

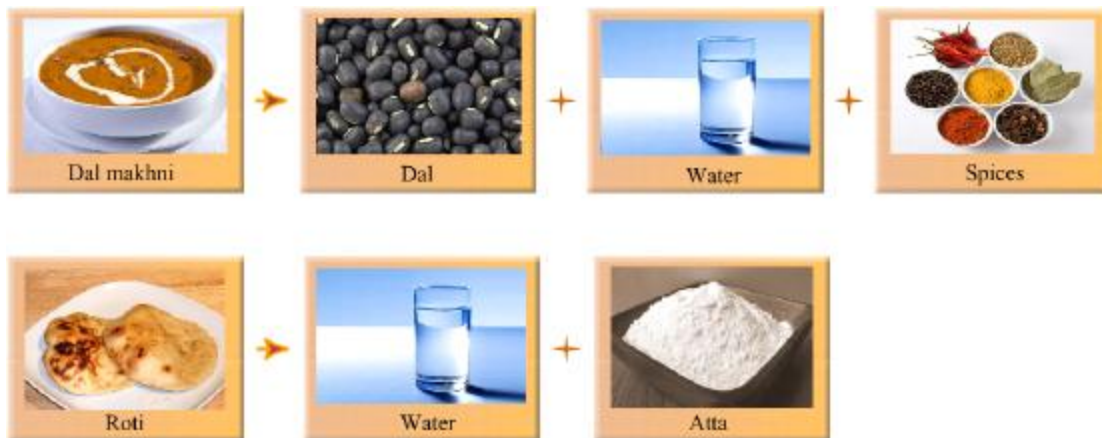
Food - Where Does It Come From

Food Items

We all need food. **Food** gives us the energy to do work and also keeps us healthy. Do you remember what you had for lunch or dinner yesterday? Did you notice that the food you had, for example dal, roti, sabzi etc. are made up of a combination of different substances. Lets understand this with an example.

Rohan ate *chapattis* and *dal* for lunch. **Do you know the ingredients required to prepare these food items?**

Ingredients for Dal and Chapatti (roti)



These substances that are required for preparing a particular kind of dish are known as its **ingredients**.

Food variety

Do you think that people living in different states of India have similar food habits? The answer is '**No**'.

In India, different types of food are prepared in different states.

Reasons for this Variety

There are many reasons that bring the variety in the food habits of people of different regions of India. Some of them are:

Reasons	Examples
The method of preparation	Open fires and tandoors are used in Northern India.
Types of oils used	Coconut oil is used in south Indian food preparations while mustard oil is used in north Indian food preparations.
Spices used	Garam masala is a spicy powder used in most north Indian food preparations.
The climatic conditions	The climate of northern India is hot and dry. Hence, the people of northern India consume wheat products.
The types of crops grown	Wheat is grown in most parts of northern India while in southern India, rice is grown.
The geographical location	Fish preparations are common in the coastal regions because they are obtained in abundance.
Some Interesting Facts: Milk chocolate was first made by Daniel Peter, who sold the concept to his neighbour Henri Nestlé. The world's first chocolate candy was produced in 1828 by Dutch chocolate-maker Conrad J. Van Houten.	

The given table lists the popular dishes of different parts of India. Now try to recall the state to which the given food items belong.

State	Dishes
	Sandesh, Rasabali, Rasagolla
	Dal-Bati, Bajre ki Roti
	Dosa, Vada, Sambar
	Bal Mithai, Gulab Jamun, Peda

Sources of Food Ingredients

What is your favourite food item? Is it idli sambhar, Pizza or burger? Various substances make your food tasty. These substances that are used in making a food item are known as its ingredients. Do you know where the ingredients of your favourite food items come from? These food ingredients can be obtained from varied sources.

Based on the source, food items can be classified as plant products and animal products.

Have you ever made onion raita at home? Do you know, what are the ingredients used in making onion raita? The given table shows the ingredients of onion raita.

Try to complete this table by naming the sources of these ingredients.

Ingredient	Source
Curd	
Onion	
Salt	
Pepper	

While doing this activity, you might have noticed that some ingredients are obtained from plants while the other are obtained from animals. Ingredients obtained from different sources go into the making of a particular dish.

Now, let us learn about some other food items and their sources.

Ghee and butter are made from milk. Milk is obtained from animals such as cows, buffaloes, goats etc.

Garlic, pepper etc. are obtained from their respective plants.

Oil is something which we get both from animals and plants. Mustard oil is obtained from the seeds of mustard plant. Similarly, groundnut oil is obtained from groundnuts.

- Salt is obtained from sea water.

Ingredient	Source
Cheese	
Rice	
Butter	
Dal	
Chicken	
Milk	

- Complete the following table by listing the sources (plant or animal) of the given ingredients.
- Do you know who vegetarians are? People who do not consume meat like red meat, poultry, sea food, etc. and rely only on plant products are called pure vegetarians. However, people who consume animal products such as meat, eggs, etc. are called non-vegetarians.

Some Interesting Facts:

1. Do you know who vegans are? Vegans are pure vegetarians who do not consume any animal product. These people exclude all animal products from their lifestyle such as wool, silk, leather, etc.
2. Honey is the only food that does not spoil. Honey found in the tombs of Egyptian pharaohs has been tasted by archaeologists and found edible.
3. The rearing of honeybees for commercial production of honey is called apiculture.

