EVS

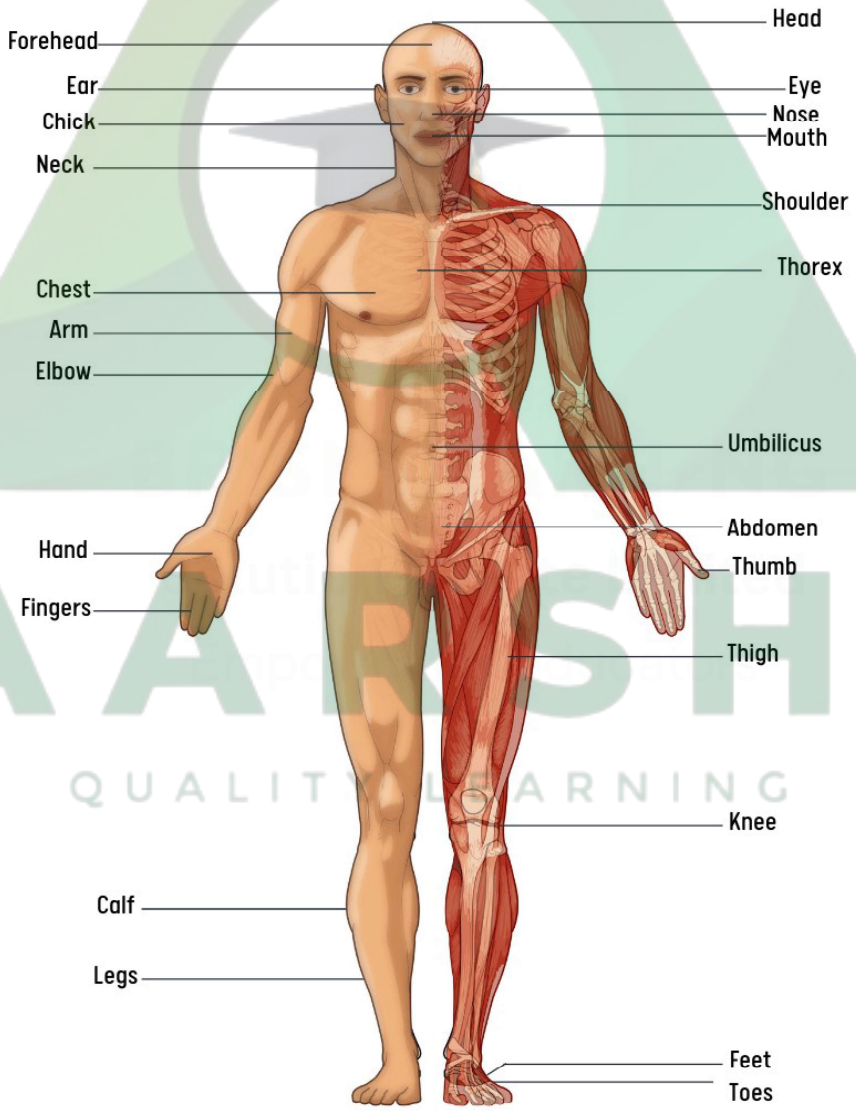
CHAPTER 2: HUMAN BODY AND THEIR NEEDS

HUMAN BODY AND THEIR NEEDS

➢ LEARNING OBJECTIVES

THIS LESSON WILL HELP YOU TO:

- Learn about the human body and its organ system.
- Know about food and digestion.
- Learn and study about teeth and microbes.
- Understand and learn about importance of sanitation and related diseases.
- Learn about nutrition.



QUICK CONCEPT REVIEW

➢ HUMAN BODY

- The human body is made up of a head, neck, torso, two legs. The average height of an adult human is about 5 to 6 feet.
- There are many systems in the human body:
- Circulatory System (heart, blood, vessels).
- Respiratory System (nose, trachea, lungs).
- Immune System (many types of protein, cells, organs, tissues).
- Skeletal System (bones).
- Excretory System (lungs, large intestine, kidneys).
- Urinary System (bladder, kidneys).
- Muscular System (muscles).
- Endocrine System (glands).
- Digestive System (mouth, oesophagus, stomach, intestines).
- Nervous System (brain, spinal cord, nerves).
- Reproductive System (male and female reproductive organs).
- Your body is made up of four main types of bones. Long bones such as the bones in your arms and legs, short bones such as the bones in your hands, feet and spine, flat bones which protect your organs provide a place for muscles to attach, and irregular bones, which are simply all the bones that are not long, short or flat.
- Your body is constantly breaking food down in the digestive system, and then using the pieces to build, repair, and grow your body.
- The job of your heart is to pump blood through your body. Even in your sleep, your heart keeps beating, or pumping blood. If it stopped, you would quickly die. Your heart is divided

into two sides. The left side of your heart is filled with oxygen-rich blood, while the right side of your heart is filled with oxygen-poor blood.

- Just like a city with hallways and roads, your body has blood vessels, arteries and veins that help move things around. Most of the cells inside your body do not move. If a cell is hungry or needs to get rid of waste, it can't simply move itself to the part of your body where it needs to go. Instead, your body must bring the food to your cells and take the waste away from them.
- Oxygen is used by your cells as it performs the functions of life. As your body uses oxygen, your cells produce another gas known as carbon dioxide. Too much carbon dioxide can be toxic, and even deadly. For this reason, it is important that your body has a way to get rid of it.
- The main organs in your respiratory system are your lungs. Your lungs are, in their simplest form, nothing more than sacs. As you breathe in, you fill these sacs with fresh oxygen-rich air. Your heart pumps blood into the walls of your lungs where it absorbs oxygen and releases carbon dioxide. As you exhale, or breathe out, you release the carbon dioxide-rich air into the space around you. With each breath you take, you are taking oxygen in, and putting carbon dioxide out.
- From your lungs, blood returns back into your heart where, it is pumped out to the rest of your body, carrying oxygen along with it.
- The central nervous system is made up of your brain and your spinal cord. It is the main control centre of your body, and the centre of thought. Your central nervous system controls most of the actions within your body.

❖ Real-Life Example

- Children who have access to good nutritious food are more fit an active, whereas children who do not get good nutritious food and are devoid of essential vitamins and minerals suffer from various diseases and are pale, lethargic in comparison to healthy kids.

