

## Digestive System

Deer are ruminants, meaning they are equipped with a four chambered stomach. They have a digestive system, which makes it necessary for them to chew, regurgitate and chew again their cud: they ruminate. The ruminant's four chambered stomach allows the deer to gather a lot of food at once and then chew and digest it later. They have the characteristic to be able to digest the cellulose of plants. To be able to break their foods down they have a stomach in four parts.

- Rumen
- Reticulum
- Omasum
- Abomasum

As deer begin to feed in the pasture, they chew very fast. Depending on the type and abundance of food, the deer can fill its stomach in about one or two hours. When a deer eats, food is chewed just enough to swallow. This is the first chewing. The food then passes down the esophagus into the stomach. The food goes into the first stomach. (the rumen) This area is used for storage. The soft round ball of chewed food is mixed in a bath of bacteria which attack the cellulose in the plants that the deer has eaten. Fermentation releases the acids amino contents in the cellulose, breaks it down into simpler substances and the substances can then be absorbed by the deer. Fermentation produces a gas (methane) which the deer must discharge very regularly.

Later, when the deer is at rest, the cud of regurgitation go for a second and longer chewing which makes it possible to break remaining cellulose fibers. This second process now repeats in the second stomach. (the reticulum) The finest particles pass in the third stomach,(the omasum) where water is absorbed.

Finally, resulting cud enters the last chamber, (the abomasums), where the gastric juices continue digestion. Last, it moves on to the small intestines.

The food material then goes through the intestines and everything that isn't digested is passed off as waste droppings.

The  
FOUR  
STOMACHS

