



Let us maintain a healthy body



Our body is wonderful. Its functions help us to maintain our life. The body is made of several systems and each system has a special function to perform to maintain the body. All these systems function in harmony to sustain life.



Eye, ear, nose, tongue and skin are the sensory organs that help us to connect to the environment around us. Therefore, we must protect these organs to ensure their optimum function. This section will educate you on how to do it.



There is life in all of us

Place your hand on the left side of your chest and see if you can feel the heartbeat. Feel your pulse by placing your left fingers below the wrist of your right hand.

Check your heart rate after running around the school grounds. Place a finger below your nostrils and see whether you are breathing faster than usual. Note whether it is faster than at the times you are resting. Observe the changes that take place in your body as you inhale and exhale.



Try to lift several objects of different weights and observe the difference when trying to lift each of them. Why is it not possible to lift a table, although it is possible to lift a few books without much difficulty? What is the part of the body that strains most when you are trying to lift a heavy object?

Above activities show that different organs and systems are working in our body and they help the body to sustain life.

E.g. Digestive system helps us digest food and beverages we consume.
Urinary system eliminates waste from the body.



Functions of the body



Why do we feel thirsty when we are playing?

Think of the times that you got a cut or an abrasion on your body? What happened to it after a few days?

Why do you think some illnesses such as the common cold are cured even if we do not take any medicine?

All the systems in our body help to maintain the body and sustain life. The systems make sure that internal functions of the body are performed properly. In other words, the systems coordinate with each other to sustain life.

E.g.

- Glucose in our blood provides energy to the body. When the blood glucose level is low, It is indicated to us by feeling hungry. The food we eat is converted into glucose in the digestive system.
- The body temperature increases when we play. The body brings down the temperature by sweating. The body cools down when the sweat on the skin evaporates. The water inside the body will be reduced and we perceive it as thirst. That makes us drink water to replenish it.

- The body has the ability to heal cuts and wounds.
- The immune system in the body can fight bacteria and virus that cause illnesses. It has the ability to cure illnesses and also to prevent.

What happens when we engage in our day-to-day activities?

How do activities such as walking, running, jumping and throwing occur? Discuss the ways we get energy to engage in these activities. Think how your hands and legs work when you walk, run and jump.

You have learnt the proper techniques of walking, running, jumping and throwing in lesson five.

Bones, muscles and joints help the body to move. Bones in the body are connected by joints. Joints allow the limbs to be flexible. Muscles in the body provide the power needed to make the movements. The energy needed to do all these activities is provided by the food we eat.



Eyes, ears, nose, tongue and skin are the sensory organs that help us to obtain information and connect to the environment around us.

Eye



Figure 8.1 - External appearance of eye.

We see when, light in the environment goes through the eye to create a reflection. When these rays of light reach the retina inside the eye, the cells there send a message to the brain through the optic nerve. This message to the brain makes us “see”.

Maintaining healthy eyes

Our eyes are a very important sensory organ. We must make sure they are well protected. Our eyes can get tired when we read, use the computer or watch television for a long period of time without a break. When doing such activities, we must allow our eyes to rest. This can be done by taking a break once every 10 minutes to look at a distant object. It helps the eyes to relax. When watching television at least a distance of about 2 1/2 times of the screen size should be maintained between you and the television screen. A green colour background such as a plain of grass is the best to have when you read. Such a background will reduce tiredness of the eyes. Furthermore, reading must be done in a place where there is plenty of light. Eating food that are good sources of Vitamin A (e.g. green leaves, animal protein) frequently helps to make your eyes healthier.

Eyes are very sensitive organs. Therefore, you must not apply medicine or any other ointment into the eyes without obtaining medical advice. Cleaning the eye with clean water can help you to remove any dust that has gone into it.

Eyes can be harmed easily when working in factories, doing carpentry work and using lawn mowers and other equipment. It is compulsory to wear goggles when engaging in such activities. It is best to use a pair of good quality sunglasses to protect eyes from direct sunlight.

Let us Learn More

Checking eyesight

Weaknesses in eyesight can be identified through an eyesight check. This check includes reading the standard reading board from a distance of 20 feet and then reading the board with one eye closed. The same test can be repeated with the other eye closed and read all the letters up to the last line.



