



SWASTHAYA SWARAJ SOCIETY

A people's movement for Swaraj in Health

A TRAINING MANUAL FOR HEALTH & NUTRITION PROMOTION IN PRIMARY SCHOOLS IN TRIBAL AREAS





TRAINING FOR HEALTH & NUTRITION PROMOTION IN PRIMARY SCHOOLS

Health, Education and Nutrition are three essential pillars of development and are the keys to the development of children and their future livelihoods. However, the reality facing millions of children is that these goals are far from being met.

Health education is commonly given to parents especially mothers, but it is limited to children. Primary School is a period of transition from parental control to self-control. This period is also the best time to build concepts and ideas with constant reason. Applying an important concept for healthy behavior in this period will help develop a child's mindset in the future to prevent many common communicable and noncommunicable diseases.

Children who go to school hungry cannot learn well. They have decreased physical activity, diminished cognitive abilities, and reduced resistance to infections. Their school performance is often poor and they may drop out early. In the long term, chronic undernutrition decreases individual potential and has adverse effects on productivity, incomes and national development. Thus, a country's future hinges on its children.

Investments in health, nutrition, and education are essential to break the cycle of poverty, undernutrition, and ill health in tribal areas. We believe that schools can make an important contribution to our country's efforts to overcome hunger and undernutrition and help them grow up healthy, and promote health and nutrition in their families and village communities, especially tribal areas. In this regard, it is important to stress that School Nutrition Gardens which will be set up in each school are a platform for learning. In the Health & Nutrition promoting school programme, school-based nutrition education, and Health education, and other related activities are regarded as a way to better nutrition and education.

A strong education component of Health & Nutrition in the school curriculum ensures that the effects go beyond the immediate time and place, to children's families and their community. Throughout this innovative process of imparting health & nutrition education, the community is involved at various levels and are educated simultaneously.

This curriculum will assist children, school teachers, parents, and communities. Classroom lessons are linked with practical learning in the school, families, and community. The training modules are prepared for children of 7-14 year age group.

General principles:

- Understanding the topic
- Finding out more about the topic from daily life and from other sources
- Planning
- Taking action
- Evaluation.





Activities involving the community

SCHOOL NUTRITION GARDEN

Involvement of children in the school MDM management

SCHOOL HEALTH SERVICES

SCHOOL MAGAZINE (hand written)

SCHOOL HEALTH & NUTRITION WEEK (annual event)

SCHOOL SPEAKING TO COMMUNITY- regular monthly event.

SUMMER CAMP/ BAL MELA for all 15 schools together: 2-3 day event with interschool sports, games and competitions (annual event)

Acknowledgement:

We acknowledge the financial support and guidance given by Mrs Hema & Ashok Hattangadi, Bangalore for the Health & Nutrition promoting schools programme in 15 Govt Primary schools of Kerpai & Silet Gram Panchayats and in bringing out this manual for the trainers. We Acknowledge support and cooperation of District Education Department of Kalahandi, Odisha.



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Malaria



Learning objectives:

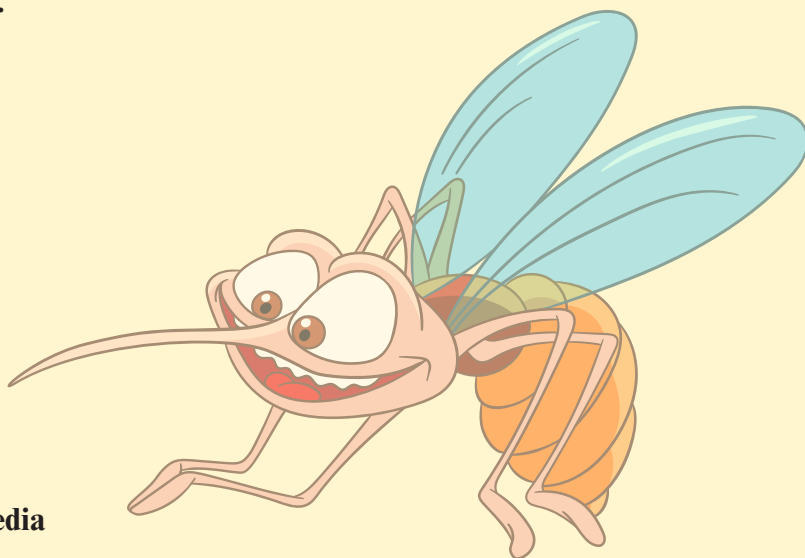
1. Educate the children about how malaria is caused, and symptoms of malaria
2. Understanding the severity of malaria/what malaria does to children and adults
3. Capability of applying critical thinking, and brainstorming to promote awareness on malaria and on its prevention.

Teaching methods:

Group discussion, Drawings, Short skits, games, Multimedia(Videos)

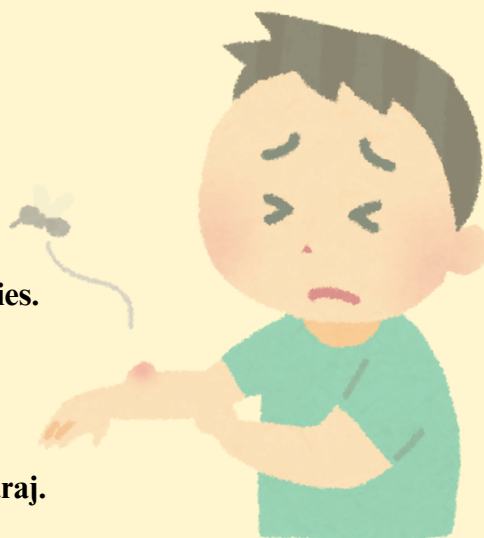
Teaching Learning Materials:

- Plain charts,
- Colouring charts for life cycle and symptoms,
- Sketch pens,
- Crayons, stationary,
- T-shirts (red,brown and black),
- Pico projector,
- Film- malaria sachetan film in the tablet
- Malaria comic- printed version & multimedia
- Target malaria- cartoon



Topics that will be taught:

- Introduction to malaria
- How malaria is caused
- How do I know that I may be having Malaria? (Symptoms)
- What harm malaria do to children, to our families and communities.
- What should I do if I get malaria,
- Dangers of malaria.
- Review of what I learned today.
- Watch “Malaria Sachetan Film” documentary by Swasthya Swaraj.





Start the class with icebreaker games.

1. Introduction

Understanding the pre-existing knowledge of the students-

- Have you heard of malaria? Explain what you have heard.
- How many of you or any one in your house had malaria?
- Can malaria kill people?

2. What causes Malaria?

Watch Malaria sachetan film :

Now the CN explains:

Malaria is caused by a germ (jeevanu) called **plasmodium** which enters into our blood and makes its home there with its babies. Plasmodium cannot be seen by the naked eyes. It needs a microscope to visualize. One drop of blood under the microscope will reveal the plasmodium germs. (when you come to the hospital with fever, didi takes blood from your finger and examines it under the microscope to see these germs.)

Plasmodium is of two kinds- **vivax** and **falciparum** – chota malaria and bodo malaria respectively. In our area bodo malaria is common and is dangerous.

The tribal villages in Odisha have lot of malaria. In the world every year 5 lakhs people die of malaria. Most of them are children under five years and pregnant women. If it is a dangerous disease and common in our area, we children should know more about it.

3. How does the plasmodium enter our blood?

Game of 3 people in a triangle- A,B,C. C is not a child, it is mosquito (cover the face with gamcha and put wings)

Child A has malaria. He is shivering with fever (covered with blanket) and sitting, not able to stand up. Child B does not have malaria and standing. After 15 days B gets malaria. They did not touch each other. Mosquito comes singing and bites A and sucks his blood into its tummy and then goes singing and bites B and after few days B gets malaria.



So mosquito is the vehicle (gadi) who carries the malaria germs from one to another- the mosquito spreads malaria from one to another, carrying plasmodium from one person to another.





Plasmodium is not in water, not in air, not in food. It is in the blood. It can live only in our blood or in the body of mosquito. So what can we do or how can we stop malaria? We cannot kill child A or B. We have to protect the lives of A and B. But we can kill plasmodium which causes malaria, and we can kill mosquito which spread malaria from one person to another.

- a. we can kill plasmodium in the blood by taking medicines correctly.
- b. We can destroy mosquito in many ways.

For this we need to learn the basic life cycle of mosquito.

4. (i) Life Cycle of Mosquito:

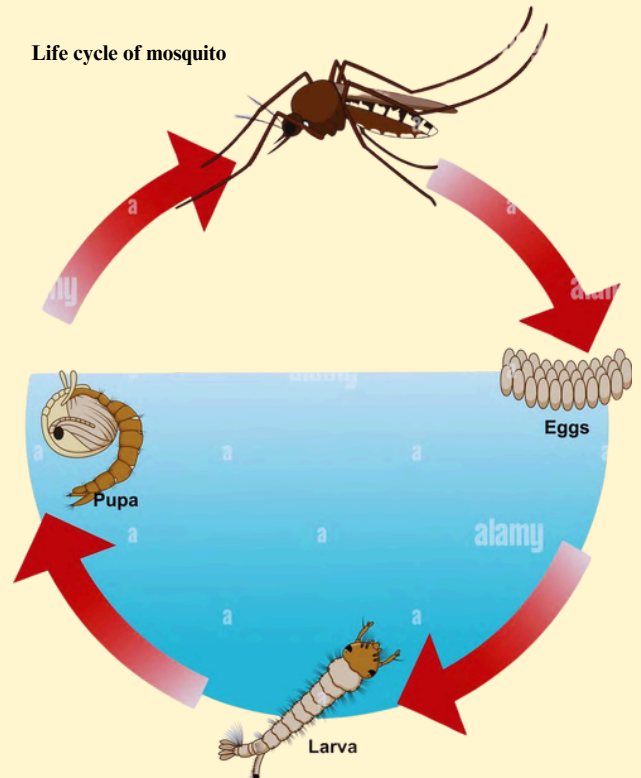
Life cycle of mosquito: Mother mosquito laying the eggs-larva-pupa--adult mosquito.

Where do they lay the eggs? In clean stagnant water.

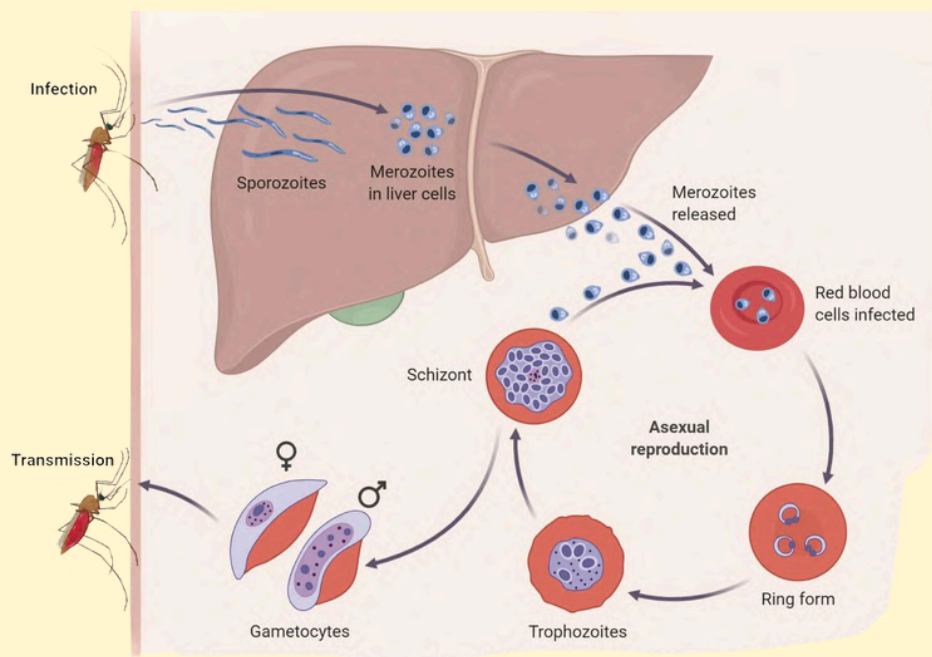
Where do we find stagnant water?

