**Human Physiology Focused on the Gastrointestinal System**

**Task: Take a look at the picture. Can you name the organs and their functions?**

**Vocabulary**

**Match the words to their definitions:**

|  |  |
| --- | --- |
| digestive system | the liquid in the mouth that makes chewed food wet and begins to digest. |
| nutrients | the system that digests the food and removes it from the body |
| digestion | a baglike organ with muscular walls |
| saliva | the tube that carries food and liquids from the mouth to the stomach |
| enzyme | the changing of food into forms that the body can use/ |
| esophagus | a substance in food that the body uses for energy, for growth and repair, or form working well |
| large intestine | the organ of the digestive system in which most digestion takes place |
| small intestine | the last organ of the digestive system which removes liquid wastes and stores solid wastes |
| stomach | a chemical that helps your digestive system change food into nutrients |

**Video**

http://www.youtube.com/watch?v=Z7xKYNz9AS0

Task:

Watch the video about the digestive system and fill in the blanks. All the words you need are organs of the digestive system.

Food in the \_\_\_\_\_\_ is mixed with saliva. Saliva begins to dissolve the food as the \_\_\_\_\_ grind and cut it. Food is forced into the \_\_\_\_\_,farynx by the \_\_\_\_\_\_\_.Food in the \_\_\_\_\_\_ stimulates the swallowing reflex. Food goes from the farynx to the \_\_\_\_\_\_\_\_. The unique muscular structure of the stomach \_\_\_\_\_ the food into small pieces called chyme. The major portion of absorption and digestion occurs in the \_\_\_\_ \_\_\_\_\_\_\_.

**Text**

Vocabulary:

Food intolerance - An unpleasant reaction to food

Deficiency - lack

Intake – the amount taken in

Artificial – not natural

Flavor enhancer – substance used to improve the taste of food

**What Causes an Unhealthy Digestive System?**

An unhealthy digestive system may be caused by:

• Poor diet – A diet that lacks basic nutrients affects the digestive system’s ability to function effectively and can lead to many chronic conditions.

• Overuse of antibiotics – Antibiotics kill the “good” bacteria and the “bad” bacteria, leading to an imbalance in intestinal flora.

• Chronic infections resulting from various organisms, bacteria, fungi, and viruses

• Food intolerances – Lactose and gluten intolerance can irritate the digestive system.

• Stress – Chronic stress and negative thinking can literally “upset” the digestive system. Over time, stress can cause serious damage to the digestive system.

• Heavy metal toxicity – Heavy metals such as mercury cannot be easily processed by the digestive system.

• Lack of proper digestive enzymes – Without the right combination of digestive enzymes, food can’t be broken down efficiently, which leads to vitamin, mineral, and amino acid deficiencies.

• Low hydrochloric acid (HCl) – A low output of HCl (aka hypochlorhydria) leads to bacterial and yeast overgrowth, which worsens many chronic conditions.

**What Can You Do to Restore the Digestive System?**

Diet. There are many things you can do to support the healthy functioning of your digestive system:

• Fill your diet with nutrient-dense whole foods such as nuts and seeds.

• Increase your intake of saturated fats with extra virgin coconut oil.

• Add high-fiber ingredients such as flax meal to your diet.

• Increase foods that contain omega 3 fatty acids such as wild salmon and walnuts.

• Supplement your diet with quality digestive enzymes.

• Maintain the correct amount of hydrochloric acid (HCl) in your stomach.

• Stop eating two hours before bedtime, so you don’t fall asleep on a full stomach.

• Chew your food thoroughly to aid digestion.

• Eat small meals throughout the day, rather than large, heavy meals.

• Drink plenty of water in between meals.

**AVOID** foods that can irritate the digestive system:

• Alcohol

• Caffeinated beverages such as coffee, tea, and soft drinks

• Dairy products

• Foods that contain gluten

• Foods such as soy milk and ice cream that contain carrageenan (a seaweed extract that’s added to foods to retain their creamy texture)

• Refined sugars and artificial sweeteners

• Nitrites found in processed foods such as hot dogs, lunch meats, and bacon

• Monosodium glutamate (MSG) found in many foods as a flavor enhancer

• Deep-fried food, fast food, and junk food

**Questions for Discussion**

What causes of unhealthy digestion can you name?

What things can help us maintain healthy digestion?

What kinds of food should we avoid to have a healthy digestive system?

Excerpt from WELLNESS PIECE BY PIECE by Pat Sullivan