Nutrition and Digestion Test Review

# Matching

Place the letter corresponding to the following processes in the correct box for the appropriate structure of the digestive tract.

|  |  |  |  |
| --- | --- | --- | --- |
| A) Ingestion | B) Break down of protein by gastric juices | C) Break down of starch by saliva | D) Break of carbohydrates by intestinal juices |
| E) Absorption of most nutrients | F) Absorption of water, vitamins and minerals | G) Release of bile to help breakdown fats | H) Movement of waste into rectum |
| I) Movement of food by peristalsis into stomach | J) Breakdown of proteins by intestinal juices | K) Churning and mixing of food |  |
| L) Breakdown of fats by intestinal juices | M) Mastication and deglutination | N) Movement of food into small intestine by peristalsis |  |

|  |  |  |
| --- | --- | --- |
| Organ  **Mouth** | Mechanical Processes | Chemical Processes |
| Mouth and pharynx |  |  |
|  |
| Esophagus  **Stomach** |  | NONE |
| Stomach |  |  |
| **Small Intestine** |
| Small intestine |  |  |
|  |
|  |
|  |
| Large intestine | **Large Intestine** | NONE |
|  |

# Short Answer

1. Which two nutrients are the body’s main sources of energy?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Which nutrient is used to repair the body’s cells and tissues?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Which two nutrients are only required in small amounts daily?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What are the building blocks that **proteins** are broken down into during digestion?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What are the building blocks that **fats** are broken down into during digestion?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What are the building blocks that **carbohydrates** are broken down into during digestion?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What is the function of the uvula?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What is the function of the epiglottis?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. For each of the following foods indicate the main macromolecule (fat, carbohydrate, protein):

Bread \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Tuna \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Steak \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Butter \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Potato \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Tofu \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Bean \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Apple \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Rice \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Donut \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What are some signs that would indicate your friend might have an eating disorder?
2. What are the two main types of eating disorders?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What are some benefits and concerns associated with GMOs?

|  |  |
| --- | --- |
| **Benefits** | **Concerns** |
|  |  |

1. What is pasteurization? What are some of its applications today?
2. Name the parts of the digestive tract in order (start with ingestion):

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

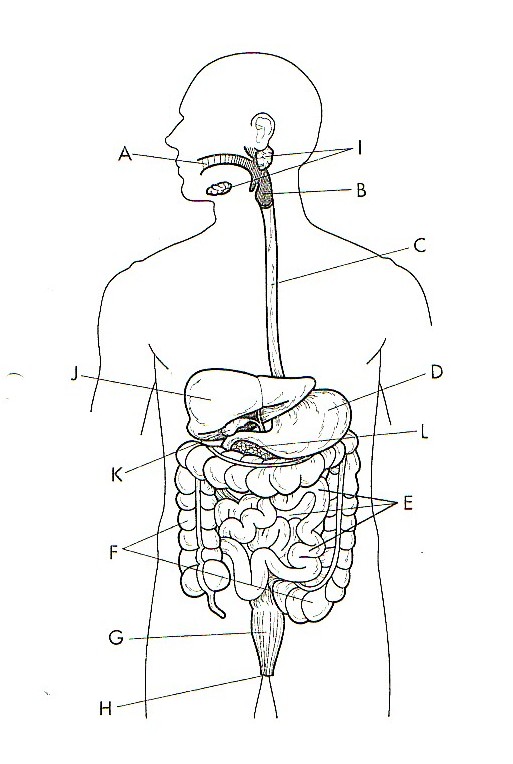
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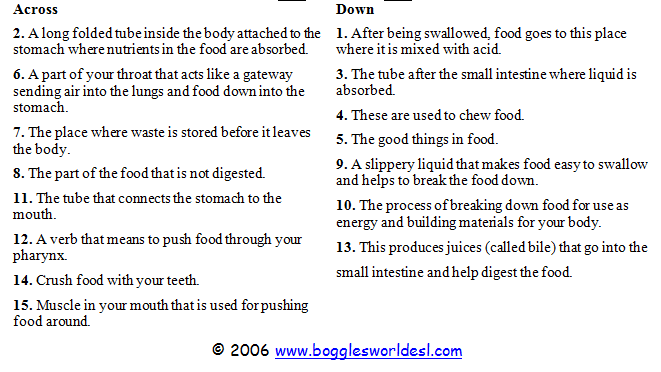
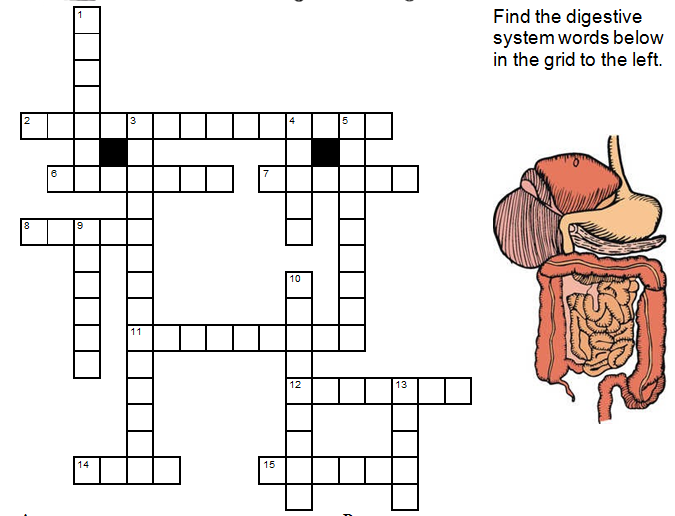
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# Labeling

