



OUR FOOD - OUR HEALTH

We need food to live. Do all of us eat the same type of food? Do all of us eat food at the same time? Are the food habits same for everyone? We get food from plants and animals. Let us know more about our food in this lesson. Look at the picture given below. What is the activity going on?



Think...

- What are the various activities seen in the picture?
- Why did they gather there?

10.1. Picnic

Naveed, Vipin, Neeli and Deepthi are studying in fifth class. Their families went out for picnic one day. They opted for an open space with trees on the banks of their village tank, as the picnic spot. The children and the elders enjoyed the picnic. They spoke to each other and played different games. They fetched dry grass and fire wood for cooking. They helped each other and shared things. They cooked a variety of food items.

All of them sat along the circumference of a large a circle for lunch as it was lunch time. Children arranged the leaf plates. Some people used freshly picked leaves as plate. Hot cooked food was served along with the different items brought from their houses. Naveed brought Jowar roti's, Neeli brought chakki and sweets, Vipin got parboiled horse gram, red gram and bengal grams, Deepthi shared the porridge she brought. All of them shared their food items and ate heartily. They spent the day happily. For picnics, there is really no need of occasion at all. People just decide and go on a picnic for fun.

Discuss in groups



- ◆ Do you like to share your food with others and eat? why?
- ◆ Why do you like to go out for picnics?
- ◆ Differentiate between the food cooked at home and those cooked in a picnic?
- ◆ On what occasions do we eat food together?

10.2. Mid day meals:



Lunch bell rang in the school. All the children started washing their hands and plates at the tap. They stood in a queue for taking mid day meals. Some children got lunch from home and all of them sat in a line and had their meals. Today they served khichdi and sambar in mid day meals. There is a different menu every day for the mid day meals. Eating together helps the children to develop friendship with other students. They share their food with each other and know the different food habits of each other apart from likes and dislikes of others. Some children eat rice and pickle only. Some children do not eat properly. This is not a good practice. Some children do not get enough food at their home and they come to school without eating. As a result, they do not show enough interest in studies. For children like these serving mid day meals has become a must.

Many children in our country do not get enough food to eat. There are still many others who do not get to schools. The children who do not get sufficient food are not healthy, they even do not show interest in studies. Hence Supreme Court of India has ordered that nutritional food be served to all children in schools. From then onwards Govt of India has been serving midday meals to all children in government schools.

Think...

- Who serves mid day meals to you at school?
- Do you eat midday meals served at school or food brought from home? why?
- At what time do you have mid day meals?
- What is today's menu in midday meals at your school?
- Is sufficient food served in your school?
- Do your teachers eat with you? why?
- Do all children like to eat pieces of vegetables in food or do they discard them?
- Some children throw away the pieces of vegetables from sambar. Is it a good practice?
- What food do you like to have for mid-day meals.

Information skills - project work



List out the food items served during midday meals at your school for the past few days. Which items you think will be better if served as part of midday meals? Tabulate them.

Day	Food served in midday meals	Do you like it or not?	Food you would like to have in mid day meals
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			

- On what days did you like the food? why?
- On what days you didn't like the food? why?
- Do all the children like mid day meals?
- What do you do with the left overs of mid day meals at school?

10.3. Healthy food habits

There are many disadvantages of wasting food. What happens if we eat stale food? Why does the food get stale? How does the food gets contaminated / spoiled? Food gives us energy and helps us to stay healthy. Hence we should take proper care and measures to keep food safe. Do you know what happens if we neglect to eat good food? Observe the picture given.



Observe the picture and say.

Think...

- Have you seen house flies on the food we eat? what are the other harmful insects seen on food?
- What are the different food items sold on the road side? What happens if the food items are not covered properly?

The food items sold on the road side are not covered properly. Dust, germs, flies and other harmful insects sit on the food and contaminate them. The harmful germs and micro organisms stick to the body of the flies. They sit on dirt and discharge the same on the food. This contaminates the food we eat and is harmful to our health. Some hotels and road side food vendors use the same oil again and again which is not good for health. If oil is heated repeatedly it leads to cancer. So, we should not eat this food. We should not reuse the oil which is already used. We should always eat fresh and hot food. We should always prefer to eat the food prepared at home.