Mother mosquito is the blood sucker. It sucks our blood in the night. When it bites one patient having malaria, the plasmodium in his or her blood gets into the mosquito's body where the plasmodium germs multiply. Later when this mosquito bites another person, these plasmodium babies are injected into that person's blood. (show this part in the film)

Life cycle of mosquito



4 (ii) life cycle of Plasmodium



- Do Ball and thread game: to remember the stages of the mosquito life cycle.
- Ball and thread game: to remember the life cycle of Plasmodium. (use different colour thread ball)





5. Watch Malaria Sachetan film in parts again. (from you tube)

- Who do you think is our bigger enemy- Plasmodium or Mosquito?
- Divide students into two groups: one group saying villain is plasmodium and one group supporting mosquito.
- Why do you say it? Justify your choice with reasons. (this is to promote thinking and speaking ability of children).

6. Inputs by trainer

- A. mortality due to malaria. (repeat- from Pg 6)
- B. explain what is PF and PV malaria (repeat from Pg 6)

7. Divide the students into 4-5 groups

- a). provide them with a chart paper with simple, uncoloured diagram of mosquito's life cycle.
- b). ask each group to colour the chart and label the diagram
- c). any group which voluntarily agrees, is asked to present the chart with the whole class.

Break time for 10 mins.





Learning objective:

Students are able to clearly identify the symptoms and signs of malaria.

1). Performance of a small skit with co-facilitators, shiksha sathis and student volunteers

The skit is:

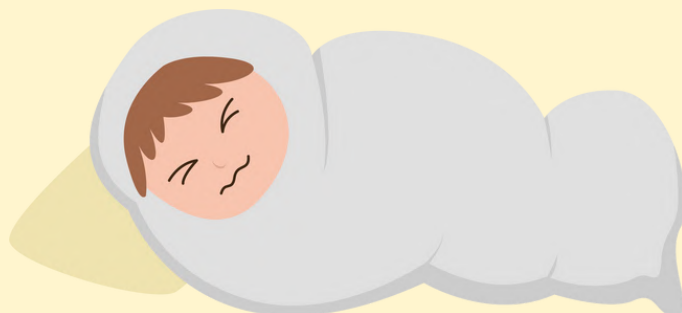
- a) a child getting sick with classical malarial symptoms and sees the doctor along with his parents
- b). blood test is done by nurse.
- c).The doctor explains the diagnosis and gives appropriate treatment.
- d). child refuses to take treatment. Nurse explains to the mother the importance of taking complete treatment.

The skit is completed

2). Students are asked to assemble in the same groups as the previous activity.

- a).A custom-made chart with various pictorial figures of symptoms of malaria are given.(fever with chills, headache, vomiting, cough and breathing difficulty, convulsions, severe tiredness, abdominal pain, spleen enlarged, jaundice, black urine)
- b). Each group is asked to colour the chart with the colour pens provided
- c). 30 minutes is the time given to complete the task
- d).A group picked either randomly or a volunteer group is asked to present
- e). discussion of the activity

Break time for 5 mins.





Story with actions:

Trainer tells the story of Sher(lion) and the cunning Beluva, how the small Beluva killed the mighty Lion.

Once upon a time in the jungle a furious Lion (furious) lived. Lion eats any animal which comes on its way. It has long teeth and terrible face and proud way of walking. There was also a Fox (Beluva) also lived in the jungle. The fox survives with its cunning nature, not with its strength or might. He was very frightened of the lion, but somehow he made friendship with the lion and used to bring hens from the jungle and from the homes as food for the lion.

Once the lion was very hungry and the jungle was dry in the summer and there were no animals to eat. Lion could not control its hunger and it found the two children of the Fox and he ate them up. The fox questioned the lion, but the lion simply threatened him saying that he may eat him up also. The fox knew he is nothing compared to the lion. He was looking for a chance to trick the lion and take revenge on him. The fox finally tricked the lion and killed his two babies and finally him too.....



- We can end malaria:
1. if we can eradicate plasmodium from our communities.
 2. If we can destroy mosquitoes
 3. If we can protect ourselves from mosquito bites.





1. How do we eradicate plasmodium?

Ans: If all malaria patients are treated fully, then there will be no plasmodium in the community.

2. How do we destroy Mosquito ? they are many, they can fly for about one and half km. and we cannot kill all mosquitoes.

Ans: We can kill their babies which are in the water where they lay eggs. (remember the story of lion and beluva).

a) Do not allow mosquitoes to breed in our villages: for this destroy its breeding places- not allowing stagnant water, channelising water/covering up puddles. Putting Gambusia fish in the ponds and water bodies.

b) Destroy the adult mosquito- by IRS (spray) once in 6 months in houses

c) Burning neem leaves in the house in the evenings

d) Preventing mosquito bites - not to allow the mosquitoes to bite us:

- By sleeping under bed nets/ mosari
- Children under five years and pregnant mothers should by all
- Means sleep under bednets, as they get malaria easily.
- By applying neem thel

Break for lunch – 1 hour

Activity: “Target Malaria Cartoon”. Watch the cartoon with trainer’s help.

Let the children explain what they understood.

Once again let them go thru the cartoon.

Watch “Malaria Comic” on screen (to instill scientific temper in them).

Students Project: Explain. Also decide when, who etc.....

1. Find the breeding places of mosquito in your village and channelize the water.
2. Anyone with fever- test for malaria and take treatment fully.
3. See the globe- where in the world is malaria seen more? In India map, locate areas of high malaria.
4. Do a skit on malaria by the children.
5. Some children can prepare a speech on malaria
6. Write an article on “ children’s fight against malaria” for the School magazine.
7. Malaria song and dance for all the children together.

Slogans by children:

We can defeat malaria and we will.

No child shall die of malaria in our village

Let the children make posters and placards of slogans like these.

Conclude the training by a group song, dance and photo.

Grand Finale:

Create malaria awareness activity in the village (school speaking to community prog.)

Prize to the best performing team, interaction with students .



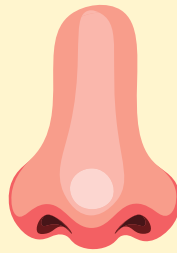


EAR, NOSE THROAT INFECTIONS



These are common in childhood and common causes of school absenteeism and also contagious.

1. Common cold:

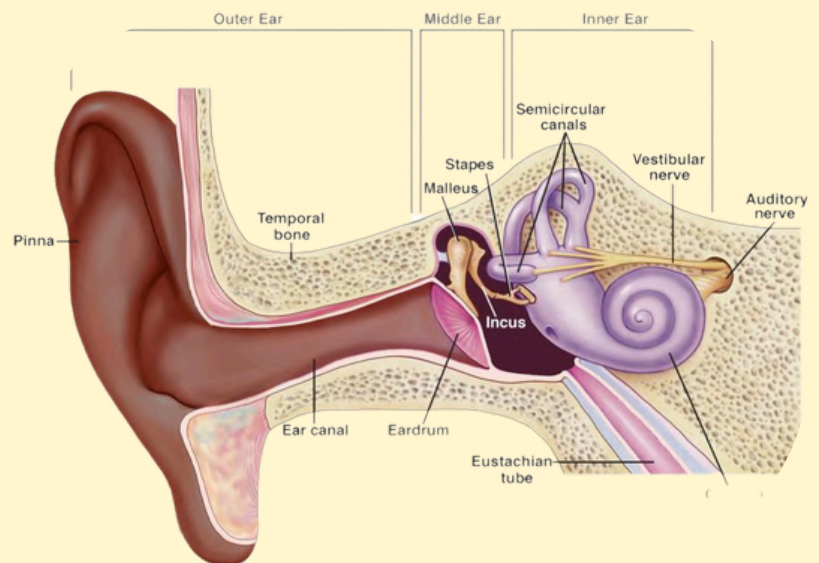
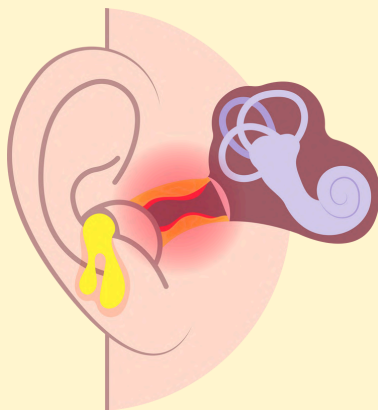


A extremely small organism (viruses) causes this.

Child starts with cough, sneezing, running nose and feel feverish. Child becomes irritable.

- Practice cough hygiene – cough into your arm pouch or towel.
- do not go close to your little siblings and play with them during this period and do not cough on their faces. They will catch it easily.
- wash your hands frequently after handling your nasal discharge.
- Avoid exposure to cold breeze and rain during this time, lest it may flare up into more serious problems.
- take rest at home. It will subside within 3-4 days. If it does not, consult the community nurse or doctor.

2. Ear pain, ear discharge:

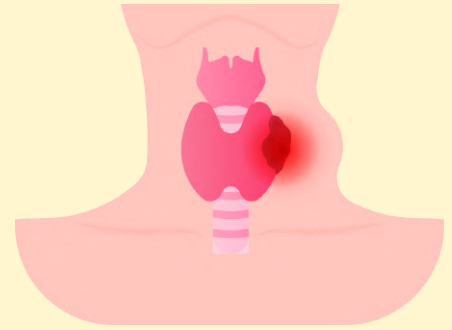


1. Ear infections can cause severe pain, discharge and fever.
2. Do not put any oil or other medications in the ear.
3. Consult doctor and take the medicines regular.
4. If you have ear discharge do not allow water to enter the ears- avoid bathing in river. When you
5. Take bath plug the ears with cotton.
6. Infected tooth causing pain can present as ear pain. So in a child complaining of severe pain in the
7. Ear, check the teeth- painful teeth.





2. Throat infection:



Throat pain, cough, difficulty in swallowing along with fever is usual in childhood.

Doctor or nurse will look at your throat and see whether your tonsils on either side of the throat is enlarged or not.

- a. Do not take ice cream and cold water during this period.
- b. Take warm saline gargles which will soothe the throat and give you relief.
- c. You may have to take antibiotics to kill the organisms causing this, lest you may develop later complications.

General instructions:

- Cover your mouth when coughing and sneezing,
- keep away from cigarette/beedi/pikka smoke,
- Keep away from smoke burning garbage,
- Keep away from motor vehicle fumes.





For trainers:

1. Children need food for their minds and bodies. Good food in the childhood increases their
2. potential for doing well in school and living a happy life in the future.
3. All children need access to the best food available in the family. Girls as well as boys.
4. Children need a wide variety of available food to help their growth.
5. Families need to grow at least some of their food.
6. Soil is a resource that cannot be replaced. With more people in the world, we need to make better use of it. Families should preserve and enrich their soil for themselves and their descendants. (overgrazing, tree cutting..., importance of contour planting and ridging.)

Learning Objectives:

1. Children understand the importance of nutrition in their life.
2. They understand the variety of foods available in the village contribute to energy, body building and protection against diseases.
3. Change of their attitudes and practices of food consumption,
4. They learn to assess their nutritional status and deficiency manifestations
5. Improvement of the children's nutritional status.

Methodology:

- learning by doing,
- Discussion with parents and grandparents
- learning from environment- forest walk, village tour, group discussions with
- Community



Materials:

- Pics of well nourished child and poorly nourished child
- Pics of active, playing child and dull looking child
- Samples of food items available in the locality





We are today going to learn about the food we eat.

