

# **Food We Get from Plants**

We'll cover the following key points:

- Plants and Their Types
- Parts of Plants Used as Food Items
- Plant Products



Hi, I'm EeeBee

Do you Remember:

Fundamental concept in previous class.

In class 2<sup>nd</sup> we learnt

 Trees, Shrubs, Climber, Creepers and Water Plants

Still curious? Talk to me by scanning the QR code.



#### **Learning Outcomes**

#### By the end of this chapter, students will be able to:

- Understand the variety of foods we obtain from plants and their significance in supporting life.
- Identify and classify plants into different types—trees, herbs, shrubs, creepers, and climbers—with examples.
- Learn about the different parts of plants used as food, such as leaves, roots, fruits, seeds, and flowers.
- Explore plant-based products like cereals, pulses, oils, spices, and other edible items, understanding their role in our diet.

#### **Guidelines for Teachers**

The teacher can start the chapter by introducing the importance of plants as a source of food, highlighting their role in human nutrition and the ecosystem. Discussions can focus on categorizing plants into trees, herbs, shrubs, creepers, and climbers with real-life examples. The teacher can also explain how various parts of plants are used as food and introduce plant-based products such as cereals, pulses, oils, and spices. Emphasis should be placed on understanding the diversity of plant-based foods and their nutritional value.



#### Who am I?

- 1. I am a herb. I am used to make chutney.
- 2. I am a water plant. I am the national flower of India.
- 3. I add taste to your food. I am
- 4. I creep along the ground. I am
- 5. Iam a fruit. Iam



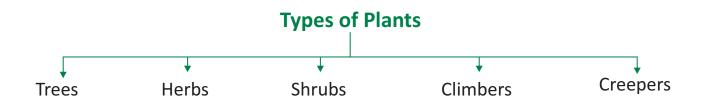
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### Fun Fact

In 16th-century France, potatoes were as valuable as gold! These humble tubers, brought to Europe by Spanish explorers, initially served as livestock feed. But once people discovered their incredible nutritional benefits—loaded with carbohydrates, vitamin C, potassium, and fiber—they skyrocketed in status, becoming a staple food and even a form of currency. From feeding animals to fueling human survival, potatoes transformed into a treasure on every plate!

We see different kinds of plants around us. Each plant differs from other plants in size, shape, colour, smell, place of growth etc. Plants are very useful to us and we get most of our food from plants. Plants give us vegetables, fruits, cereals and pulses. Plants also give us coffee, tea, sugar, oil and spices. We get food from different parts of plants. We eat **roots**, **leaves**, **stems**, **flowers** and **fruits** of plants.

Plants can be classified:



#### **Trees**

Trees are big, tall and strong plants. They have a thick, brown and woody stem called trunk. The trunk is covered by hard covering called the bark. They have many branches that bear leaves, flowers and fruits. Their roots are thick and strong and go very deep into the soil. Trees usually live for many years.

**Examples:** Neem, Pine, Mango, Peepal, Banyan, Coconut etc.

#### **Shrubs**

Shrubs are small to medium-sized woody plants and may grow up to height of five to six metres. They are smaller than trees. They are highly branched from the base of the stem. They have many thin, brown and woody stems. They are also called bushes .Shrubs usually live for a few years.

**Examples:** Rose, Hibiscus, Jasmine, Tulsi, Cotton etc.



#### Herbs

Herbs are very small and weak plants. They have thin, green and soft stems. They usually live for three to four months. It can be used as medicines or to add flavour to food. They are mostly known for their smell, which is pleasant and amazing. Banana plant is the world's largest herb.

**Examples:** Mint, Coriander, Spinach, Rosemary etc.

#### **Climbers**

Climbers are plants with weak stems. They cannot stand straight and need support to grow. They must climb on other plants, sticks or walls to grow.

**Example:** Pea, Grapevine, Money Plant, Bean etc.

#### **Creepers**

Creepers are weak plants that mostly grow along the ground. They have weak stems and thin branches. They usually bear big fruits.

**Example:** Pumpkin, Gourd, Watermelon, Muskmelon etc.



#### Write 'T' for true and 'F' for false statements.

- 1. We get food from different parts of plants.
- 2. Trees have many branches that bear, leaves, flowers and fruits.
- 3. Herbs are known as bushes.
- 4. Creepers have weak stems and thin branches.
- 5. Climbers need support to grow.

#### **Food from Plants**

#### **Fruits**

Fruits and their juices are naturally sweet but there are some fruits too like lemon. Different types of fruits contain different nutrients, so it is important to eat a variety of fruits. They keep us healthy and strong. Fruits include Cherry, Watermelon, Muskmelon, Pomegranate, Grapes, Banana, Mango etc.



#### **Vegetables**

Vegetables are good source of many **nutrients**. Vegetables like broccoli, spinach, tomatoes and garlic are considered to be very nutritious. Other vegetable includes Drumsticks, Potato, Tomato, Radish, Turnip, Cauliflower, Capsicum, Onion, Spinach etc.





