

# Teacher Guide

4th  
Grade

Nutrition Education  
Program





<b>Introduction .....</b>	<b>2</b>
<b>Common Questions Teachers Ask .....</b>	<b>5</b>
<b>Commonly Miscategorized Foods .....</b>	<b>6</b>
<b>More for Teachers—Questions + Answers .....</b>	<b>7</b>
<b>Pre-Assessment .....</b>	<b>9</b>
<b>Lesson 1: Healthy Me! .....</b>	<b>13</b>
<b>Lesson 2: Nutrient Power! .....</b>	<b>17</b>
<b>Lesson 3: Serving Superstars .....</b>	<b>23</b>
<b>Lesson 4: Label and Nutrient Trackers.....</b>	<b>29</b>
<b>Lesson 5: Dinner Detectives and Smart Snackers.....</b>	<b>35</b>
<b>Lesson 6: Fuel Up With Breakfast! .....</b>	<b>41</b>
<b>Lesson 7: Healthy Habits—Putting It Together .....</b>	<b>47</b>
<b>Post-Assessment .....</b>	<b>53</b>



What a special opportunity you, as an elementary teacher, have in influencing the lives of young children in a positive way. Healthy eating and physical activity are among the personal responsibilities children in elementary school are developing. *Nutrition Pathfinders* is designed to assist you in teaching these important skills and habits to your students.

The program has been designed with fun and learning in mind, in order to blend well with your usual instructional sequence and pacing. The program is skills-based to help students apply problem-solving, reasoning and critical-thinking. *Nutrition Pathfinders* engages fourth-grade students by providing opportunities to use their personal experiences. Students draw upon relevant health and nutrition concepts in authentic, meaningful ways. *Nutrition Pathfinders*, although self-contained, builds upon key concepts taught in the third-grade program, *Shaping Up My Choices*, and is the foundation for the companion fifth-grade version of *Nutrition Pathfinders*.

The program provides fourth-grade teachers with instructional materials and procedures to help students make healthy food and physical-activity choices on a daily basis. In the broader context, we know that healthy, well-nourished children perform better in the classroom. The program is aligned to California and national education content standards. These alignments are included for each individual lesson. The lessons can be graded throughout the program after the Pre-Assessment has been completed.

The development of the *Nutrition Pathfinders* program was guided by several key principles:

- Utilize the best nutrition science and education methodology available.
- Design learning that directly supports grade-level standards.
- Engage students in learning that is developmentally appropriate, relevant and fun.
- Foster development of personal responsibility and healthy choices that will lead to lifelong good health.
- Support the inherent link between well-nourished children and improved classroom achievement.
- Strive to ensure success for all students.
- Contribute to the whole health of students, including physical health as well as emotional, mental, cultural and social well-being.

Thank you for including *Nutrition Pathfinders* in your curriculum.

## Program Student Learning Objectives

### Lesson 1: Healthy Me!

Upon completion of this lesson, the student will be able to:

1. Identify the five food groups and classify individual foods according to food group.
2. Identify foods that are “extras” and explain why they are not in a food group.
3. Identify the amount of moderate-vigorous level physical activity they need each day.
4. Classify a variety of activities as low level or moderate-vigorous level.

### Lesson 2: Nutrient Power!

Upon completion of this lesson, the student will be able to:

1. Identify the main nutrient for each food group.
2. Explain the health benefit that each main nutrient supports.
3. Explain variety and why it is important to eat a wide variety of foods each day.
4. Explain why drinking sufficient amounts of water each day is important for hydration.

### Lesson 3: Serving Superstars

Upon completion of this lesson, the student will be able to:

1. Choose the right serving size for foods representing all five food groups using hand symbols as a comparison.
2. Analyze the type and amounts of food-group foods in common mixed-food dishes.
3. Identify the number of servings from each food group needed daily.
4. Distinguish single, half and double servings of food-group foods.
5. Analyze a sample day’s intake to determine if the recommended number of servings from all food groups are met; adjust food choices to meet serving recommendations.

### Lesson 4: Label and Nutrient Trackers

Upon completion of this lesson, the student will be able to:

1. Identify specific information on the Nutrition Facts food label: serving size, servings/container, calories per serving, nutrients to encourage (especially calcium).
2. Locate the amount of calcium in different foods using the food label.
3. Analyze the food label to select foods that are good sources of calcium.

