RESOURCE

ENCYCLOPEDIC ENTRY

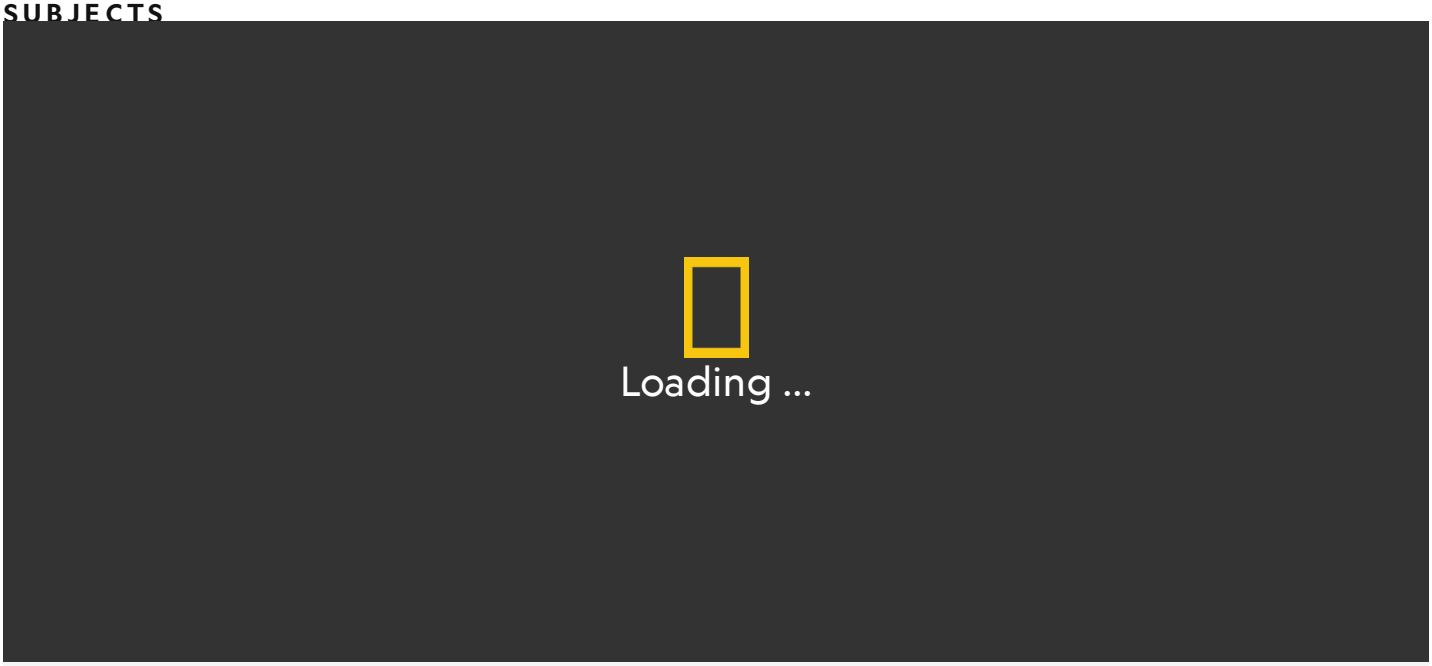
Omnivore

An omnivore is an organism that regularly consumes a variety of material, including plants, animals, algae, and fungi. They range in size from tiny insects like ants to large creatures—like people.

GRADES

6 - 12+

SUBJECTS



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ARTICLE VOCABULARY

An omnivore is an organism that regularly consumes a variety of material, including plants, animals, algae, and fungi. They range in size from tiny insects like ants to large creatures—like people.

Human beings are omnivores. People eat plants, such as vegetables and fruits. We eat animals, cooked as meat or used for products like milk or eggs. We eat fungi such as mushrooms. We also eat algae, in the form of edible seaweeds such as nori, which are used to wrap sushi rolls, and sea lettuce, eaten in salads. Bears are omnivores, too. They eat plants like berries as well as mushroom fungi and animals like salmon or deer.

Omnivores are a major part of the food web, a description of which organisms eat which other organisms in the wild. Organisms in the food web are grouped into trophic, or nutritional, levels. There are three trophic levels. Autotrophs, organisms that produce their own food, are the first trophic

level. These include plants and algae. Herbivores, organisms that consume plants and other autotrophs, are the second trophic level. Both omnivores and carnivores, meat eaters, are the third trophic level.

Autotrophs are called producers, because they produce their own food. Herbivores, carnivores, and omnivores are consumers. Herbivores are primary consumers. Carnivores and omnivores are secondary consumers.

Most birds are omnivores. Robins pull worms from the ground. They also feast on berries. Ostriches graze on plants and grasses. They also eat lizards and insects.

Many mammals are omnivorous. Skunks eat rodents, lizards, honeybees, leaves, grasses, nuts, fungi, and almost anything else they can find.

Some reptiles are also omnivorous. Box turtles feed on fish, frogs, rodents, and many other creatures, but they also eat flowers, berries, and roots.

Fish can also be omnivorous. The opaleye, a fish that feeds mostly on seaweeds along the Pacific Coast of North America, also eats small creatures found among the seaweed.

Some insects are omnivores. Ants eat seeds, nectar, and, often, other insects.

Some omnivores are scavengers, creatures that eat the meat of dead animals. Black bears eat mostly nuts, berries, and other fruit. But if they find a dead animal, they eat it.

Many animals that are often thought of as carnivores are in fact omnivores. Red foxes, for example, prey on rabbits, but they also eat fruit.

Some animals that are thought of as herbivores also eat animals. Squirrels eat mostly nuts, fruits, and seeds, but they sometimes eat insects, small birds, and other creatures.

Omnivore Adaptations

Many omnivores have biological adaptations that help them eat a variety of kinds of foods. They have adapted many characteristics of both carnivores and herbivores. Like many carnivores, raccoons have sharp front teeth that help them rip apart mice and other small creatures. And like many herbivores, raccoons also have large molars that help them chew up plants. Raccoons also have quick paws and long fingers that they can use both to grab prey and to reach a variety of fruits and other plant products.

Compared to herbivores and carnivores, omnivores often have a greater chance of surviving difficult conditions. They can adjust their diets. If all the salmon or other animals disappear from a river ecosystem, a big cat living in that habitat could not survive. Cats are carnivores that cannot digest or obtain nutrients from plant material. However, a grizzly bear could still survive eating berries, fruit, roots, and insects.

Because they have an easier time finding food, omnivores are sometimes better at adapting to new environments than creatures with more specific feeding habits. Omnivores can better adapt to development than herbivores or carnivores.

Urban development, the process of clearing land for homes, business, and agriculture, destroys habitats, the places where animals live in the wild. Herbivores such as elephants cannot survive without a lot of trees and grasses to eat. But omnivores such as opossums, seagulls, and many species of monkey easily adapt to life in urban areas and farmland, where they often find meals in garbage cans.

FAST FACT

Living Garbage Cans

Some animals, such as tiger sharks or goats, have been known to consume a wide variety of objects: aluminum cans, surfboards, clothes and textiles, plastics, and rope. These "living garbage cans" are not considered omnivores, because they gain no nutritional value or energy from these products. Tiger sharks are carnivores that mistake these items for food. Goats are herbivores that are curious about unique odors or new foods.

website

National Geographic Ocean: Marine Food Chain

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