We should eat clean food. If we eat clean food with dirty hands we may fall sick. Hence good food habits are must for every one. Let us find out what good food habits you have? Read the following and tick (✓) against the one if you follow it.

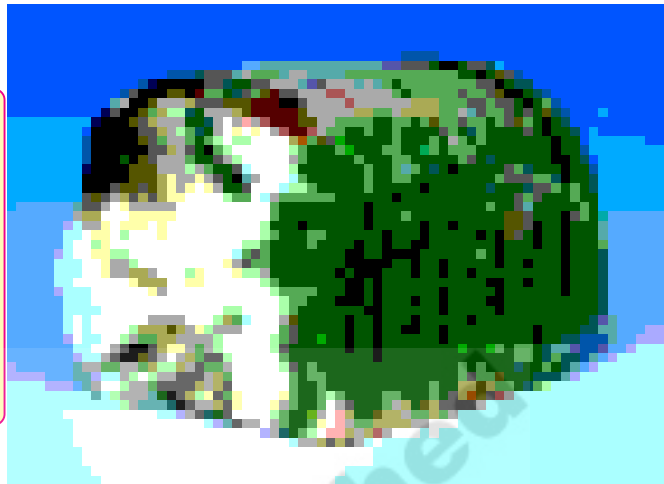
Do you follow these?

- Do you always eat fresh food?
- Do you wash your hands before eating with soap?
- Do you wash your plates clean after eating?
- Do you cover the food items with a lid?
- Do you prefer to eat food made at home and not road side food?
- Do you eat seasonally available fresh and cheap fruits, vegetables and leafy vegetables?
- Do you always use dustbins to throw away garbage and not litter every where?
- Do you wash your hands thoroughly with soap and water after using toilets?
- Do you brush your teeth every morning and before going to bed? Do you massage your gums with fingers?
- Do you rinse your mouth after every meal?
- Do you clean your tongue frequently?

Every one should follow the good food habits as listed above. If you are not following them everyday, then follow them compulsorily from today, without fail.

Do this

- Take a piece of bread and sprinkle some water on it. Keep it aside in a dark place for three to four days. Observe the changes.



Discuss in groups



- ◆ Did you observe any spots on the piece of bread? What is the colour of the spots?
- ◆ Did you notice any change in the odour of the bread? Is it good to eat this?
- ◆ It is not good to eat this piece of bread? why?
- ◆ Have you noticed moulds and fungus on pickles, rotten vegetables and coconut? Why do they form? Think and say?

Do this

- Keep the left over food in a vessel and observe after two days. What changes do you notice in the colour, odour and taste of the food?

Discuss in groups



- ◆ What are the changes seen in rice?
- ◆ What are the changes seen in sambar and curries?
- ◆ What changes did you observe in raw fruits and vegetables.
- ◆ What are the changes noticed in preserved food items?
- ◆ What changes are observed in milk and curd?
- ◆ Which food gets spoiled quickly, cooked or uncooked - Think. Why?

Microorganisms and germs grow on the food items and spoil them. These harmful germs make the food poisonous. If we eat this type of poisonous food, we fall sick. Care must be taken to keep food safe from dust and harmful germs. We should always eat fresh food while it is hot. We should not buy or cook excess food and waste. Cook wisely, sufficient food needed and do not waste and spoil the food.

10.4. Preservation of food:

Are all the food items available to us throughout the year? Name them. How can we preserve them for a long period without them getting spailt?

Pickles, chutneys, jams, vadiyalu etc are preserved for many days. Using extra salt and drying them before storing helps in preserving them. Vegetables, meat, fish are mixed with salt and then dried in hot sun. These are used as food whenever we want to eat. They are called as "orugulu". However pickels are not good for health.

