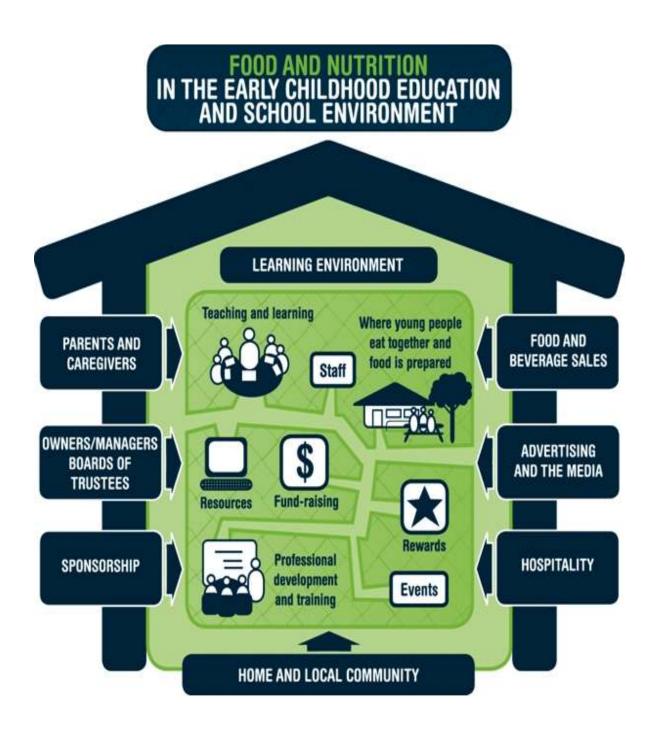
Chapter 11. Basics of Nutrition, Health & Hygiene and Toilet Training



#### Introduction

Health education plays a vital role in the community hygiene. To avoid illness and have positive health attitude, correct and complete knowledge of health is compulsory. Health is cleanliness and cleanliness is one of the main defences against diseases, whether contagious or self-generated. In this lesson we will discuss the significance of health and hygiene, so that the aim of good health can be achieved through sanitary habits and healthy way of living.

#### What is Health?

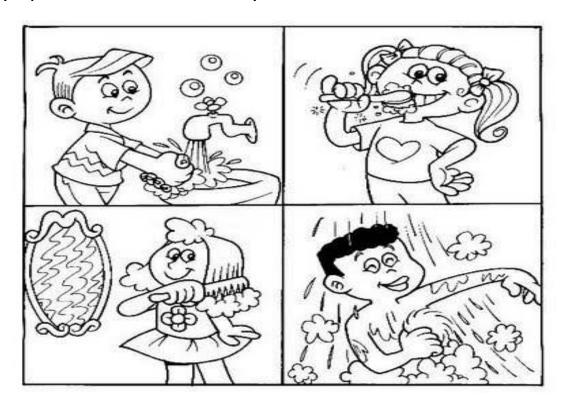
Health is a positive state of well being, where the body and mind is in harmony and is functioning properly. In other words, when every organ of the body is functioning normally, the state of physical well being is known as health. It has been well said that a person can be called healthy who has a sound mind in a sound body. Health is the characteristic of life that enables a person to live longer. According to World Health Organisation (WHO) "Health is the state of complete physical, mental, spiritual and social well-being and not merely absence of a disease." If a person is free from all diseases or in a good physical state, but under stress, tension, anger, greed etc. Then that person is not considered as a healthy person. Therefore, in addition to physical health, we must consider the mental and emotional health also, only then spiritual and social health can be achieved and man can step forward for the well being of the society. Let us understand the various aspects of health-

- Physical health When the body is free from any physical ailment or abnormal condition, it is physical health.
- Mental health The state of absence of stress, tension, worry, negative thoughts etc.
   Is mental health.
- Emotional health A balanced state of absence of anger, greed, proud, hatred etc. Is emotional health.