1. Introductory questions to test the pre-existing knowledge and attitudes and practices.

Discussion on food:

What do you eat each day/each week?

They discuss what foods they usually eat.

Their present eating timetable- what they eat and when do they eat, how many times.

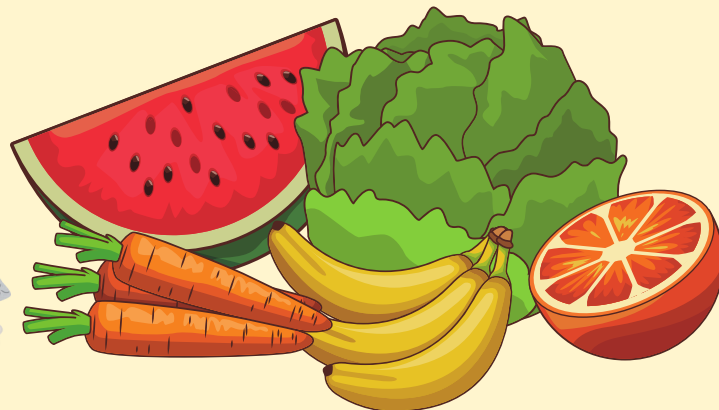
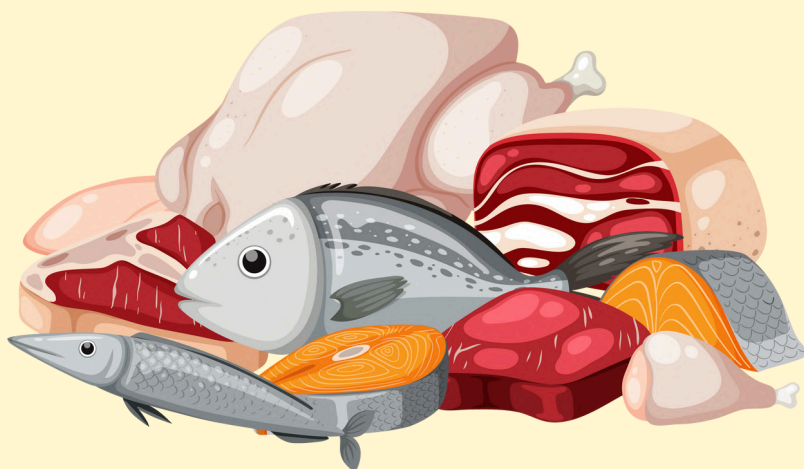
Another time table for their younger brothers and sisters.

Children discuss in pairs, groups or as a class:

Did we eat enough at the right time? Do our younger brothers and sisters eat often enough?



- How many natural colours do we eat each day?
- What are the things your parents produce in the donger or at home?
- What are the edible fruits, leaves, flowers available in village, in donger, in the forest?
- Can we eat more colourful food? More variety of food?
- If we do not eat well, what will happen?
- Why & What questions:
- Why do the children not have breakfast?
- Why do we have less to eat?
- Why do we eat only twice or three times?
- What can be done so that children eat more food and more often?





Look at a bike or jeep running. How does it run? We put petrol or diesel and that is burnt. With that power, the motor engine runs.

Our body is also an engine. Our heart beats, we keep breathing in and out, our mind keeps thinking always, even when we sleep the engine keeps running. Where does it get the energy or power for it?

It is from the food we eat.

When we are hungry, we are not able to run or do longer work. We feel then tired and want to sit down. We are not able to study or remember what we study. Again eg of motor bike. When the fuel is over, bike does not run, it has to be pushed.

So what have we to do? We have to eat.

Food is needed to be alive, to grow, to work, to study, to reproduce and to stay healthy. As children we have to grow, we have to play, work and study.....

In eating food- 4 things important: quality, variety, frequency, quantity.

- What to eat? (variety and quality)
- How much to eat? (quantity)
- How many times to eat? (frequency)



Quality:

Keep in one row: Kurkure, biscuits, samosa/ gulgula, pakodi, chowmeen, fast food-.

Keep in another row: Whatever is available in the village or longer-

Which one is good for us? Why do you choose that?



Quantity: as much as you want-

Frequency: Minimum 3 times daily.

children should eat more times.



Food Variety: Make a list of all different kinds of food we have (without categorisation).

Chawal, mandya, kangoo, kosla, moka, aloo, kondha, diff vegetables, fruits, meat, fish, egg, dhal, chana, aloo, kondhas, soya bodi , sags, fruits etc etc. etc.





FOOD CATEGORIES:

1. **Energy food (carbohydrates)** : Say some of the activities you do daily: running, climbing, sweeping, champing, playing... etc.

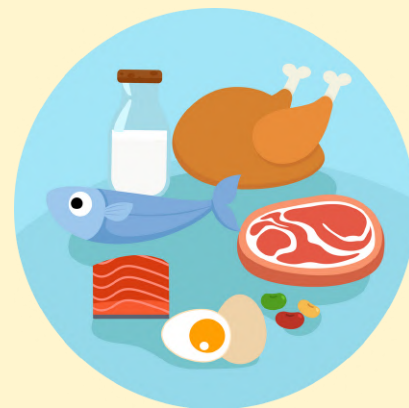


All these need energy/shakti. So we need food which gives energy. We need to eat them more daily. *Shakti kargyo.*

Rice, ragi, maize, wheat, banana, aloo, kondhas, koya, kangoo, kosla- all the food which we eat more in quantity. This is our main food which our parents produce and we need to eat them in large quantities.



- 2). **Body building food (Proteins)** Now see the pics: child growing . how does it happen?



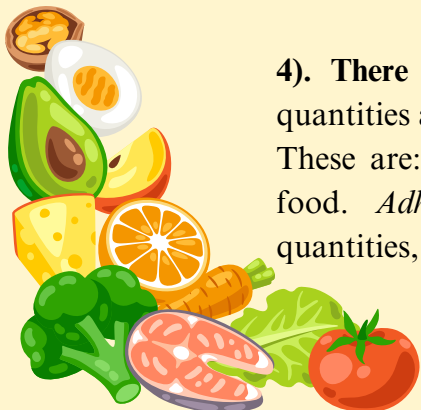
Milk, fish, egg, meat, beans, groundnut, pulses, channa, soya bodi, badam, cutting, judung, mutter, semi.....

- 3). **Protective food (vitamins & minerals)**: We need protection from those who come to attack us. Also we need good hair, teeth, bones, skin, nails, ...fast wound healing, protection from microorganisms which attack us.... This is *Suraksha food*.

Fruits and vegetables- sags, vegetables, tomatoes, lime, papaya, pumpkin, amla, mangos, jackfruit,

- 4). **There are some food which we eat in small quantities and are not included in this.**

These are: Oil, gudu, honey.. This is high energy food. *Adhik shakti kargyo.* We take in small quantities, but it give more energy and taste.

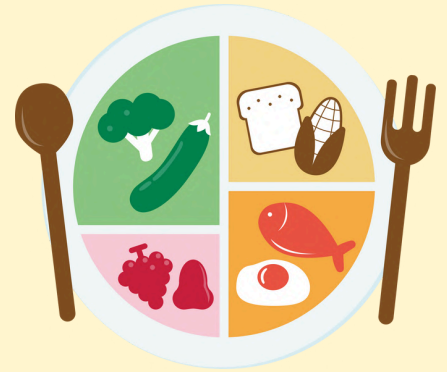




Game on balanced Diet: Balanced diet is always a mixed diet.

3 sets of cards.

- One (RED) card with pic of mixed, balanced food
- Four cards (GREEN) with visuals of 4 groups of food
- Several other cards (YELLOW) each one with visual of one food item



1. Pin Red card on one participant and make her stand in the middle.
2. Pin the Green cards on 4 different girls and make them stand around the red girl, touching her.
3. Ask others to pick up one yellow card and pin it on herself and join one specific green group and explain why she joins her group.

VITAMINS & MINERALS (PROTECTIVE FOOD) :

Vitamin/Mineral	Deficiency Leads To	Present In
Vitamin A	Night blindness, Bitot's spots in the eye, ulceration of the eye, frequent diarrhea in children	Milk, egg, fish, papaya, mango, greens, drumstick, carrot, pumpkin
Vitamin B Complex	Ulcers in the tongue, corners of the mouth, skin ulcerations, swollen feet, swollen hands	Greens, hand-pounded rice, groundnut
Vitamin C	Bleeding gums	Amla, lime, mango, oranges, papaya, tomato
Vitamin D	Bowlegs, rickets	Sunlight, egg yolk, fish oil
Calcium	Required for bone formation (Vitamin D is necessary for calcium action)	Sesame oil, mustard seeds and oil, ragi, milk, drumstick
Iron	Anemia (pale, tired, giddy)	Greens, mustard seeds, jaggery, sesame seeds, eggs, meat, liver

4 categories of food: Shakti food, Pushti food and surakhya food + extra energy food (in science we call it carbohydrates, proteins, fats, vitamins & minerals).

4 groups with each drawing sheet, sketch pens and crayons. Each group for one group of food. Draw the items what is available in your village. You can consult parents too. local sources of each:

Next week, each one has to bring some items from home/village in different packets. We will have an exhibition of the items.





Exhibition of the different items children brought- category-wise.
What all you like to eat in your daily food?

Practicals in groups:

1. Prepare a menu for your family- selecting items from the 4 groups.
2. Now think of your MDM. What does it lack?
3. How should your MDM be like? What all you like to have in MDM?
4. Plan the MDM- quantity, variety.
5. Make a national flag with the food items
6. Make a salad for your MDM using vegetables &/or fruits of 3 colours. (radish, tomato, green ?mutter ? leaves cooked, asoka chakra in the middle.



Total calorie requirement:



Storytelling: Imagine your body is like a car. To keep going, the car needs petrol (energy), which comes from food!

Carbohydrates are like fuel for running and playing.

Proteins help your body grow big and strong, like building blocks.

Fats protect the car and give extra energy for long trips (activities).

Vitamins & Minerals protect your body from attackers

Visual Example:

Show a plate divided into three sections: rice/bread for energy, dal/eggs for growth, and a little oil/nuts for more energy.

Add colourful vegetables and fruits for vitamins that protect you.



Age Group	Calorie Requirement	Explanation
1-2 years	1000 Calories per day	Half of what a father or mother consumes
5 years	1500 Calories per day	Requires more energy to grow, play, and engage in activities
12 years	2000 Calories per day	Needs as much food as an adult for growth, protection, and strength (Shakti, Pushti, Suraksha)





1 gm carbohydrates give 4 Calories.
1 gm proteins give 4 Cals
1 gm of fats give 9 Cals.



100 gm rice may give = Cals.
5 ml oil may give = Cals.
5 ml honey may give =20 Cals.
5 gm gudu may give =20 Cals.

Vegetables & fruits extra- no
calorie content, but it is essential.

Now plan :

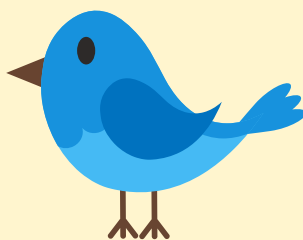
1. Total carbohydrates needed in one day, total fats, total proteins if you have to eat 2000 Cals per day.
2. where will you get these?

Menu preparation: Thali game

Big cardboard pieces

Many small round cardboard pieces- draw one item on each.

Each participant fills the big thali with small ones to make a balanced diet.



Discuss the following in this: a balanced diet with items that are available in the village, existing food habits, how can we avoid wasting of money on food items which are not essential or harmful (which are those foods), How can we make more protein food available in the village/home?