Information skills - project work



- ◆ Papads and vadiyalu are preserved year long. How are they prepared? Write the process of preparation.
- ◆ How are pickles made at home? Write the steps involved in it.
- ◆ List out the food items used at your home which have been perserved for a long time.
- ◆ Learn from your parents how fruits and vegetables can be kept fresh for two to three days..

Do this

- Wrap the fruits, vegetables and leafy vegetables in a wet cotton cloth. Sprinkle water 4 to 5 times a day. Observe and say for how many days we can keep them fresh.

10.5. Let us prepare the Janata fridge:

Take two different sizes of earthen or cement flower pots. See that one pot get's fixed to another. Care must be taken to have space of three to four centi meters between them. Fill the large earthen pot with a thick layer of sand for about two to three centimeters. Fix the small earthen pot into it. Now fill the empty space between the pots with sand, sprinkle water on the sand in order to make it wet. Keep the fruits and vegetables in the inner pot.

Cover it with wet gunny bag or a thick cotton cloth. Sprinkle water for 3-4 times per day. Fruits and vegetables remain fresh and unspoil. This is called "Janata Fridge" or "Poor man's fridge" as poor people cannot afford to buy expensive Refrigerators. They can prepare this at low cost as it is very useful for them.



Observe the above picture.

Discuss in groups



- ◆ How do the vegetables remain fresh in Janata Fridge?
- ◆ What other items can be preserved in Janata Fridge?
- ◆ Which is a natural fridge, Janata fridge or an electronic fridge?
- ◆ What are the difficulties faced in our house due to the usage of electronic fridge?
- ◆ Which is cheaper, Janata fridge or refrigerator?
- ◆ Which is available to many people, a Janata fridge or refrigerator?

Food material are stored in different ways. Generally, we preserve food items in cool places or refrigerators (fridge). Storing in a fridge is expensive. It consumes electricity. Care should be taken to save electricity while using refrigerators. We should not open the fridge often as shown in the figure. we should close the door immediatily after use.

While buying a fridge, see that a 5 star power saving symbol is marked on it. This 5 star fridge will consume less electricity and thus save power.

10.6. Wastage of food.



As shown in the picture food is wasted a lot on occasions like weddings, parties and function. Read the questions given below and discuss with your friends.

Discuss in groups



- ◆ What are the various dishes prepared and served during wedding and functions?
- ◆ Is food wasted in parties? Why? What are the disadvantages of it?
- ◆ What plastic items are used for eating in parties?
- ◆ What can be done to avoid the wastage of food?
- ◆ In olden days people used to eat food in banana and lotus leaves. Nowadays their usage is reduced. Why?
- ◆ What are the disadvantages of wasting food, using plastic plates and tumblers?

On occasions like weddings, festival and fairs eating food together is common. The benefits of eating together are that new relationships develops among the people. As people meet after a long time they share their feelings and happy moments with each other, the bond of love becomes stronger between them.

On occasion like marriages and parties many special dishes are cooked and served. Some hosts prepare and serve a large number of dishes and this is much more than required for all the guests. So, we can see a lot of left over food and wastage of food on these occasion. While washing hands drinking water is also wasted. Plastic plates and tumblers are being used for picnics and functions. Though in minute quantity, some plastic enters into our body, which is very harmful for us. The plastic takes some lakhs of years to mix up with soil and thus adds to soil pollution. They even block the micro organisms which make soil fertile. The plastic glasses and plates when burnt release harmful gases into the atmosphere and thus cause air pollution.

Think...

- What can be used instead of plastic tumblers and plates?
- What can be done to avoid wastage of food and water during marriages and parties?



Leaves of Butea(moduga) and banyan tree are used as plates. Since ancient times we have been using leaf plates for eating. They mix up with soil in less time and easily. Thus they protect our environment. Plastic plates are harmful to health and also lead to soil pollution.

Think...

- Have you ever seen leaf plates, if yes, where?
- Describe how they are made?

10.7. Wastage of food at home:

You have learnt how food is wasted in functions. Is food wasted at home? Let us know how?

If excess food is cooked then it gets wasted. Left over food is thrown as waste. Some people spill the food while eating and some waste the food without eating completely.

