

## Unit Overview

This unit on nutrition will give students an understanding of how nutrition is an important part of our daily lives. "We Are What We Eat" will be the major theme throughout this unit. The lessons will delve into the basic food groups, the nutritional value of the foods we eat, how our bodies digest and use food, the importance of water and fiber in our diet, food labels, food preparation, food allergies, and food safety. Within each lesson there are lesson plans, notes, questions, experiments, worksheets, and other fun activities to reinforce this nutrition unit.

Some lessons have a variety of activities for the extension of the lesson. You may choose to do one or all of the activities suggested with your class.

Make sure to have a variety of Resource Material about "Nutrition" available to the students. This could be in the form of books, videos, charts, etc. A great way to end the unit would be to have a Resource Person, such a dietitian speak, to the class.

## Student Assignments and Activities

Student notes have been provided to go along with each of the nutrition lessons. The notes can be used on an overhead, photocopied, or written on the board. The notes provide information that reinforces the basic concepts presented in each of the lessons. The notes also aid in the completion of written questions.

**Lessons 2 & 3**

**Digestion**

**Objectives:**

- Students will understand the term **energy**.
- Increase the students' knowledge of what happens to food as it moves through our body (digestion).
- Locate the various organs that assist in our body's digestion of food.
- Increase the students' knowledge of what foods do for our body.

**Teaching Strategies:**

1. Review the terms **nutrition** and **diet**.
2. Brainstorm the term **energy** and how it relates to nutrition. Brainstorm the word **digestion** (what digestion is and how the body works to take the nutrients from our foods). Discuss the terms: **saliva**, **esophagus**, **stomach**, **small and large intestine**, **liver**, **pancreas**, **villi**, and **digestive juices** - as these relate to digestion.
3. Students complete Activity #1: "How Does Our Body Get Energy From Food?" Students can work in pairs.
4. Use the overhead, photocopied notes, or write notes on the board for lessons 2 and 3. Explain/draw examples/and question students to make sure they have a clear understanding of the notes (p. 27).
5. Students will complete the lesson by answering the written questions on lessons 2 and 3 (p. 59).
6. For an extension of the activity, students can work on the Vocabulary Match Activity.

**Activity # 3**

**Did I Eat Healthy Foods Today?**

On the following chart, fill in the list of foods you have eaten over the past 24 hours. Answer the questions after you have completed the chart.

	Meat & Alternates	Fruits & Vegetables	Milk & Milk Products	Breads & Cereals
Breakfast				
Dinner				
Supper				
Snacks				
Your # of servings				
Servings Required	2	5	3	5

