Vista Murrieta High School Anatomy & Physiology G. Nicholas

## **Digestive System Homework Problem Set**

Answer the following questions as complete as possible to the best of your ability. These are not yes and no questions and need to be explained fully.

1) What are Hemorrhoids? How do you get them?

2) How does the brain control hunger and digestion?

3) What is Hepatitis B and what is it caused by?

4) Explain the importance of the Colon and the re-absorption of water in the body.

5) Give a brief overview what happens when the food enters the mouth until it reaches the Anus. Brief---a few sentences.

6) What is the digestive system?

7) Where does food pass through between the mouth and the stomach?

8) What is the relationship between enzyme activity and pepsin, with respect to pH?

9) What happens when food reaches the stomach?

10) Where does the partly-digested food (in liquid form) go after it leaves the stomach?

11) How does digested food finally reach the bloodstream?

12) Solid waste leaves the body through the rectum then the anus. Liquid waste leaves the body after passing through the

13) Digestion takes place in a long tube-like canal called the alimentary canal, or the digestive tract. Food travels through these organs in the following order:

14) The liver is located in the abdomen and performs many functions. What are they?

15) What is the proper name (i.e. non-slang dictionary term) for passing gas?

16) Generally speaking, which gas combinations contribute the most to combustibility of passing gas?

17) Most gas is formed in what part of the digestive tract?

18) What is the beginning of the large intestine called?

19) What is the portion of the digestive tract between the stomach and large intestine?

20) What is the hanging ball thing in the center, at the back of your throat called?

21) Small microscopic projections in the walls of the small intestine are called\_\_\_\_

22) Measuring from the pyloric sphincter to the first part of the large intestine, the small intestine is\_\_\_\_\_\_

23) What is the ring of muscle at the distal end of the stomach called?

24) A woman is brought to an emergency room complaining of severe pain in her left iliac region. She claims previous episodes and says that the condition is worse when she is constipated and is relieved by defecation. A large tender mass is palpated in the left iliac fossa and barium study reveals a large number of diverticula in her descending and sigmoid colon. What are diverticula and what is believed to promote their formation? Does this woman have diverticulitis or diverticulosis? Explain.

25) A woman in her 50's complains of bloating, cramping, and diarrhea when she drinks milk. What is the Cause of her complaint and what is a solution.

26) A 21 year old man with severe appendicitis did not seek treatment in time and died a week after his abdominal pain and fever began. Explain why appendicitis can quickly lead to death.

27) What muscles are involved in a bowel movement? How often should a normal adult defecate?

## Yes, these are topics that most people don't discuss publicly, some answers are in the book - the rest you may have to google. Keep your answers as scientific as possible.

28) Explain the relationship between the human and his/her colonic bacteria.

29) What is flatus? What is the main "gas" in it? How much flatus does a normal human produce in a day? What factors play a role in how much flatus is produced?30) What are feces made of? What gives feces their characteristic brown color? What other colors can your feces be? What do those other colors indicate?

31) What muscles are involved in a bowel movement? How often should a normal adult defecate?

32) What is diarrhea? What causes it? Why can uncontrolled diarrhea lead to dehydration and death in a relatively short period?

33) What does it mean to be constipated? What causes the condition?

34) What is Irritable Bowel Syndrome (IBS)? What are the causes? How can it be treated?

35) What's the right balance of carbohydrate, protein, and fat?

36) Should I stop eating red meat, specifically, why or why not?

37) Should I take vitamin pills? If so, what type and how often?

38) Is an energy bar best for an afternoon snack before I work out?

39) I don't drink eight glasses of water every day. Is that bad?

40) Which is better to replace sweat losses-water or a sports drink?

41) How much should I weigh based on my age and sex?

42) I do lots of fat-burning exercise and don't eat any fat. Why haven't I lost weight?

43) How do I best gain weight? Lose weight?

44) I think my friend has an eating disorder. What can I do?

Define Vocabulary: Use your book and the internet to define the terms.

## - Anorexia Nervosa

- Bulemia
- Dental Caries
- Crohn's Diseases
- Halitosis
- Ulcers