#### **Spices**

A **spice** is a seed, flower bud, fruit, root, bark, or other plant parts primarily used for flavouring, colouring or preserving food. They can be used whole or ground in a powdered form.



**Examples :** Cinnamon, Black Pepper, Cardamom, Clove, Coriander, Turmeric Red Chillies.

#### **Beverages**

Tea is made from the dried leaves of tea plant. We get coffee from coffee beans which are the seeds of coffee pant.

### Did you know?

A herb is specifically from the leaf of a plant, and a spice is from the seed, berry, stem, bark, root or bulb.

#### **Seeds We Eat**

Cereals: Cereal includes wheat, oats, bajra (millets), maize and rice etc. Cereals are very important part of human diets as it is rich in nutrients. Flour of wheat is used to prepare Bread,

Roti etc. Cereal grains are energy rich foods for humans.

Pulses: Pulses are the edible seeds. The main pulses include Chickpeas, Kidney Beans, Red Gram, Black Gram (urad), And Red Lentil. Pulses are used as foods such as Dal, Sambhar etc.

Nuts: Nuts are very nutritious and give lot of energy. They are considered healthy snacks. Nuts include Pistachios, Walnut, Raisins, Peanuts, Almond, Cashew Nut etc.

Oil Seeds: Oils play an important part in a healthy and balanced diet. These include Sunflower, Groundnut, Mustard, Sesame Seeds etc.



#### **Various Uses of Plants**

1. We get food from different parts of plants.

Leaves – Spinach, Coriander, Cabbage

Stem – Potato, Sugarcane

Roots – Radish, Onion

Fruits – Apple, Mango

Seeds - Rice, Corn

Seeds

Flowers

Stems

Leaves

**Fruits** 

Cabbage has 91% water content!

Roots

- 2. We get cocoa and chocolate from the seeds of cacao tree. Cocoa is a dark brown powder made from the roasted and grounded seeds of cacao.
- 3. Sugar and jaggery are made from sugarcane juice.
- 4. Some plants are used for medicinal purpose. For example
  - Tulsi leaves are used to cure cough and cold.
  - Turmeric is considered as anti-inflammatory.
  - Aloe vera and neem leaves are good for skin and cures skin infection.
  - Amla is good for stomach.
  - Cloves are used to treat toothache.
  - Sandalwood oil has antiseptic properties.
  - Eucalyptus leaves and oil are used in making medicines.

Thus, we can see that plants are very helpful to us. They are primary resource of food for all living organisms.



S	
you know ?	

Bananas contain a natural chemical

which can make people feel happy.

<b>*</b>	
CHEC	Critical Thinking
Fill	in the blanks with correct words.
1.	The mango, banana, grapes and pomegranate are (fruits/vegetables).
2.	(Beverages/Spices) can be used whole or ground in powdered form.
3.	The wheat, oats, bajra and rice are (pulses/cearels).
4.	Sugar and jaggery is made from (bamboo/sugarcane) juice.

### In a Nutshell

- Plants are of different types-trees, herbs, shrubs, creepers, climbers.
- Trees are big and have single, woody stem.
- Shrubs are smaller than trees and have many thin, woody stems.
- Herbs are smaller than shrubs and thin, soft stems.
- Climbers and creepers have thin weak stem and need support,

Key Words

Improving Vocabulary

Anti-inflammatory : Medicine to reduce swelling or redness.

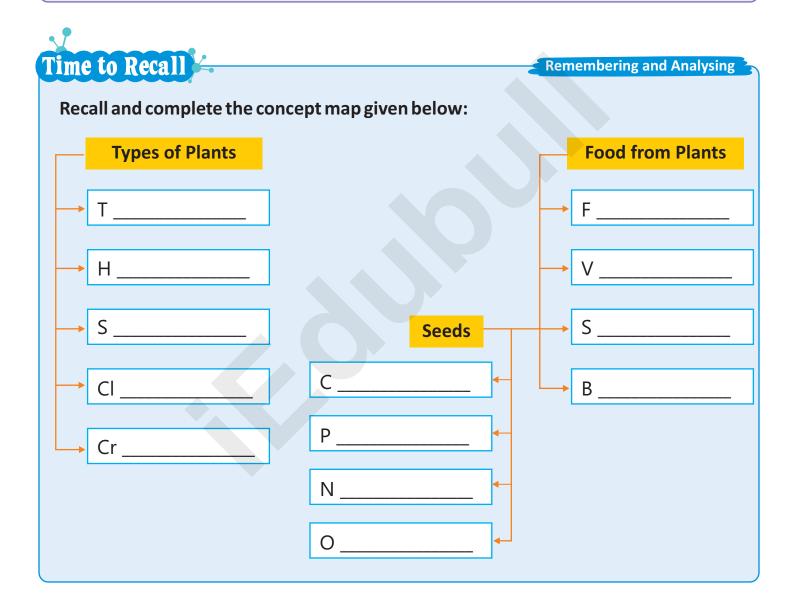
Nutrients : A substance that is needed for healthy growth and

development.

