

1.C

2.A

3. E

4. D

5. B

6. D

7. A

10. D

12. B

13. A,C

14. A

15. D,A

16. D,B

17. Describe what happens to food during each of the following stages:

- a. Ingestion : Food is taken in
- b. Digestion: Food is broken down
- c. Absorption: Nutrients are transported throughout the body
- d. Elimination: removal of waste

18.

- a. Name the digestive organs show in the diagram below

A: mouth

B: liver

C: Gallbladder

D: Large Intestine

E: Esophagus

F: Stomach

G: Pancreas

H: Small Intestine

- b. Sort the organs you named into those that are part of the digestive tract and those that are accessory organs.

Digestive Tract : A,D,E,F,H

Accessory Organs: B,C,G

19. Describe how the shapes of teeth are suited to their functions.

The incisors and canines are smaller and more pointed for cutting and tearing food, whereas the molars are flatter and larger for grinding and crushing your food.

21. Name two functions of the small intestine:

1. The chemical digestion of food (food gets broken down by enzymes like bile)
2. Absorption of nutrients into the blood stream

23. Explain the role bacteria play in the large intestine.

Bacteria in the large intestine use the waste material to make vitamins B and K, they produce enzymes that breakdown plant cell walls and they help digest and absorb food.

30. Explain how the structure of villi helps them perform their function.

Because they are small and there are a lot of them they increase the surface area of the small intestine so more absorption can take place.

33. Your friend has an ulcer in her stomach. In an effort to get healthier, your friend quits smoking and starts exercising more. She notices that her ulcer is starting to heal. Which lifestyle change is likely causing her disorder to improve, and why?

The ulcer is probably starting to heal because she quit smoking. The tobacco in cigarettes makes our stomach produce more acid and can lead to ulcers, with less acid in her stomach the ulcer is able to heal properly.

35. Describe how the digestive, circulatory, and urinary systems work together to remove wastes from the body.

The digestive system breaks down the food and the nutrients are absorbed into the circulatory system through the blood stream. The urinary system works with the digestive system to remove wastes from the body in the form of urine.

36. Explain how the digestive system interacts with the following body systems in maintain homeostasis

a) nervous system – the digestive system provides nutrients for growth, maintenance, and repair of nerve cells within the nervous system and the nervous system controls peristalsis throughout digestion.

b) muscular system – the digestive system provides glucose for muscle activity and the muscular system supports and helps protect the digestive organs as well as carries out peristalsis in the digestive system.

c) respiratory system – oxygen is provided to the organs of the digestive system and removes the carbon dioxide. We are able to breath because the digestive and respiratory systems share the pharynx.