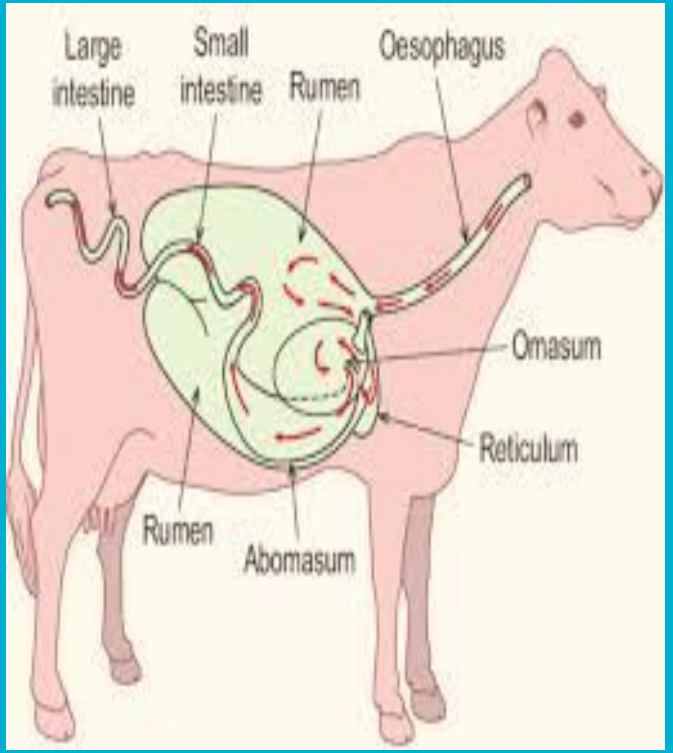
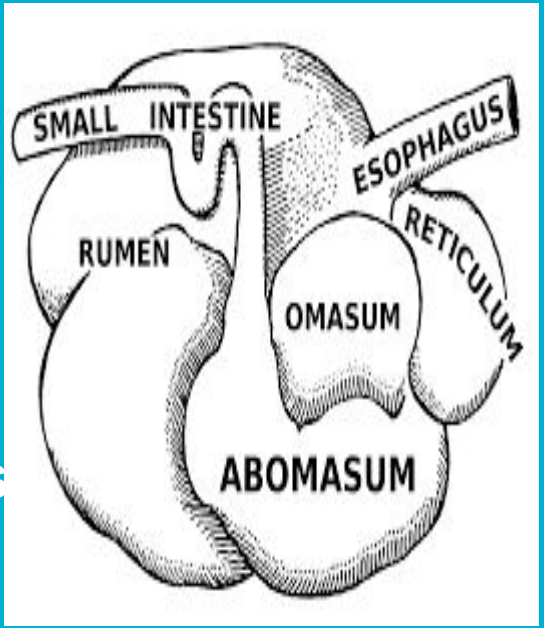
Digestion in Grass Eating Animals Ruminants