❖ Amazing Facts

- The brain of an adult human weighs around 3 pounds (1.5kg). Although it makes up just 2% of the body's weight, it uses around 20% of its energy.
- The study of the human heart and its various disorders is known as cardiology.
- Blood makes up around 7% of the weight of a human body.
- As well as having unique fingerprints, human also have unique tongue prints.
- It takes the body around 12 hours to completely digest eaten food.
- Your sense of smell is around 10000 times more sensitive than your sense of taste.
- The toothbrush was invented more than 500 years ago by Chinese.

Questions

1. **What is the name of body parts?**

Answer: Some common body parts are the eyes, ears, neck, hands, legs, nose, etc.

2. **What are the 3 main body parts?**

Answer: The three main parts of the body are: the head, the trunk and the limbs (extremities). The head is composed of the cranial and facial parts. It contains the brain, the centre of the nervous system.

➢ FOOD AND DIGESTION

- Our body must digest the food that we have eaten.
- When we chew, food is crushed up and mixed with saliva (spit) so it becomes mushy.
- We swallow the mush and it travels through the oesophagus, a long tube that runs from the mouth before it goes into the stomach.
- Inside the stomach there are juices that mix the food until it looks like thick soup.
- The food then goes to the large intestine.
- Water from the food goes into the blood.

- By now, the body has taken all the things it needs from the food. What is left is waste that is not needed by the body.
- It gets stored at the end of the large intestine inside the rectum.
- The waste must leave or the body will get sick.
- Muscles push the waste out of the body through the anus, which is the opening in your bottom.

❖ HOW LONG DOES IT TAKE FOR THE BODY TO DIGEST FOOD?

Food can remain for 3-4 hours in the stomach, then for p about 3 more hours as it moves through the intestine It can stay in the large intestine for up to 36 hours. So depending on the type of food and the speed at which it1 moves, it can take about 40 hours or more for the body to digest food.

- Teeth are present in mouth cavity on the upper and lower jaws. We use our teeth for chewing the food before swallowing.
- Teeth have different shapes and they are used for different purposes.
- The teeth present in front of the mouth are used for cutting. These teeth are called incisors They are 8 in number;
- Sharp and pointed teeth are present next to incisors these teeth are used for tearing. They are called canines. They are 4 in number.
- The flat and wide teeth are present at the back of the mouth. They are called premolars and molars. Food is crushed and grinded by these teeth. We have 8 premolars in the mouth cavity, called upper jaw and lower jaw. Each jaw has 16 teeth so every adult has 32 teeth.
- The part of tooth visible above the gum is known as crown. The part of tooth in the gum is called root which holds the tooth strongly to the gum.
- Cavities are rotten or decayed portion of the teeth that can be minor or severe, reaching even to all tooth's core and roots.

- Cavities result from plaque build-up. As plaque accumulates, acids are released and tooth material becomes degraded. This is tooth decay. Decay is not exclusive to visible parts of ones teeth. This plaque, and its subsequent decay, can occur even at the roots and extend to the bones of the jaw.
- Taking care of your teeth helps prevent plaque which is a clear film of bacteria that sticks to your teeth.
- If you don't take care of your teeth, cavities and unhealthy gums will make your mouth very, very sore. Eating meals will be difficult.

❖ SANITATION AND DISEASES

- Sanitation is the hygienic means of promoting health through prevention of human contact with the hazards of wastes as well as the treatment and proper disposal of sewage wastewater.
- Hazards can be physical, microbiological, biological or chemical agents of disease.
- Wastes that can cause health problems, include human and animal faces, solid wastes, domestic wastewater (sewage, grey water), industrial wastes and agricultural wastes.
- Hygienic means of prevention can be by using engineering solutions (e.g. sewerage and wastewater treatment), simple technologies (e.g. latrines, septic tanks), or even by personal hygiene practices (e.g. simple hand-washing with soap).
- Sanitation is a necessity for a healthy life.
- Lack of sanitation leads to various diseases. Some of the diseases caused are cholera, typhoid, diarrhea, etc.

Questions:

1. **What is the digestion?**

Answer: Digestion is the complex process of turning the food you eat into nutrients, which the body uses for energy, growth and cell repair needed to survive. The digestion process also involves creating waste to be eliminated.

2. What is food and its importance?

Answer: A food is something that provides nutrients. Nutrients are substances that provide: energy for activity, growth, and all functions of the body such as breathing, digesting food, and keeping warm; materials for the growth and repair of the body, and for keeping the immune system healthy.

➢ NUTRITION

Humans require food substances to supply the components necessary to build tissues, to repair tissues as they wear out and die, to keep the body (in good working condition, and to supply fuel for energy.

❖ Historical preview

- In 1747, the scottish surgeon James Lind discovered that citrus fruits like orange, lemons etc., helped prevent scurvy (a deadly disease)
- Vitamin A was discovered in year 1913.
- The earliest evidence of urban sanitation was seen in Harappa, Mohenjo-Daro and the recently discovered Rakhigarhi of Indus Valley civilization this urban plan included the world's first urban sanitation systems within the city, individual homes or groups of

homes obtained water from wells. From a room that appears to have been set aside for bathing, waste water was directed to cover drains, which lined the major streets.

❖ Misconcept/concept

Misconcept: Human blood in veins is blue in colour.

Concept: Human blood in veins is not blue. In fact blood is always red due to haemoglobin. Deoxygenated blood has a deep red colour, and oxygenated blood has a light cherry-red colour.

Misconcept: 8 glasses /2-3 litres of water are required to maintain good health.

Concept: 8 glasses or 2-3 litres of water a day are not needed to maintain health. The amount of water needed varies according to person's weight, activity level, clothing and environment (heat and humidity). Water actually need not be drunk in its pure form, but can be derived from liquids such as juices, tea, milk, soups, etc., fruits and vegetables.

- For good nutrition a person should eat a well-balanced diet, that is, one that provides an adequate amount of each of the classes of nutrients each day.
- Children require relatively larger amounts of nutrients and calories because of their rapid growth.
- The foods required for proper nutrition fall roughly into three major groups: proteins, carbohydrates, and fats. Vitamins, minerals, and water are also important.

