

THE DIGESTIVE SYSTEM**Video Quiz**

At the conclusion of the videotape, there will be a short quiz with these questions. Write your answers in the space provided. Use the back of this sheet if necessary.

Question 1: What is digestion?

Question 2: What are the six main types of substances needed by the body for growth, repair, maintenance, and energy?

Question 3: Our bodies need the equivalent of how many eight-ounce glasses of water per day?

- a. 5 b. 10 c. 12 d. 20

Question 4: What is a calorie?

Question 5: How many calories per day does the average teenager require?

- a. 2,500 - 3,000 b. 3,000 - 4,000 c. 4,000 - 5,000 d. 500 - 1,000

Question 6: What is an example of mechanical digestion inside the mouth?

Question 7: Food moves through the digestive tract because of muscular contractions called _____.

- a. enzymes b. saliva c. bolus d. peristalsis

Question 8: The name of the tube leading into the stomach is the _____.

- a. trachea b. esophagus c. bolus d. epiglottis

Question 9: How are the villi of the small intestine important to the digestive system?

Question 10: Why is a balanced diet important to maintaining a healthy body?

THE DIGESTIVE SYSTEM**Vocabulary**

Directions: Write a definition for each of the terms listed below:

1. digestion-

2. calorie-

3. nutrients-

4. esophagus-

5. saliva-

6. liver-

7. pancreas-

8. enzymes-

9. peristalsis-

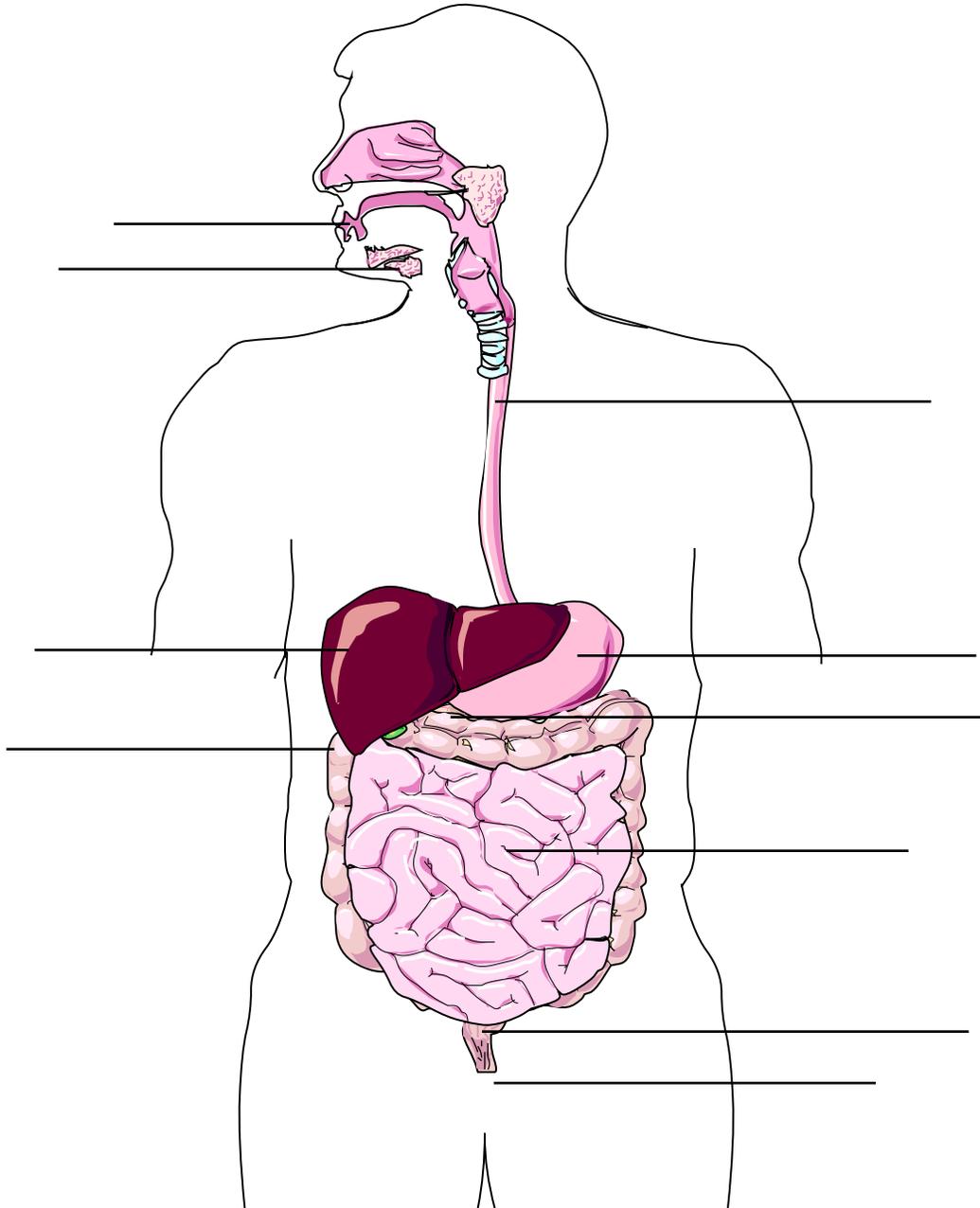
10. bolus-

11. chyme-

12. villi-

THE DIGESTIVE SYSTEM
Parts of the Digestive System

Directions: Place the words from the box at the bottom of the page next to the lines on the diagram of the digestive system.

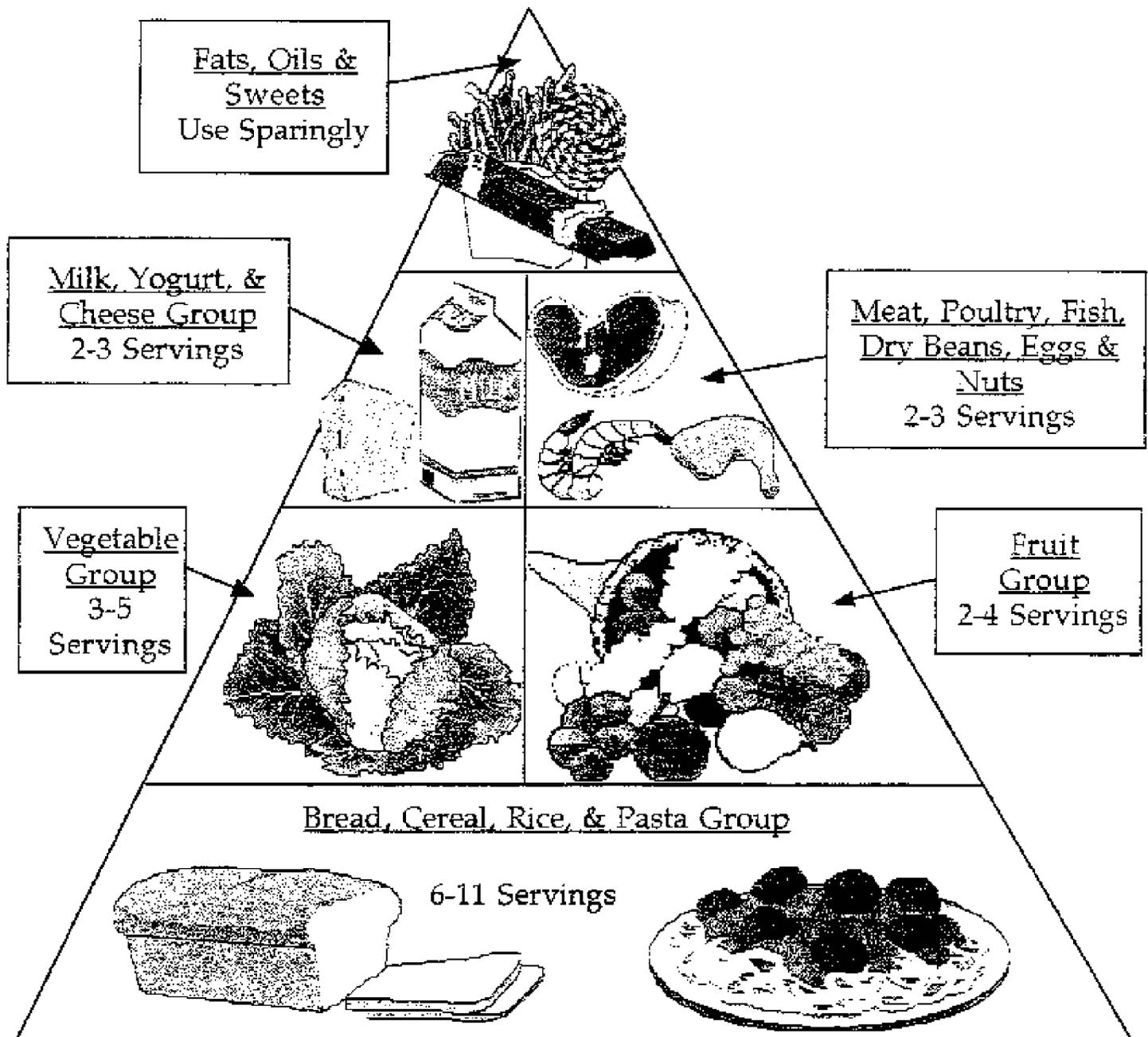


- | | | | | |
|-----------------|---------|-----------|-----------------|-----------------|
| Liver | Stomach | Anus | Small Intestine | Rectum |
| Large Intestine | Mouth | Esophagus | Pancreas | Salivary Glands |

