



**4-H and Youth After School Program**  
***Foods & Nutrition, Lesson Plan***  
**Six, 60-minute sessions**

**Grades:** 7-8

**Optimum Group Size:** 20 youth

**Supplies Needed:** See individual lesson activities

**Reference Resources:**

Six Easy Bites, Purdue University Cooperative Extension, 4-H 792 Level A  
Tasty Tidbits, Purdue University Cooperative Extension, 4-H 792 Level B  
You're the Chef, Purdue University Cooperative Extension, 4-H 792 Level C  
Leaders/Helper's Guide for Foods Curriculum, 4H-801, Purdue University  
Growing in the Garden, ISU, 4H-905A  
"Family Nutrition Guide" ISU publication PM 1082

**Physical Setting:** Classroom with tables and access to stoves and water.

**Life Skills Addressed:** Learning to Learn

- Decision Making
- Cooperation
- Communication

**Indicator:**

- Name key nutrients and associate them with their appropriate food groups.
- Learn basic food preparation methods
- Youth will identify and use healthy food preparation techniques.
- Learn what foods make healthy snacks.
- Students will recognize and select foods moderate in fat, sugar and salt.
- Learn to compare cost and quality of convenience foods.

**Content Objective:**

- Identify key nutrients in each food group and their basic functions.
- Demonstrate correct methods for measuring ingredients when preparing foods.
- Understand healthy food preparation techniques.
- Identify healthy snacks.
- Recognize and select foods moderate in fat, sugar and salt.
- Learn to compare cost and quality of convenience foods.

**Related School Standards and Benchmarks:**

- Understand essential concepts about nutrition and diet.
- Knows how to maintain and promote personal health.

**Evaluation:**

Time Allotment	Activity	Supplies
<b>DAY 1</b>		
20 Minutes	<p>Get Acquainted:</p> <ul style="list-style-type: none"> <li>• Give everyone a 3 X 5.</li> <li>• Have them write on the left side in a column 4 different times such as 4:00, 4:05, 4:10, 4:15.</li> <li>• When finished they are to go around and make an appointment with 4 other people in the group that they don't know.</li> <li>• They should write the name of the person they are making an appointment with on their card.</li> <li>• When everyone's appointments are made tell them they are now to go to their first appointment.</li> <li>• They need to introduce themselves and share their favorite food along with one thing they like to do in their free time.</li> <li>• Continue through each appointment.</li> <li>• When finished select one person to begin and have them introduce their first appointment, (sharing their name, favorite food and one thing they like to do) the person they introduce then needs to introduce that person.</li> <li>• Continue until everyone is introduced</li> </ul>	3 x 5 cards and pencils
5 minutes	<ul style="list-style-type: none"> <li>• Establish group guidelines</li> </ul>	Newsprint and makers
5 minutes	<p>Review the Food Guide Pyramid:</p> <ul style="list-style-type: none"> <li>• Have a blank pyramid and see if the youth can fill in where each food group goes and the number of servings.</li> <li>• Discuss nutrients found in each group. See ISU publication PM 1082 "Family Nutrition Guide" and Foods and Nutrition Leaders Guide, Level A, page 4 for background information.</li> </ul>	Newsprint & markers
15 minutes	<p>Nutrient Tic Tac Know:</p> <ul style="list-style-type: none"> <li>• Divide the group into two teams.</li> <li>• On the board draw a tic tac toe board.</li> <li>• Designate one team to be the "O" and the other to be the "X".</li> <li>• Begin with one team and ask them one questions from the attached "Tic Tac Know" sheet.</li> <li>• If their team gets it correct they get to mark their "X" or "O".</li> </ul>	Poster board and markers or chalk board