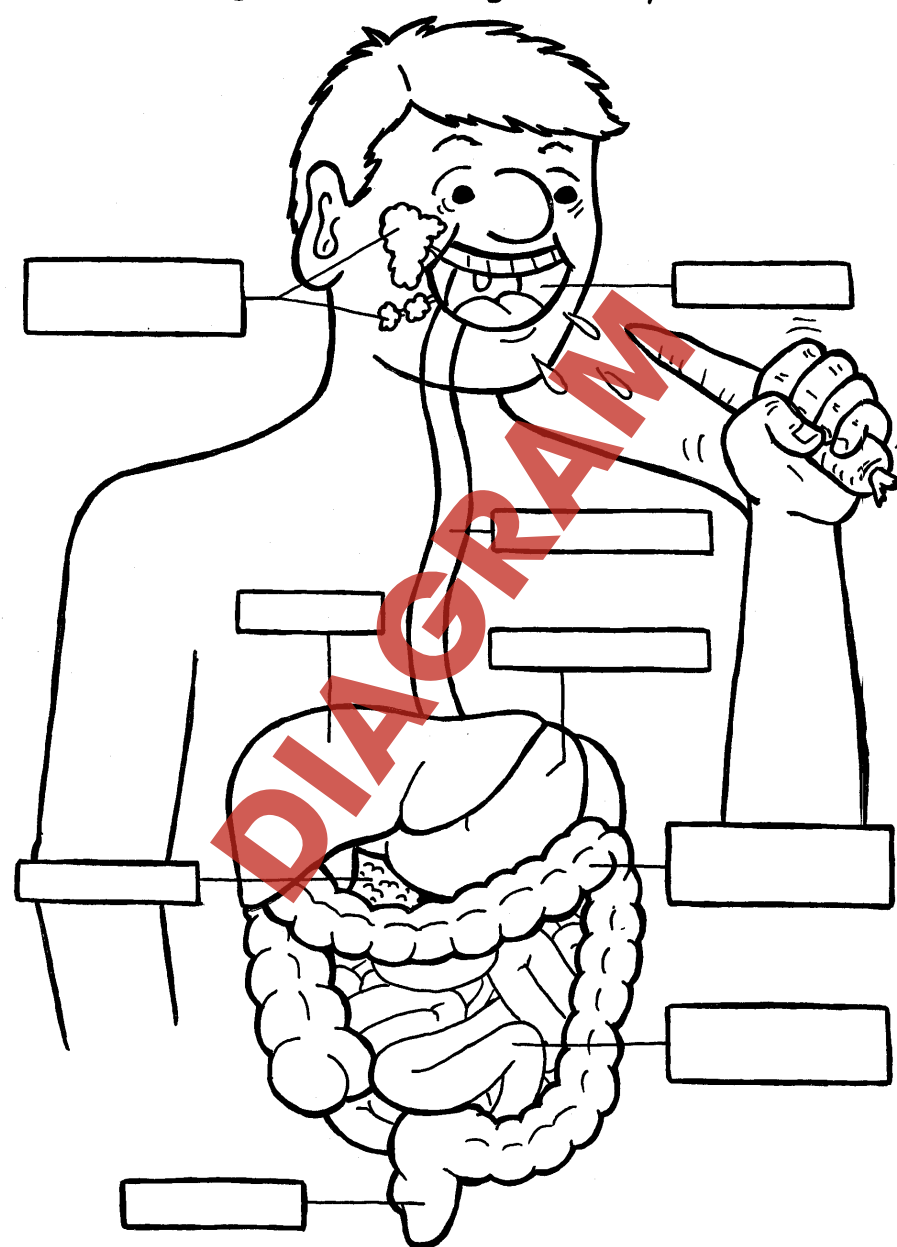
1. Were you low in any of the food groups? \_\_\_\_\_  
Which one(s)? \_\_\_\_\_
2. Were there any foods eaten that had low nutritional value?  
\_\_\_\_\_

**LESSONS 2 AND 3**

**Digestion**

- Inside each cell, the food we eat is broken down into chemical changes by **digestion**. The oxygen we breathe combines with these chemical changes. The result is **energy** being released. Energy is the ability of our body to do work.
- Different foods provide our bodies with different amounts of energy.
- **Digestion** is the process by which food is broken down or changed in our body, so that the body can use the nutrients from the food.
- Our bodies need certain daily nutrients to maintain good health. The food taken into our bodies helps our body's cells to **grow**, **repair**, and **reproduce**. In order for this to happen, our food needs to be digested or broken down into the nutrients. The body can then use these nutrients.
- Digestion begins in our mouth. The food is chewed and is mixed with **saliva** (digestive juice in your mouth). **Saliva** is produced by the salivary glands. The saliva contains chemicals that begin to change or break down our food.
- The food is then swallowed and passes down through the **esophagus tube**. This tube is made of muscle and slowly squeezes our food into our stomach.