Forest walk:



- Collect all oil seeds available in the forest or donger.
- Collect all edible leaves and flowers
- Seasonal nutritious foods available (eg. mushroom, bamboo shoots, mohua flower, lotus stem, etc.) and their nutritious value.

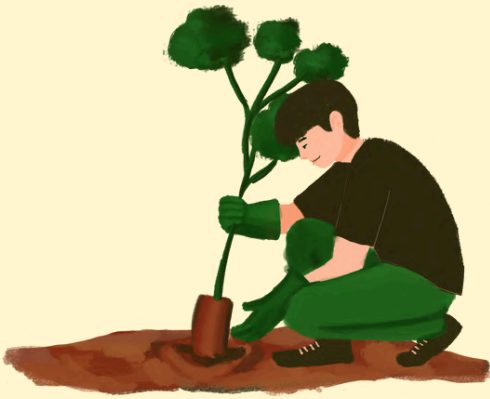


Names of all jungle products which were available in the past and now not available. (collect information from your parents, grand parents , buda budis in the village). Make a document of these and display.

Names of all Kondhas available in your village now and 50 years ago.

Names of all jungle animals which your people were eating, now not available (document).





- The seed sprouts, brings out shoot and leaves, then it grows. Grows in height and width, then it flowers, then it bears seeds. Seeds are collected by us and we eat and some we keep for seeds to replant.
- Growth becomes stunted when the manure is less or when some disease happens. Manure is the food for the plant.

“

Same thing happens to us. Childhood is the time of growth – growth of the body and of the brain.

”



When a child does not take adequate food, the first thing that happens is:



Failure to Grow.

- Decreased ability to resist the microorganisms which come to attack us.
- Repeated infections
- Child loses weight and becomes always sick.

Weight and Height Chart for Girls
from
2 - 12 Years

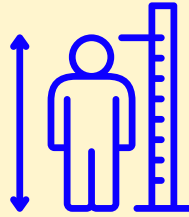


1. What is Nutrition Status?

Nutrition status tells us if we are growing well and staying healthy by eating the right food. We can measure it using our height, weight, and the size of our upper arm (MUAC - Mid-Upper Arm Circumference).

Nutrition status assessment:

- Height
- Weight
- MUAC

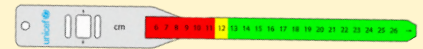


Stadiometer



Weighing scale

Read - Sever Acute Malnutrition
Yellow - Sever Acute Malnutrition
Green - No Malnutrition



MUAC belt

- *Accurate measurement using these.*
- *Nutritional status assessment of each child.*
- *Monthly assessment. (individually by bigger children and of the small children by the big children).*

- *Plotting nutrition status on graph for each student monthly and review:*
- *Familiarise with the growth card of under-five children. Road to health chart.*
- *interpretation of growth curves of underfive children in the family:*





Story of Hare and the Tortoise:

Story thru role play:

One child wears the mask of mother hare, one wears baby hare, and another one wears mask of baby tortoise.



Scene 1:

Mother hare is worried about her son who is fussy about eating. He does not like any vegetables or leaves or fruits. He likes only aloo and rice. He also always cries for Kurkure and biscuits which are non nutritious. He always picks up fights with his friends and ends up crying.

Scene 2:

One day the school organizes a race. Baby hare and baby tortoise participate in it. Seeing the baby tortoise the baby hare laughed and thought, it is silly for him to participate in this race. How can he run fast. He is very slow moving person.

The race begins. After running a short distance, the baby hare started panting and he sat down to rest. He is tired and he dozed off. But the baby tortoise was active and steady and eventually crossed the sleeping hare. After some time the hare wakes up and looked behind. The tortoise was not there. He tried to run fast and was surprised to see that the tortoise had already reached the target. Baby tortoise won the race. The baby hare stood in shame.

Scene 3:

Baby hare asked tortoise what is the secret of his winning the race?

Baby tortoise explained that since he eats lots of vegetables and fruits, he does not feel tired and breathless. So he runs steadily and does not have to sit down.

Now the hare understood why he lost. He decided that he will not make fuss over food, will not waste food and will eat vegetables and fruits to keep him healthy and active.

Normal Blood:

Blood looks red due to Hemoglobin in the blood. Hemoglobin carries oxygen from the air we breathe. Oxygen from the lungs enter the blood. In the blood, the oxygen is carried by hemoglobin to all parts of the body- brain, eyes, ears, hands, legs, stomach, kidneys, bone, skin

When hemoglobin is less- blood looks less pink, and the child looks pale. We are not able to work, always tired, not able to play, not able to remember. This condition is called Anemia.

For producing hemoglobin in the body, we need iron, proteins and other items like folic acid, vit B12, copper etc in small small quantities

Iron comes from green leafy vegetables, and nonveg food.

How can we prevent anemia and stay healthy? For this we need to eat more vegetables and nonveg food.





The students now Examine one another for anemia: look at the eyes, tongue, palms, nails.

Draw the pic of a child- where all you will look for pallor. (using stickers or draw on chart paper)

At home, examine your parents and siblings for anemia. Who all are anemic in your home, in your class? How many are not anemic in your class?



Normal child



Anemic Child

Discuss:

- How can we have more iron content in our food?
- Can we grow more green leafy vegetables in our school nutrition garden and eat them more?
- Eating more amla helps in increased absorption of iron from our intestine into blood. Plant one amla tree in the campus and in the village in many places.
- Plant moringa, lime, spinach, palak, tomato, pumpkin, beans, radish, red sweet potato, carrot, ladies finger,
- How can we children make our parents and elder sisters to eat more green vegetables?
- How can we change of food patterns in the family, in the school?
- How can we communicate this knowledge to the community?
- Let the children come out with ideas and plans.

VITAMIN A Deficiency:

- Health education using story telling method- use puppetry for this.
- Educating the mothers by interpreting the growth curves of the under-five children.
- Make a rainbow of fruits and vegetables (including leaves)- red, orange, yellow & green.
- Make a dish with variety of food items.

Importance of eating orange and yellow fruits and vegetables, dark green leafy vegetables for

1. good eyesight and
2. protection against disease.

Act out – story of jackal and Rabbit

Jackal is old and weak. Cannot see in the night.

Rabbit teases him. **Jackal** could not see in the night and he was very upset. He consults doctor jungle fowl and he gets back his eyesight by eating fruits and vegetables. Gradually he became strong. But rabbit continued to laugh at him, without knowing the reality. He used to come close to him in the night and tease him. And so he came close to him and then jackal pounced on him and finished him off.





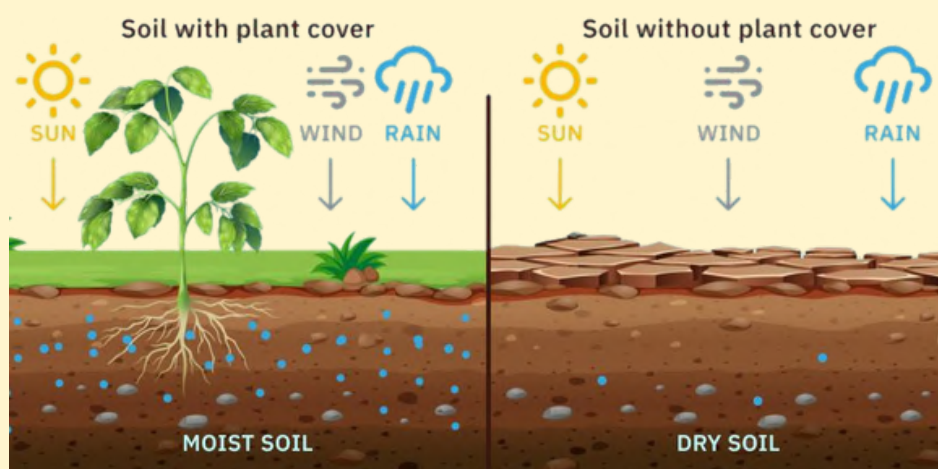
Soil Conservation:

- How do we care for our soil?
- Is all soil suitable for growing food?
- Why is it important to preserve the top layer soil?
- How can we increase it and make it rich?
- How can the soil be lost?
- When it is lost, can it be replaced?
- If it is lost, how could it affect our health?



- *In the rainy season children collect some containers and collect samples of run off water. Muddy water means that soil is being washed downstreams and lost for farming. Why are the plant roots not holding the water in the soil?*
- *Children look at farming in the donger. Are the rows of plants arranged around the donger (contour planting)? Are there terraces to reduce the amount of soil being washed off?*

Discuss how soil could be preserved better.



- *I will grow more vegetables and fruits at home and fee my brothers and sisters.*
- *I will eat more fruits and green leafy vegetables and make it available.*
- *I will collect edible wild fruit, nuts and leaves*
- *We will make our SNG full of veg and fruits.*
- *At porba time, how can we promote our local food instead of chowmin and fast food, Kurkure etc?*

- *Survey the shops selling food. Which are healthy and clean food?*
- *Can we promote healthy snacks to friends and families?*
- *Can we grow fish, rabbits, ducks, chicken, pigs etc- all provide good food.*
- *Ask elderly people about edible wild plants. Make a display of these plants in the class.*
- *Cookery demonstration in the class.*
- *The local agriculture officer or farmer to advise and help children to make a compost pit and tell them about mulching.*





SCABIES



Objective:

- Children understand that scabies is caused by lack of personal hygiene,
- Prevention of scabies,
- Need to treat all at home.

TLM: Scabies Pics. Magnifying glass, Video clippings, Permethrin cream, Gentian violet, hen's feather

Methodology: Skit, Video, Discussion

Introduction:

How many of you had scabies?

Describe the scabies infection you had? (One child comes scratching all – generate interest in all)
Your understanding about – what causes it, how it spreads, treatment etc.

Story of Scabies: Make the children act this drama.

Scene 1. The King + Queen bugs – they are trying to find a place where they can live happily and raise a family. What are they looking for.

Scene 2. A clean boy comes who wears clean clothes. The King insect asks 'how about this boy? Can we live on his body?' The Queen says 'No. Don't be silly. He bathes daily, wears clean clothes he doesn't have enough dirt on his food. We need dirty bodies to live!

*Scene 3. shows Somu - he is playing on the sand and is very dirty. His clothes are dirty.
Queen: Yum! Yum! Just look at all the dirt on this boy. That is the kind of body you and I can live on and have lots of children. Let's go to his body!*

Scene 4. Somu is itching all over (act like someone is itching all over) see his hands. The baby insects are digging holes into his hand and feeding on dirt. The hand is very itchy.

His sister sleeps next to him. She also starts itching. Why? The insects have spread to her body. Soon, the whole family is itching! They cannot sleep! What is causing the whole family to itch? Why can't you see them with the eye?

Scene 5. The King and Queen insects must be very happy. They have many babies with them. But.....one day The King + Queen are scared - Why? A nurse is coming! The Queen says 'Oh no, it's that lady who has killed all our relatives in other houses. She has brought that white medicine and is asking the whole family to use it! We are all going to die!'

The nurse tells the family that the cause of their trouble is a tiny insect that is so small that it cannot be seen by the eye. The nurse says "do not worry. This white medicine will kill these insects."





Scene 6. The nurse puts the medicine **ALL OVER** Somu's body and not only on the places where the itching is. These insects will run and hide in other parts of the body if we only put the medicine on the wounds. She also tells **ALL** those in the house to do the same. Yes, even if the others have no itching. Only if we kill all the insects will the disease not come back.

But she also says that this medicine is poisonous to people if they drink it. So how can you stop small children sucking their fingers after you put the medicine? (wrap the fingers in cloth at night after putting the medicine. You also do not rub the medicine in to the skin, just apply it like oil. Another more expensive medicine called permethrin is sold in shops in tubes and is less dangerous to small children. You only apply scabies medicine once- do not apply it every day. If the itching is very severe it can be repeated one more time a week later.