- Spiritual health To live in you with uniformity and harmony is spiritual health. Also, to have faith in your religion and respect & view other's religion with equal harmony is known as spiritual health.
- Community health is the art and science of maintaining, protecting and improving the health of people through organized community efforts.

# **Hygiene**

Hygiene is defined as the science and art of preserving and improving health. The main purpose of hygiene is to help man to live in healthy relationship with his environment. It deals both with an individual and a community as a whole. Hygiene and sanitation plays a very important role in order to be healthy.



# **Environment Hygiene**

Health education of the masses helps to build up an interest in the environmental sanitation. Though we try to keep ourselves personally very clean but we do not usually care for our surroundings. Our sources of water are constantly getting contaminated. Unhygienic surroundings give an invitation to mosquitoes and flies. Environmental hygiene or sanitation

therefore helps to lessen the incidences of those diseases which are commonly transmitted through excreta or contaminated water, food and drinks. These comprise of gastrointestinal diseases like diarrhoea, dysentery, cholera etc. And insect-borne infections like malaria, dengue, plague etc. Because of its universal use, water can be the means for spreading various diseases like typhoid, cholera, dysentery etc. Besides these, viral hepatitis, polio and worm infestation are also transmitted because of the use of polluted water. Drinking water supplies may be likely to get contaminated with sewage or other excreted matter. Water pollution can be effectively controlled by:

- Educating the people about use of safe drinking water.
- Wherever possible, the drinking water should be provided through the piped water supply.
- Sanitary wells should be provided where the piped water supply is not possible.
- Conventional water purification ways like disinfection by bleaching powder or chlorine gas should be regularly employed.
- Domestic filters should be used where chemical disinfection of water is not possible.

Unsafe disposal of faeces (stool) is one of the main causes of spread of diseases, particularly in rural areas. Many diseases are caused by the germs (or their eggs) found in the stools or faeces of the infected persons. These germs get into the water, food, utensils and to the surfaces used for preparing food and are transmitted to new hosts either by the dirty fingers or by infected food or water. Hence, personal as well as public hygiene or sanitation is essential in order to stop this faecal to mouth transmission of infections. To prevent this and to maintain proper environmental hygiene, one must follow the underline points:

- Public toilets (latrines) should be built and used.
- If that is not possible, people should defecate (pass stool) at designated places away from habitation (houses).
- After defecating, the faeces should be buried right at that place.
- The faeces of babies and children have as many harmful germs as the faeces of adults, so their faeces should be cleared up right away.

- Toilets should be cleaned regularly and kept covered.
- The faeces of animals should also be kept away from houses and water sources.
- The dung or 'gobar' of cattle should be either used in the gas plant or in a manure pit or made into cakes (uple) for fuel at a secluded place.
- It is essential to wash hands with soap after defecating and after cleaning the bottom of a baby, who has just defecated.
- In villages, if soap is not available, instead of using mud the better substitute for cleaning the hands is 'ashes' of burnt wood (raakh).
- Children put their hands into their mouths quite often, so it is essential to wash a child's hands frequently, particularly before giving him food.
- A child's face should be washed every time he makes it dirty. This helps to keep flies away
   from the face and avoid eye and skin infection.

# Food Hygiene

Food hygiene is a crucial part of maintaining good health. If the basic rules of hygiene are overlooked while buying, preparing, cooking and storing food; the consequences in terms of 'food poisoning' can be severe. So, one should adopt following measures to maintain good food hygiene:

#### **Content**

- A clean kitchen:
- Cleanliness during preparation of food:
- Cleaning of refrigerator:
- Clean water:
- Storage of food:

# (a) A clean kitchen:

Bacteria in order to multiply need food, warmth, moisture and time. So, we must keep our kitchen clean and dry.

- Keep food covered.
- Do not leave scraps lying around and wipe away any spillages (left over food).
- Empty rubbish bins (dust bins) frequently.
- Keep pets away from food and from the kitchen.
- All these measures will help to prevent insects such as flies, cockroaches' etc. Spreading diseases.