Food grains like rice, wheat, pulses like grams and oilseeds like ground nut are attacked by insects and fungi, causing decay and damage to them. Hence to avoid this, neem leaves are placed in the storage bags and huge bins. Rats also spoil the stored food grains. Ants make the sugar and jaggery unusable.

Have you ever felt bad while throwing away food and spoiled food grains? If yes? why did you feel so?

Do you know how do we get the food we eat?

Discuss in groups



- ◆ From where do we buy groceries like rice, dal and other items?
- ◆ From where do we buy vegetables? Who cultivate them?
- ◆ From where do we get fruits, vegetables and food grains to the market?
- ◆ Name the different people who help us in growing the different food grains?

Observe the pictures given below. We get rice from paddy. Observe the people who work for us in obtaining rice from paddy.



Making the agricultural tools and implements



Watering the crops



Harvesting the crop and storing in bags



Selling the crop at the market



Buying the food grains at a grocery shop



Eating the food obtained with lot of efforts and labour of different people

The food we eat is produced (obtained) with lot of efforts and labour of different people(artisans) like farmers, agriculturalists, agricultural labourers, blacksmiths, carpenters etc. With all the combined effort of different artisans we get fruits, vegetables and other food materials to our houses. Farmers till the soil, sow the seeds, harvest the crops and transport them to the market. From the market to the shops and from the shops to our home. After knowing the hard work and labour behind the process of producing food one should not waste the food. Use the food wisely and completely. Care must be taken in storing the grains as insects and ants may spoil them. We must follow safe and protective practices to protect food from rats and rodents. Cooking excess food, throwing left over food, should be avoided.

Key words :

- | | | |
|--------------------|----------------------------|-----------------|
| 1. Eating together | 5. Artisans | 9. Farmers |
| 2. Wastage | 6. Agriculturalists | 10. Food grains |
| 3. Harmful insects | 7. Agricultural labourers | 11. Effort |
| 4. Micro organisms | 8. Agricultural implements | |

What have we learnt?

1. Conceptual understanding

- Name some occasions where people eat food together.
- Why should we not use plastic plates and glasses?
- What are the good eating habits? write them.
- List the healthy habits you have and those you don't have.
- When does the food get wasted?
- How is the food wasted? Why we should not waste food?
- Name the people whose efforts are behind the process of producing the food we eat.

2. Questioning - hypothesis

- Kavitha questions the principal of the school on how to improve the quality of midday meals served at school. If you were Kavitha what questions would you like to ask the principal?
- What are the reasons for food getting spoilt? What are the measures to be taken for keeping the food safe and clean?

3. Experiments - field observations

- a) What are the steps involved in making the leaf plates. List them in order.
- b) Some vegetables are to be wrapped in a wet cloth, some are kept outside in open and some are to be stored in Janata fridge. Observe them after three days. What happened? List your observations. Which vegetables remain fresh?

4. Information skills, projects

- a) Visit a place where a function or party is being celebrated? Write how the food is wasted and what type of garbage is produced from there. Tabulate the rules to be followed to avoid the wastage and garbage.

5. Communication through mapping skills, drawing pictures and making models

- a) Prepare Janata fridge with earthen pots. Display it in your class room.
- b) Collect different types of leaves used in preparation of leaf plates. Prepare the leaf plates and display in the class room.
- c) Draw the Janata fridge

6. Appreciation, values and awareness towards bio-diversity

- a) There is a lot of effort by different people in producing the food we eat. Write few lines appreciating their labour and efforts.
- b) Why should we eat together? Write how did you feel while eating together?
- c) What are the measures taken to prevent raving of food and wastage of food at your home?
- d) List the good food habits followed by you daily.

Can I do this?

1. I can explain the wastage of food, measures taken for preventing wastage of food and good food habits. Yes / No
2. I can question the principal on the quality of midday meals served. Yes / No
3. I can explain the process of preservation of fruits and vegetables with experiment. Yes / No
4. I can list the places and the crops grown in our state in plenty in a tabular form and explain the details. Yes / No