➢ PROTEINS

- Protein builds, maintains, and replaces the tissues in our body.
- Our muscles, our organs, and our immune system are made up mostly of protein.
- The best sources are beef, poultry, fish, eggs, dairy products, nuts, seeds, and legumes like black beans and lentils.
- Our body uses the protein we eat to make lots of specialized protein molecules that have specific Proteins are made up of small molecules called amino acids. There are 22 amino acids, out of which 9 are essential.
- Protein from animal sources, such as meat and milk, is called complete, because it contains all of the essential amino acids.
- The average adult requires 1 gram of protein per kilogram of body weight per day; children may require two to three times this amount.

❖ CARBOHYDRATES

- Carbohydrates are the major source of energy for the body.

- There are two main types of carbohydrates – sugars (like the kinds in milk, fruit, table sugar, and candy) and starches, which are found in grains, breads and pasta.
- Sugars are simple carbohydrates whereas starches are complex carbohydrates.
- Complex carbohydrates are preferred because the fast-acting simple carbohydrates, such as honey and sugar, are difficult for the body to handle in large doses.
- Simple carbohydrates also lack the vitamins, minerals, proteins, and fibres that generally accompany foods rich in complex carbohydrates.
- Cereals, fruits, vegetables, legumes, and pasta are good sources of complex carbohydrates.

❖ FATS

- Fats (fats and oils) in the diet provide a concentrated source of energy.
- Some foods, including most fruits and vegetables, have almost no fat. Other foods have plenty of fat. They include nuts, oils, butter, and meats like beef.
- Fat is an important part of a healthy diet.
- Fats in the body, in addition to acting as a source of stored energy, supply physical protection and insulation for tissues.
- Fats also aid in the absorption of the fat-soluble vitamins (vitamins A, D, E, and K) from the intestine. ` Milk, butter, meat, and oils are important sources of fat.

➢ VITMINS, MINERALS AND WATER

- To keep the body functioning properly it is necessary to have, in addition to the basic foods, a sufficient intake of accessory substances such as vitamins,

  Minerals and enough water to carry nutrients to the tissues and waste products away from them.

- A minimum of about 2 litres of liquid per day are recommended for the average adult.
- Vitamins play a critical role in important body processes.
- A large variety of minerals are required, some in trace amounts and others, such as calcium and iron, in relatively large amounts.
- Milk, cheese, and dark, leafy green vegetables are excellent sources of calcium. Liver, meat, and egg yolks are good sources of iron.
- Minerals are vital to the development of teeth and bones (calcium, phosphorus, and fluoride) and to the functioning of a number of body's metabolic systems.
- Iron is a necessary part of blood; various metals are required in many enzymes; sodium and potassium are essential for functioning of the nervous system; magnesium is needed for the normal functioning of nerves and muscles; and iodine is required for
- Thyroid hormone.

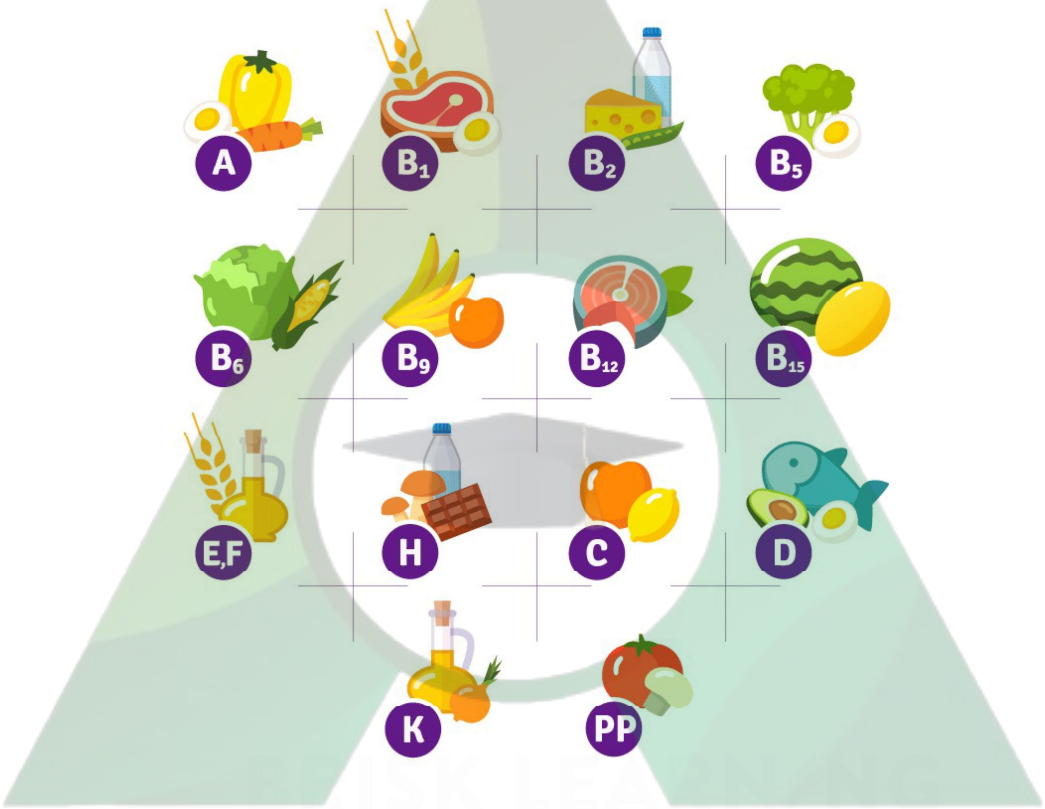
- Vitamins are of the following types- Vitamin A, B, C. D, E and K.

❖ VITAMIN A

- This vitamin plays a really big part in eyesight.
- It helps your body fight infections by boosting your immune system.
- It is found in milk, liver, orange fruits and vegetables and dark green leafy vegetables.

❖ VITMIN B

- There's more than one vitamin B. Here's the list:



are important and they help make energy and set it free when your body needs it.

- This group of vitamins is also involved in making red blood cells, which carry oxygen throughout your body. Every part of your body needs oxygen to work properly, so these vitamins have a really important job.
- It is found in whole grains, fish and sea food, eggs, poultry and meats, beans and peas, leafy green vegetables, dairy products, etc.

❖ VITMIN C

- This vitamin is important for keeping body tissues, such as gums and muscles in good shape.
- Vitamin C is also a key component in case of cut or wound because it helps you heal.
- This vitamin also helps your body resist infection.

