

- Chapter Five: Digestive System
- What is the primary function of the Digestive System
  - Breakdown, absorption, and metabolism of nutrients
- What are the types of digestive systems?
  - non-ruminants (monogastric)
    - Herbivores
    - Carnivores- Cats
    - Omnivores
  - Pseudoruminants
    - Herbivores horses and rabbits
  - Ruminants
    - cattle, sheep, and goats
- What is Microbial Fermentation?
  - Occurs in the rumen: ruminant species and Cecum in Pseudoruminants
  - Microbes break down roughages and produce Volatile Fatty Acids
  - Butyrate, Propionate Acetate
- What section does water absorption occur in the ruminant stomach?
  - Omasum

- Chapter Five: Digestive System
- What section does Enzymatic digestion occur in the ruminant , where do these enzymes come from.
  - Abomasum, from the pancreas
- What section of the ruminant removes waste and stimulates regurgitation?
  - The reticulum also known as the Honey comb
- What type of tissue is found in the GI tract and utilized for absorption ?
  - Simple Columnar Epithelial Tissue
- What is the process of Digestion?
  - Prehension
  - Mastication
  - Deglutition
  - Regurgitation
  - Digestion
  - Absorption
  - Assimilation
  - Egestion

- Chapter Five: Digestive System
- What digestive Enzymes are utilized in the GI Tract?
  - Amylase: found in Saliva breaks down carbs
  - Lipase: Break down of lipids
  - Protease: breaks down proteins
  - Pepsin: Converted from pepsinogen by the acidic environment of the stomach, and aids in digestion of protein.
- What Hormone stimulates ingestion?
  - Ghrelin
- What hormones are key regulators in blood sugar levels
  - Insulin, Glucagon
- What type of movement and muscle is utilized in the digestive tract?
  - Smooth Muscle
  - Peristaltic Contractions
- What are the major classes of nutrients? what is the most important?
  - Water: Most important
  - Proteins: amino acids
  - Carbohydrates: sugars, starches and cellulose
  - Lipids: Insulation Protection, Energy
  - Vitamins
  - Minerals

- Chapter Five: Digestive System
- Label the sections of the GI Tract and what occurs in each section.

