



Food is essential for living beings. Food gives us energy for different activities like walking, running, reading, etc. It acts as fuel for the body. It makes our immune system strong. It also helps our body to build and repair worn out cells and tissues.

CARBOHYDRATES

Carbohydrates are sugars and starches. They provide instant energy to the body. Food like bread, potatoes, rice and cereal contain starch. Sugar is contained in honey, sweets, chocolates, etc. These are called energy-giving foods. They are required in large amounts by people indulging in a lot of physical labour.

Carbohydrates can be stored by the body, if eaten in excess. It is stored in the form of fat.



Bread



Potatoes



Rice



Cereals

FATS

Fats are also energy-giving foods but they provide more energy than carbohydrates. They give us heat and energy. Butter, ghee, oil, etc, are rich in fats. They also help our body to stay warm. Fats are stored in our body cells and fatty tissues. Too much of fats in diet may cause obesity.



Butter



Ghee



Oil

PROTEINS

Proteins help our body to grow. Protein is required for the repair of worn-out cells and to build body tissues. It is also essential for the proper growth of bones and muscles. Milk, peanuts, eggs, meat, pulses, etc, are rich in proteins. These are also called body-building foods. They are required in large amounts by growing children and patients recovering from an illness.



Milk



Eggs



Meat



Pulses



Peanuts

VITAMINS

Vitamins keep our body fit, improve appetite and increase the ability of the body to fight diseases. There are different vitamins that are needed for different purposes in our body. Green leafy vegetables and fruits are rich source of vitamins.



Fruits



Vegetables

MINERALS

Minerals are needed for growth and development of the body. They help in the formation of teeth, bones and blood. Iron, calcium, iodine and phosphorus are a few important minerals required by the body. Minerals can be obtained from milk, fresh fruits and vegetables, eggs, etc.



Milk



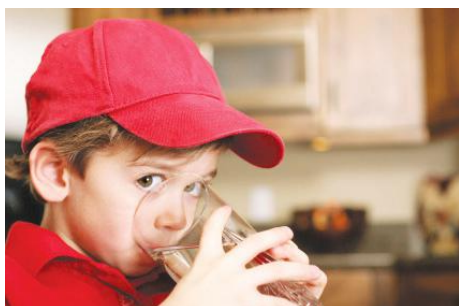
Eggs



Fruits



Vegetables



WATER

Water plays an important role in the proper digestion of our body. Our body releases water in the form of sweat and urine. Water also helps to regulate our body temperature. We should drink atleast 8-10 glasses of water everyday.

ROUGHAGE

Roughage is the undigested portion of the plant food that includes mostly fibres. It is mostly present in whole grains, as well as in various fruits and vegetables. It helps in the easy passage of food through our digestive system. It adds bulk to the food.

BALANCED DIET

To remain healthy, our diet must include adequate amounts of different nutrients. A diet that contains adequate amounts of different nutrients, required for the healthy functioning of the body is called a balanced diet.



Balanced diet

EXERCISE



Children exercising

Exercise is as important as balanced diet to maintain a healthy body. Exercising daily helps in proper digestion of our food, specially fats. It makes us feel energetic and active. It helps us tone our muscles, stay lean and give our body a graceful appearance. It helps in blood circulation and enables our heart and lungs to work efficiently.

Playing outdoor games and doing yoga are good ways of keeping the body fit.

REST

Rest is very important for the body. A good sleep provides rest to the body systems. It is important for the brain and nervous system to get rest. It helps in keeping our mind and body healthy. Atleast eight hours of sleep is essential for everyone.



Boy sleeping

DISEASES

A disease is a state in which our entire body or a part of it is in an unhealthy condition and is not able to function properly.

Diseases can occur due to various reasons. A common cause of disease is the lack of one or more components of food. It can also occur due to germs or microbes. Diseases are of two types – non-communicable diseases and communicable diseases.

Non-communicable Diseases

Non-communicable diseases are those that do not spread from infected persons to healthy persons. These diseases are spread by germs. Some of them are caused due to lack of certain nutrients in your body. These are called deficiency diseases.

