0652CH01

1 Food: Where Does it Come From?

What did you eat at home today? Find out what your friend ate today. Did you eat the same kind of food yesterday and today? We all eat different kinds of food at different times, isn't it?

1.1 Food Variety

Activity 1

Ask your friends in the school about the items they would be eating during a day. See if you can also get this information from friends staying in different states of India. List all the items in your notebook as given in Table 1.1, for as many friends as possible.

Table 1.1 What do we eat?

Name of the student/friend	Food items eaten in a day

Fig. 1.1 *Different food items*

There seems to be so much variety in the food that we eat (Fig 1.1). What are these food items made of?

Think about rice cooked at home. We take raw rice and boil it in water. Just two materials or **ingredients** are needed to prepare a dish of boiled rice.

On the other hand, some food items are made with many ingredients. To prepare vegetable curry, we need different kinds of vegetables, salt, spices, oil and so on.

Activity 2

Choose some of the items you listed in Table 1.1 and try to find out what ingredients are used to prepare these, by discussing with your friends and elders at home. List them in Table 1.2. Some examples are given here. Add some more items to this list.

Table 1.2 Food items and their ingredients

Food Item	Ingredients
Roti/chapati	*Atta*, water
Dal	Pulses, water, salt, oil/*ghee*, spices

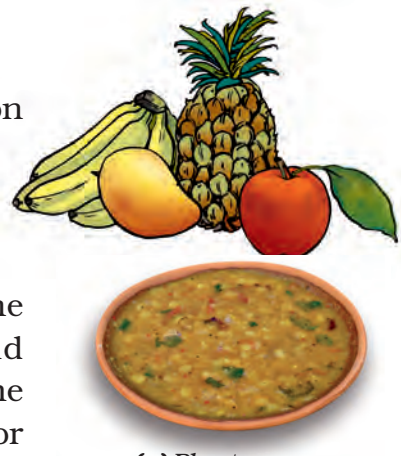
What do we find? Do we find some ingredients common for different food items? Discuss in class.

So, where do these ingredients come from?

1.2 Food Materials and Sources

It may be easy for us to guess the sources of some of the ingredients that we listed in Table 1.2. Fruits and vegetables, for instance (Fig. 1.2a). Where do they come from? Plants, of course! What are the sources of rice or wheat? You may have seen paddy or wheat fields with rows and rows of plants, which give us these grains (Fig. 1.3).

And then, there are food items like milk, eggs and meat, which come from animals (Fig. 1.2b).



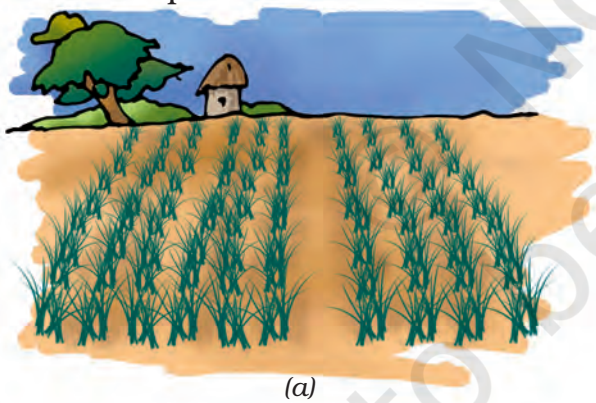
(a) *Plant sources*

(b) *Animal sources*

Fig. 1.2 *Sources of food ingredients*

Activity 3

Let us take the food items listed earlier and try to find out where they come from — the ingredients and their sources. Some examples are shown in Table 1.3. Fill in the blanks in Table 1.3 and add more examples to this list.



(a)

(b)

Fig. 1.3 *Source of food grains*
(a) Paddy field (b) Wheat grains transported

Table 1.3 Ingredients used to prepare food items and their sources

Food Item	Ingredients	Sources
Idli	Rice	Plant
	Urad dal	
	Salt	
	Water	
Chicken curry	Chicken	Animal
	Spices	
	Oil/*ghee*	Plants/ Animals
	Water	
Kheer	Milk	Animal
	Rice	Plant
	Sugar	

What do we conclude from Activity 3? Plants are the sources of food ingredients like grains, cereals, vegetables and fruits. Animals provide us with milk, meat products and eggs. Cows, goats and buffaloes are some common animals which give us milk. Milk and milk products like butter, cream, cheese and curd are used all over the world. Can you name some other animals which give us milk?

1.3 Plant Parts and Animal Products as Food

Plants are one source of our food. Which parts of a plant?

We eat many leafy vegetables. We eat fruits of some plants. Sometimes roots, sometimes stems and even flowers (Fig 1.4). Have you ever eaten pumpkin flowers dipped in rice paste and fried? Try it!

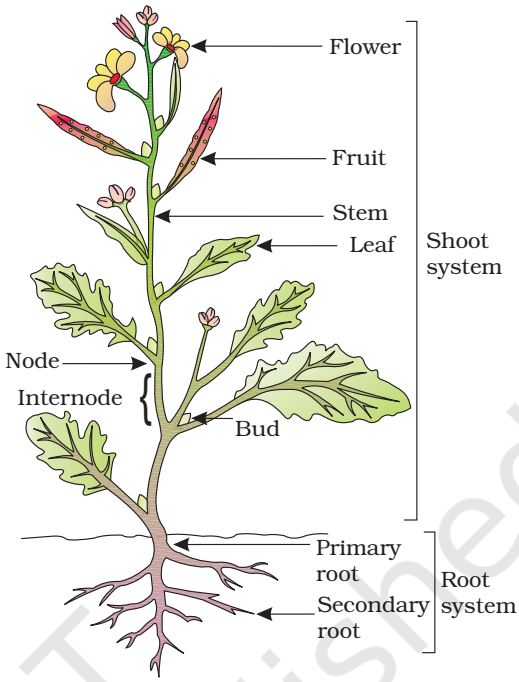


Fig. 1.4 *Different edible parts of plants*

Some plants have two or more **edible** (eatable) parts. Seeds of mustard plants give us oil and the leaves are used as a vegetable. Can you think of the different parts of a banana plant that are used as food? Think of more examples where two or more parts of a single plant are used as food.

