potato, sugarcane and honey.
3. _____ like calcium and iron keep us fit and healthy.
4. The _____ in the stomach break down the proteins in the food.
5. We eat _____ as well as _____ food.

C. Write 'T' for true and 'F' for false statements :

1. We all eat food to live.
2. Butter, ghee and oils are examples of proteins.
3. Vitamins also keep us healthy.
4. Each item of food in a balanced diet contains one or more of the nutrients.
5. The liquid food passes into the blood through the walls of large intestine.

D. Answer the following questions :

1. Name the three different kinds of foods.
2. What are nutrients ? Name three important nutrients present in the food stuffs.
3. What is the function of carbohydrates and fats present in foods ?
4. What role do the proteins play in our body ?
5. Name some foods rich in vitamins and minerals.



Creative Work

- Make a list of foods that you like to eat, under each of these headings :

| Morning | Noon | Night |
|---------|------|-------|
| | | |

- Draw one food item from each food group on given space :