

Carnivore, Omnivore, or Herbivore

Part 1 of 2

Our Health and Temperance topic for today is the question, "What kind of animal are you?"

Are you an herbivore? An herbivore is an animal that gets its energy from eating plants, and only plants. Many herbivores have special digestive systems that let them digest all kinds of plants, including grasses. As originally created by God, both man and ALL the animals were herbivores. No animal killed and ate another animal.

Or are you a carnivore . . . an animal that feeds on the flesh of other animals. After the flood, God did add that "every living thing that lives shall be food for you . . ." but with some restrictions such as not eating unclean animals, nor animals that have died of their own accord, nor eating the blood or fat therein.

Maybe we are omnivores eating both plants and animal flesh. Let's look at some characteristics of carnivore animals comparing them to those of the human animal.

If we look at the mouth of a common carnivore, the dog, we see several characteristics that are different between it and an herbivore. The opening of the mouth of a dog is much greater and wider than the human mouth can open.

The "walled-in" oral cavity of an herbivore has the ability to greatly expand during eating. Herbivores carefully and methodically chew their food by pushing it with their tongue and facial muscles back and forth between their teeth for grinding or milling. This thorough process is necessary to mechanically disrupt plant cells in order to release the digestible intracellular content and mix it with saliva.

Carnivores' teeth are separated; the incisors are small; the canines are quite long and dagger-like; the molars are flattened and triangular with jagged edges functioning like serrated blades.

Herbivore teeth share common structural features. The incisors are wide, flattened and rectangular. The canine teeth may be small as in the horse, prominent as in hippos, pigs and some primates or completely absent. In general, the molars are square and flattened on top to provide a grinding surface. The molars do not glide side by side vertically in a slicing motion, but glide across one another horizontally to crush and grind.

Carnivores have claws, sharp front teeth capable of subduing prey, and no flat molars for chewing. Herbivores have no claws or sharp front teeth capable of subduing prey, but they have flat molars for chewing.

Humans have the same characteristics of teeth and claws as herbivores.

The saliva of carnivores does not contain digestive enzymes. Instead, it is acidic. When a carnivorous mammal greedily swallows the food, it does it so fast that it does not even chew. Since the enzymes for protein digestion cannot be released inside the mouth because of the danger of destroying the oral cavity (called auto-digestion), carnivores do not need to mix their food with saliva. They simply bite off huge chunks of meat and swallow them whole, without crushing.

The saliva of herbivores is alkaline, which helps pre-digest plant foods. Human saliva is alkaline.

The main muscle that moves carnivores' jaw is the tempōrālis muscle. When you pet a dog, you are petting its tempōrālis muscles.

The jaw of all mammalian carnivores is a simple hinge joint in line with the teeth. When the jaw closes, the blade-shaped molars glide toward each other, creating an ideal mechanism for tearing flesh from bone.

In herbivores, the jaw joint is located in a position above the teeth allowing the complex jaw motions needed when chewing plant foods.

The stomach volume of a carnivore represents 60–70% of the total capacity of the digestive system. The carnivore's stomach has an exceptional ability to secrete hydrochloric acid. Carnivores are able to keep the pH in the stomach at the level of 1–to–2, even if the food is still in the stomach.

Herbivore stomachs represent only 21–to–27 percent of the total capacity of the digestive system and the pH levels are twenty times less acidic.

In summary for part one of the question, “You are an animal . . . but what kind?”:

- Carnivores have claws. Herbivores and humans do not.
- Carnivores sweat through their tongue. They have no sweat glands or pores. Herbivores and humans sweat through the pores of the skin.
- Carnivores have sharp fangs for tearing. Herbivores do not have sharp fangs. Neither do humans.
- Carnivores do not have flat molars for grinding. Herbivores and humans do.
- Carnivores have small salivary glands while herbivores and humans have well developed salivary glands for predigestion of grains and fruits.
- Carnivores have strong hydrochloric acid in the stomach to digest meat. The stomach acid in herbivores and in humans is twenty times weaker.
- Carnivores have smooth intestines that are three times the body length. Herbivores and humans have bumpy and pouch-like intestines that are six times the length of the body.

We will return to this question in the part two of this presentation, “You are an animal . . . but what kind?”