

Bite and Chew

Day 2: Yesterday you did a close inspection of your teeth and learned about the different kinds of teeth in your mouth.

Today we are going to look at the teeth of other Mammals. Teeth have different functions:

- Incisors - They are the teeth in the front. Their primary function is to cut food. Incisors have a single root and a sharp edge.
- Canines or Cuspids - They are behind and next to the incisors. Their main function is to tear food. They have a single, pointed cusp and a single root. They have the longest root of any tooth. They also serve to form the corners of the mouth.
- Premolars - These teeth are located behind and next to the canines and are designed to crush food. These teeth can have 3-4 cusps.
- Molars - The teeth in the back of the mouth are molars. They have broader and flatter surfaces with 4-5 cusps. They are designed to grind food.

Can you name all the teeth in your mouth?

Let's look at the different groups of CONSUMERS again (remember Week 1).

HERBIVORES: Animals that only eat plant material

OMNIVORES: Animals that eat plants and other animals

CARNIVORES: Animals that only eat other animals

If you look at all the functions of the different teeth you will notice that not every animal needs every kind of teeth.

- HERBIVORES need large strong INCISORS, to cut grass or leaves and gnaw on plants. Strong MOLARS to chew and grind down the leaves or grass are important, it helps in digesting plants with lots of fibers.
- CARNIVORES could not survive without having strong CANINES. They are needed for killing the animal they hunted and for tearing meat. They will also need good PREMOLARS to help crush the meat before swallowing it.
- OMNIVORES normally have all the different groups of teeth, so they are able to eat any kind of food plant or/and animal. But, they are normally not as good of a

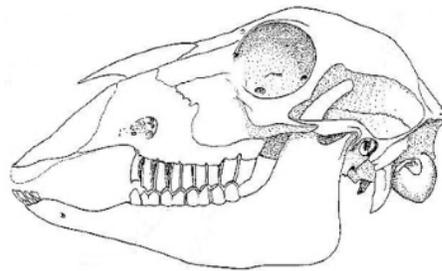
hunter as CARNIVORES, or as efficient in cutting leaves and digesting plants as HERBIVORES.

Let's start with HERBIVORES.

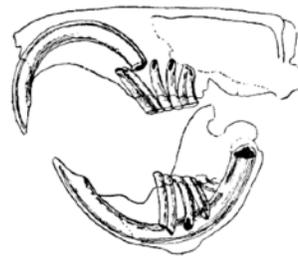
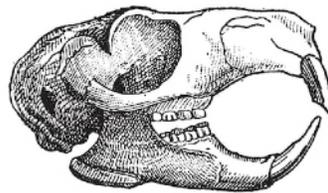
HERBIVORES are animals that eat plants. Plants can be a lot of different things: nuts, fruits, seeds, vegetables, grass, leaves, tree bark, twigs, cactus, hay, and flowers. Most plant material has a lot of fiber, which can not be digested, but doesn't provide a lot of nutrition. To get the most out of their food HERBIVORES tend to chew and grind their food for a long time. Large herbivores, like cows, deer and sheep even chew their food twice. They chew and swallow the first time, then it sits in the stomach for a while and then they bring it back up into their mouth to chew it again (chewing the crud). That sounds really gross, but is very effective in getting the most out of their food.

Rodents sometimes eat their own poop and digest it again to get all the nutrition.

This is the skull of a sheep. Sheep eat mostly grass, either fresh or dried out. They have incisors only in the lower jaw and use the extra hard bone of the upper jaw for cutting up the grass. Sheep have very big molars for grinding down the grass.



Rodents have very sharp incisors, that keep growing their whole life. This is the reason for them gnawing on wood - so the teeth don't grow too long. They also have strong molars.



Your challenge for the day is to eat like an HERBIVORE. How do you bite into and chew a carrot? How do you bite into a leaf of lettuce? Which teeth do you use to bite into a banana?

Tomorrow we will look at CARNIVORES and OMNIVORES. Have fun! Stefanie