THE DIGESTIVE SYSTEM

The Food Pyramid

The USDA (United States Department of Agriculture) has developed a Food Pyramid chart to help establish guidelines for a balanced daily diet. Use this page with **Blackline Master 5, The Food Pyramid 2**, to carry out an examination of your daily diet.



THE DIGESTIVE SYSTEM
from The Human Body Systems Series
©1997 AGC/United Learning

THE DIGESTIVE SYSTEM

Six Basic Substances For Nutrition

Foods typically contain nutrients from more than one of the six groups of nutrients. However, most foods contain a lot of one or two of the groups. Here is a chart that breaks down the substances into which nutrients are grouped and their sources and uses.

Substance	Source	Use in the body
<u>Proteins</u>	milk, eggs, lean meats, fish, beans, peas, cheese	growth, repair and maintenance of tissue, manufacture of enzymes
<u>Carbohydrates</u>	cereals, breads, fruits, vegetables	source of energy
<u>Fats</u>	fatty meats, bacon, cheese, butter, nuts, vegetable oils	source of energy
<u>Vitamins</u>	butter, milk, lean meats, fruits, leafy vegetables	growth, chemical processes
<u>Minerals</u> iron	meats, liver, nuts, cereals	production of hemoglobin
iodine	iodized salt, seafood	thyroid gland
calcium	whole-grain cereal, meats, milk, table salt, vegetables	strong bones and teeth
<u>Fiber</u>	whole-wheat bread, bran, whole-grain cereals, fruits, vegetables, nuts	keeps digestive system healthy

Directions: Look at this chart and compare it with the Food Pyramid produced by the USDA to help people make good choices about diet.

1. What does it mean to plan a balanced diet?
2. Why would a balanced diet be important to a person's health?

THE DIGESTIVE SYSTEM**Taste Test**

PURPOSE: To test your ability to recognize food by taste alone.

MATERIALS:

test foods such as: potato, apple, lemon, lettuce, sugar, salt, orange
 small plates
 blindfold

PROCEDURES:

1. Obtain food samples cut into small pieces and place on separate plates.
2. Blindfold the volunteer test subject.
3. Have the test subject hold his or her nose while someone feeds him or her one piece of food at a time.

OBSERVATIONS:

Test Food	Subject's Guess	Test Food	Subject's Guess

CONCLUSIONS:

1. How did people do at guessing the identity of a food based on taste alone?

2. Design an experiment to test the ability of a person to identify a food by smell alone.

THE DIGESTIVE SYSTEM
Water Content of Fruits and Vegetables

PURPOSE: To determine the amount of water in many common fruits and vegetables.

MATERIALS:

Various fruits and vegetables such as lettuce, cabbage, orange, apple, banana
 oven
 scale

PROCEDURES:

1. Preheat the oven to 200 degrees Fahrenheit.
2. Weigh a few leaves of lettuce and cabbage. Also weigh a peeled orange or apple.
3. Place the test item in the oven for a few hours.
4. Weigh the test items a second time and calculate how much water was heated away.

OBSERVATIONS:

Fruit or Vegetable	Initial weight	Weight after heating	Weight of water lost

CONCLUSIONS:

1. Which test items had the greatest water content?

2. How would you calculate the amount of water compared to the overall weight of the test items?

THE DIGESTIVE SYSTEM**QUIZ**

Directions: Use the space provided to answer the following questions. Use the back of this sheet if you need more space.

1. The body needs six types of substances which it gains from food and drink. What are those six substances?
2. Why is water so important to the human body?
3. What is digestion?
4. What is a calorie and how could counting calories be helpful to maintaining a good diet?
5. Digestion begins in the mouth. What examples of mechanical and chemical digestion take place in the mouth?
6. What is it that moves food along through the digestive tract, even when we are lying down or floating in the weightlessness of space?
7. What examples of mechanical and chemical digestion take place in the stomach?
8. What does the liver do for digestion?
9. What role does the pancreas have in digestion?
10. How do the villi in the small intestine help with the passage of food into the circulatory system?