- It is found in citrus fruits like oranges, strawberries, cabbage, kiwi fruit, broccoli, tomatoes, etc.

❖ VITAMIN D

- Vitamin b is the vitamin you need for strong bones it's also great for forming strong teeth.
- Vitamin D is made in the skin when exposed to sunlight, or you can get it from the foods you eat.
- It is present in milk, fish, liver, eggs, cereals, etc.

❖ VITAMIN E

- This vitamin protects your cells and tissues from damage. It is also important for the health of red blood cells.
- It is found in wheat germ, egg yolks, vegetable oils, green leafy vegetables, etc.

❖ VITAMIN K

- It is required to stop blood from flowing outside our body when we get injured. This process is called clotting and vitamin K is clot-master.
- It is found in soybean oil, broccoli, dairy products, leafy green vegetables, etc.

Questions

1. **What are benefits of protein?**

Answer: Protein is also a critical part of the processes that fuel your energy and carry oxygen throughout your body in your blood. It also helps make antibodies that fight off infections and illnesses and helps keep cells healthy and create new ones.

2. What food is highest in protein?

Answer: Top 10 Protein Foods.

- Fish.
- Seafood.
- Skinless, white-meat poultry.
- Lean beef (including tenderloin, sirloin, eye of round) ADVERTISEMENT.
- Skim or low-fat milk.
- Skim or low-fat yogurt.
- Fat-free or low-fat cheese.
- Eggs.

➢ IMPORTANCE OF GOOD NUTRITION

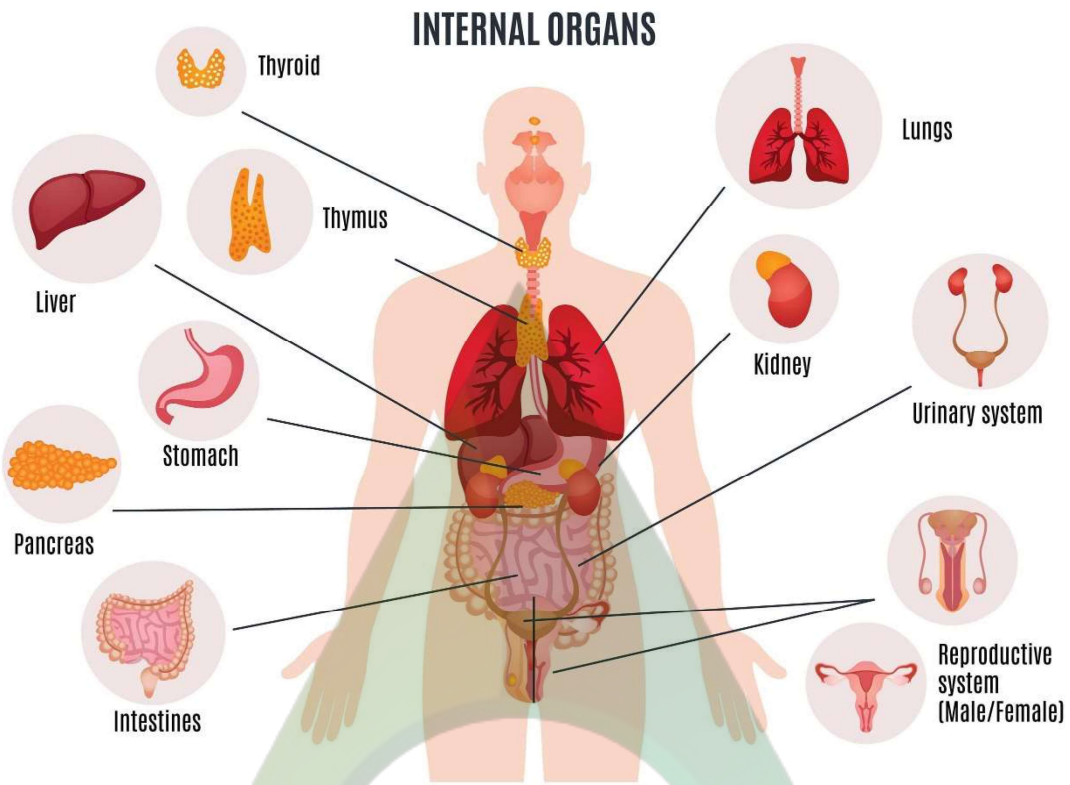
Good nutrition is reflected not only in the growth and function of the body but also in its appearance.

- The eyes, skin, hair, and teeth indicate whether body nourishment is good or poor.
- A poorly nourished child will fail to grow properly; a poorly nourished adult will have a decreased resistance to infection and disease.

Poor nutrition may result from excess in the diet as well as deficiencies. Excess of certain vitamins or minerals can produce potentially lethal disease, and excess of carbohydrates or fat can result in obesity.

➢ HUMAN BODY

All organs work together to perform functions for the body. A group of organs doing some particular jot for the body form an organ system.



Human body has the following system performing certain function:

Respiratory system is responsible for carrying oxygen from the air to the bloodstream. Oxygen is necessary for human life.

Digestive system breaks the food we eat into smaller substances. After digestion, food can be used for producing energy.

Skeletal system gives shape to human body and helps in the movement.

Nervous system performs the functions of thinking, smelling/seeing, tasting etc.

Circulatory system helps in transportation of nutrients and other substances to various parts of the body.

Muscular system helps in movement.

Questions

1. Why is it important to have good nutrition?

Answer: People with healthy eating patterns live longer and are at lower risk for serious health problems such as heart disease, type 2 diabetes, and obesity. For people with

chronic diseases, healthy eating can help manage these conditions and prevent complications.

2. What are the 5 importance of nutrition?

Answer: Proper nutrition promotes healthy pregnancy outcomes, supports normal growth, development and ageing, helps to maintain a healthy body weight, and reduces the risk of chronic disease leading to overall health and wellbeing.

➢ SKELETAL SYSTEM

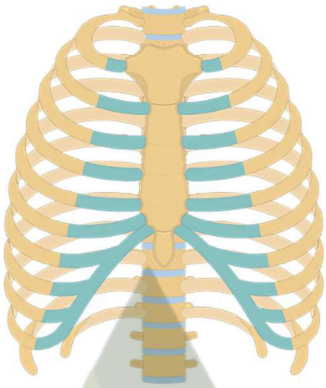
It is the framework of bones which gives support to human body. Adult human skeleton has 206 bones. Different parts of the human skeleton are.

