

How Plants Prepare their Food LR

How plants prepare their food. Objective. To understand how plants prepare their food, we see many plants and trees around us.

Plants too are living organisms and require food in order to live. However, they cannot get their food like we do as they cannot move. They make their own food in their leaves.

That's why leaves are called the food factories of a plant. To make their food, plants need sunlight, carbon dioxide, water, and a green coloured substance called chlorophyll. Let's see how plants get these things and make food.

Chlorophyll is present in the leaves of plants and it's this that makes the leaves appear green. Plants get light from the sun. Sunlight provides energy to the leaves for making food.

Plants absorb water from the soil with the help of their roots. The water from the roots reaches the stem and then the leaves. Carbon dioxide present in the air also enters the plant through tiny pores present on the underside of the leaves.

These pores are called stomata. Once the plant has water, carbon dioxide, and sunlight, the process of making food begins. All these things are mixed together in the leaves and the food is ready.

The food is then passed on to the stem and the other parts of the plant. This process of making food by the plant is called photosynthesis. We can break the word photosynthesis into photo and synthesis.

The word photo means light and synthesis means putting together. That is why putting water and carbon dioxide together in the presence of sunlight is known as photosynthesis. To summarize, green plants make their own food through the process of photosynthesis.

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Summary: How Plants Prepare Their Food

Plants **cannot move** to get their food like animals, so they **make their own food** in their **leaves**. Leaves are called the **food factories** of a plant. The process by which plants **prepare food** is called **photosynthesis**.

Plants need the following to **make food**:

1. **Sunlight** – Provides **energy** for the process.
2. **Carbon dioxide** – Enters through **stomata** (tiny pores on leaves).
3. **Water** – Absorbed by **roots** from the soil and transported to the leaves.
4. **Chlorophyll** – A **green-colored pigment** in leaves that helps in the process.

During **photosynthesis**, plants combine **water and carbon dioxide** using **sunlight** to produce **food**. This food is then transported to the **stem and other parts** of the plant.

The word **photosynthesis** is made up of:

- **Photo** (means **light**)
- **Synthesis** (means **putting together**)

Thus, **photosynthesis** means "putting together water and carbon dioxide in the presence of light."

Quiz: How Plants Prepare Their Food

1. What is the process by which plants make their own food?

- ☒ a) Photosynthesis
- ☐ b) Respiration
- ☐ c) Fermentation
- ☐ d) Transpiration

2. Which part of the plant is responsible for food production?

- ☒ a) Leaves
- ☐ b) Roots

- ✗ c) Stem
- ✗ d) Flowers

3. What provides energy to the plant for making food?

- ☒ a) Sunlight
- ✗ b) Soil
- ✗ c) Wind
- ✗ d) Water

4. What are the tiny pores on the leaves called, which allow carbon dioxide to enter?

- ☒ a) Stomata
- ✗ b) Chlorophyll
- ✗ c) Veins
- ✗ d) Xylem