Plant Products as Food

Plants are the ultimate source of food material for all animals. Plants provide us with a large number of food items. Grains, vegetables, pulses, cereals etc. are all obtained from plants.

From what part of the plant do we get food? Is there only one part of the plant that is eaten as food or are different parts of plants consumed?

No! In fact, many parts of plants can be used as sources of food.

The parts of plants that we eat are known as edible parts.

So you saw in the video that many parts of the plants are eaten as food. These can be listed as below:

- **Fruits:** Fruits form edible parts in tomato, cucumber, gourd, pumpkin etc.
- **Flowers:** Broccoli, cauliflower, Pumpkin (though pumpkin's fruit is eaten on the larger scale its flowers are also edible) etc. have edible flowers.
- **Stems:** Stems are edible in potato, ginger, turmeric etc.
- **Leaves:** Spinach, cabbage, mustard, kale etc. have edible leaves.
- **Roots:** Roots of carrot, turnip, and beetroot are edible.
- **Seeds:** Seeds form edible parts in peas, beans, sunflower, mustard, etc.

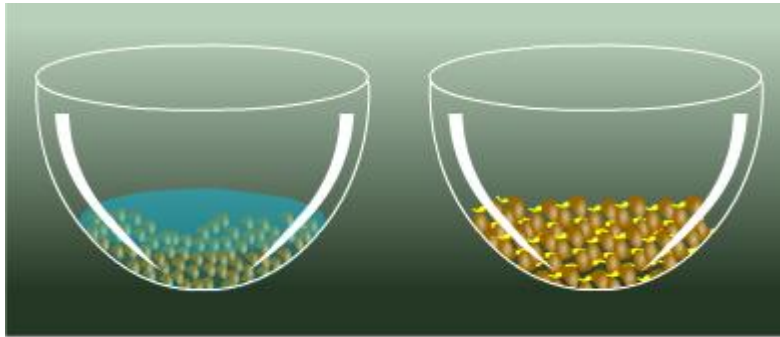
There are some plants whose more than one part is used as food material. For example, the fruit (both in raw and ripened form), stem and flower of banana plant are edible. Also, the seed and leaves of both coriander (*dhaniya*) and fenugreek (*maithi*) are edible.

Can you name few more?

Activity Corner

Preparing sprouts

Put some dry gram seeds in a container filled with water. Keep this container aside for one day. Drain the water the next day and keep the soaked gram seeds in a piece of wet cloth.



After one day, you will observe that small white structures have grown out of the seeds. These seeds are called **sprouts**.

These seeds can be consumed after washing. You can also boil these seeds and eat them after adding some spices.

Complete the given table by listing the name of the edible part of the given plants.

Plant source	Edible part
Onion	
Carrot	
Spinach	
Sunflower	
Cucumber	

Classification of Animals On The Basis Of Their Eating Habits

A lion was kept in an area which was full of fruit trees, herbs and shrubs but devoid of any animal. It was seen that after a month the lion was dead. Can you guess the reason behind the death of the lion?

Well, this happened because a lion does not eat plants. It requires flesh to satisfy its hunger. Hence, in the absence of animals it died due to starvation.

Does this mean that all animals eat flesh?

No! The food habits among animals are different. For example, squirrels like nuts, elephant likes sugarcane, bear likes honey, etc. Different animals consume different food items. Let us study the type of food consumed by some animals.

Animals and their food	
	<ul style="list-style-type: none">- Deer- Rabbit- Zebra
	<ul style="list-style-type: none">- Grains- Fruits- Small insects
	<ul style="list-style-type: none">- Grass- Hay- Grains

Based on the given table, we can conclude that while some animals eat only plants others eat other animals. Some animals eat both plants and animals.

Do you know how these animals are classified according to their eating habits?

Animals can be classified into herbivores, carnivores, and omnivores on the basis of their eating habits.

Now, look at the given table carefully. Place the animals that eat only plants and their products in group **A** and the animals that eat other animals and their products in group **B**.

Animal	Food consumed	Group
Deer	Leaves, grass, fruits	
Butterfly	Leaves, nectar of flowers	
Eagle	Fish, waterfowl, rabbits	
Cow	Leaves, grass	
Chimpanzee	Nuts, berries, insects	
Rat	Mice, bugs, grains	
Giraffe	Vines, herbs, leaves	
Lion	Deer, antelope, zebra	

Animals such as deer, butterflies, cows, giraffes, etc. eat only plants. Hence, they are placed in group **A**. Such animals are known as **herbivores**.

Animals such as eagle and lions mostly eat other animals. Hence, they are placed in group **B**. Such animals are known as **carnivores**.

You must have observed from the given table that there are some animals such as chimpanzees and rats that eat both plants and animals for which you kept the field blank. These animals form another group which is known as **omnivores**.

Riddle Time

A man is travelling through a forest with his sheep, wolf and a bundle of grass collected in the forest. On the way, they come across a river which has to be crossed with the help of a boat. The boat can carry only two things at any given time. The man cannot leave the wolf and the sheep alone, because the wolf is a

carnivore and it will eat the sheep. He can neither leave the sheep and the grass bundle alone, because the sheep is a herbivore. The wolf and the grass can be left together because wolf does not eat grass.



Can you think of a way in which the man can cross the river safely with his belongings?