❖ Skull

Skull consists of 28 bones which protects the brain. All bones of skull are immovable except the lower jaw. With the help of movable lower jaw, we can talk and eat. In lower and upper jaw, we have teeth for cutting and chewing food.

❖ Rib Cage

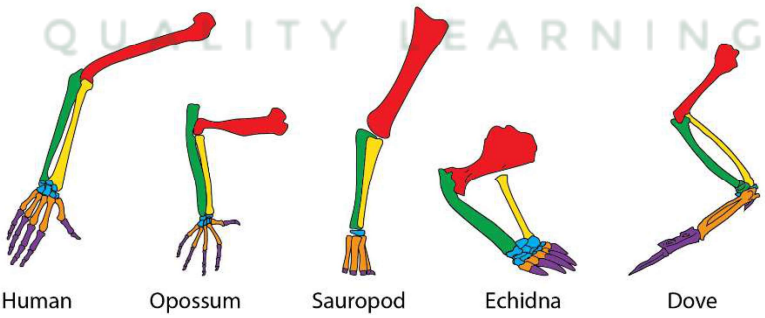
Ribs make a cage of bones around the chest which is called rib cage. It protects our internal organs. Generally adults have 12 pairs of ribs. There is a long bone at the centre of the chest which holds the ribs in place which is called as sternum. Ribs are attached to the backbone. Last two ribs are not attached to the sternum and are known as floating ribs. There floating ribs are attached to the backbone.



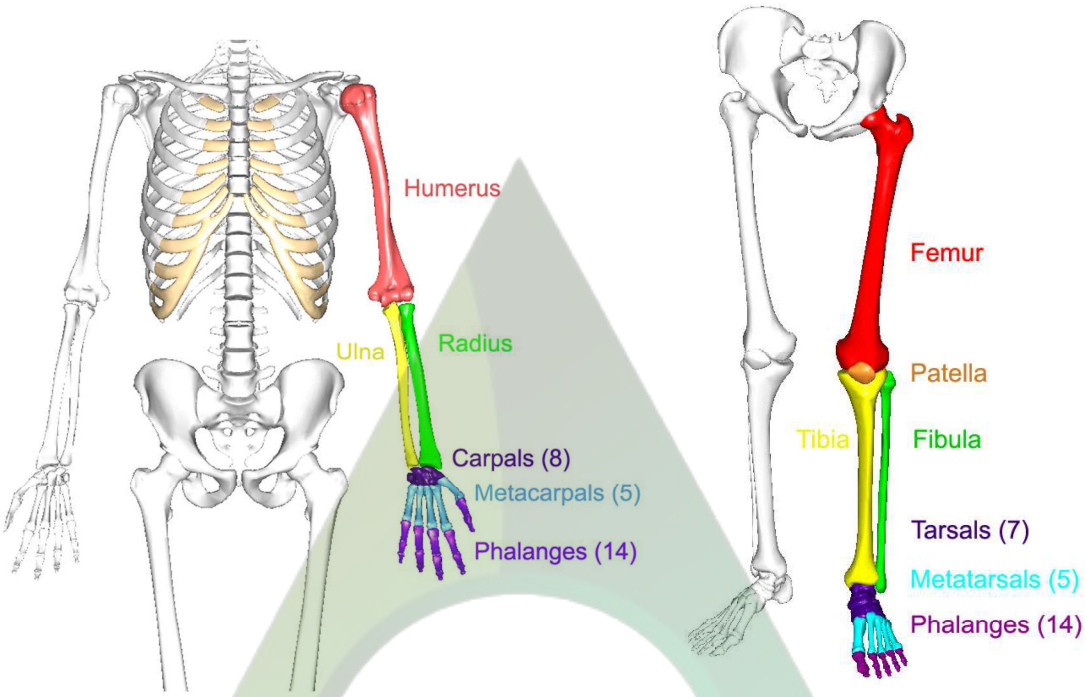
❖ Backbone

It protects the spinal cord. It is made up of a series of small bones called vertebrae. Backbone is also called as vertebral column. Tigers, frogs and some other animals have backbone and are called vertebrates. Snails, earthworm and cockroaches like animals do not have a backbone and are called invertebrates.

❖ Limbs



All human beings have two pairs of limbs: the forelimbs (arms) and hind limbs (legs). Thigh bone or fermur is the longest bone in the body.



➢ FUNCTIONS OF THE SKELETAL SYSTEM

The skeletal system has the following functions.

It gives shape and support to our body. Without the skeleton, our body would be floppy like a jelly. Forget about walking, we would not even be able to stand.

It protects our soft internal organs.

- The skull protects the brain.
- The rib cage protects the heart and the lungs
- The backbone protects the spinal cord.

It allows the movement of different body parts.

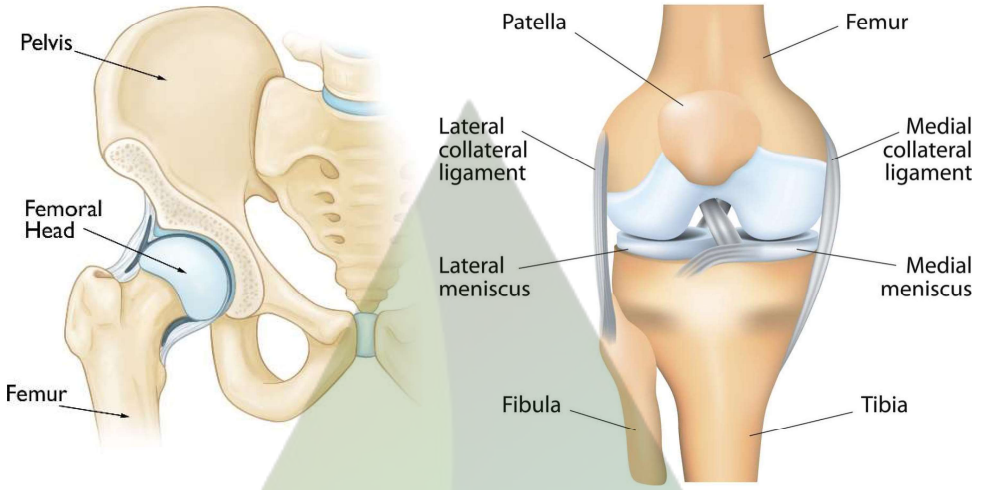
Bones contain marrow, where our blood cells are made.