<b>Time Allotment</b>	<b>Activity</b>	<b>Supplies</b>
	<ul style="list-style-type: none"> <li>Continue play until a team has three in a row.</li> </ul>	
15 minutes	<ul style="list-style-type: none"> <li>Snack</li> </ul>	
<b>DAY 2</b>		
10 minutes	<ul style="list-style-type: none"> <li>Explain to the group that they are going to be making Pretzels.</li> <li>In order for a recipe to produce good results it is important to measure ingredients correctly.</li> <li>Demonstrate the correct way to measure wet and dry ingredients. See Six Easy Bites, page 44.</li> </ul>	Wet and dry measuring utensils Flour, sugar, water
5 minutes	<ul style="list-style-type: none"> <li>Have youth wash hands.</li> </ul>	
20 minutes	Twisting Twisty Pretzels, Tasty Tidbits, Level B, page 20 (Divide the youth into groups of 4 to make recipe)	See recipe.
10 minutes	<ul style="list-style-type: none"> <li>Wash dishes and clean up work space</li> </ul>	
10 minutes	<p>Play Food Basket Upset:</p> <ul style="list-style-type: none"> <li>Have the group sit in a circle and one person in the center.</li> <li>Give each person the name of a food group.</li> <li>The person in the center will call out a food group and those individuals need to switch chairs.</li> <li>The person in the center will try to get a chair.</li> <li>The person left standing calls out another food group.</li> <li>They can also call out more than one food group or say Food Basket Upset when everyone must move.</li> </ul>	
10 minutes	<ul style="list-style-type: none"> <li>Enjoy Pretzels</li> </ul>	
<b>DAY 3</b>		
15 minutes	<p>Mystery Muffins, Six Easy Bites, page 22</p> <ul style="list-style-type: none"> <li>Divide the youth into smaller groups and have each group adjust their recipe as follows: <ul style="list-style-type: none"> <li>Group 1-make recipe as stated</li> <li>Group 2-reduce fat by 1/3</li> <li>Group 3-reduce sugar by 1/3</li> <li>Group 4-substitute whole grain flour for ½ of flour</li> <li>Group 5-reduce salt by 1/2</li> </ul> </li> </ul>	
15 minutes	Where's the Fat, Foods and Nutrition Leaders Guide, Level A, pages 5-6	Various food samples such as butter, milk, pretzels, bread, brown

<b>Time Allotment</b>	<b>Activity</b>	<b>Supplies</b>
		paper bags cut in 10 inch squares, toothpicks and pencils
10 minutes	“Map Your Taste Buds”, Tasty Tidbits, page 44	See lesson in manual.
10 minutes	<ul style="list-style-type: none"> <li>Have the youth each try the various muffins and evaluate them for taste.</li> </ul>	Plates and napkins
10 minutes	<ul style="list-style-type: none"> <li>Clean up work area.</li> </ul>	
<b>DAY 4</b>		
10 minutes	Make Your Own Cola, Six Easy Bites, Level A, pg. 42	Sugar, vanilla, cinnamon, club soda, lime or lemon juice, decaffeinated coffee, food coloring, ice, measuring cup, measuring spoons, cups
15 minutes	Sweet Sugary Search, Six Easy Bites, Level A, page 14	Food labels from items that contain a sugar
15 minutes	Snackin’ Power, Six Easy Bites, Level A, page 10	Bowls, toasted oats, nuts, raisins, margarine, brown sugar, honey, salt, vanilla, jelly roll pan, measuring spoons & cups
10 minutes	<p>Name Game:</p> <ul style="list-style-type: none"> <li>Have the group sit in a circle, the first person will say their name and the name of a snack that starts with the first letter of their first name such as Christy-carrots.</li> <li>The next person will say their name and the name of a nutritious snack.</li> <li>They will then repeat the names and snack of each of the people who have gone before them.</li> <li>Continue around the circle until everyone has had a chance.</li> <li>When finished discuss what food groups the various foods are found.</li> </ul>	
10 minutes	<ul style="list-style-type: none"> <li>Enjoy snack and clean up</li> </ul>	
<b>DAY 5</b>		
10 minutes	“Better Wedges”, Tasty Tidbits, page 9. Make the tortillas only.	
15 minutes	<p>Summer Garden Salsa, “Growing in the Garden” Grade 3, Unit 3 Lesson 4</p> <ul style="list-style-type: none"> <li>Divide the youth into groups and assign</li> </ul>	

<b>Time Allotment</b>	<b>Activity</b>	<b>Supplies</b>
	each group one or more of the tasks to complete the making of the salsa.	
10 minutes	<ul style="list-style-type: none"> <li>• Enjoy tortillas and salsa.</li> </ul>	Plates and napkins
5 minutes	<ul style="list-style-type: none"> <li>• Wash dishes and clean up kitchen area.</li> </ul>	
15 minutes	Play the Salsa Game from “Growing in the Garden” Grade 3, page 205. Discuss what “Value-added” means.	Game boards, dice, markers
<b>DAY 6</b>		
20 minutes	Check “Em Out!, Tasty Tidbits, Level B, page 15	See activity
10 minutes	<ul style="list-style-type: none"> <li>• Wash dishes &amp; clean up work space</li> </ul>	
10 minutes	<ul style="list-style-type: none"> <li>• Play Jeopardy Game (Questions attached)</li> </ul>	Question Board on newsprint or chalk board
10 minutes	<ul style="list-style-type: none"> <li>• Taste the various kinds of pizza and have the group evaluate the flavor and consider preparation time and cost.</li> <li>• Which do they think is the best value?</li> </ul>	Plates, napkins
10 minutes	<ul style="list-style-type: none"> <li>• Clean up</li> </ul>	
5 minutes	<ul style="list-style-type: none"> <li>• Evaluation</li> </ul>	Evaluation Forms