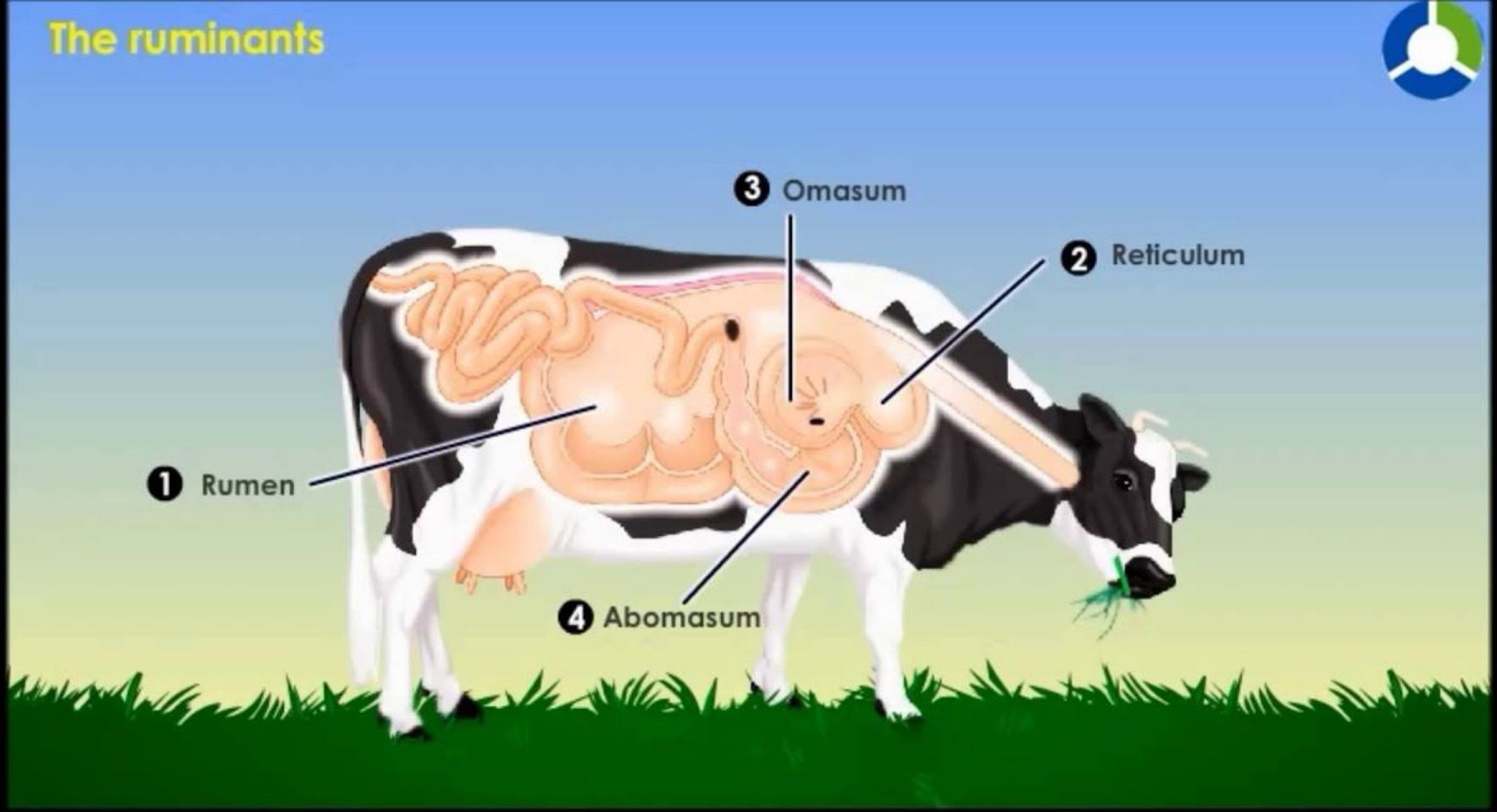
None of the animal can digest cellulose which is a major component of the food eaten by herbivores. The plant eating animals digest their food in two steps. Their stomach is divided into four chamber the rumen, reticulum, omasum and abomasum.



First of all, half chewed food is swallowed and it then goes from mouth to the rumen, the first chamber of the stomach. Here, it is acted upon by bacteria. These microorganisms digest the cellulose.This half digested food goes muscular chamber; the reticulum.



From the reticulum the food is sent back to the mouth as cud to be chewed again. Chewing of the cud is called rumination and such animals are called ruminating animals or ruminants. Cow, goat, buffaloes, sheep, bison, etc. are good example of ruminating animals. After digestion and absorption, nutrients from food are taken to the cells in all parts of the body. The cells oxidize the food to release energy.