❖ Joints

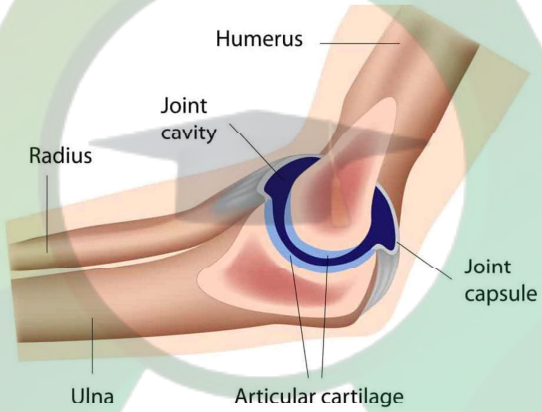
A Joint is the place where two bones meet. Most joints are movable. There are four kinds of joints in our body.

Ball and Socket Joint

This type of joint allows movement in many directions. The shoulder joint and the hip joint are examples of ball and socket joint.



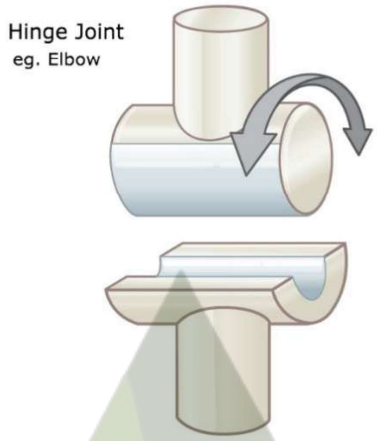
Hip Joint **Knee Joint**



Elbow Joint

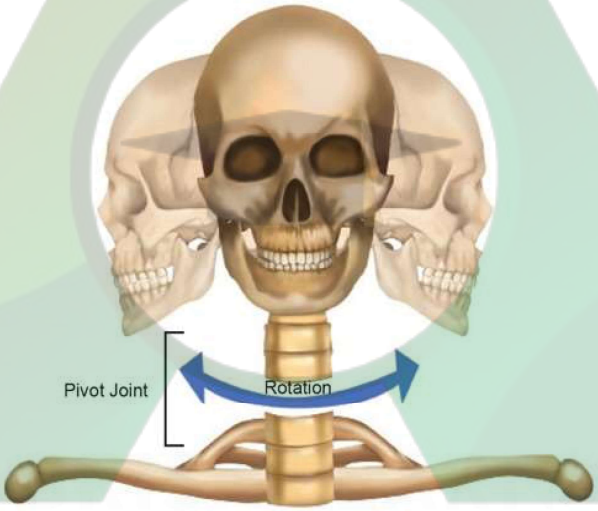
❖ Hings joint

This type of joint works like the hinges in the door. This kind of joint only allows back and fourth movement. Bones in the knee, elbow/ fingers, and toes have this type of joint.



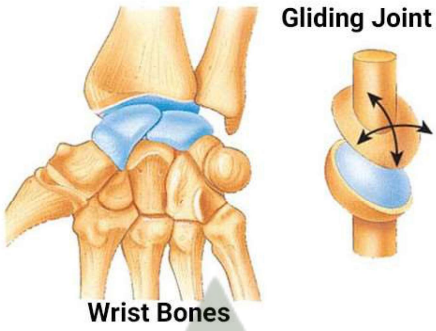
❖ Pivot joint

This type of joint is found between the first two vertebrae of your backbone. It allows you to move your head up, down, and sideways.



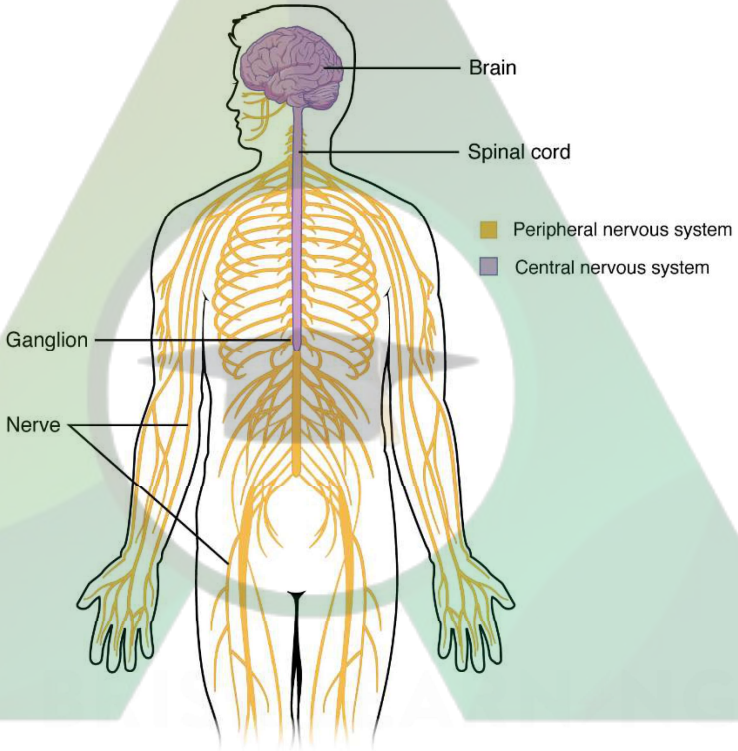
❖ Gliding Joint

This type of joint is found in the bones of the wrist and the ankle. It allows these bones to slide against each other in a gliding motion.