## IOWA STATE UNIVERSITY

### University Extension

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## **Foods & Nutrition Jeopardy**

Use the following format to create a Jeopardy Board on newsprint or a blackboard.

Food Groups	Nutrients	Snacks	Chance
10	10	10	10
20	20	20	20
30	30	30	30
40	40	40	40

**How to play:** Divide the group into teams. The first team will select a category and point value. If they answer the question correctly they earn the points and you will cross off the space on the board so another team does not select. If they get the answer wrong do not tell the answer and the next team may either select that question if they know the answer or they may select another question.

### **Food Groups**

- 10 Points - Which food groups provides vitamin C? (Fruits and Vegetables)
- 20 Points - Which food group contains vitamin D? (Milk)
- 30 Points - How many servings do we need each day from the grain group? (6-11)
- 40 Points - In which food group do we find eggs? (Meat)

### **Nutrients**

- 10 Points - Which nutrients builds strong bones and teeth? (calcium)
- 20 Points - Which nutrient helps us see at night? (vitamin A)
- 30 points - Which nutrient is responsible for cooling our body? (water)
- 40 points - Name the six basic types of nutrients. (carbohydrates, proteins, fats, vitamins, minerals and water)

### **Snacks**

- 10 Points - Why are pretzels a good snack? (low in fat)
- 20 Points - Why are oatmeal cookies a smarter snack than a cream filled cookie? (oatmeal cookies have less fat and contain oatmeal)
- 30 Points - Name three healthy snacks.
- 40 Points - Why should we limit the intake of fats, oils and sweets? (They make you full so that you have less room for nutrient-high foods. They provide many calories but few nutrients.)

### **Chance**

- 10 Points - What type of measuring cup should be used for water? (glass or plastic, liquid measuring cup)
- 20 Points - Which food groups provide iron? (meat and grains)
- 30 Points - How many servings of milk should a teen have each day? (3 servings)
- 40 Points - What determines a smart breakfast? (contains foods from at least 3 food groups. i.e.: a bowl of cereal with milk and orange juice)

## Tic Tac Know Questions

1. How many servings should a person eat each day from the grain group?  
Answer: 6-11
2. What is the main nutrient that comes from foods found in the Meat Group?  
Answer: protein
3. True or False -- Carbohydrates supply energy to your body.  
Answer: True
4. Fruits and vegetables are important to the diet as they provide a substance that helps keep food moving through our bodies. What is this substance called?  
Answer: Fiber
5. What nutrient helps regulate body temperature?  
Answer: Water
6. Fruits are a good source of what vitamin?  
Answer: Vitamin C
7. Calcium is found in foods from which food group?  
Answer: Dairy Group
8. True or False -- Iron helps carry oxygen in the blood.  
Answer: True
9. Name a food that is a good source of carbohydrates.  
Answer: breads, cereals, rice, pasta, fruit, vegetables, dried beans and peas
10. Which vitamin helps prevent infection?  
Answer: Vitamin C
11. How many servings does a person need each day from the vegetable group?  
Answer: 3-5 servings
12. Name a food that is a good source of Vitamin A.  
Answer: carrots, sweet potatoes, potatoes, apricots, peaches, pumpkin, cantaloupe, kale, spinach, collards, broccoli, liver, milk, egg yolks, cheese, butter
13. How many servings does a person need each day from the meat group?  
Answer: 2 servings
14. True or False -- Teens need 3 servings from the milk group each day.  
Answer: True
15. What vitamin helps keep your eyes healthy?  
Answer: Vitamin A
16. True or False -- Your body needs some fat.  
Answer: True, helps insulate your body from the cold, cushions internal organs and bones from damage, helps carry vitamins throughout the body, supplies concentrated energy
17. True or False -- Proteins help build and repair cells.  
Answer: True
18. Name a food rich in iron.  
Answer: lean meat, liver, oysters, dried peas and beans, fortified grain products, some vegetables such as tomatoes and spinach, some dried fruits such as prunes, raisins and apricots.