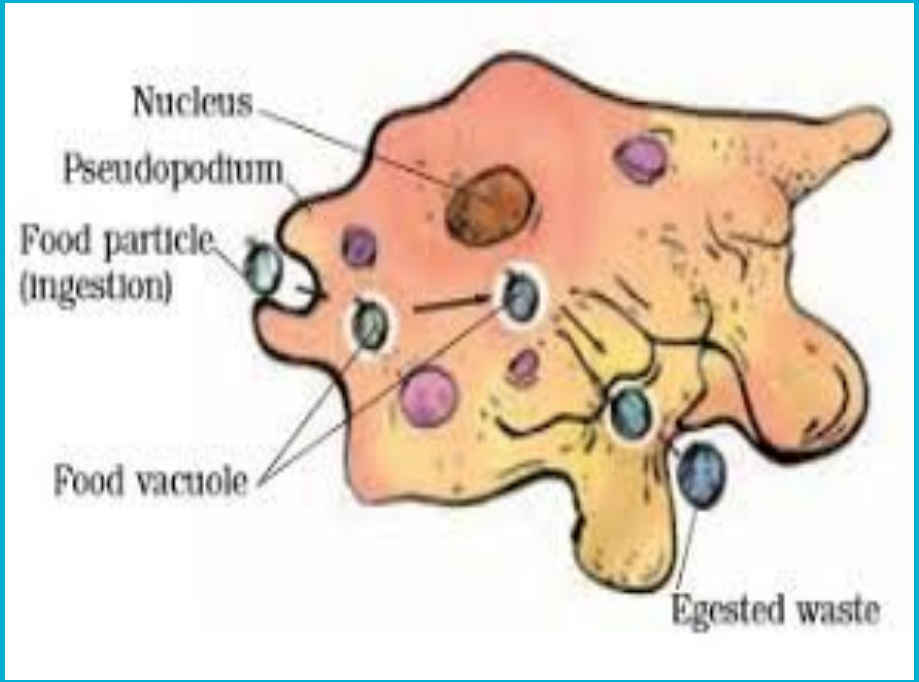


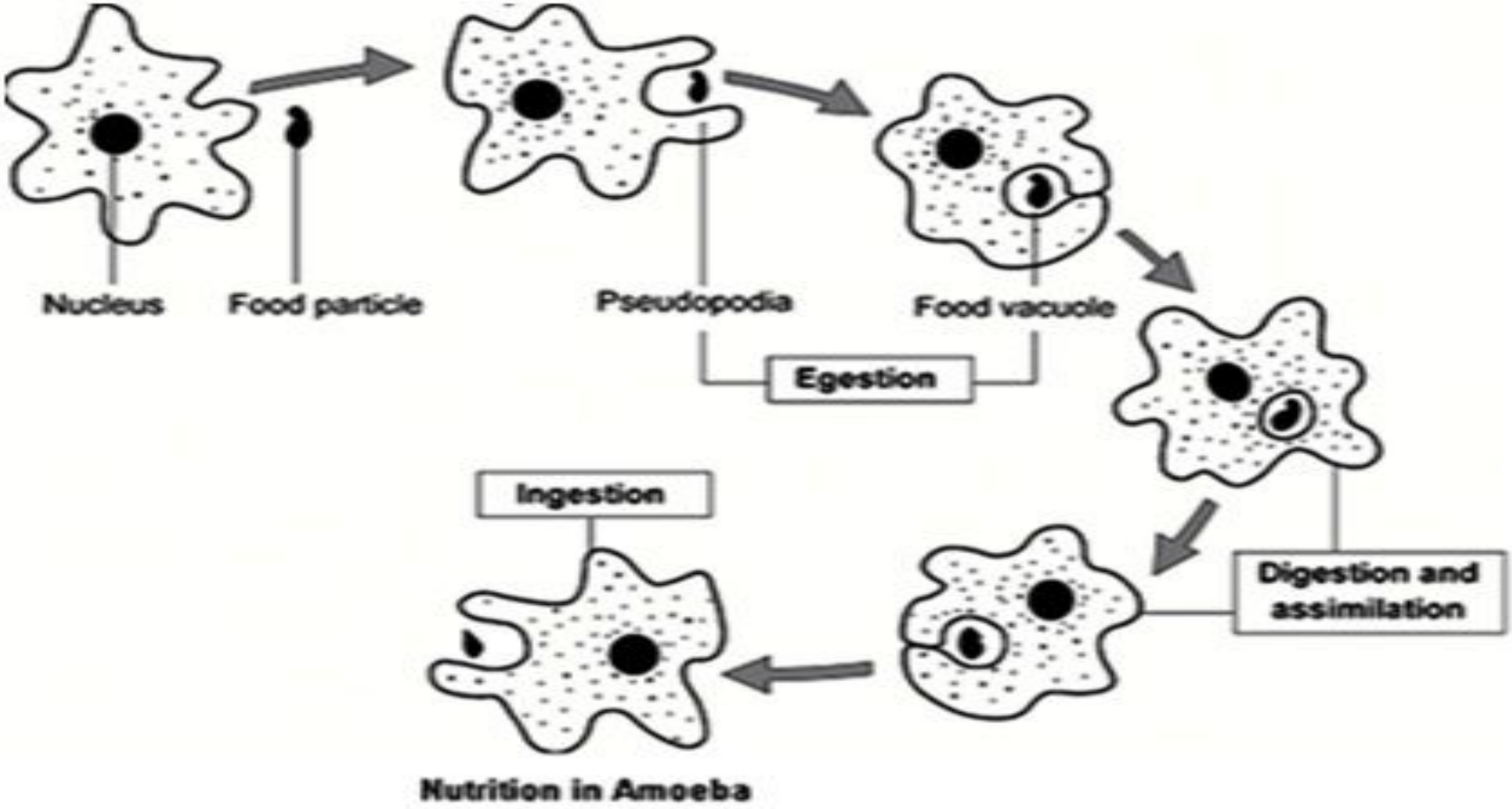
In ruminants half–chewed grass travels from the mouth to the first chamber of the stomach,

Mode Of Digestion In Amoeba -

Amoeba, a unicellular animal, engulfs tiny particles of food by using pseudopodia.

Amoeba surrounds the food by pseudopodia and then makes a food vacuole to engulf the food.





Nutrition in Amoeba

PLENARY -

Q. Can we survive only on raw, leafy vegetables/grass? Discuss.

Solution:

No, we cannot survive only on raw, leafy vegetables because they mainly consist of Cellulose which cannot be digested by us due to lack of cellulose digesting enzyme in our body.

ASSESSMENT

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EVALUATION

Q. Name the organs that make up the alimentary canal.

A. Mouth, oesophagus, stomach, small intestine, large intestine and rectum are the parts of the alimentary canal.

Q. Name the four types of teeth.

A. The four types of teeth are: Incisors, Canines, Premolars and Molars.

Q. Name the four compartments in a ruminant's stomach.

A.Four compartments in a ruminant's stomach: Rumen, reticulum, omasum and abomasum.