# (b) Cleanliness during preparation of food:

Always wash your hands with soap before touching food. If you need to cough, blow your nose or sneeze use a clean handkerchief, so as not to spread germs. Vegetables need to be washed properly and carefully as soil may contain bacteria. Wash knife thoroughly before and after cutting raw food items, meat etc.

### (c) Cleaning of refrigerator:

Do clean the refrigerator (fridge) on a regular basis. Take out all food items and wash all surfaces including the shelves with hot soapy water. A solution of bicarbonate of soda and warm water is a good cleanser and will not make the refrigerator smell.

# (d) Clean water:

Many diseases are water born so for good health, it is compulsory to have plentiful supply of safe piped water from a tube-well or deep hand pump. Water should be boiled at least for 5-10 minutes to kill all germs and then kept in a sterilized bottle before drinking.

#### (e) Storage of food:

We should store food and drinking water in clean and dry place. Food items should be kept covered and out of reach of cockroaches, rodents (rats) etc. Maintain temperature for storage of food as per food items

Personal hygiene is often a sensitive subject to bring up in front of a classroom full of students. At the same time, it is important to instil good hygiene practices early amongst students to prevent dental cavities and infections and other health problems. The students must also feel safe discussing these topics with you, especially when they begin to go through

puberty. There are a number of ways to teach personal hygiene. In most cases, teachers must explain how germs spread and cause us harm, develop a hygiene plan and try and make the learning processhygiene a fun-filled experience for students.

Teachers must first explain the concept of germs and bacteria to the students. This can be done with books, preferably illustrated ones containing stories about what germs are, how they spread from person to person, how they act on the human body and what the most common diseases are. Teachers can also show students some videos on hygiene and healthy practices.

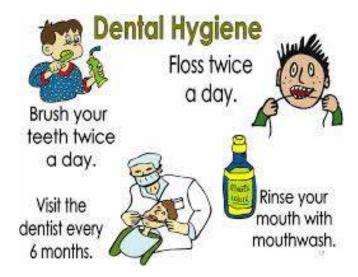


To actively demonstrate how germs are transferred from one person to another, teachers can try the chalk experiment with students. In this experiment, the teacher should have a box of chalk powder ready, into which she dips her hand. Then she shakes hands with one child and asks the child to shake hands with other children. Soon all of them have chalk powder on their hands. This is where the teacher explains that germs also spread in a similar manner. This visual explanation will certainly demonstrate the gravity of the problem to the students more effectively.



Teachers should also teach students the 6 steps of hand-washing immediately after explaining how germs spread. These steps are wetting the hands, applying soap, creating lather, rubbing the hands for at least 20 seconds, rinsing them and finally drying them. The school bathroom can be used to do this activity. The students can also be taught an easy song or jingle to help them memorise these six steps.

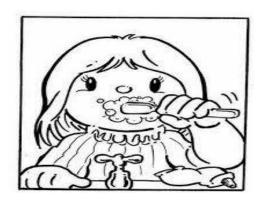
The teachers could also ask the students to make a list of all the times when it is necessary to wash your hands. They should also discuss the importance and benefits of daily bathing in connection with hand washing, enumerating, at the same time, all the places germs like to hide in and how best to clean them with soap and water. In this case, it is always better to ask the students where they think germs may grow and how best to get rid of them, instead of giving them a standard lecture. Encouraging casual conversation about hygiene usually creates a more comfortable environment and provides students an opportunity to participate in the discussion and learn from their own or their peers' ideas and experiences.



One very important topic related to health and hygiene is dental hygiene. It is important for teachers to emphasize strongly on the practice of dental hygiene. Besides explaining to students the importance of dental hygiene for protecting our teeth and how germs can cause our teeth to decay and cause us a lot of pain, teachers should also create a dental hygiene lesson plan. The best way to do this is to ask a dentist to personally come and talk to the students about dental hygiene. This could be made more effective by handing out toothbrushes and toothpaste.