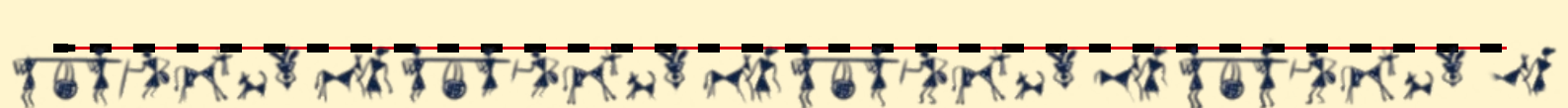


Scene 7. The next day Somu has a bath. The medicine is left on the body overnight. Ask why? The medicine needs one day to kill these insects. You can say that insect killing medicines sprayed on plants in the field, will not work if it rains soon after the medicine was sprayed- so do not bath straight way after the medicine is applied).

Scene 8. The nurse also said to wash all cloths and dry them in the sun. Put blankets and mattresses in the sun as well. Ask why? (The eggs and some insects may hide on the cloths. The sun will kill these.)



Scene 9. The family did all that the nurse said! What will happen to the king and queen and all their bad babies which caused so much trouble. They all died. The itching and wounds all healed one week after the medicines were put. (This point may be important. Many people with scabies are unhappy because the itching stays for 1 week after the medicine is applied and they think the medicine has not worked. Tell them to be patient. After one week, the itching will stop.)





Inputs:

- Scabies is common in our communities.
- Children are commonly affected as it spreads from person to person.
- It is often seen in hostels, small dingy houses, where people sleep together, where there is poverty same clothes, blankets, towels etc, where people do not bathe well.
- Scabies is caused by *ITCHMITE* (*Sarcoptes Scabei*) – can be seen with magnifying glass.



There are female and male itch mites.

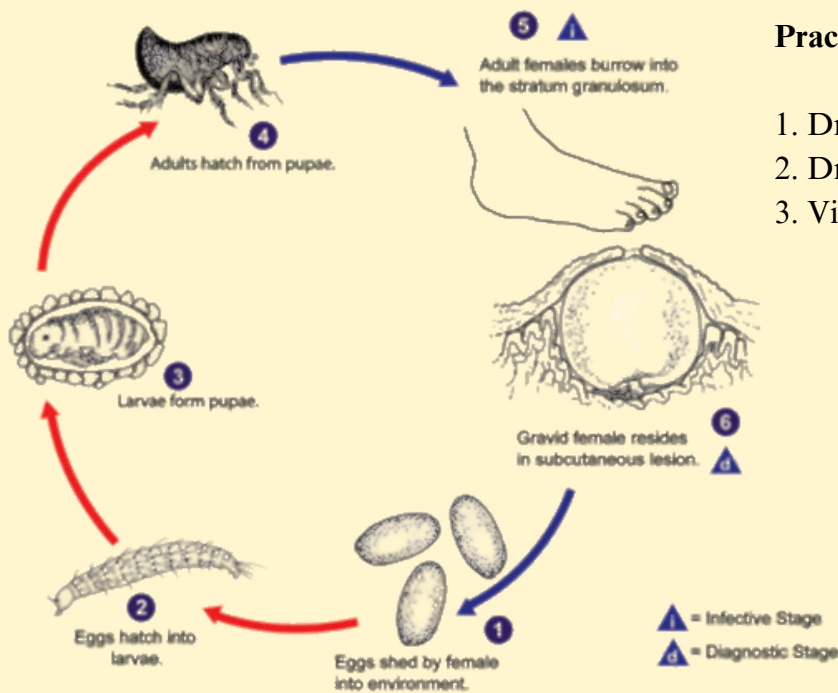
Females lay eggs → larva → larva sleep for a while near the hair follicle in small sacs filled with fluid called vesicles, → larva become young itch mites called nymphs → adult itch mite. This cycle takes 10-15 days.

The females when it wants to lay eggs, burrows into skin folds between fingers, toes, under the breast, between the buttocks, inguinal region etc. like a rat burrows into. Because of this burrowing, it starts itching in these areas. Because of the itching and scratching, there is injury and pus formation.

Treatment: Permethrine cream, Lindane lotion, Treat all at home.

Prevention: Regular baths, wash clothes regularly and sun-dry the clothes, , cut nails.

Without community involvement, difficult to keep the disease away.



Practical:

1. Draw the Pictures/ draw itch mite causing scabies
2. Draw the lifecycle of itch mite
3. Visualise the mite in the microscope.

Projects:

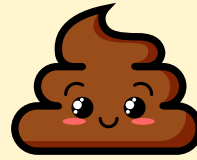
- How do you prevent scabies in your community? Discussion in the classroom
- Survey- how many children in your school have scabies and find out from their families how many of the family members are suffering from scabies.
- Puppetry on Scabies- School speaking to community activity





Learning objectives:

1. Children learn how diarrhoea spreads,
2. Immediate management of diarrhoea
3. prevention,
4. personal and environment hygiene,
5. capability to apply critical thinking and change of practices in life.



TLM:

balloons, water in bucket, soap, clean water in bottle, sugar, salt, lemon, tumbler + spoon (optional), magnifying glass

Introduction: Let us start the class with a story of a boy called Raju in a nearby village.

Skit/ drawing: what happened to 2 year old Raju

Raju developed loose stools one day. His mother did not worry as she thought, "babies always get diarrhea." The next day Raju still had diarrhea. His mother thought that the only way to make him better was to stop giving him food and water. Raju was very thirsty and cried for water but his mother did not give him water. She believed that water would make the diarrhea worse. Raju became very weak and dry and still had diarrhea. His mother was now very worried and she gave water to drink. But Raju continued to have diarrhea and became very weak. Mother did not know what to do. When Raju's father came home 2 days later, he decided that the baby should go to the Hospital 15 kilometers away. But when they reached the clinic, Raju died.

Discussion:

- Have you seen such case happening in your village/ have you seen/ heard of child
- Died because of diarrhea?
- Ask the children to share their experiences and narrate.
- Have you had diarrhea and what was your experience?
- What do you think was the reason for Raju's death?- do a critical analysis of what
- Happened to Raju.

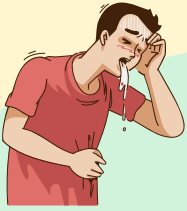
What is Diarrhoea?

Diarrhea is when someone has watery stools more than 3 times a day.

Watery stools, increased frequency, increased quantity.

Diarrhea causes loss of water from the body. Along with water, salt is also lost. This loss of water and salt is dangerous and kills, especially children.





How Diarrhoea is caused?



*Germ*s cause diarrhea. We can't see the germs that get into our mouth, from our hands or food into our tummy. Diarrhea is caused by germs getting into the mouth from contaminated food, or drink or touching the mouth with dirty fingers, or using dirty spoons and cups.

The germs make our tummy want to get rid of the germs by using more water, making our poo watery. When we have diarrhea we can lose a lot of water and might get a fever. It is very dangerous to lose a lot of water. When we have lost a lot of water we become very sleepy, with saggy skin and sunken eyes.

When we have a watery poo, or when a baby has a watery poo, more than three times a day we need to take action to treat diarrhea and replace water and nutrients to help the person get well.

We can't see germs. Germs come from poo and they can move from person to person on hands and food and in water that is dirty because poo has got into it. When we wash vegetables or plates and spoons with dirty water, or if we drink it, the germs can get into our bodies. To stop germs from spreading we need to remember to wash our hands with soap every time before we eat and after we poo. We need to use the toilet and keep our drinking water clean and covered.



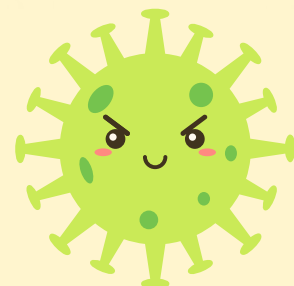
Experiments:

a). Looking at the dirty water from the pond (keep muddy water in a glass)
see the tiny organisms swimming about in the water through the lens or through a microscope. Some of these are harmful – the germs.

- Boiling the water kills most of these germs.
- Placing it in sunlight in a clear glass or plastic bottle also kills the germs.
- Filtering water is another way of making it safer to drink.

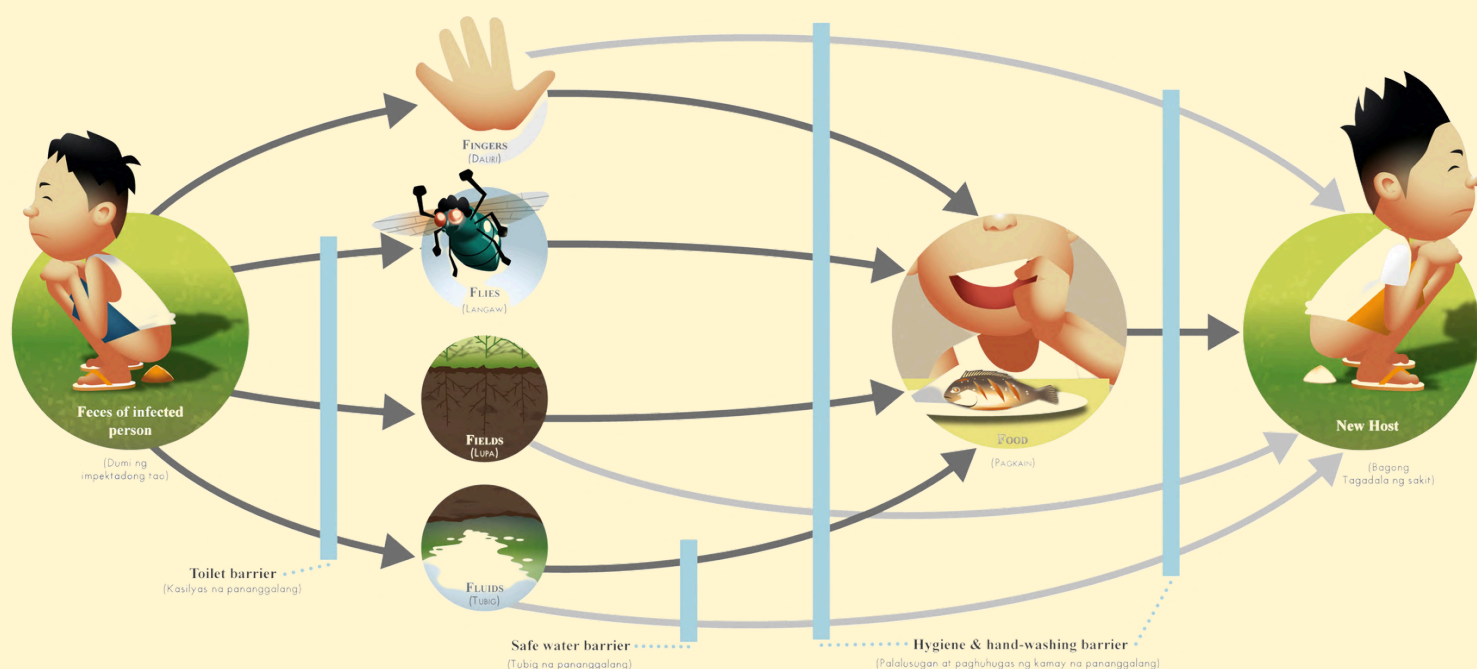
b) Model making:

- Make large model flies using available materials such as seeds, clay, six bent twigs as legs and two leaf wings.
- Make models of pics of food for the flies to walk on.
- The flies are made to walk in dirt or cow dung, and then on a clean surface.





c) Draw the cycle how germs reach and spread in the community with help of arrows and picture card (stool to mouth / anus to mouth cycle)



(Faeces --- fly sits on it.....fly then comes and sits on coloured rice.....flies deposits
Germs.....fly then goes to other dishes too... someone comes and eats the food..... Diarrhea starts

After defaecation, no proper handwash, germs on the hand, eats food or prepares food, eats it, down with diarrhea) pics for it.

