

Exam 2 Questions Part 2 (23-41, 43-47)

1. Why are the two classes of essential nutrients?
 - a. Essential AAs
 - b. Essential fatty acids
 - c. Vitamins
 - d. Minerals
2. Why are they essential rather than it essential to be essential?
 - a. They are essential to cells, organisms to obtain from dietary sources, your body does not make them.
3. _____ fatty acids are the essential fatty acids. **unsaturated**
4. How many amino acids are essential? How many essential nutrients?
 - a. 20, 50
5. Vitamins are either fat _____ or _____ soluble. **water**
6. 13 of 21 vitamins are fat-soluble vitamins, vitamins are **organic**.
7. **Undercarboxylated**
The result is that they consistently supply less chemical energy than the body requires.
8. Five stages of food processing:
 - a. Ingestion: eating
 - b. Digestion: breaking food down into small molecules so we can absorb them.
 - c. Absorption: uptake of nutrients
 - d. Elimination: passage of undigested material out of digestive compartment
9. Five types of ingesta:
 - a. Suspension feeds: with small food particles from water (fishes)
 - b. Masticatory feeds: that use air to food source (invertebrates)
 - c. Filter feeds: catch particles from water/food (invertebrates)
 - d. Bulk feeds: eat large pieces of food (humans)
10. Invertebrate vs. vertebrate digestion
 - a. Invertebrate: food particles are ingested by outpocketing and digested within food vacuoles
 - b. Vertebrate: the breakdown of food particles outside of cells
11. Types of vertebrate digestion
 - a. _____, invertebrates to both digestion and the filtering systems (simple body plan animals) **gastrovascular cavity**
 - b. More complex animals have a digestive tube with two openings.
 - i. Digesting tube is called _____ or _____ **complete digestive tract, alimentary canal**
12. Features of the complete digestive tract
 - a. The **alimentary digestive system** consists of an **alimentary canal** and accessory glands that secrete digestive juices through ducts.