



Chapter 1

Food — Where Does It Come From?

Keywords : Ingredients, Yolk, Albumin, Enzyme, Milch Animals, Sprout, Beehive

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?

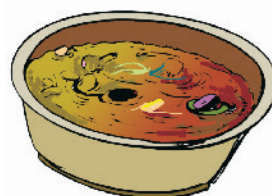
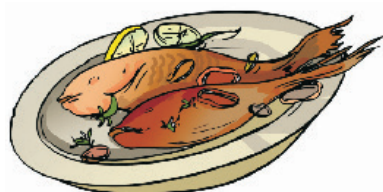
1.1 FOOD VARIETY

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



There seems to be so much variety in the food that we eat. 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

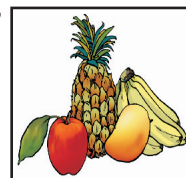
Choose some of the items you listed in Table 1.1 and try to find out what ingredients are used to prepare these, by discussing with your friends and elders at home. List them in Table 1.2. Some examples are given here. Add some more items to this list.

**Table 1.2 Food items and their ingredients**

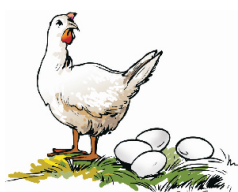
Food Item	Ingredients
Roti/Chapati	Atta, water
Dal	Pulses, water, salt, oil/ghee, spices
Chawal	Rice, water

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. 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.

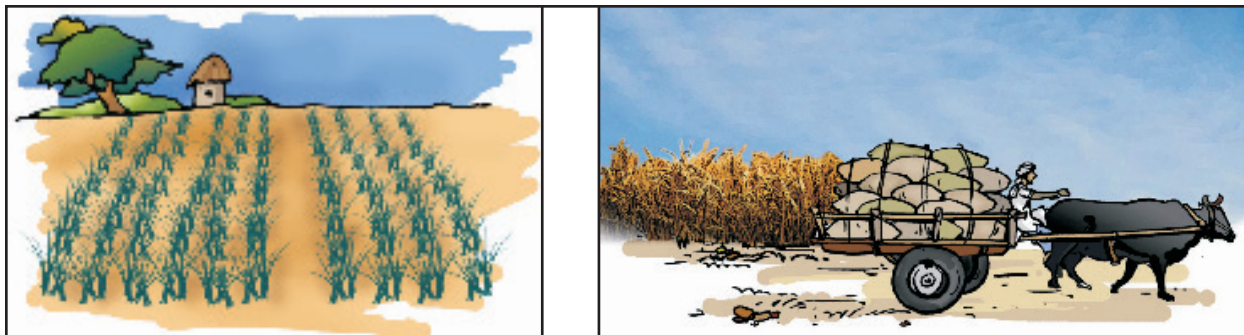
And then, there are food items like milk, eggs, meat, chicken, fish, prawns, beef and such others, which come from animals.

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.

Table 1.3 Ingredients used to prepare food items and their source

Food item	Ingredients	Source
Chicken curry	Chicken	Animal
	Spices	Plants/Animals
	Oil/ghee	
	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? Animals which give us milk and meat are called Milch animals e.g. goat. [More to Know]*

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. Have you ever eaten pumpkin flowers dipped in rice paste and fried? Try it!



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.

More to Know

- * 1. Animals which provide meat and egg are called poultry animals.
- 2. The egg has yellow (yolk) and white (albumin) portions. Yolk is rich in fats and lipids, while the albumin is rich in proteins. The egg shell is made of calcium carbonate.

Activity 4

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



Table 1.4 parts of Plant used as food

Food items with plant as the major source	Ingredients/source	Plant part which gives us the ingredients
1.Brinjal curry	Brinjal	Fruit
	Chilli as spice	Fruit
	Oil	Seed

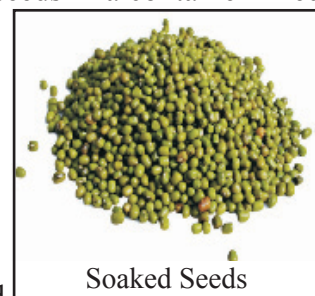
Activity 5

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



Sprouted Seeds

do you observe any changes in the seed? A small white structure may have grown out of the seeds. If so, the seeds have sprouted. If not, wash the seeds in water, drain the water and leave them aside for another day, covered with a wet cloth. The next day, see if the seeds have sprouted.



Soaked Seeds

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

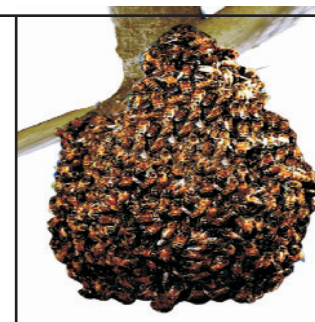
Have you taste honey? Do you know where honey comes from, or how it is produced? Have you ever seen a beehive where so many bees keep buzzing about? Bees collect nectar (sweet juices) from flowers, convert it into honey and store it in their hive. Flowers and their nectar may be available only for a part of the year. So, bees store this nectar for their use all through the year in hive. When we find such a beehive, we collect the food stored by the bees as honey. Honey consists of water, sugar, minerals and enzymes. It is an antiseptic and easily digestible. For this reason honey is used in medicines.



Soaked Seeds



Sprouted Seeds



“Beehive

[The place used for the rearing of honey bees is called an apiary].



1.5 WHAT DO ANIMALS EAT?

Do you have cattle or a pet that you take care of? A dog, hen, cat, buffalo or a goat? You will then surely be aware of the food, these animals eat. What about other animals? Have you ever observed what a squirrel, 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 below. Fill in the blanks in the table.



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 only.

Table 1.5 Animals and their Food

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

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	Bear

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 every one.



What You have Learnt

- 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

Milk, curd, paneer, ghee
Spinach, cauliflower, carrot
Lions and tigers
Herbivores

Column B

eat other animals.
eat plants and plant products.
are vegetables.
are all animal products.



4. Fill up the blanks with the correct words:
- (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 _____.
 - (f) Pulses are rich in _____ while as cereals are rich in _____.
 - (g) Animals which provide both meat and egg are called _____.
5. Why does our body need food?
6. Why man is called an omnivore?

SUGGESTED PROJECTS AND ACTIVITIES

1. 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.
2. Find out the names of plants that grow in water and which are eaten as food.

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?