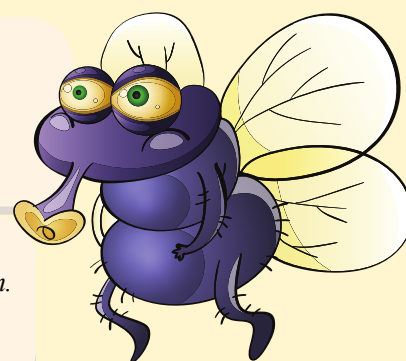


d. Make stories and drama by children.

d. 1) Some people dirty the drinking water source by throwing plastic and dirt into it. Some children taking initiative to clean the water source and educating the people about the value of safe drinking water.

d. 2) Life of a dirty fly and people following bad habits. Children come to take action. How the flies and some adults hate these children

d. 3) My little sister dirtying the floor of the house... community nurse teaching the students that children's poo also contains germs and spread disease. Health Education to family.

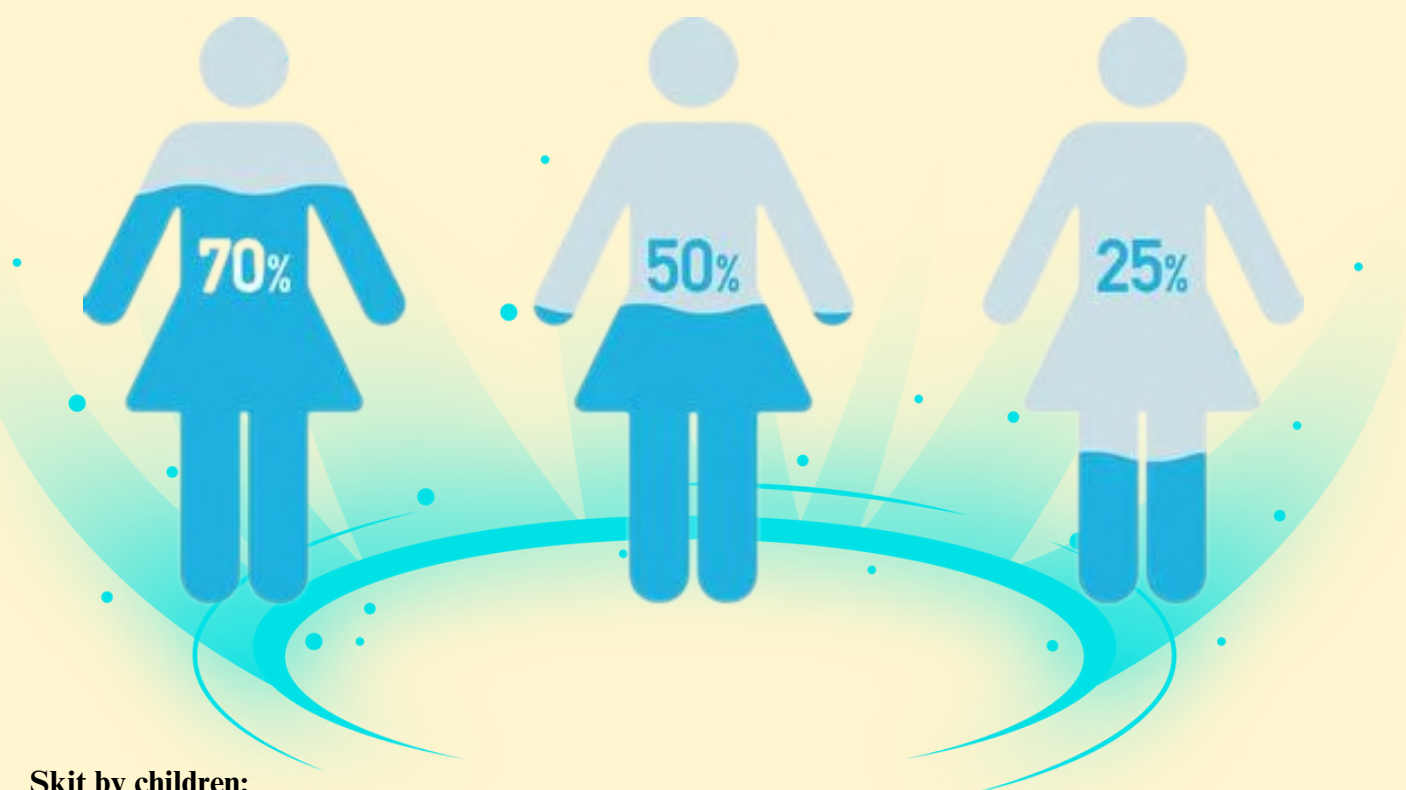




What happens to the body when we get diarrhea?

Experiment: Diarrhoea doll made of gourd or balloon or bottle losing water from below.

When we have watery poos and when we poo often, our body loses water and salt. We need water and salt to keep our body working properly. If we lose a lot of water and salt, body becomes weak and children will die of dehydration. Recall the balloon baby losing water and shrinking.



Skit by children:

Jagu was crying continuously...very irritable....his mother wanted to go to field as this is the season for rice sowing.....but jagu didn; t stop crying....this was sixth time he was passing watery stool since night...mother cleaned him again and was wondering what to do....when she saw Tela dei walking with her baby going towards field.

She remembered that Tela dei goes for some training at Kerpai hospital..she called her loudly...Tela dei came to her.

(Stop the narration here and ask one child dressed as Nurse to come forward and continue the role play)
What a Nurse should see and enquire when she comes across such situation:

1).Sit down... go closer to her...take time to hear her problem..and assure her that you are willing to see her child (or any family member) and willing to help.





- 2). Listen to mother whatever she wants to tell with no or minimal interruption. Then the Nurse asks:
- since when child is having diarrhea ?
 - how is the diarrhea ? is it watery /sticky ?
 - How many times in a day?
 - Is there blood in the stool ?
 - has child had fever ?
 - Did the child have convulsion ?
 - Is he drinking or taking breast milk or not ?

3). what to look for ?

The general condition of child

- **Sunken Fontanelle -**

- (The fontanelle is the soft space between the bones of the top of baby's skull. touch and feel the fontanelle. Due to dehydration it sink down between the bones of his skull where we can feel edge of bone. less or no pulsation can be felt at fontanelle).

- This sign is only possible to check in child less than one year

- **Sunken eye** – (when eyes sink (fall back) into his skull. Eyes lose their shine and look dull and stay half open when child sleeps.)

- **Dry Mouth** and thirst and ability to drink

- (Dry mouth and tongue is an early sign of dehydration.

- If child is on breast feed ask mother to feed the child.

- For an older child offer water. See how child is drinking. Is he drinking eagerly /poorly / normally.

- If he is drinking eagerly that means he is thirsty and has early sign of dehydration.

- If the child is not accepting any feed / water or drinking poorly and the mother also says it - is a danger sign.)

- **Skin elasticity**

(Pinch up a fold of skin at the side of child's abdomen between your finger and thumb (vertically) [demonstrate] hold it for few seconds and then let go. Normally the fold of skin goes back immediately. If the fold stays up for two seconds, he is severely dehydrated.)

- **Less Urine/no urine**

(normal child passes urine almost every three hour but dehydrated child passes very less urine and less frequently. Ask mother- is her child passing urine less than usual ?)

The nurse/doctor may also look for:

- **Weak and fast pulse**

- **Increased heart rate and Fast breathing**

Recall Signs of Dehydration in diarrhoea:

Labelling game by stickers by children on the board on a child's drawing/picture to help children remember the signs of dehydration.

Each child labels on a drawing of human body on the black board





What can children do when someone gets diarrhea?

- Rehydration : to save a child from worsening we have to maintain the water level in the body. Hence rehydration..

How to give oral rehydration solution (O.R.S.)

a) with ready ORS packet

1. wash hands with soap properly
2. take a one liter water in a bottle or any clean vessel.
3. empty complete packet into water.
4. Mix well
5. keep feeding this solution to the child..after every loose stool feed again and again.



b) Home-made preparation of ORS

- -Hand wash, Clean water in a glass
- -Take salt in pinch with three fingers- thumb index and middle finger, put into water and mix well.
- Test it : should not be more salty than tears.
- then take sugar in four fingers scoop and mix well with water
- Keep feeding this solution to child.
- If available, add half lemon juice to it.
- Instead of sugar, jaggery can be added to ORS.
- Demonstrate and Make ORS in the class and everyone tastes it.



• Other fluids that can be given are:

Rice water (Torani pani) with salt, Dal water, lemon juice for a breastfeeding child ask mother to continue breastfeeding. If the patient vomits, wait for five to ten minutes and give ORS again. Usually, vomiting stops on its own.

- ORS does not stop diarrhea. It prevents the body from drying up. The diarrhea stops by itself when all the germs are flushed out of the gut.





Practical questions for discussion:

1. come to earlier question when they described about people who died due to diarrhea...ask

How some die of diarrhea and some got better?

It is the dehydration which kills a person.

Have this discussion to impart importance of rehydration.

2. Why do we add salt in ORS? Why not give water alone?

In diarrhoea, along with water, salt from the body is also lost. Salt is also very important.

When we feed the baby with water alone without salt, child remains weak and become serious. We need to add a pinch of salt only in one litre water, but that one pinch is very essential.

3. Why do we add sugar in ORS? Is it to sweeten the water and make it good drink?

Sugar is added not to sweeten it or to make it an energy drink. It is to improve the entry of

salt into the blood from the intestine. Sugar acts like a porter /coolie carrying the salt molecules into the blood from the intestine.

4. If diarrhea increases and / or vomiting persist, or child is unconscious and not accepting

any feeds, what is to be done? Can guru guniya make the child alright?

No. Take the patient immediately to a health clinic where doctor, nurses and proper health care facilities are available. They will give saline (water with salt) into the veins/ blood stream of the child.

5. If child has fever with diarrhoea, what is to be done?

Along with giving ORS, blood test for malaria has to be done. Because malaria is common in Adivasi area. Child also need medicine for fever.

6. Some children pass blood and mucus (shingani) in the stool when they have diarrhea.

How does this happen and what is to be done then?

The child may have some special germs in the intestine for which special medicines have to be given. This child has to be seen by nurse or doctor.





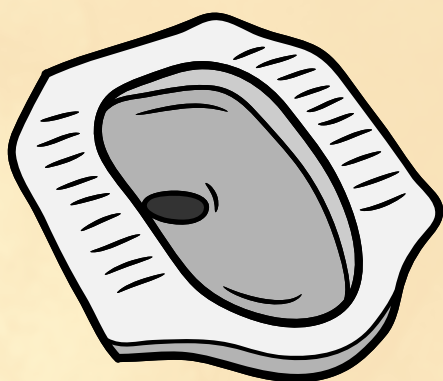
How can we prevent diarrhea or save ourselves from diarrhea?

- Start with what ideas swasthya sathi already have.
- place those ideas of prevention in cycle of diarrhea on “stool -to- mouth” drawing

1). Handwash

(Notes to trainer & teacher): Washing hands with running water and using soap is very important.

Germ and viruses can survive up to 2 hours on the surface of the skin, tables, door handles, toys, and so on. Hand hygiene that is not properly maintained can cause diseases such as diarrhea, cough, runny nose, and fever. It is crucial to know how to wash hands well and encourage children to wash their hands before eating, after playing, after going to the toilet, and after traveling.

