

Food Energy Pyramid

By Cindy Grigg

All living things depend on other living things. Plants make their own food. Almost all animals depend on plants for food energy. A food chain or web shows how each type of animal gets its food.

Sometimes food energy is shown as a drawing of a pyramid. The bottom of the pyramid is made up of the producers. Producers or plants produce their own food. Green plants use energy from the sun, along with carbon dioxide and water, to make their own food. This process of photosynthesis makes a form of sugar that plants can use to live and grow. Plants are the producers that make up the base of almost all food chains on Earth.

Animals are consumers. They consume, or eat, producers. In the energy pyramid, the second layer is made up of herbivores. Herbivore means "plant eater." Herbivores eat only plants.

The next layer up in the pyramid is the carnivores. Carnivore means "meat eater." Carnivores eat herbivores. Some carnivores eat other carnivores. It is possible to have more than one layer of carnivores in a food energy pyramid.

As you go up the pyramid, did you notice that each level gets smaller? There are fewer herbivores than producers. Each layer of the food energy pyramid has fewer individuals than the layer below it. There are fewer carnivores that eat herbivores than there are herbivores. There are even fewer carnivores that eat other carnivores.

Why do you think this is so? It is because at every level, most food energy is used up or lost. Only about ten percent of the energy is available to one living thing as it feeds upon the ones below it. Producers use most of the energy they make. They pass on only about ten percent to the consumers that eat them. The consumers, also, only pass on about ten percent of their energy to the next level consumer. The energy pyramid helps us see how energy is passed along between producers and consumers.



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Questions

- _____ 1. What is the energy pyramid?
- A. a drawing that shows how energy is passed through the food chain
 - B. a drawing of a food web
 - C. a drawing that shows us which foods we should eat every day
 - D. a drawing showing the carbon cycle
- _____ 2. The author's main reason for writing this story was to _____.
- A. persuade readers
 - B. demonstrate how producers help animals
 - C. entertain readers
 - D. inform readers