Figure 8.2
Standard reading board.

Let us put it into practice

Calculate the distance that must be maintained between the viewers and the television set according to screen size of the television and present the information in a table.

Ear



Figure 8.3 - External appearance of ear.

The ear can be divided into three parts as the outer ear, the middle ear and the inner ear. Sound goes through the external auditory canal to the inner ear via the middle ear. Then you can hear.

Maintaining healthy ears

When we catch a cold, the infection can sometimes reach the middle ear. This may cause earaches, clogged ears or decreased hearing. When such symptoms occur or at any other time, you must not pour any liquids into the ear without medical advice. However, you can pour a small amount of oil (pure coconut oil) or even clean water if you cannot find oil into the ear if an insect has crawled inside. Immediately afterwards take the person to a hospital.

Objects such as cotton buds and safety pins should not be put into the ear to clean it. Such actions can easily damage the ear. A clean piece of cotton wool can be used to clean the ear lobe.

Listening to very loud music or other sounds too often can cause harm to the ears. Similarly, wearing headphones and using hand phones frequently can also harm the ear.

Let us Learn More

Identifying hearing weaknesses

Stand behind a person at a distance of about one meter. Make sounds of different levels of intensity and observe the response by the individual to each of them.

Nose

The cells inside our nose help us to feel different smells. When cells in the nose feel these smells in the environment, messages are generated and they are taken to the brain through the cells in our nose. When an object gets stuck inside the nose, something like a coconut fibre can be used to tickle the nose and cause sneezing. Sneezing will dislodge the object and make it come out. If it does not work, you must not insert anything into the nose to take the object out, but take the patient to a hospital without delay.

Tongue

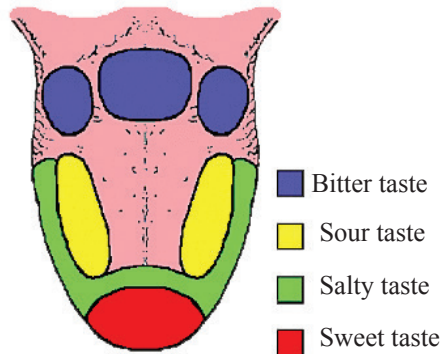


Figure 8.4 - Areas that feel taste.

The tongue is used for talking, mixing food inside the mouth and for tasting. Our tongue is able to recognise four main types of tastes.

Sweetness	– sugar
Sourness	– lime
Bitterness	– bitter gourd
Saltiness	– salt

Different parts of the tongue are better able to taste each of these tastes.

Clean your tongue properly while you brush your teeth.

Let us put it into practice

Prepare a table of different food types that will give different tastes.

Skin

Our skin performs a number of functions:

- Protection
- Giving shape and appearance to the body
- Controlling body temperature
- Producing vitamin D
- Discharging waste from the body through sweat.

Skin must not be exposed to extreme sunlight. Furthermore, you must refrain from using different kinds of creams and ointments on the skin as well as washing the skin too often using soap. However, it is important to keep the skin clean by washing twice a day.

Nails and Hair

Nails and hair protect the body. Nails must be clipped and maintained properly. Dirty nails can cause illnesses. Hair must be maintained, clean and free of lice. It is important to wash your hair at least once every two days.

Teeth

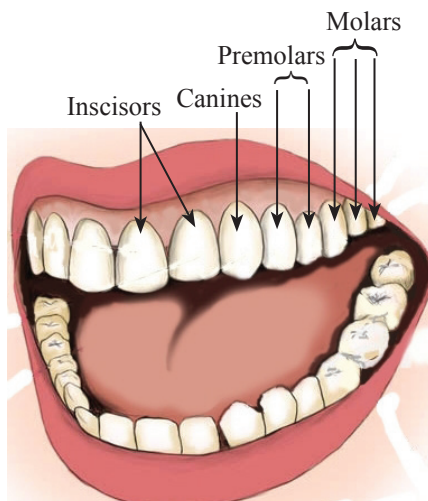


Figure 8.5 - Arrangement of teeth.

