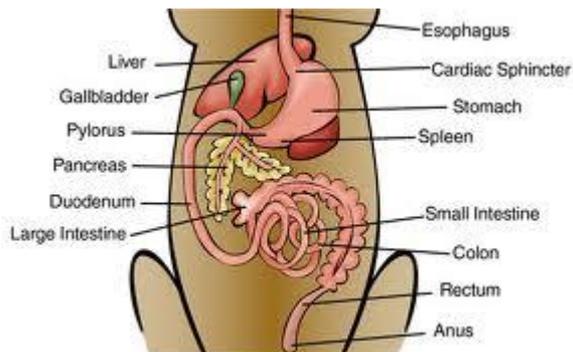


A carnivore is a meat eater. An herbivore is a plant eater. An omnivore is a plant and meat eater. Here is the unmistakable answer to whether humans are herbivore, carnivore, or omnivore.

Starting at the mouth, here is how a carnivore digestive system works:

Jaws and Teeth:

Carnivores have canine teeth, also called carnivore teeth. The adult canine teeth of a dog number 42. Canine teeth rip and tear the flesh of its prey, and the jaws chew up and down, rather than side to side. Many times the carnivore 'wolves' his food nearly whole. Some carnivores can go several days before they need to hunt and feed again.



Stomach:

A dog's stomach can hold about 2 quarts of contents (4 pints, or 8 cups). It secretes hydrochloric acid for digesting and breaking down the food into liquid 'chyme.'

Small Intestine:

Once broken down into its constituent parts, the small intestine is where the nutrients get absorbed into the blood stream. Digestion and absorption of nutrients (fat and protein) is extremely efficient. Less than 4% of fat, and just trace amounts of protein make it beyond the small intestine into the large intestine.

Carnivores have NO enzymes for digesting cellulose, a complex carbohydrate and the main building block in plant cell walls. Obligate carnivores such as dogs cannot digest cellulose.

Cecum:

The cecum in a carnivore digestive system is a tiny useless appendage.

In dogs, the cecum is equivalent to the human appendix. It is an S-shaped blind pouch that joins the intestines at the junction of the small and the large intestines. If it has any function, it is a very minor one. Dogs do not have an appendix.

Large Intestine:

The large intestine (colon) serves a single purpose - to reabsorb the water out of the waste material. Anything left over at the other end of the long tube passes out and turns into manure.

Intestinal Flora:

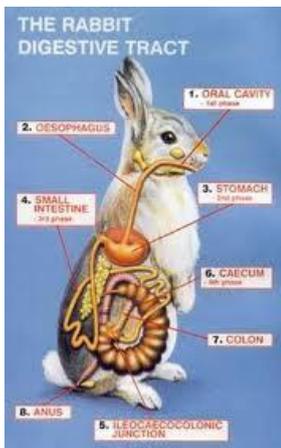
Thanks to the hydrochloric acid in the stomach, the entire intestinal tract is close to sterile, until the large intestine. A very large population of healthy bacteria resides in the colon. This natural gut flora participates in immune system function by competing with and helping to minimize the presence of

dangerous bacteria. While the bacteria manufacture b-vitamins, biotin, vitamin K and folic acid, it is unclear whether these nutrients are bioavailable to the carnivore.

Herbivore Digestive System

Two distinct types of herbivore digestive systems exist.

- The horse, rabbit, gorilla and others have a single stomach and a gigantic cecum (huge blind pouch) which contains billions of bacteria and participates in digestion.
- The cow, goat, camel and sheep, among others, have multiple, very complex stomachs, the first three of which contain billions of bacteria that help digest plant cellulose.

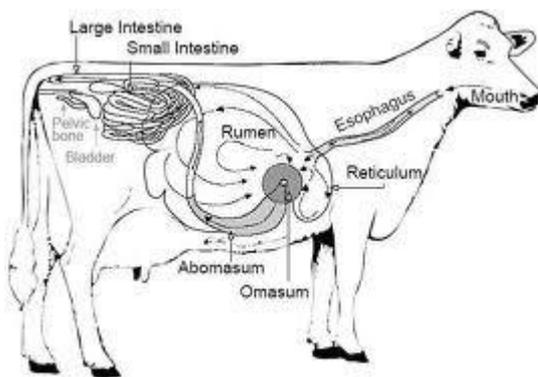


The intestines of an herbivore are up to 27 times longer than the length of the herbivore, when measured in a living animal. This is because the process of digesting cellulose is long and difficult, and requires the help of untold billions of bacteria which do the breaking down for the herbivore.

Starting at the mouth, here is how an herbivore digestive system works. For this discussion, we'll look at the guts of a cow, but the digestive processes in herbivores with simple digestive systems is similar, in that the large cecum, not the stomach, is where the actual digestion takes place. In a rabbit, the cecum is also called the "hind gut," referencing its location near the end of the very long intestinal tract.