Disease and Symptoms	Deficiency	Sources
1. Night blindness (In this, you cannot see well in dim light or at night)	Vitamin A	Milk, fish, eggs, carrot, tomato, papaya, green vegetables
2. Beriberi (Weakness)	Vitamin B	Milk, eggs, meat, cereals, nuts, green vegetables
3. Scurvy (bleeding of gums, swelling of joints)	Vitamin C	Citrus fruits, tomato, amla, green leafy vegetables
4. Rickets (bones become weak and soft)	Vitamin D	Milk, eggs, fish, vegetable oils, exposure to sunlight
5. Goitre (swelling of the throid gland)	Iodine	Iodised salt, seaweed
6. Anaemia (paleness and tiredness)	Iron	Meat, apples, bananas, green leafy vegetables

The best way to prevent communicable diseases is to ensure proper hygiene of your body, food, water and surroundings.

Communicable Diseases

The diseases which can be passed from a sick person to a healthy person are called communicable diseases. These diseases are caused by microbes or germs such as bacteria, protozoa, viruses and fungi.

Different microbes cause different diseases and they spread in different ways. Here is a chart for you to learn easily, how the diseases are caused and communicated.

Disease	Pathogen/ Microorganism	How it spreads
Common cold	Virus	Contact with a sick person through his sneezing, coughin, clothing or things used by him.
Measles	Virus	
Chickenpox	Virus	
Tuberculosis (TB)	Bacteria	Infected food or polluted water
Whooping cough	Bacteria	
Cholera	Bacteria	
Typhoid	Bacteria	
Food Poisoning	Protozoa	
Diarrhoea	Protozoa	
Malaria	Protozoa	Through mosquito bites
Dengue	Protozoa	

Hygiene

Hygiene is the science of cleanliness whose aim is to preserve health and prevent the spread of diseases. It is an essential component of healthy living. So, it is important to adopt hygienic practices and promote hygiene in community, school and other places. The following measures will help maintain health and hygiene.

- Wash your hands with soap and water before eating food or touching any food item.
- Take a bath daily.
- We must brush our teeth atleast twice a day.
- We must trim our nails regularly.
- Always throw garbage in covered dustbins.

Do You Know ?

Only female mosquitoes bite humans. Males live on water and plant juices.



Know the Keywords :

Roughage	:	Fibre present in food
Diet	:	A type of food that someone usually eats
Obesity	:	The state of being overweight

Point to Remember

- Food contains nutrients which are the building materials of our body and provide us energy for growth and other activities.
- Protein is required for the repair of worn-out cells and to build body tissues.
- Iron, calcium, iodine and phosphorus are a few important minerals required by the body.
- A diet that contains adequate amounts of different nutrients, required for the healthy functioning of the body is called a balanced diet.
- Diseases are of two types - non-communicable diseases and communicable diseases.
- Hygiene is necessary to stay healthy and to keep away diseases.

EXERCISE TIME

A. Multiple choice questions (MCQs).

Tick (✓) the correct option :

- Which of these is the fibre content in our food?
a. Roughage b. Proteins c. Minerals
- _____ exercise is an important part of staying healthy.
a. Vigorous b. Irregular c. Regular
- Goitre is caused due to the deficiency of :
a. Iodine b. Iron c. Vitamin D
- Deficiency diseases are caused due to :
a. too much physical activity
b. insufficient amounts of nutrients in the food
c. too much protein in the food

B. Write 'T' for true and 'F' for false :

- Minerals are essential for our bones and teeth.
- Playing outdoor games and doing yoga are good ways of keeping the body fit.
- Rest is important for the brain and nervous system.
- Typhoid is caused by virus.

C. Match column A with column B :

Column A	Column B
1. Scurvy	a. Vitamin B
2. Beriberi	b. Vitamin C
3. Rickets	c. Vitamin A
4. Night blindness	d. Vitamin D
5. Anaemia	e. Iron

D. Fill in the blanks :

- To much of fats in diet may cause _____. (Anaemia/Obesity)
- _____ are called body- building food. (Proteins/Vitamins)

3. _____ plays an important role in the proper digestion in our body. (Minerals/Water)
4. Rickets is caused due to the deficiency of _____. (Vitamin C/Vitamin D)

E. Answer the following questions :

1. Mention the role of each of the nutrients. Write two sources of each.
2. What do you mean by a balanced diet?
3. What are the benefits of regular exercise?
4. What is the difference between communicable and non- communicable diseases?
5. What is hygiene? How can we maintain it?



Creative Work

- Prepare a diet chart for a patient suffering from jaundice.
- Observe the nutritional value given on the packets of different food stuffs available in the market. Think and decide which food is healthy for you and which are not.