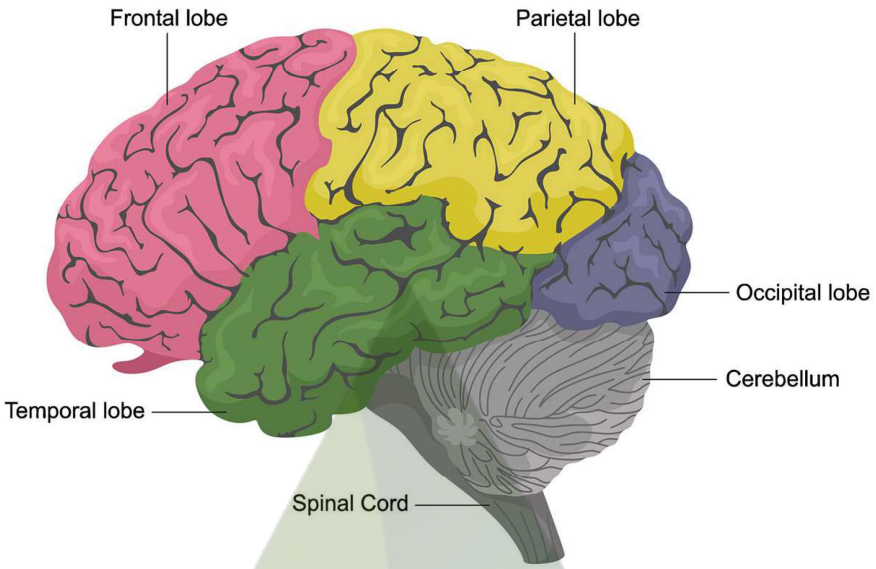
❖ Nervous System

The nervous system controls the different organs of our body.



❖ Brain

Brain is a very important organ. It controls our body movements and helps us to store information in our memory. The human brain has three parts



❖ Cerebrum

It is the largest part of the human brain and is responsible for learning, memory, intelligence, and logic.

❖ Cerebellum

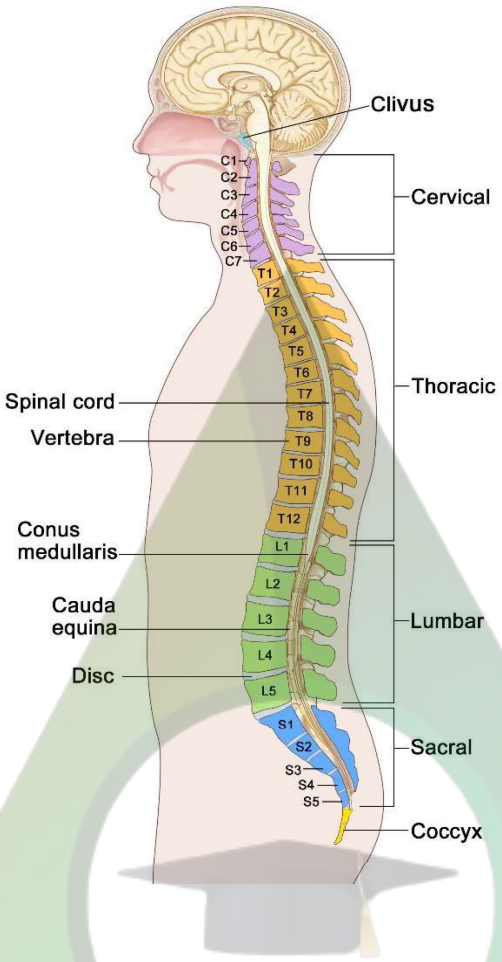
It is situated below the cerebrum and is responsible for muscle coordination and for maintaining the balance of our body.

➢ EDULLA OR THE BRAIN STEM

It controls activities such as heartbeat, breathing, swallowing, and sneezing.

❖ Spinal Cord

The spinal cord is a thick cord of nerve tissue, which extends does form the brain stem. It is protected by the backbone. The spinal cord is responsible for the transfer of information between the brain and the rest of the body. It even controls the actions that do not involve the brain.



❖ Nerves

A network of nerves runs throughout our body. Sensory nerves pass through the spinal cord and carry messages to the brain. Motor nerves carry messages back form the brain.

The automatic response of the body to an event is called a reflex action. Reflex actions are due to messages sent by the spinal cord. These actions are very fast.

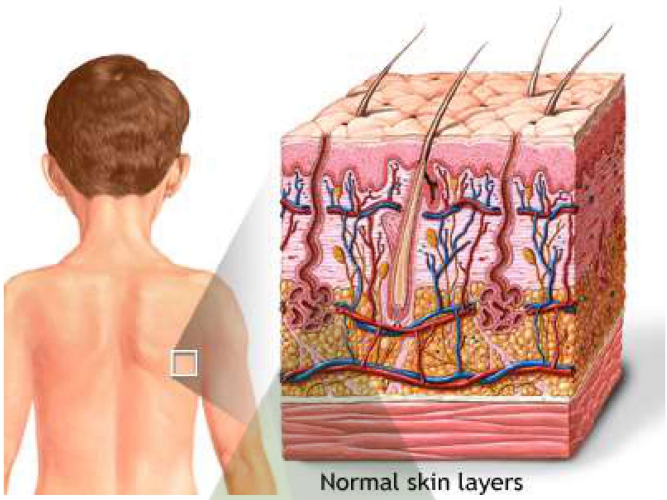
For example, if you touch a hot object accidentally you withdraw your hand almost immediately.

➢ SENSE ORGANS

Our sense organs help us to see, hear, taste, smell, and touch..

❖ Skin

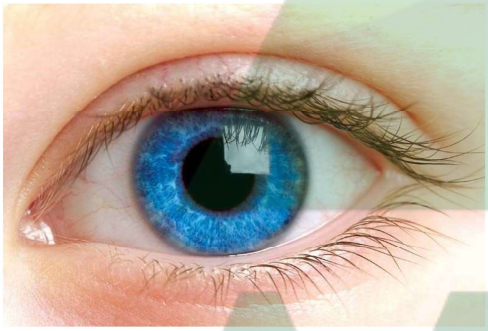
There are tiny nerve endings in our skin. These nerve endings help us to feel things. They also help us to detect heat, cold, and pain.



Skin

❖ Eyes

Eyes help us in seeing the various objects around us. Since eyes are very important organs, our body has several features to protect them. The eyebrows prevent sweat from running into the eyes. The eyelashes protect the eyes form dirt and strong light. The eyelids protect the eyes form injury.



Eyes

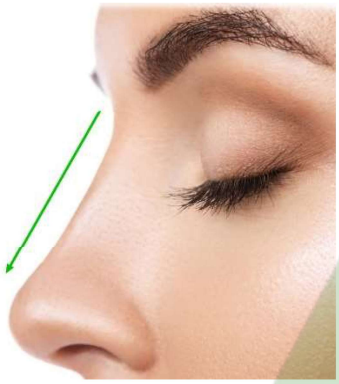
❖ Ears

Ear help us in hearing. They also help us to keep our balance.