# **Basics of Toilet Training**





Another important aspect of a lesson on health and hygiene is toilet training of students. Toilet training is different from toilet learning. Toilet training involves the training of students by the teacher while toilet learning is something that the students learn by themselves. Toilet training involves the teacher sharing information with students regarding why it is important to inculcate good toilet habits, how germs spread due to unhealthy toilet habits, how bad habits can lead to a lot of disease and discomfort and so on.

The discussion on toilet training is again a subject that is often embarrassing, not only for students but also for teachers. The best way out of such an awkward situation is to invite the students to discuss the topic instead of giving them a regular lecture. This will definitely lead to a lot of interested participation on the part of the students. They may also be asked to make charts and models, collect pictures and information on this topic or even related topics. They may also be shown videos related to cleanliness in the toilet.

Teachers can ensure the participation of students in toilet training by giving them weekly rewards for the best toilet manners or even grades on cleanliness at the end of every semester. It is of the utmost importance that teachers tell the students clearly about the importance of flushing before and after using the toilet, rechecking after flushing and before leaving the toilet, not littering on the floor of the toilets and washing their hands with soap and drying their hands on a towel before coming out of the toilet and into the class.

Learning to use the toilet is an important breakthrough for toddlers. It is a big achievement for them as they start realizing their body signals and behave responsibly to their own bodies.

Every child behaves differently in this regards. Some seem to train themselves, while others need help from parents. The best way is to encourage the child when they are learning new skills.

#### What is the ideal way?

Over the years the ideas about toilet training have changed. Earlier it was decided by parents when it was time for their child to learn how to use the toilet. Nowadays it best works when they try to follow the signals from children that they are ready.

Each child will learn at their pace and follow their own learning steps themselves. Their learning ways will differ depending on different cultures.

The process of toilet training should not be rushed.

#### Are they ready?

Children mostly learn at their own pace, however many shows their readiness and physical maturity needed between the ages of eighteen months to twenty four months. During this phase they try to behave more independently.

Some of the readiness signs one might notice are the child's ability to:

- Copy the elder's behaviour and follow simple instructions
- Say the words poo and wee, and show interest in using the toilet
- Pull their pants up and down
- Stay dry for two hours or more in a day. This helps in understanding that the child is able to hold on a little rather than their bladder just emptying it when full like babies and young toddlers
- Intimate the elders that they have done wee or poo in their nappy, or when their bowel is full

# Other signs include:

- Having bowel motions at a fixed time every day
- Not wanting to wear nappies
- Trying to remove the wet or dirty nappies

The child does not need to show all the signs but one can wait until they show some of them. A supportive and relaxed environment is essential for toilet training. It works best when developing the habit is easy, effortless and fun as possible.

#### How long will it take?

The time frame may vary amongst children; some take three to four weeks to learn while some manage within a few days. It is often seen that girls develop it earlier than boys; however this is not always the case.

There are many steps in learning to use the toilet and it takes time to put them all together.

#### What about staying dry at night?

Staying dry at night takes longer because it is not something a child can learn to control. While a child sleeps they do not have any control over when their bladder empties. It is not something they can stop by trying hard. It also depends on the genes of the family members.

Bed wetting happens when the bladder becomes full at night but children do not wake up. The bladder empties itself automatically. The link between the brain and bladder needs to develop so brain is able to tell the bladder not to empty. This happens at different ages.

Often children become dry at night by about three years. Most are dry at night by five years although some wet until six or seven or even older. If the child wets often after being dry at night, you may want to talk with your doctor or health professional. Sometimes there can be a medical problem.

# **Getting ready for toilet training**



Talk with your partner about what you will do to help your child learn to use the toilet. If the child is going to child care, or spends time with others make sure everyone knows what you are doing. It helps to be consistent. To help your child get ready for toilet training you could:

- Read a toilet training book or watch a DVD with your child. This helps the learning in a fun way that it is normal for everyone to wee and poo.
- Teach your child the words for toilet training; choose words you are comfortable with.
- Make sure the toilet area is safe. Keep household cleaners and toiletries out of reach.
- Dress your child in clothing that is easy for them to get on and off, and easy to wash,
   Toilet training can be easier in warmer weather because there are lesser clothes to remove in a hurry.
- Learn your child's cues so you can be ready to guide them to the toilet in time. It is important to have the toilet or potty set up ready to avoid accidents.