Diagram of Our Digestive System

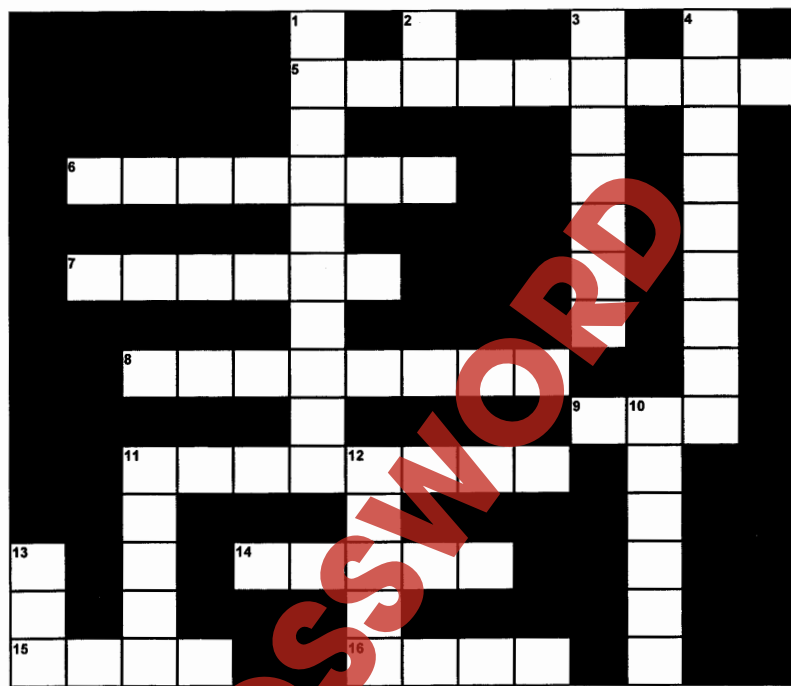


<b>fructose</b>	a natural sugar produced in fruits and vegetables
<b>amino acids</b>	the building blocks of proteins
<b>iron</b>	a mineral that produces healthy blood cells
<b>calorie</b>	a unit of measurement for the energy in food
<b>carbohydrates</b>	a nutrient that keeps us warm and produces energy for our bodies (starches and sugars)

## Lessons 14 and 15:

- Why must fruits and vegetables be thoroughly washed?  
\_\_\_\_\_
- Why is it important to keep food cold?  
\_\_\_\_\_
- Why is it necessary to thoroughly cook poultry and pork?  
\_\_\_\_\_
- What is the value of food labels?  
\_\_\_\_\_
- Name the information that food labels give to a consumer.
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
- How are ingredients listed on food labels?  
\_\_\_\_\_
- What are preservatives?  
\_\_\_\_\_
- Beta-carotene is a natural additive and is \_\_\_\_\_ in colour.
- What is a food allergy?  
\_\_\_\_\_
- Three foods some people are allergic to are \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

## Crossword



## ACROSS

- Once food is swallowed, it is squeezed down the \_\_\_\_\_ tube.
- The \_\_\_\_\_ is the control center of the cell.
- Saturated fats are derived from \_\_\_\_\_ sources.
- Proteins are the \_\_\_\_\_ blocks of our body.
- Are there 6 basic food groups?
- Vitamin D is also known as the \_\_\_\_\_ vitamin.
- Digestion begins in our \_\_\_\_\_.
- Energy is the ability of our body to do \_\_\_\_\_.
- The common name for saliva is \_\_\_\_\_.

## DOWN

- We need at least 2 servings of \_\_\_\_\_ daily.
- Does the pancreas produce bile?
- Bugs Bunny can see very well at night because he eats a lot of \_\_\_\_\_.
- All foods contain certain \_\_\_\_\_ that our body uses to keep healthy.
- Carbohydrates supply our body with \_\_\_\_\_.
- If we are eating lots of cake and cookies, we are eating lots of \_\_\_\_\_.
- It takes about 24 \_\_\_\_\_ for our body to digest food.
- Milk was originally produced by a farmer's \_\_\_\_\_.

## Nutrition Quiz

- Complete each sentence with one of the following words.

