



CDT Materials

Class – V

Subject – EVS & GK



Food and Nutrition

Balanced Diet:

A balanced diet contains the right amount of the seven classes of food to meet the daily requirements of the body. A balanced diet is necessary for the following;

- Supplying the required energy
- Balanced body growth
- Maintaining the health of the body
- Preventing deficiency diseases such as scurvy and rickets

Nutrient groups:

| Nutrient Groups | What they are needed for | Examples of foods |
|---------------------|---|--|
| Carbohydrates | Energy | pasta, rice, potatoes, cereals, fruits and vegetables |
| Proteins | Building the body (for example muscles, skin, hair, nails) and repair | Meat: beef, pork, lamb and chicken Fish: Tuna and Salmon Eggs Pulses: baked beans, kidney beans, lentils and chick peas |
| Fats | energy and insulation, skin health and brain health | dairy products, meat, fish, vegetable oils (olive oil), nuts and seeds |
| Vitamins & Minerals | Keep our body healthy | fruits, vegetables |
| Fiber | Helps us to digest our food | Fruits, vegetables, cereals |
| Water | Removes waste from the body | Drinking water |

Organ systems

An organ is a group of tissues in a living organism that has a specific form and function. Organs are grouped together into organ systems. Organ systems perform a specific task.

Ten major organ systems:

| Organ System | Function |
|---|---|
| Nervous system | It is responsible for carrying messages from the brain to various parts of the body. It includes the brain, spinal cord, and nerves |
| Respiratory system | It is responsible for breathing. It transfers oxygen into the blood stream and removes carbon dioxide. It includes the lungs, larynx, and airways |
| Cardiovascular or circulatory system | It carries blood throughout the body to help bring nutrients to various other organs. It includes the heart, blood, and blood vessels. |
| Digestive system | It processes food into substances that different parts of the body can use for energy and nutrients. It includes organs such as the stomach, gallbladder, |

| | |
|-----------------------------|---|
| | intestines, liver, and pancreas |
| Endocrine system | It uses hormones to regulate many functions throughout the entire body such as growth, mood, metabolism, and reproduction. Major organs in the endocrine system include glands such as the pituitary, thyroid, and adrenal glands |
| Excretory system | It helps your body to get rid of food and toxins that it doesn't need. It includes organs such as the kidneys and bladder |
| Integumentary system | It protects the body from the outside world. It includes the skin, hair, and nails. |
| Muscular system | It is made up of all the muscles in our bodies. It is controlled by the nervous system. |
| Reproductive system | It includes all the organs needed for reproduction. Unlike the rest of the organ systems, the reproductive system is different in males versus females |
| Skeletal system | It provides support and protection for the rest of the organ systems. It is made up of bones, ligaments, tendons, and cartilage |

The human body has a large number of organs that somehow all work together to keep us alive. Here is a list and short description of a few of the major organs.

| Organs | Function |
|----------------|---|
| Brain | It is the most important organ in our body. It helps us to think, feel and control the rest of the body. It is protected by a thick skull and fluid |
| Lungs | Lungs are major organs that bring much needed oxygen into our blood stream |
| Liver | It performs all sorts of vital functions in our bodies from helping us to break down food in digestion to ridding our bodies of toxins |
| Stomach | It holds our food when we first eat it and secretes enzymes that help to break down our food before it goes to the small intestine |
| Kidneys | They help to keep our bodies clean from toxins and other waste products. Without our kidneys our blood would quickly become poisoned |
| Heart | It is the center of life. It helps to keep the rest of the organs and body working and healthy as well |
| Skin | It is a major organ. It covers our entire body and also sends messages to the brain through the sense of touch |

Natural Resources

A natural resource is something that is found in nature and can be used by people. Earth's natural resources include light, air, water, plants, animals, soil, stone, minerals, and fossil fuels.

Renewable Resources: Many of the natural resources people need to survive are renewable. Renewable resources—such as sunlight, water, and air—cannot be used up. "Flora" and "Fauna", i.e. Plants and animals are also renewable resources. Normally living things replace themselves through reproduction.

Nonrenewable Resources: Nonliving things make up another kind of natural resource. These resources, such as soil, stone, oil, and gases, can take thousands or millions of years to form. They are considered nonrenewable because people use them faster than they can form.