#### Potty or Toilet?

Before you start toilet training you will need to decide whether to use potty or the toilet. Many parents use both. It helps to find out which one your child prefers.

#### Toilet

If using the toilet, you will need a toddler toilet seat with a smaller hole that fits inside the big toilet seat. You will also need a step they can climb up on by themselves and rest their feet on

while sitting. They need to feel safe and relaxed sitting on the toilet to be able to let the wee or poo out.

Some toddlers are afraid of being flushed down the toilet, even with the toddler seat in place. Even though you might want them to use the toilet, using a potty may be easier for them. It can help them get used to the toilet and give a sense of control to flush the toilet so they can see what happens. Make sure flushing is only allowed after a wee or poo, otherwise it might become just a fun game that is not linked with using the toilet.

### Potty

Many parents start toilet training with a potty. It is easier for a child to get into a potty without help and they seem to feel safer because it is not so high. You can put it some where they can get in a hurry because they get very little warning that a wee is going to come out. When you go out it can be easier to take a potty with you than to make toilets in other places safe and comfortable for your child.

Children get to know how it feels and that it is their potty. You might leave it within easy sight wherever they are playing so they get used to it, or put it in a place they choose. Your child could sit on the potty at different times through the day with their clothes on without any other expectations. When confident with the potty they can make the transition to the toilet. The most important thing is to make it easy and fun for your child. If they are afraid or upset about the potty or toilet, do not put pressure on the child. Put the training off for a month or so.

#### **Getting Started**

If you think your child may be ready to start, choose a time when you will have the time and patience to give it your attention. Start by watching carefully so you notice when a wee or poo is coming out.

Encourage your child to tell you when they have done a wee or poo in their nappy. It may not be so easy for them to know if using pull-up nappies which take away the feeling of wetness. Sometimes pull ups are called "pull-up training pants" which can be confusing. Training pants are usually made of towel or similar cloth. They feel wet as soon as a wee comes so it helps children recognize they have done a wee.

Next watch for signs they are about to do a wee or poo. They may start fidgeting or crossing their legs.

If your child tells you before they do wee or poo thank them for telling you and take them to the toilet or potty straight away. You will need to move very fast because there is very little time between them knowing it is going to happen and the wee coming out.

If your child is relaxed about it you could take their nappy off and put them on the toilet or potty at a time when they usually do wee or poo in the nappy.

Don't make the child sit on a potty or toilet for more than a couple of minutes. It can feel like a punishment and does not help toilet training. Five minutes is a long time for a young child.

The points mentioned above are just a few helpful guidelines for teachers. They can choose any of these ways or even think up novel ways for catering to the varying needs of their students. What is ultimately important is not the method adopted but the result of the same, that is, how far the method has succeeded with the students.

# **Body odour**

Body smells are caused by a number of factors working in combination, including:

- Chemicals in sweat, including pheromones, which are made by the body and sexually attract or repel other people.
- Wastes like metabolised alcohol excreted through the skin.
- The actions of bacteria that live on the skin and feed on dead cells and sweat.
- Unwashed clothes like socks and underwear.



# Personal hygiene for women

Here are some personal hygiene suggestions for women:

- Menstruation wash your body, including your genital area. Change tampons and sanitary napkins regularly, at least 4 – 5 times a day. Always wash your hands before and after handling a tampon or pad.
- Cystitis is an infection of the bladder which is commonly seen in sexually active young women. Urinating after sexual intercourse can help to flush out any bacteria that may be in the urethra and bladder.
- Thrush some soaps and detergents can cause irritation in the vagina and can make thrush infections more likely. Some also find that they often get thrush when they use antibiotics. Use mild soap and un-perfumed toilet paper. Avoid wearing tight synthetic underwear, try wearing cotton underwear and change regularly.

