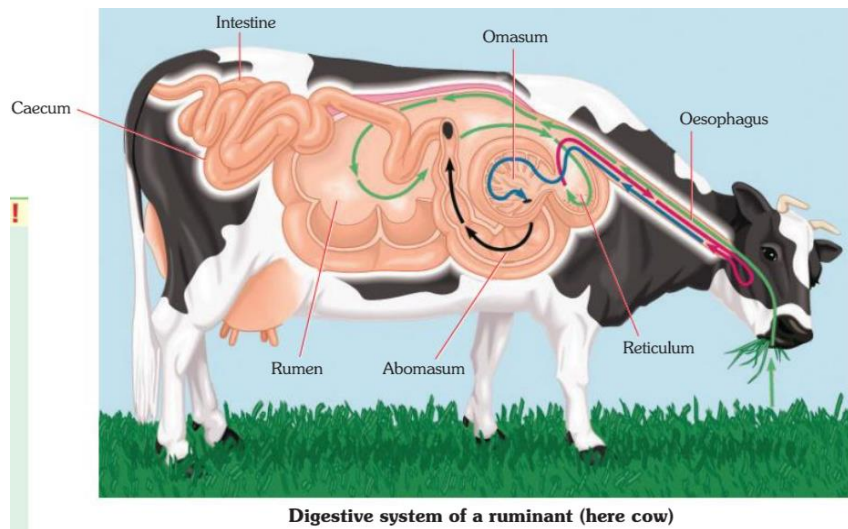


Nutrition in a Ruminant



The animals (such as cow) which eat grass have a special stomach to digest the tough cellulose carbohydrate present in grass.

The stomach of a cow is large and consists of four compartments (or four chambers). These chambers are called rumen, reticulum, omasum and abomasum. The first compartment of a cow's stomach is the biggest and it is called rumen.



When cow eats grass as food while grazing, it does not chew it completely (because it has no time for it). The cow swallows the grass quickly with little chewing and stores it in the rumen (which is the first compartment of stomach).

The rumen contains cellulose digesting bacteria. The bacteria present in the rumen of a cow start to digest cellulose carbohydrate present in grass food. Thus, the grass is partially digested in the rumen.

The partially digested food (or partially digested grass) in the rumen of a cow is called **cud**.

This cud is brought back into mouth of the cow from the rumen into small lumps and animal chew it again. This process is called **rumination** and animals are called **ruminants**.