

Answers

Nutrition and Digestion Test Review 2016

#1-7

#8-18

1. What are the 3 functions of food?

Growth + Repair, Energy, Regulate Metabolism

- * 2. Fill in the table.

Nutrient	Function	Food examples
Carbohydrates	1 ST Energy Source	Pasta, cereal.
Protein	Growth & Repair (3 rd E.S.)	meat, chicken
Fat	2 nd Energy Source	butter, oil
Minerals	Regulate metabolism	fruits / veggies
Vitamins	Regulate metabolism	fruits / veggies
Water	Regulate metabolism Hydrate.	water / juice / f + V
Dietary Fiber	Keeps you regular	all bran - fiber 1 - fruits

- * 3. Give 3 examples of carbohydrate food.

pasta, cereal, apple.

- * 4. Give 3 examples of protein food.

tofu, meat, eggs

- * 5. Give 3 examples of fatty foods.

butter, oil, junkfood.

6. A) How do you convert fat, carbohydrates and protein into kJ?

$$\begin{array}{ccc} \downarrow & & \underbrace{\quad}_{x 37} \\ & x 37 & x 17 \end{array}$$

- B) Convert the following nutritional information to kJ.

$$\begin{array}{lll} \text{Cookies: } & 15 \text{ g of carbohydrate} & = 15 \times 17 = 255 \text{ kJ} \\ & 3 \text{ g of protein} & = 3 \times 17 = 51 \text{ kJ} \\ & 7 \text{ g of fat} & = 7 \times 37 = 259 \text{ kJ} \end{array}$$

7. What are the 4 food groups and how many servings do you need per day?

Vegetables + Fruit (7-8) Grains (6-7) Meats (2-3)

8. What is an enzyme and what does it do?

Milk (2-4)

Enzyme is a secretion secreted by glands which help in the breakdown of carbs / fats / protein

* Refer to table I gave you.

9. Fill in the table.

Digestive passageway	Physical breakdown	Chemical breakdown
Mouth	chewing - tongue moves food swallowing	salivary amylase breaks down carbs
Pharynx	swallowing	—
Esophagus	peristalsis	—
Stomach	peristalsis churning	gastric glands pepsin for protein
Small Intestine	peristalsis churning	pancreatic enzymes - protein intestinal enzymes - fats
Large Intestine	peristalsis	—

10. Fill in the table below.

	Fats	Protein	Carbs
Where 1 st breakdown occurs + gland + enzyme + what it becomes	Small intestine Liver Bile	Stomach Gastric Enzymes Pepsin small bits of fat	Mouth salivary amylase. Amino Acids Glucose.
Where 2 nd breakdown occurs + gland + enzyme + what it becomes	Small Intestine Intestinal Glands Intestinal Enzymes	S. I. I. Glands I. Enzymes	S. I. I. Glands I. Enzymes
Where absorption takes place	Fatty acids/glycerol	Simple Amino Acids	Simple Carbohydrates

11. What is the function of the uvula?

to block nasal cavity when eating

12. What is the function of the epiglottis?

to block tracheal / respiratory path when swallowing

13. What is Bolus and Chyme?

Bolus is what food becomes after mixing with saliva.

14. Where does the absorption of water, vitamins and minerals occur?

large intestine

Chyme is when it mixes with

15. What is the difference between a protein, amino acid and simple amino acid?

protein has not yet been digested. amino acid gastric juice

16. Where are the villi located and what is their function?

digestion by pepsin.

S. I. increase surface area & help simple amino acid

17. What are the 5 glands of the digestive system?

absorption has completed

Salivary, Gastric, Liver, Pancreas,

18. Is bile an enzyme? Explain.

Intestinal

digestion in S.I.

No - it is just used to emulsify (break apart) fats. & can be absorbed

19. If you suspect a friend of having an eating disorder, what is the first thing you should do?

Tell AN ADULT

20. List 5 signs (physical or behavioral) that could indicate that your friend has an eating disorder.
- dieting, obsessions with fat + nutrition
 - pretending to eat, lying about eating
 - dramatic weight loss, going to bathroom
21. Explain what a GMO is.
- DNA is changed - genetically modified organism
 - a desired trait from another organism is inserted into an organism that you wish to modify
22. What are 3 pros and 3 cons associated with GMOs?

- Pros:
- 1) can produce results after one generation
 - 2) transfer useful gene to another
 - 3) gene bank
 - 4) improve harvests (resist herbicides + insecticides)
- Cons:
- Risk of new allergies
 - Risk GMO's hazardous to humans
 - no natural plants
 - risk insecticide on plants

23. Explain pasteurization:
- heats up food, destroys bacteria, keeps nutritional value, keeps food fresh longer
24. Fill in the diagram