Ears

❖ Nose

Nose helps us to smell a variety of objects from flowers to rotten eggs.



Nose

❖ Tongue

Tongue helps us in tasting things. Different regions of the tongue help us in tasting different kind of substances.

Tongue

➢ NUTRITION

Nutrition is defined as the process through which organisms take in and utilizes materials necessary to support life. Food contains chemical substances called nutrients that are required by all living organisms. Our body requires carbohydrates, proteins, fats, minerals and vitamins. In addition to the five nutrients, our body also requires water and roughage.

❖ Carbohydrates

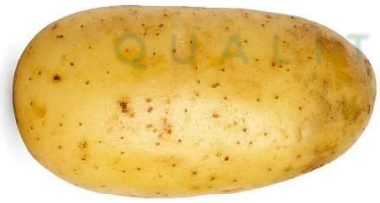
Carbohydrates contain carbon, hydrogen and oxygen. Large percentage of food that we eat consists of carbohydrates. The simplest form of carbohydrate is sugar such as glucose and fructose. For example, glucose is present in food items like jams, jellies, etc. and fructose is present in various fruits such as banana, apple, etc.

Jell

contains glucose

Complex form of carbohydrate is starch. Starch is present in food items such as wheat, rice, potato, etc. Starch or sugar cannot be stored in the body.

Example: potato, rice wheat contains starch



➢ FATS

Fats contain carbon, oxygen and hydrogen. Energy given by one gram of fat is twice the energy given by one gram of carbohydrate. Fat is present in food items such as butter, ghee, milk, grandaunts, etc. Our body takes long time to break down fat than to break down carbohydrate. Fats can be stored in the body. If the carbohydrates consumed are more than the required quantity, then excess amount is converted into fats and is stored in the body.

➢ PROTEINS

Proteins contain nitrogen, carbon, oxygen and hydrogen. Proteins are required for the growth and repair of the body. Our hair, nails, skin and muscles are made up of proteins. Protein is found in food items such as pulses, soya bean, nuts, egg, meat, etc. Protein cannot be stored in our bodies. If excess amount of protein is consumed then it is excreted from the body in the form of urea or is stored as fats.

Egg **pulses contain proteins**

➢ VITAMINS

Vitamins are required for the healthy functioning of the body. Vitamins are required in very small quantity by our bodies. If required quantities of vitamins are not present in our diet, then one can fall ill. The various vitamins required by our body are vitamin A, B-complex, C, D, E and K. Vitamin B-complex includes vitamin B1, B2, B6 and B12.

Our body gets vitamins from outside sources such as plants. Vitamin D can be manufactured in the body, when the body comes in the contact of sunlight.

Vitamin	Source	Function	Deficiency Disease
A	Spinach, carrots, pumpkins, butter, sweet potatoes, fish-liver oil,	Keping eyes, hair and skin healthy	Poor vision, night blindness, low resistance to disease
B1	Eggs meat, all cereals, yeast, milk	Helps in proper functioning of digestive and nervous system	Weakness and beriberi
B2	Eggs, peas, beans, milk, green vegetables, fish, meat	Keeping skin and mouth healthy	Poor growth, bad skin, sons in mouth
B6	Wheat, other cereals, potatoes, tomatoes, meat, fish, peanuts	Keeping skin, nervous and digestive systems healthy	Pellagra
B12	Animal products such as meat, fish, liver, eggs, milk	Helps in the formation of blood and proper growth	Anaemia

C	All fresh fruits, especially citrus fruits, guava, amla tomatoes	Keeping gums and joints healthy and building resistance to infections	A disease called scurvy bleeding gums, loose teeth and aching joints
D	Fish-liver oil, milk, butter. Sunlight helps the body to produce this vitamin	Building strong bones and teeth	Rickets in children and soft bones in adults
K	Green vegetables, tomaties, yolk of	Clotting of blood	Excessive bleeding after injury

❖ Minerals

Minerals are also required in small quantities by our body. Various minerals are sodium, potassium, calcium, magnesium, chlorine, iron, fluorine, sulphur, phosphorus and iodine. Food consists of compounds that contain these elements. For example, common salt contains sodium, chloride and iodine. Calcium is present in milk, green vegetables and beans. Calcium is required for the growth and maintenance of bones and muscles. Iron is present in cereals, pulses, meat, leafy vegetables and eggs. Iron is essential for the formation of blood.

❖ Water

Most of the weight of a person is due to water content in the body. Water is very essential for the existence of organisms. Water carries the digested food around the body. Water is the constituent of blood and carries chemicals and gases throughout the body. Water is responsible for regulating the body temperature.

❖ Roughage

Roughage or fibre is required for the smooth functioning of digestive system. Roughage swells up in the intestine by absorbing water and helps in smooth movement of digested food in intestine. Fibre is present in whole grain flour, whole pulses/green peas, leafy vegetables and fruits.

❖ Balanced Diet

Diet is the food that we eat. A diet that contains all the nutrients required by the body in the right proportion is called a balanced diet. A balanced diet is required by our body for its proper functioning. Thus for proper health of the body, foods that provide sufficient amount of carbohydrates, fats, proteins, minerals and vitamins must be included in the diet. Both fats and carbohydrates provide energy to body, more amount of carbohydrates and less amount of fats should be included in diet. This is because the fats are difficult to digest and fat deposition causes obesity and many other diseases. In addition, one must drink sufficient amount of water. The diet should also include roughage.

❖ Deficiency Diseases

If there is not a proper intake of food then a person suffers from malnutrition. The malnourished body does not function properly, and the person can suffer from diseases. Children suffering from malnutrition have slow mental and physical growth and catches infection easily.

Questions

1. **What is the skeletal system?**

   Answer: The skeletal system is your body's central framework. It consists of bones and connective tissue, including cartilage, tendons, and ligaments. It's also called the musculoskeletal system.

2. **What are the 7 main minerals?**

   Answer: The major minerals, which are used and stored in large quantities in the body, are calcium, chloride, magnesium, phosphorus, potassium, sodium, and sulfur. The trace minerals are just as vital to our health as the major minerals, but we don't need large amounts.