\*\*Note: Not all of the words will be used.\*\*

minerals	vitamins	Vitamin A	energy
sugars	cellulose	bread	carbohydrates
calcium	Vitamin D	iron	liver
fiber	Vitamin C	enriched	esophagus
thyroxin	iodine	labels	bacteria
fructose	Vitamin K	amino acids	gelatin
saturated fats	zinc	water	unsaturated fat
calorie	bacteria	milk	

- \_\_\_\_\_ produces roughage in your diet.
- \_\_\_\_\_ is the sunshine vitamin.
- \_\_\_\_\_ is high in iron.
- \_\_\_\_\_ is a mineral found in milk.
- \_\_\_\_\_ are nutrients used by the body for growth.
- \_\_\_\_\_ is a form of carbohydrate made from a grain.
- \_\_\_\_\_ are the building block of protein.
- \_\_\_\_\_ produces healthy teeth and gums.
- \_\_\_\_\_ has no nutrients.
- \_\_\_\_\_ helps improve eyesight at night.
- \_\_\_\_\_ is necessary for the production of red blood cells.

## Word Search

C A R B O H Y D R A T E S S P  
 V Y H M X F E N E R G Y T T T  
 I E G L U C O S E V T B A O J  
 D I G E S T I O N C E U R M F  
 N Z V E B R E A D M E K C A J  
 C U T I T X D Q C G F R H C Q  
 K F T L T A C A L O R I E H S  
 N I D R A A B W W A U O S A A  
 C A L C I U M L N A C H U R L  
 E U C N U T R I E N T S G P I  
 F P R O T E I N N S O E A Z V  
 M I N E R A L O U M S Z R U A  
 S F B S E R V I N G E K S E T  
 T K D E D T O U N U F A W P D  
 Y C I F R U I T U C X F T I V

bread	digestion	fruit	nutrition	stomach
calcium	energy	glucose	protein	sugar
calorie	fiber	meat	saliva	vegetables
foodgroup	mineral	serving	vitamin	carbohydrates
cereal	fructose	nutrients	starches	water

# ANSWER KEY



## Crossword

V N C N  
 E S O P H A G U S  
 G R T  
 N U C L E U S R R  
 T O I  
 M A L S E N  
 B T  
 B U I L D I N G T  
 E Y E S  
 S U N S H I N E N  
 U O R  
 G M O U T H E  
 A P R G  
 R K S P I T Y

## Word Search

R B O H Y D R A T E S S P  
 H M X F E N E R G Y T T T  
 G L U C O S E V T B A O J  
 G E S T I O N C E U R M F  
 V E B R E A D M E K C A J  
 T I T X D Q C G F R H C Q  
 T L T A C A L O R I E H S  
 D R A A B W W A U O S A A  
 L C I U M L N A C H U R L  
 C N U T R I E N T S G P I  
 R O T E I N N S O E A Z V  
 N E R A L O U M S Z R U A  
 B S E R V I N G E K S E T  
 D E D T O U N U F A W P D  
 I F R U I T U C X F T I V

it is fat or low fat,  
calories per given unit,  
ingredients used

6. order of most to least nutrients
7. chemicals or additives added to food to make them last longer, improve the taste and appearance
8. orange
9. when a person gets sick from eating certain foods
10. peanuts, peanut products, milk, bananas, wheat, certain shell fish

## Nutrition Quiz

1.
  - a. Fiber
  - b. Vitamin D
  - c. Liver
  - d. Calcium
  - e. Minerals
  - f. bread
  - g. amino acids
  - h. Milk
  - i. Sugars
  - j. Vitamin A
  - k. Iron
  - l. Vitamins
  - m. Vitamin C
  - n. Carbohydrates
  - o. Cellulose
  - p. Iodine
  - q. Thyroxine
  - r. Labels
  - s. Energy
  - t. Enriched
  - u. Saturated fats
  - v. Gelatin
  - w. Zinc
  - x. Unsaturated fat
  - y. Fructose
2. answers will vary
3. answers will vary
4. wheat, oats, barley, corn, rice, rye
5. Breads and Cereals  
Meats & Meat Alternates  
Fruits  
Vegetables  
Milk and Milk Products  
Fats and Sugars