Water Cycle: The water cycle is a continuous cycle of how water returns back to earth.

Sunlight (Sun powers the water cycle)



Water resources → Vapor → Clouds → Rain → Water resources

To stay healthy we need a clean environment. Proper disposal of waste is necessary to keep our environment clean. How we manage waste affect our environment and environment in turn affects us.

The waste we create has to be carefully managed so that it does not harm our environment and our health. Practicing of three R's will help us to keep our surrounding clean and healthy.

The three R's – Reduce – Rescue – Recycle

Reduce: This means to use less.

Example: Use of water and power wisely - We can save electricity by not using it unnecessarily and can save water by closing water tap when it is not in use.

Reuse: This means using things again.

Example:

- Carry old plastic or cloth or jute bags to the grocery store for reuse.
- Plastic or glass container in which we buy things can be used to store other products at home.
- Material can be donated to the people who could use them in its original form.
- Carry washable glass or cup instead of using disposable cups.

Recycle:

Many materials such as paper, glass, aluminum, plastic etc. can be recycled to make useful things out of them. Recycling means treating or processing material in certain way, so that it can be used again.

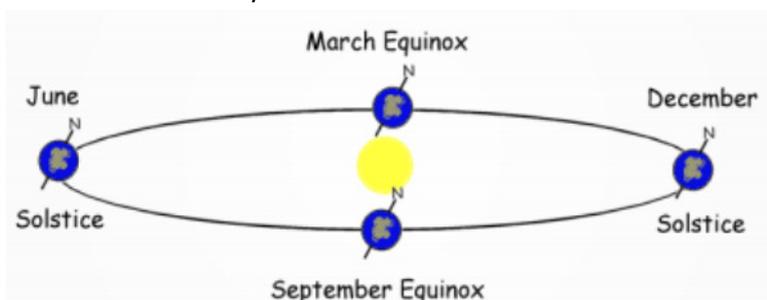
Ways to conserve energy:

Energy is an important part of our daily lives. The forms of energy we will look at include Geothermal Energy, Fossil Fuels -- Coal, Oil and Natural Gas, Hydro Power and Ocean Energy, Nuclear Energy, Solar Energy, Wind Energy.

Example: using florescent bulbs to save electricity, using steps instead of lift, using alternative ways like bicycle, walking to go nearest places, using solar heaters, etc.

Earth movements

- Rotation is the turning around of the Earth on its axis from west to east.
- The earth spins on its axis once in 24 hours
- The Earth axis is an imaginary line running through it on which the Earth spins. It goes through the north and south poles
- The axis of the Earth is not vertical. It is tilted at an angle of $23\frac{1}{2}$ from the vertical. The tilting of the Earth axis is also called the inclination of Earth's axis.
- The tilt or inclination of the Earth's axis results in Unequal days and nights, Seasons.
- The movement of the Earth around the sun in a fixed path is called its revolution.
- The Earth's axis always tilts in the same direction.



Solstices

At two points throughout the year, the tilt of the Earth's axis reaches its maximum angle compared to the Sun, and begins to move back the other direction. This usually happens around June 21st and December 21st. These days are known as solstices. On these solstices, the rays of the Sun shine directly on one of the two Tropics. During the June Solstice the rays of the Sun shine directly on the Tropic of Cancer. During the December Solstice the Sun's rays shine on the Tropic of Capricorn.

Equinoxes

As the Earth moves around its orbit, it reaches two points during the year where the tilt of its axis causes it to be straight relative to the Sun. These days are known as equinoxes. During these equinoxes the rays of the Sun shine directly on the equator. This happens on approximately March 20th and September 22nd.

Phases of Moon: The moon itself doesn't emit any light like the sun. What we see when we see the moon is sunlight reflected off the moon. The phase of the moon is how much of the moon appears to us on Earth to be lit up by the sun. As the New moon begins its orbit and we see more and more of the moon, this is called **Waxing**. After the moon gets to its Full phase, we start to see less and less of the moon. This is called **Waning**.

Map Of India :

- **States and Capitals.**
- **States and their neighbouring states.**

Important Abbreviations:

- **Academic Institutions and Exams of National Importance.**
- **Important Organizations at World Level.**

Our India:

- **Important constitutional posts and their present post holders.**
- **Renowned persons from our country and their contributions.**