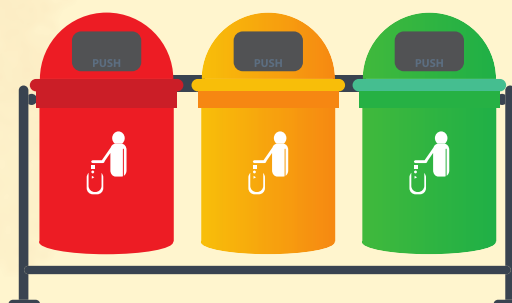


3). Use of Toilet

- Teach children to use latrine for defaecation and clean with water, handwash after
- Defaecation using soap.
- Keep the toilets in the school and home clean. Clean the toilet pan with soap powder and brush.
- Do not let water be stagnant in the toilet.
- Avoid open air defaecation.

2) . Maintaining environmental cleanliness:

- Some activities that children can perform are
- Disposing garbage in its place,
- Putting shoes in place,
- Putting dirty eating utensils in place away from animals who may lick the vessels,
- Using footwear when being outside of the house,
- Cleaning toys regularly
- Practice defecating and urinating in the toilet.





3). Safe drinking water



- Filter in the school to filter drinking water.
- Exposure of water to sun in transparent vessels.

4). Safe Food



- Wash vegetable or meat thoroughly with water before cooking
- Cook well and adequately.



Brainstorm:

- Why handwash?
- How do we do correctly handwash- handwash song & dance.
- Why use toilet?
- Prepare song to be sung in duet on toilet use
- Why safe drinking water?
- How can we purify water in an economic and safe way in our setting?



At a personal level

Safe drinking water:

1. water should be filtered with clean cloth
2. Boil water for a minute
3. add chlorine drops to water and keep for a half an hour
4. Keep water in a transparent bottle /vessel covered to keep flies away in sunlight. All the germs die in the sunlight. Then keep in mudka for cooling it.

Safe food

wash vegetable or meat thoroughly with water before cooking
cook well and adequately.
Eat fresh food, Keep food covered.

1. Safe hands - Hand wash :

2. Wash hands with soap and enough water thoroughly
3. If soap is not there use ash.
4. Demonstrate steps of hand wash
5. hand wash before eating
6. before cooking
7. after defecation
8. After cleaning child who has passed stool

At a village level

Build latrines away from river or water source.
Pit latrines.

At least cover stool with soil.

Drink filtered water. Chlorination of water tanks at regular intervals.





Practical:

Watch the odiya video on cholera- how a child saved the lives of people in diarrhoea outbreak. how a boy takes immediate action and prevents death.

Practical application:

- Preparing ORS
- Water testing for microbial contamination,
- Health education to community thru skit or puppetry

Students' project:

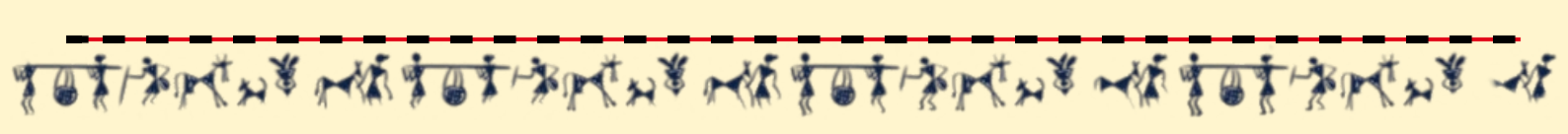
1) Go to your parents and grand parents and find out:

- How many people died of diarrhea and vomiting in this village as much as they remember?
- Was there any time when many people getting diarrhea at the same time?
- What did they do then?

2) Incidence of school absenteeism due to diarrhea in your school– monthwise. Plot the graph month-wise.

3) prepare a health education session for the village community using skit/ puppetry.

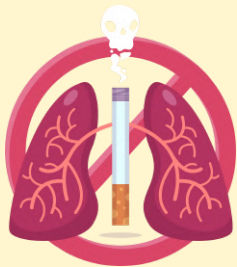
4) Make a song on diarrhea prevention.



SMOKING, TOBACCO CHEWING, ALCOHOL

Smoking and tobacco chewing is started by many in childhood. Children see adults doing it and try to follow that. Or they learn from peer groups. 90% adult smokers started it when they were kids.

What problems can smoking and tobacco cause?



- Beedis, cigarettes and chewing tobacco contain a chemical called – **NICOTINE**. This chemical is
- addiction-forming within days- you become dependent on it. (Explain).
- It gives some pleasure for some time, but damages- our lungs, heart, brain, causes cancer in lungs,
- throat, mouth, esophagus.
- Smokers also get- pneumonia, breathing difficulty, mouth ulcers, stomach ulcers.
- When father is smoker at home, children's lungs also get damaged and also mother's lungs.



Personal decision:

**NO TO SMOKING, CHEWING
and ALCOHOL.**



Learning objectives:

- Children learn about what is TB,
- its infectiousness,
- its effects on children, parents and community
- when to suspect TB,
- prevention, behavioural changes
- need for uninterrupted regular treatment for the prescribed duration.

TLM:

- Projector, chart paper, sketch pens and crayons, sputum smear mounted on microscope.
- Methodology:
- Inputs,
- Discussions
- Quiz
- Presentations

Introduction: How many of you have heard of TB? Do any of your family members suffer from TB? Has anyone ever seen any family member or villager spitting blood in the sputum and coughing?

Tuberculosis is common among children. It can kill children and adults. TB is more common among poor people. Many people die of TB every year in the world. This is more among poor people.

Causative agent: TB bacilli, visible only in microscope.

Spread of TB: through the air- when a patient coughs or sneezes. The germs get into the other person's lungs and develop into TB (see the animated film)



Tuberculosis Symptoms



Fever



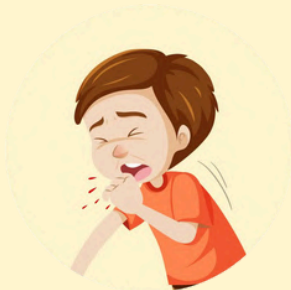
Fatigue



Weight loss



persistent cough



blood in cough



night sweats

When do we suspect TB?

Cough for more than 2-3 weeks, blood in the sputum, weight loss, fever in the evenings.

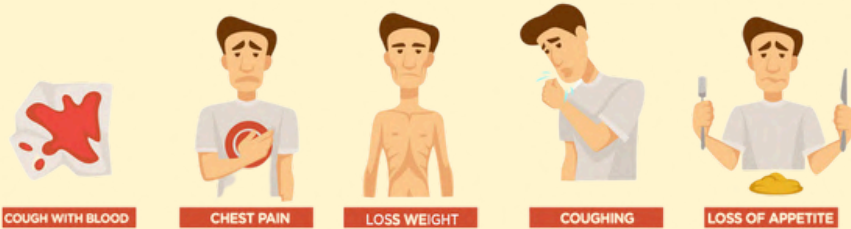




TUBERCULOSIS

SYMPTOMS AND PREVENTION

SYMPTOMS



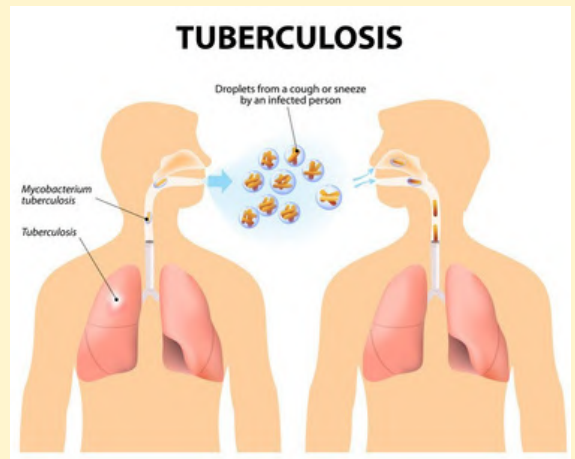
PREVENTIONS



If TB is confirmed, treatment typically lasts for 6 months, involving a combination of antibiotics to prevent drug resistance. Adherence to the full course of treatment is critical to ensure a complete cure and avoid relapse.

Prevention:

- *Cough hygiene- when you cough use towel/ cough into arm pouch or elbow pouch.*
- *Do not spit inside house and in the courtyard, or in the road and public places.*
- *Encourage any of the family members who is coughing for more than 2 weeks to go to hospital and checking for TB*
- *Teach all family members to practice cough hygiene*
- *BCG vaccination for preventing TB in children. Ask your mother, how many of your*
- *younger siblings had BCG vaccination on the left upper arm. See for the BCG scar on your left upper arm.*
- *Do not skip any meals.*
- *Importance of good nutrition which will build your immunity.*
- *Stop smoking by your parents and relatives. Smoking damages lungs and when they get TB it is worse.*



Practical:

- *Observe the TB bacilli in the microscope*
- *Draw the TB infection in the lungs.*
- *Labelling game of symptoms of TB on a picture.*

Project:

1. *Find out if there is a TB patient in your village and whether he is taking treatment.*
2. *Survey how many children in your school have BCG scar on the left upper arm.*
3. *How will you advice a coughing patient and encourage him or her to practice cough hygiene.*
4. *Health education to family about his nutrition and cough hygiene.*

Quiz on TB, passing the ball game on TB.

HE on TB:

<https://youtu.be/Aos6nImGriE>,_ <https://youtu.be/isYRfYEcqU>





- *Calling for help*
- *Finding a First Aid Kit*
- *Understanding the Kit contents*
- *Controlling the bleeding - with a clean cloth tied or pressed.*
- *Avoiding infections- use soap and clean water if no other lotion available.*
- *Understanding medication keep medicines away from children*
- *In case of broken bones- immobilize the limb.*
- *Dealing with allergy: recognize allergy if patient has difficulty in breathing, swollen lips, itching rashes etc.*
- *Treating Burns: immediately put cold water over the area.*

First aid for kids.

Watch the video on first aid.

<https://youtu.be/b97kq2etQF0?si=l791YXoDNZuHentX>



Animal Bites:

- Bee sting:** pull out the thorns stuck in the skin with the help of others.
Wash with soda (baking soda) solution
Ask the nurse to give you the necessary tablet.
- Wasp sting :** pull out the thorns stuck
wash with vinegar solution
- Scorpion sting:** immediately go to hospital
- Snake Bite:** do not panic. Be calm.
don't waste time on puja and guru guniya treatment.
Tie above the bite area
Identify the snake- if it is poisonous or not.
Call ambulance and go to hospital
If poisonous, antivenom is the only treatment.

Practical:

Work with the nurse in preparing the First aid kit
Know the items in the kit.
Learn the use of the items in the kit.







Class setting: In the forest. The whole class spends time in the forest from morning till noon.

Objectives:

To drive home the following ideas to the children.

- OUR FORESTS ARE OUR LIFE
- OUR FORESTS ARE OUR WEALTH
- OUR FORESTS SUPPORT OUR LIFE
- PROTECT OUR FORESTS
- DO NOT BURN FORESTS
- DO NOT DESTROY FORESTS.
- WITHOUT FORESTS WE WILL ALL PERISH
- PLANT TREES
- PLANT TREES WHEREVER WE CAN.
- FORESTS ARE OUR OXYGEN RESERVOIR.
- IF WE DESTROY FORESTS, OUR VILLAGES WILL BECOME VERY HOT AND LIFE NOT SUSTAINABLE.
- CONSERVE FORESTS.

Methodology: Experiential learning.



Practicals:

- Forest walk.
- Document edible fruits, edible oil seeds bearing trees, birds, animals, forest products which we depend on, medicinal plants,
- Let each student make friendship with one tree- Gocha sango.
- Talk to your friend tree. Listen to
- What your friend is telling you. Share it in the group, write about it.





5. Sit still. Experience and enjoy the coolness in the forests, the breeze, the stillness, the silence, Observe the diversity in the forest- big trees, small trees, grass.. all live and grow together.