Teeth inside the mouth help us chew the food we eat. Teeth begin to appear when children are around six to nine months of age and are completed by about three years of age. First set of teeth that appear are known as milk teeth and there are 20 such teeth. Milk teeth fall off between the ages of six years and 12 years to make way for permanent teeth. There are 32 permanent teeth in the mouth. They are divided into four types.

Teeth can decay due to the following reasons:

- Not cleaning the teeth properly
- Eating sticky and sweet food too often
- Taking very hot or very cold food/ drinks often

- Cleaning teeth using sharp objects
- Biting on very hard objects such as bottle caps and pen clips
- Using sand, coal and other rough material to clean teeth.

The following good habits will help to keep our teeth healthy:

- Brushing teeth after meals - all five sides of the tooth must be cleaned properly (Figure 8.7)

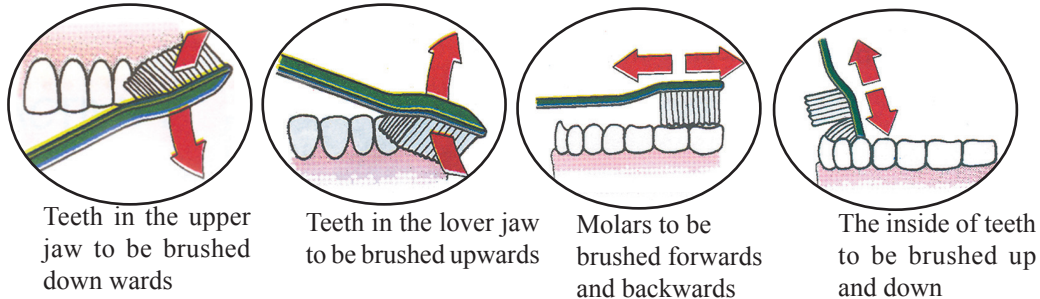


Figure 8.6 - Brushing teeth correctly.

- Using dental floss regularly to clean teeth
- Rinsing the mouth after eating sweets
- Using a suitable brush to clean teeth - avoiding the use of old brushes with bent or broken bristles
- Avoiding the use of sharp objects to clean teeth
- Eating food that has more calcium
- Getting your teeth checked by a dentist at least once every six months
- Getting your broken teeth filled without delay
- Obtaining medical advice if a tooth is broken by accident. - It is now possible to fix teeth that are broken in accidents. Take the tooth that broke off and see a dentist immediately.



Maintaining a healthy body and protecting it

We must follow good health habits to be healthy.

1. Healthy food

Having a healthy balanced diet is important to keep the body healthy.

2. Clean water

You need to drink about 1.5 - 2 liters of water per day. You must not forget to drink a sufficient amount of water on very hot days and at times you engage in sports. Water is the best drink to quench your thirst.

3. Sleep and rest

Sleep allows your body to rest. You need to have about 8-10 hours of sleep per day. Lack of sleep can cause tiredness, weak memory power and irritation.

4. Exercise

Out door activities, helping parents with household chores, walking, riding the bicycle and engaging in sports that can provide exercise to the body requires. Growing children must engage in such physical activities for at least an hour a day.

Keeping our bodies healthy through such good practices will prevent illness and other issues that cause problems for us. In that way, we will be able to spend our days happily and productively while enhancing our talents.

Let us put it into practice

1. Prepare a timetable that shows a daily routine which promotes physical, mental and social development.
2. Discuss how you can use the talents you already have, to spend a productive and joyful life.

Now we know....

All the systems in our body are useful to sustain our life. The systems make sure functions of the body are maintained in a proper order. Eye, ear, nose, tongue and skin are the sensory organs that receive messages from the environment and, nerves send these messages to the brain. We must follow good health habits to maintain a fit and healthy body. Healthy meals, personal hygiene, sufficient sleep, rest, exercise and having active lifestyle are good practices that will help us to maintain a healthy body.

Let us test our knowledge

1. What are the sensory organs that connect us to the environment around us?
2. Name three things you must do to maintain healthy eyes.
3. Give three actions that must be followed for the protection of the ear.
4. What are the four main tastes that are felt by the tongue?
5. Give five functions performed by the skin.
6. Name four health habits that must be followed by us to be healthy.