

Equine Digestive System

I. Define

- a. Peristalsis
- b. Cecum
- c. Rectum
- d. Mastication
- e.

II. Matching

- A. Mouth
- B. Teeth
- C. Saliva
- D. Cecum
- E. Starch
- F. Stomach
- G. Manure
- H. Small Intestine
- I. Small Colon
- J. Large Colon
- K. Anus
- L. Volatile Fatty Acids
- M. Rectum
- N. Esophagus

1. 4-5 feet long
2. Important energy source for horses
3. Glandular and non-glandular portions
4. End waste product of digestion
5. Holds manure until it passes out of the anus
6. First part of digestive system
7. Where most water is absorbed
8. Main site of nutrient absorption
9. Contains enzymes for initial carbohydrate digestion
10. Used for mechanical digestion
11. Sphincter that allows food to exit the rectum
12. Where manure is shaped into "balls"
13. Digested in the cecum
14. Comparable to a cow's rumen

III. Draw and label a picture of the digestive system of the horse.

Equine Digestive System

Answers

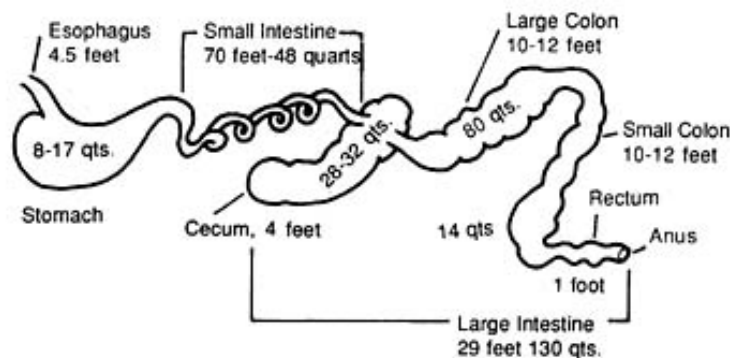
I. Define

- a. **Peristalsis** – Rhythmic, smooth muscle contractions of the digestive system that moves food through the horse's digestive system. Circular contractions prevent the food from moving backward. Longitudinal muscles are responsible for moving the food forward through the digestive system.
- b. **Cecum** – Large sac at the junction of the large and small intestines that contains bacteria and protozoa. Starches from the horse's roughage intake are digested here, via microbial fermentation, just as they would be broken down in the rumen of a cow. Results in the formation of volatile fatty acids.
- c. **Rectum** – Last part of the large intestine, connected to the rectum. Manure stays here until it is ready to be passed.
- d. **Mastication** – Term for chewing, or the mechanical breakdown of food via the horse's teeth.

II. Matching

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12. Where manure is shaped into "balls" **I. Small Colon**
13. Digested in the cecum **E. Starch**
14. Comparable to a cow's rumen **D. Cecum**

III. Draw and label a picture of the digestive system of the horse.



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