- *Biodiversity- is the principle in the Nature. No tree is similar to other one, no leaf is similar to other.*
- *One... everything is different. Look at each one of you- no face is similar, none in your family is Similar copies.*
- *There is always differences. Accept the differences in appearance, colour, caste, character, ideas, opinions, religious practices, languages etc in your life.*
- *Tolerance: Big trees allow small trees to grow in its shade, sometimes to creep over it. They do not Throw away the little ones.*
- *Trees give home and shelter to various creatures: Forest is home to not only trees, but all kinds of animals, birds, reptiles, mammals.. all live in peace and unity. They do not fight with one another.*
- *There is silence. No noise. Forests feed and nourish us: fruits, oil seeds, leaves, medicines, honey, mushrooms.... Name everything.*
- *Observe that there is no waste accumulated in the forests unlike in our villages and towns: The leaves and decaying woods and dead bodies of animals are absorbed by the soil in the forest and become one with it.*
- *The dead leaves and wood of millions of years are converted to coal and minerals over many many years which is used by man in various industries.*
- *Mining for these minerals make the land unproductive and barren.*
- *Above all, forests sustain our lives: we need life-giving oxygen to survive.*
- *Trees in the forests provide the all-important oxygen which we breathe. It takes impure air and releases oxygen after photosynthesis which enable us to live and work.*
- *If forests are gone, our lifeline is gone.*
- *We will all perish along with all living beings.*

6. Concluding the class :

What are your decisions?

Write your decisions on the bulletin board.

Prepare placards and do a rally in the village on making all aware of the need for protecting our forests





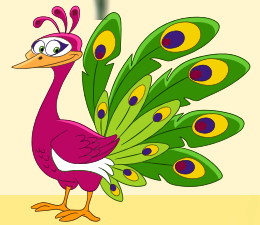
Class 2: Dangers of planting harmful trees:



- *Take the students to a Nilagiri plantation site.*
- *What are the differences you see between a natural forest and a Nilagiri forest?*
- *No other trees live in the forest,*
- *There is no diversity.*
- *There are no birds and animals.*
- *Only the tree grows tall and taller*
- *As much as the tree grows tall, its roots go down and suck all the ground water. It will lead to dry rivers, dry bore wells and ultimately shortage of drinking water and water for cultivation.*



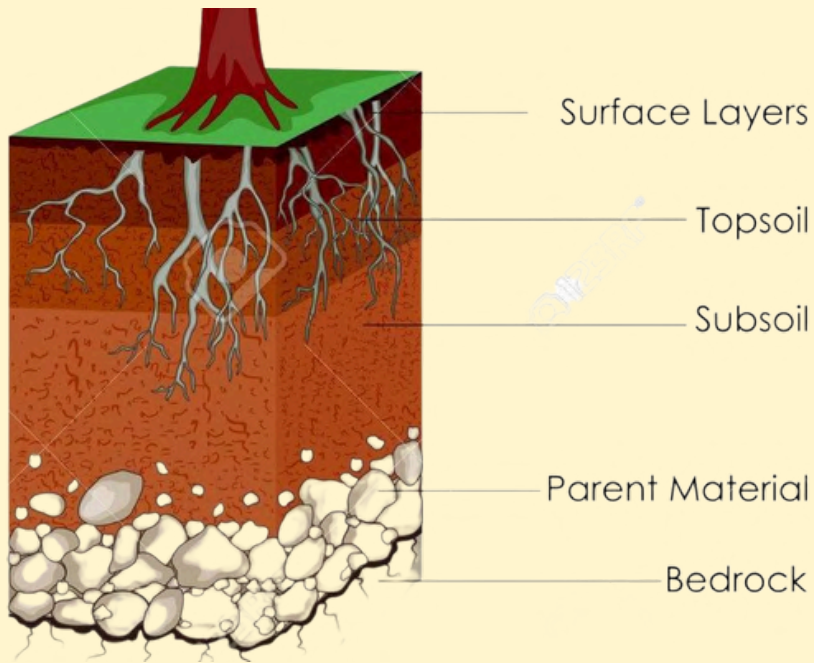
Nilagiri



Class 3: Diversity- the law of nature:

- *Is anyone alike in this class? Is all looking alike in your family?*
- *Diversity is the law of nature.*
- *Forests have different kinds of trees with different leaves, fruits, big, small, fragrant, nonfragrant, fruit-bearing, not bearing fruits,*
- *The big trees support the small ones, allow them to grow under them or on them.*
- *Appreciate diversity in nature.*
- *No caste/class/rich/poor. Everyone live together, grow together.*
- *Uniformity is against the law of nature. Appreciate diversity.*
- *Conclusion:*
- *Promote diversity. Not uniformity.*





- Let us today speak about soil.
- Take some soil in your hands. Hold it, knead it, smell it. Do you like the smell?
- Where do the plants grow? Where does the water go when it rains?
- Soil provides a place for plants to grow.
- Plants are our friends.
- If there are no plants, we will not be able to survive. No creatures will be able to survive.
- Soil holds water in place, for the roots of the plants.
- Is there life in the soil?

Yes, there is life in the soil. There are different kinds of plants and animals that live in the soil- There are many seeds and small small creatures lying dormant in the soil. When the rain comes, they wake up and start growing.

- Name some of the plants or animals which we see only after rain (fireflies, mushroom...)
- Name some of the trees you know,
- Name some of the animals you know who live in the soil..

Now you bring two samples of soil- one from the cultivated field top 2 inches and another from the ordinary unploughed soil. Hold it, feel it, smell it.

What makes the difference between the two.

- One contains nutrients or food substances needed for the growth of the plants. How does the soil get nutrients or food? All the organic items- like leaves, fruits, vegetable waste, animal droppings, rain water, dead animals, dead wood etc make it healthy and nutritionally rich.
- Soil is like a mother- Matti ma. Whatever it gets from nature, it gives to the plants and animals and other living things who live in the soil. They grow healthy and grow well. Matti ma is happy seeing that. The plants put out its roots deep in the good soil in order to get more food. Some plants are very greedy – eg Nilagiri tree, takes away all the water and nutrients and make the soil or the matti ma unproductive and wasted.
- Soil also provides a home for many animals and other living things. What are the animals you know which live in soil? Eg earth worms, snakes, rats, Mushrooms, many different seeds sleep in the soil and when the rain comes everything wake up and start growing.
- Then there are many micro organisms which we cannot see by naked eyes. We need microscope for seeing them. These micro organisms add to the health of the soil. They break down all organic waste and enriches the soil.





- When we burn the forest, all the micro organisms die away.
- When we put chemicals in the soil, these die and make the soil poisonous.
- Why do we say that we should wash our hands after handling soil?
- It is because there are many microorganisms from the animal droppings and human excreta, eggs of many worms, which will remain under our nails and when we eat with the unclean hands, we get diseases like diarrhoea, skin infections.
- What happens when we throw around plastics around us in the village and in the forest and fields?
- Plastics are made out of chemicals. It cannot degrade in the soil and become part of soil. It remains a foreign body for ever and pose dangers to us.
- Conclusion:

What did you learn today?

- *Soil is our mother- matti ma. Soil has to be healthy in order to make the plants grow and produce fruits and leaves, give us shade, wood etc.*
- *Do not grow harmful greedy trees in the soil,*
- *Do not put chemicals in the soil.*
- *Do not throw plastics around in the soil. It cannot degrade and it remains like that for years and years together adding chemicals to the soil.*

Class 2: Conservation of soil

When the rainy season comes, what happens to the colour of our river waters? Why is it?

When the rain comes, the soil gets washed off and with that the healthy part and the nutrients. The top 2 inches soil is the fertile soil which allow the seeds to germinate and grow. This is the precious layer of the soil.

1. How can we prevent the precious soil getting washed away?

Practicum: Ask your parents and come and tell us tomorrow how we can prevent this loss of superficial soil. Present your learnings in drawings, models and in lectures.

2. How can we keep our soil healthy? What all things to avoid?

List the items to avoid.

3. What can we add to make the soil healthy?

4. Learn about composting.

Practicum: Make a compost pit in the school campus with the help of your parents.





WATER- a precious gift to us.



Objective: To make the children understand the water cycle, water conservation.

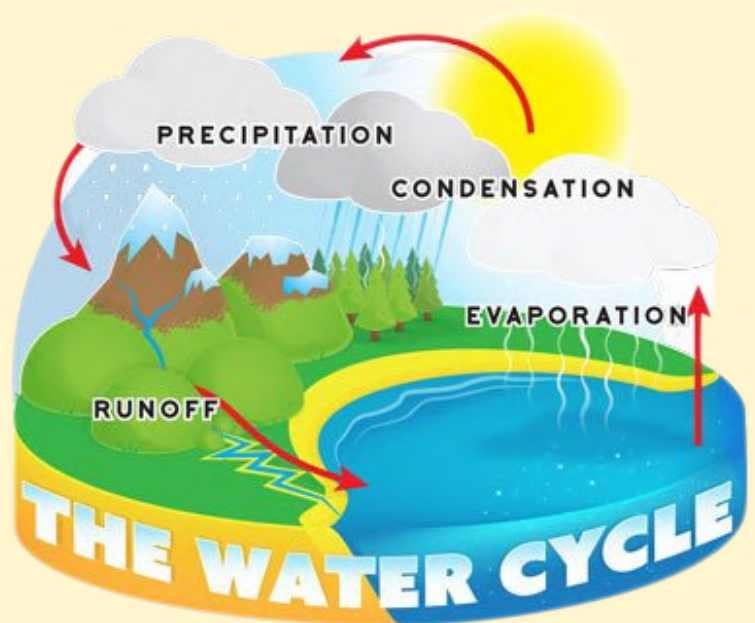
Class setting: Near the river.

- Today we learn about water.
- What will happen to us if there is no water?
- Do you know the origin of water?
- Which are the rivers you know of?
- Names of the rivers? Which is the river flowing thru Kandelguda, in Podapoi, in Pindapadar, Kachalekha etc.
- What happens to the rivers in summer and what happens in monsoon?
- Draw the two situations- in summer- wells dried up, rivers with less flowing water, plants dried up.....
- Situation in monsoon. Draw the situation.
- What are the advantages of water?
- If there is no water in the rivers, what can happen to us?
- What can happen to our forests and our cultivations?
- Show the globe. Areas covered by water. A small part only landmass.



Water Cycle- explain.

- Let the children draw the water cycle as they understood it.
- We need, sun, wind, mountains, forests to get good rains.
- Trees influence rainfall in an area. Trees give our water from their leaves during transpiration which rises in the air and form clouds. Clouds make rain. That is why deserts get scanty rain and rainforests get plenty of rain. Comparison: Th Rampur Vs Bhawanipatna.
- Plants lose water in the form of vapour everyday into the atmosphere through transpiration. A tree loses more than 30 litres of water into the atmosphere daily. This increases moisture in the atmosphere and brings more frequent rain.





I will not spit around, inside and outside the house and in public places.

Stop this unhygienic and uncultured behaviour will not start smoking and drinking alcohol.

2. Alcohol is destroying the tribal community, early death, economic poverty, quarrels at home, and insecurity of mother and children at home.

3. I will study and use my education best to acquire knowledge and practical skills.

4. Education will enable me to help me and my people to speak against exploitation and injustice.

5. I will protect our mother Earth

6. I will reduce as much as possible, the use of plastics, and will not allow others too to litter plastics around in our village and surroundings.

7. My school campus will be a 'No plastic Zone'.

8. I will do my best to conserve the soil, and keep the drinking water sources clean.

9. I will plant as many trees as possible wherever I can and encourage my friends to do so.

10. I am proud of my school, of my community, my village and will do everything to keep up the name of my school.





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