Table 1.4 Plant parts as food

Food item with plant as the major source	Ingredients/source	Plant part which gives us the ingredient
1. Brinjal curry	Brinjal	Fruit
	Chilli as spice (any other)	Fruit
	Oil from groundnut, mustard, soybean, any other plant	Seed
2.		
3.		

Do not try to taste unknown plants around you to see if they are edible! Some plants could be poisonous.

Activity 4

From all the food items you have listed in Table 1.3, choose those items whose ingredients are obtained from plants. Which part of a plant? Identify these and list the food items and plant parts as shown in Table 1.4.

Activity 5

Take some dry seeds of *moong* or *chana*. Put a small quantity of seeds in a container filled with water and leave this aside for a day. Next day, drain the water completely and leave the seeds in the vessel. Wrap them with a piece of wet cloth and set aside. The following day, do you observe any changes in the seeds?

Fig. 1.5 *Whole moong and its sprouts*

A small white structure may have grown out of the seeds. If so, the seeds have **sprouted** (Fig. 1.5 and 1.6). If not, wash the seeds in water, drain the water and leave them aside for another day,

Fig. 1.6 *Chana (gram) and its sprouts*

covered with a wet cloth. The next day, see if the seeds have sprouted.

After washing these sprouted seeds, you can eat them. They can also be boiled. Add some spices and get a tasty snack to eat.

Do you know where honey comes from, or how it is produced? Have you seen a beehive where so many bees keep buzzing about? Bees collect **nectar** (sweet juices) from flowers, convert it

Fig. 1.7 *Beehive*

into honey and store it in their hive (Fig. 1.7). Flowers and their nectar may be available only for a part of the year. So, bees store this nectar for their use all through the year. When we find such a beehive, we collect the food stored by the bees as honey.

1.5 What do Animals Eat?

Do you have cattle or a pet that you take care of? A dog, cat, buffalo or a goat?

Fig. 1.8 *Squirrel eating nuts*

You will then surely be aware of the food, the animal eats. What about other animals? Have you ever observed what a squirrel (Fig 1.8), pigeon, lizard or a small insect may be eating as their food?

Activity 6

Several animals are listed in Table 1.5. For some of them, the type of food they eat is also given. Fill in the blanks in the table.

Table 1.5 Animals and their Food

Name of the animal	Food the animal eats
Buffalo	Grass, oilcake, hay, grains
Cat	Small animals, birds, milk
Rat	
Lion	
Tiger	
Spider	
House lizard	
Cow	
Human beings	
Butterfly	
Crow	
Others	

Activity 7

Have a look again at Table 1.5 and group the animals entered here as follows. Place animals which eat only plants or plant products in Group 1. These are called **herbivores**. There are some animals which eat other animals. Place these in Group 2. These animals are called **carnivores**. Do you find some animals which eat both plants and animals? Place them in Group 3. These are called **omnivores**. Prepare a table as in Table 1.6 and enter these separately in the three columns, as shown.

Table 1.6

Herbivores	Carnivores	Omnivores
Cow	Lion	Dog

We know that there are many amongst us, who do not get sufficient

food. We need to find ways by which more food can be produced in the country. That will not be enough; we will need to find ways to ensure that this food is made easily available to each one of us.

Key words

Ingredients
Edible
Nectar
Sprouted seeds
Herbivore
Carnivore
Omnivore

Summary

- There is a lot of variation in the food eaten in different regions of India.
- The main sources of our food are plants and animals.
- Animals which eat only plants are called herbivores.
- Animals which eat only animals are called carnivores.
- Animals which eat both plants as well as other animals are called omnivores.

Exercises

1. Do you find that all living beings need the same kind of food?
2. Name five plants and their parts that we eat.
3. Match the items given in Column A with that in Column B

Column A	Column B
Milk, curd, *paneer*, *ghee*,	eat other animals
Spinach, cauliflower, carrot	eat plants and plant products
Lions and tigers	are vegetables
Herbivores	are all animal products

4. Fill up the blanks with the words given:

herbivore, plant, milk, sugarcane, carnivore

(a) Tiger is a _____ because it eats only meat.

(b) Deer eats only plant products and so, is called _____.

(c) Parrot eats only _____ products.

(d) The _____ that we drink, which comes from cows, buffaloes and goats is an animal product.

(e) We get sugar from _____.

SUGGESTED PROJECTS AND ACTIVITIES

1. You must have seen a garden lizard around your home. Next time whenever you see it, observe carefully and find out what it takes for food. Is the food different from that of a house lizard?
2. Make a list (with pictures, when possible) of food items generally taken by people of different regions of India. Place these on a large outline map of India to display in your classroom.
3. Find out the names of plants that grow in water and which are eaten as food.
4. In Chapter 10, you will find out ways of measuring length of curved lines. In your mathematics classes you will learn to prepare bar graphs. After you learn these, try the following interesting project. Prepare some sprouts of *moong* as discussed in the chapter. Wash them in water everyday and drain all the water. Let them grow for a week until the whole of the seeds grow into young plants. Measure the lengths of the sprouts everyday using a string. Take care that they do not break. Prepare a bar graph of the number of sprouts having lengths in different ranges.

THINGS TO THINK ABOUT

1. Does everyone around you get enough food to eat? If not, why?
2. What are the ways we can think of to avoid wastage of food?