Label the structures indicated below.



# The Human Digestive System



# Analysis Questions

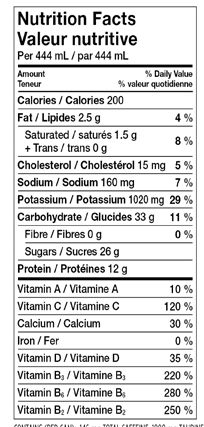
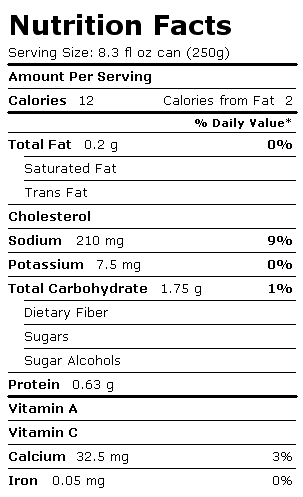
1. Here is a meal plan for one day on the “Get Lean” Diet. Based on the information provided:
2. Calculate the total number of calories consumed
3. Calculate the total amount of grams of each macromolecule consumed

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Food Item** | **Fat (g)** | **Carbs (g)** | **Protein (g)** | **Calories** |
| 3 eggs | 33 | 3.3 | 39 |  |
| 1 slice cheddar | 9 | 0.4 | 7 |  |
| 1 cup baby spinach | 0.1 | 1.1 | 0.9 |  |
| 1 peach | 0.4 | 14 | 1.4 |  |
| 2 tbsp Chocolate protein powder | 0 | 5 | 20 |  |
| 2 cups chocolate milk | 16 | 52 | 16 |  |
| 2 tbsp peanut butter | 16 | 6 | 8 |  |
| 1 tbsp chia seeds | 4.5 | 6 | 2.5 |  |
| 3 ice cubes | 0 | 0 | 0 |  |
| 4 oz rib eye steak | 25 | 0 | 30 |  |
| ½ avocado | 14.5 | 8.5 | 2 |  |
| 1 tomato | .2 | 4.8 | 1.1 |  |
| ¼ red onion | 0 | 1.8 | 0.2 |  |
| 1 Recovery shake | 16 | 50 | 25 |  |
| 3 oz chicken breast | 3.6 | 0 | 31 |  |
| 1 oz whole-wheat flax penne pasta | 1 | 37 | 7 |  |
| 1 cup sliced mushrooms | 0.2 | 2.3 | 2.2 |  |
| 2 cups broccoli | 0.6 | 12 | 5.2 |  |
| ½ cup marinara sauce | 1.9 | 10.5 | 1.8 |  |
| 1 tbsp extra virgin olive oil | 14 | 0 | 0 |  |
| **Total** |  |  |  |  |

**Is this meal plan healthy for a 15-year old? *Justify your answer.***

1. Here are the nutrition labels for 3 energy drinks.
2. For each one, indicate how many grams of fat, proteins and carbohydrates there are
3. For each one, indicate how many calories they contain
4. Determine which one is the healthiest option. **Justify your answer**.

**B**

**C**

**A**

Fats: \_\_\_\_\_\_\_\_\_\_

Carbs: \_\_\_\_\_\_\_\_\_\_

Proteins: \_\_\_\_\_\_\_\_\_\_

Total Calories: \_\_\_\_\_\_\_\_\_\_

Fats: \_\_\_\_\_\_\_\_\_\_

Carbs: \_\_\_\_\_\_\_\_\_\_

Proteins: \_\_\_\_\_\_\_\_\_\_

Total Calories: \_\_\_\_\_\_\_\_\_\_

Fats: \_\_\_\_\_\_\_\_\_\_

Carbs: \_\_\_\_\_\_\_\_\_\_

Proteins: \_\_\_\_\_\_\_\_\_\_

Total Calories: \_\_\_\_\_\_\_\_\_\_

**Which is the healthiest option? Is there any other information that would be useful to have?**