

Feeding Methods – Tutorial Script

This video will review the basic feeding methods used by marine organisms. First, we separate all organisms into autotrophs and heterotrophs, as we've done to date throughout the entire Oceanography video series.

Pause now.

Autotrophs make their own food – that means they are **producers**. Heterotrophs must consume food – they cannot make it themselves. We can also call them **consumers**. There are many ways in which consumers gather their food.

Deposit feeders are animals that find their food on the seafloor – either in it or on it. Deposit feeders include scavengers, like lamprey and many crab, shrimp, lobsters, and other organisms that eat **detritus** that sits on the bottom of the seafloor – dead carcasses, used exoskeleton molts, feces, and other organic debris. Deposit feeders also include organisms that, like lugworms and sand crabs, sift through the sediment and find their food living between the sand or mud grains.

Grazers are herbivores that feed directly off autotrophs, like isopods that feed on feather boa kelp, manatee that feed on sea grasses, and purple sea urchins that feed on the holdfasts and stipes of giant and bullwhip kelp. Grazers also include snails, chitons, limpets, abalone and other organisms that feed by scraping algae off rocks. And grazers include mixotrophs, like corals and tube worms, organisms that have gardens of algae living symbiotically within their bodies.

Filter Feeders are consumers that have a way of either moving large amounts of water through their bodies or moving themselves or their appendages through large amounts of water, filtering out and ingesting all living organisms in that water. There is no discernment of the type of organism – anything in the water is edible. Filter feeders include tunicates, most bivalves, sponges, barnacles, copepods, bryozoans, feather duster worms, anchovies, baleen whales, and whale sharks.

Suspension Feeders are easily confused with filter feeders, but the major difference is that suspension feeders are passive and wait until another organism has fallen into a spine, net, web, trap, or tentacle. Examples include most cnidarians – anemones, jellyfish, and corals – as well as radiolaria and foraminifera.

Predators hunt their prey, ingesting live animals. Examples include most fish, reptiles, birds, and mammals, some sea urchin and snails, cephalopods, and sea stars.

Pause now.

For more information and more detail, continue on to the next video in the series.

Classifying Marine Organisms Video Series:

Part 1: Nekton, Benthos, and Plankton

Part 2: Feeding Methods

Part 3: Kingdoms, Phyla, and More

Feeding Methods

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