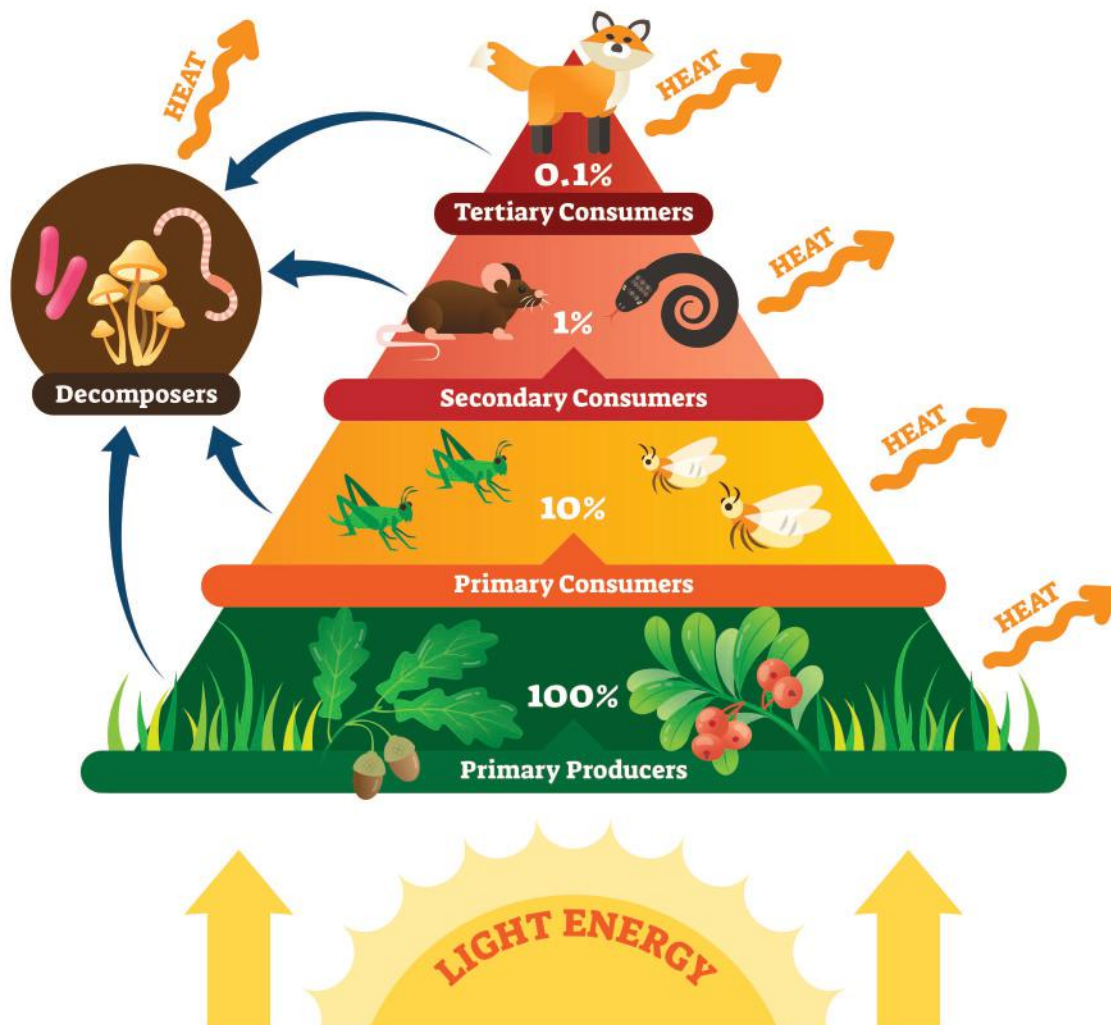


The Complex Structure Of Food Web: An Introduction

Each living organism needs energy to survive. They attain this energy from different forms of food. Organisms are dependent on other organisms to satisfy their food needs. A food chain is something that shows how one organism eats another and transfers its energy, whereas a food web is more complex. For example, a deer eats grass and the deer is eaten up by the tiger. So, this is a simple food chain—grass - deer - tiger.

A food web is a complex structure. It explains how different food chains interact with each other. It also shows the feeding habits of different animals that live in an ecosystem. Several different food chains form a food web. Therefore, a food web has multiple producers, consumers, and decomposers.

ENERGY PYRAMID



The following explanation will help you understand a food web better. Each level in a food web is called a trophic level. Transfer of energy generally happens between two trophic levels.

There are three main levels in a food web:

- 1. Producers:** They are living organisms that use sunlight and air to produce their own food. Flowers, plants, and grass are examples of producers.
- 2. Consumers:** These are living things that consume other living things. They can be herbivores, carnivores, or omnivores.
 - **Herbivores** are animals that consume only plants. Squirrels, bees, butterflies, and zebras are examples of herbivores. They are also called primary consumers.
 - **Carnivores** are animals that consume other animals. Examples of carnivores are lions, tigers, shark, etc.
 - Smaller carnivores like snakes that consume herbivores are known as **secondary consumers**.
 - Animals like lions and owls that consume secondary consumers are known as **tertiary consumers**.
 - **Omnivores** are animals that eat both plants and animals. Examples of omnivores are human beings, bears, etc.
- 3. Decomposers:** Organisms that break down dead plants and dead animals into nutrients are known as decomposers. Worms, mushrooms, slugs, etc. are examples of decomposers.

Answer the following questions:

1. Define a trophic layer.

2. Why are green plants called producers?

3. Give an example of a secondary consumer.

4. What are herbivores?

5. What are carnivores?

6. Give an example of primary consumer.

7. Give an example of tertiary consumer.

8. What are omnivores?

9. Give two examples of omnivores.

10. What are organisms that break down dead plants and animals known as?

11. Give two examples of decomposers.

12. Give two examples of herbivores.

13. Give two examples of carnivores.

14. What do producers use to produce food?

15. What do several food chains form together?