Teeth and Jaws:

Herbivores don't have canine teeth, and they don't exactly chew. They rip grass and forages with their flat front teeth, and then their jaws move side to side as the molars grind the plant forages into a pulp. Herbivores browse and graze all day long, every day, in order to take in enough forage to subsist on.



Stomach:

Or should we say **FOUR** stomachs? These huge stomachs are populated with billions upon billions of bacteria and protozoa, which begin breaking down the cellulose in the cell walls of plant fibers. This is

a long process, so the ruminant can regurgitate its cud into its mouth, and grind stuff up all over again.

- The first three stomachs, the rumen, reticulum, and omasum, are concerned with breaking down the plant fibers in preparation for digestion. The work is mainly done by bacteria.
- True digestion finally occurs in the fourth stomach, the abomasum. Glands produce hydrochloric acid, pepsin and lipase which finish breaking down the food into all its constituent nutrients.

The **abomasum** doesn't just digest the food; it also kills, liquefies and digests the billions of life forms that have been participating in the animal's digestion through the three previous stomach chambers. In this way, an herbivore manages to absorb **animal protein** from the bacteria, despite eating only plant matter.

Let's say that again, differently:

Herbivores cannot by themselves digest cellulose any more than dogs (or other carnivore digestive systems) or humans can. But, they utilize a huge army of bacteria and other life forms to break down the cellulose before digestion. Once the bacteria have broken down the cellulose, **the herbivore eats the bacteria for dinner**, thereby obtaining animal protein (and vitamin B12, BTW) despite eating only plants.

How's that for a thank-you?

Intestines:

Nutrients (small intestine) and liquid (large intestine) is absorbed into the body. The intestines of the complex herbivore are 'wasteful'- 50% of the food and nutrients passes out without being absorbed.

Human Digestive Tract

The human digestive tract bears NO resemblance to that of herbivores.

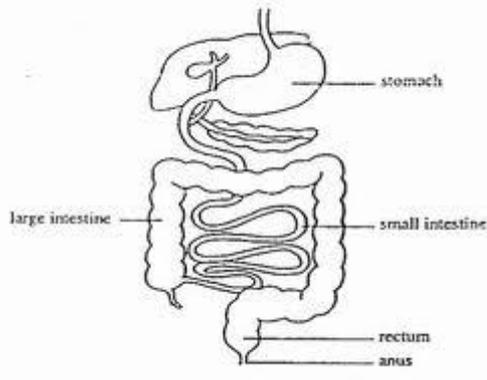
In fact, it should be very obvious how very similar the human and carnivore digestive systems are. Here's counting the ways...

- Dogs and humans have canine teeth.
- Dogs and humans eat a meal, and then may not eat again for a few hours, or days. (Herbivores graze all day long, nearly every waking moment looking for forage.)
- They use an up and down chewing motion of the jaws
- Length, digestive enzymes and function of the stomach are nearly identical in human and carnivore digestive systems. No digestion occurs in the rabbit's stomach; in a cow, digestion does not occur until stomach number 4.
- Small intestine, appendix (cecum) and colon have identical *functions* in human and carnivore digestive systems, though there are a couple physical differences.

Humans don't have a cecum, per se. Instead, the beginning of the large intestine is called the 'cecum.' It is nothing more than a segment of the colon. The *appendix* which has no known use, is attached to the large intestine at the junction of small and large intestines.

Dogs have no appendix, but at the spot where the small intestine joins the large intestine, dogs have a small, S-shaped appendage named the cecum which serves the dog about like the human appendix does humans - its use is minor or undetermined.

- Neither carnivores or humans have digestive systems that break down or utilize the cellulose in plant cell walls. (Herbivores use an army of bacteria and an extended transit time to break down cellulose to a usable form.)
- Human and carnivore digestive systems are designed for and equipped to eat meat. Both humans and carnivores eat and break down animal proteins, lipids and vitamins directly from animal sources. (Herbivores by definition do not eat animals, but they still need 'animal protein,' and they obtain it from the many pounds of **bacteria** which they continually digest.)



Human digestion does not break down plant materials efficiently.

Humans CAN extract and utilize the carbohydrates in plants (not cellulose), which is where humans and pure carnivores differ:

Dogs cannot break down carbohydrates at all. But human saliva contains **amylase**, which can digest carbohydrates (but not cellulose, which is too complex for amylase).

This is why humans are categorized as omnivores, while also having a carnivore digestive system.

What does this mean?

Humans should be eating a LOT MORE MEAT and animal fat, and a lot less carbohydrates, especially refined carbs and grains (*including* whole grains).

I know this flies in the face of quite a bit of current accepted dietary theory.

But, let's think this through for half a minute:

Current dietary recommendations have been around for 50+ years. If these dietary guidelines were even half effective, everyone would be getting **healthier**. As it is, on the current low fat, high carb guidelines, every known chronic degenerative disease has reached epidemic proportions, and 66.7% of us are not just overweight, but obese.

Something's wrong with THAT picture.

Low fat, high carb is NOT working! If what we're doing isn't working, don't you think we should be trying something different already??