#### **Nutrition**

To perform various vital functions, our body needs energy. Do you know from where does this energy come from? The answer is 'food'. Food plays an important role in the maintenance of good health and in the prevention and cure of disease. The human body builds up and maintains healthy cells, tissues and organs only with the help of various nutrients. In this lesson, we are going to study about food and nutrition, different types of nutrients and also about balanced diet and dietary management of some deficiency diseases.

The subject of nutrition is both interesting and difficult for beginners. It has become a major topic of discussion at home as well as outside of home. These days the focus is on the prevention of diseases and on being responsible for one's own health. Therefore the newest trends in nutrition lay emphasis on the teaching of nutrition in schools as a part of the curriculum from the very beginning.

Though the study of nutrition as a science is a comparatively new phenomenon, it still has its own choice of vocabulary. A beginner faces a certain amount of difficulty in getting acquainted with the language of this discipline and in comprehending the basics of the subject. The teacher's task in this case is to help the students through this phase so that they can get a grip on the subject with a minimum amount of difficulty.

The best way to make a lesson on nutrition interesting as well as instructive to students is to use charts, pictures, models and powerpoint presentations. All of these will help the students visualize the sub-topics related to the subject of nutrition. Some of the topics that teachers must cover are why a balanced diet is important, the food pyramid, what food-items to eat at various times during the day, the importance of drinking lots of water, what kind of food to

avoid and so on. Side by side, students should be taught about the importance of hygiene and how unhealthy habits cause disease and discomfort.



#### **Food and Nutrition**

All living things need food. Food gives us energy to work. Our body needs food to grow strong and healthy. The term 'food' refers to anything that we eat and drink and which nourish the body.

Functions of food: The important functions of food include:

- It is essential for the growth of human body.
- It provides the power to the body to resist diseases.
- It provides energy for the production of heat and for the maintenance of all metabolic activities.
- It is essential for the repair of daily wear and tear.

#### **Nutrition and Nutrients**

Nutrition, which depends on food, is also very vital in the cure of disease. It tells us about what happens to the food when it enters our body. Nutrition is the process by which the body ingests digests, absorbs transports and utilizes the nutrients. Almost all foods have nutrients in varying proportions. Nutrients are the constituents of food that must be supplied

to the body in suitable amounts. Following are the important nutrients which are present in food:

- Carbohydrates
- Proteins
- Fats
- Vitamins
- Minerals
- Water
- Roughage (Fibre)



# **Balanced Diet**

We need varieties of food which gives us proteins, carbohydrate, fat, vitamins and minerals to maintain normal functioning of the body.

A diet containing all the essential food constituents in correct proportions is called a 'balanced diet'. A balanced diet must be rich in various essential nutrients and include foods from all food groups. It should provide necessary energy needed by the body. It should be economical.

#### **Deficiency Diseases**

Different food gives us different nutrients. So, we must try and eat a little of all types of food every day. Deficiency disease is a condition in which a particular nutrient has been

inadequate from our daily meals for a prolonged period. The deficiency symptoms starts showing after inadequate consumption of the specific nutrients for some time. They may also occur due to some other diseases e.g. Anemia due to bleeding or worm infestation.

#### WHAT IS DISEASE?

A disease is an abnormal condition of an organism that impairs bodily functions, associated with specific symptoms and signs. In simple words, it is a condition of an individual not feeling well or a condition opposite to health.



#### **Classification of diseases**

# Diseases can be classified as:

- Air borne: This occurs due to inhalation of germs from the diseased person through air.
   E.g. T.B., Influenza, swine flu etc.
- Water borne: It is caused by consumption of contaminated water having microorganisms like bacteria, virus etc. E.g. Cholera, typhoid, Hepatitis, jaundice etc.

- Food borne: It is caused by taking contaminated or infected food having microorganism.

  E.g. Food poisoning, Diarrhoea, vomiting, Worm infestation, etc.
- Insect borne: It is caused by mosquito's bite of different types E.g. Malaria, Dengue etc.