Beverage : A drink other than water.

Flower bud : A young flower that has not yet opened up.

Antiseptic : That prevents the growth of germs.





### EXERGISE



#### That turn curiosity into confidence—let's begin!

#### A. Tick ( $\checkmark$ ) against the true statement and (X) against the false one:

- 1. Climbers need trees or sticks for support.
- 2. Sugar-cane store food in their roots.
- 3. Coriander and mint are examples of climbers.
- 4. Mustard and Groundnuts are examples of oilseeds.
- 5. Sandalwood oil has antiseptic properties.

#### B. Fill in the blanks with the correct word:

1.	Small plants with soft stems are called					
2.	Short plants with branches and hard stems are called					
3.	live for a long time.					
4.	usually live only for a few months.					
5.	have weak steam. They need another plant for a stick for					
	support.					
6.	Tall, strong plant are called .					

#### C. Draw lines to match the words in column I with those in column II:

Column I		Column II		
(i)	Neem	(A)	Herb	
(ii)	Mint	(B)	Shrub	
(iii)	Rose	(C)	Climber	
(iv)	Money plant	(D)	Tree	
(v)	Pumpkin	(E)	Hot desert	
(vi)	Cacti	(F)	Creeper	

#### D. Very Short Answer Questions:

#### I. Name the trees or plants which give us:

5. Oil: \_\_\_\_\_

#### II. Name the following:

1. Two big trees:	
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2. Two plants whose flowers you like: \_\_\_\_\_\_

3. Two plants whose leaves are eaten: \_\_\_\_\_\_

4. Two plants whose roots are eaten: \_\_\_\_\_\_

5. Two plants with soft stem: \_\_\_\_\_

#### **E. Short Answer Questions:**

- 1. How are the stems of shrubs and herbs different?
- 2. Why are spices added to food?
- 3. What are oilseeds? Give examples.
- 4. Name four plants that are used to make medicines.

#### F. Answer the Following Questions:

- 1. Write a note on the edible parts of plants with examples.
- 2. What are beverages? Which part of the plants is used to make beverages?
- 3. Differentiate between trees, herbs, shrubs with examples.



#### Time to Apply

- 1. Rajesh was very excited to visit their farmhouse where the gardener grew different types of vegetables. He pulled the carrot plant and found its roots were swollen, whereas the roots of the grass were not. Why is it so?
- 2. When Rishab sprained his ankle while playing, his mother gave him milk with turmeric? Can you say why?
- 3. When Vidhi wanted to grow French bean in a pot, her mother suggested her to put a stick in the middle of the pot. Why?

## Time to Discuss

**Pondering and Communicating** 

Why are the roots of some plants swollen while those of others are not?



Observing, Critical Thinking, Analysing

Which parts of a plant do we usually eat? The seed? The fruit? When we eat asparagus, we are eating the stem of the plant. When we eat spinach or lettuce, we are eating the plant's leaves. We eat the fruit of squash, cucumber and tomato plants. When we eat corn or peas we are eating seeds, and when we eat radish or carrot, we are eating roots. Cauliflower and broccoli plants produce flowers we like to eat. With some plants we eat more than one part.

The root of the beet plant is what most people like to eat, but the leaves are also good to eat. We can eat beet leaves in salads when the leaves are young and tender. When they get bigger, they taste better when cooked.

We usually eat the root of the onion plant. The stems taste good too, when they are young and tender.

Some of the plants we eat are poisonous if we eat the wrong part. The leaves of tomato plants are poisonous. For many years people would not even eat tomatoes, because they thought the entire plant was poisonous. Now we know the fruit of the tomato plant has vitamins that are very good for us. Tomatoes are also delicious.

- 1. Which part of the plant do we eat? (Circle all the correct answers.)
  - a. Stem
    - b. Leaves
- c. Fruit
- d. Seeds
- e. Flowers

4. The fruit of this plant is delicious, but the leaves are poisonous. \_\_\_\_\_\_.

### Time to Create

**Creating and Collaborating** 

#### How to grow a carrot top

You will need

- ★ Carrot top (2-3 cm from stem with some root growth remaining on top)
- **♦** Shallow dish
- → 10 Cotton wool
- → Water
- → Sunny and protected spot

Simply add a layer of cotton balls to your small dish. Add a light dribble of water over the cotton balls so they are wet but not completely flooded with water. Press your carrot top into the wet cotton balls and place the dish in a sunny location. Be sure to check that the cotton balls remain wet throughout the growing period. You do not want to dry them out.

You will see the carrot top begin to grow , however, once it starts it will grow quite quickly when in the right conditions.