### Lesson 5: Dinner Detectives and Smart Snackers

Upon completion of this lesson, the student will be able to:

1. Select a balanced dinner using the “5 out of 5” model.
2. Explain why a balanced dinner is important.
3. Differentiate between nutritious snacks and those that provide no nutrients.
4. Explain why nutritious snacks should be part of daily food choices.
5. Identify the recommended amount of moderate-vigorous level physical activity they need each day.
6. Classify a variety of activities as low level or moderate-vigorous level.

## Lesson 6: Fuel Up With Breakfast!

Upon completion of this lesson, the student will be able to:

1. Explain the importance of eating a balanced breakfast every day.
2. Select a balanced breakfast using the “3 out of 5” model.
3. Analyze a daily physical-activity record; substitute moderate-vigorous for low levels of physical activity as needed to meet daily requirements.

## Lesson 7: Healthy Habits—Putting It Together

Upon completion of this lesson, the student will be able to:

1. Analyze daily food and physical-activity choices.
2. Compare foods and/or activities to recommendations; recommend additions or substitutions that would allow them to meet the daily requirements.
3. Explain variety and why it is important to eat a wide variety of foods each day.

## The Teacher Materials Provided Are:

The teacher materials provided are to be retained, used year after year and include:

- **Teacher Guide**
- **Website**
  - master color documents
  - food pictures
  - vocabulary cards
  - standards alignments
  - online interactive modules to reinforce concepts
  - additional resources

There are seven lessons that average 50 – 60 minutes each. You are encouraged to teach these lessons to best meet the needs of your students and classroom, which may mean breaking the lessons into smaller segments and teaching them over more than one day. Additionally, there are Pre- and Post-Assessments, which range 35 – 45 minutes each.

### EACH TEACHER GUIDE LESSON INCLUDES:

- Overview of the Lesson
- Student Objectives
- Level of Cognition
- Nutrition Facts
- Materials
- Preparation
- Length of Lesson
- Standards Alignment
- Anticipatory Set
- Vocabulary
- Step-by-Step Procedures
- Check for Understanding
- Guided Practice
- Assessment
- Family Homework (for select lessons)
- Curriculum Connections

### TEACHER TRAINING MODULE

Please visit Dairy Council of California’s Teacher Training Program at [HealthyEating.org/TeacherTraining/](http://HealthyEating.org/TeacherTraining/). This 25-minute professional-development program will provide you with a basic overview of nutrition information to help you feel comfortable and confident to teach nutrition in your classroom. You will also learn from teachers who have taught Dairy Council’s nutrition education programs. These teachers will provide an overview of the content of the program, review student outcomes, show the materials that are provided to you and share best practices of how to best implement the program in your classroom.

## The Student Materials Provided Are:

- **Student workbooks**—available in English and Spanish (Student workbooks have been provided and will need to be re-ordered each year for your students at no cost.)

The Student workbook is designed to serve as a “mini-portfolio” of students’ work that can be used as a record of their progress and achievement and shared during parent/teacher and student/teacher conferences or open-house nights. Prior to beginning the program, students complete a Pre-Assessment exercise. They revisit this exercise at the end of the program as a Post-Assessment, which helps teachers measure knowledge gains resulting from the completion of the program.

- **Online Interactive Modules**—fun and engaging educational simulations used to reinforce core concepts and skills

Alignments of each lesson to California Content Standards and Nutrition Competencies can be found at [HealthyEating.org/NP4](http://HealthyEating.org/NP4)

## For California Teachers Only Please:

### How to Order Additional Free Student Workbooks

To assist you with your commitment to improve the health of your students, several options are available to obtain student workbooks:

1. Call Dairy Council of California at 877.324.7901
2. Visit the Schools section of our website at [HealthyEating.org/Schools/](http://HealthyEating.org/Schools/).
3. Complete and return the order card that is periodically sent to you at your school.
4. Complete and return the email order form that is periodically emailed to you.

*Materials will not be automatically sent. You need to request your additional free student materials annually.*

Outside of California, please call 866.572.1359.

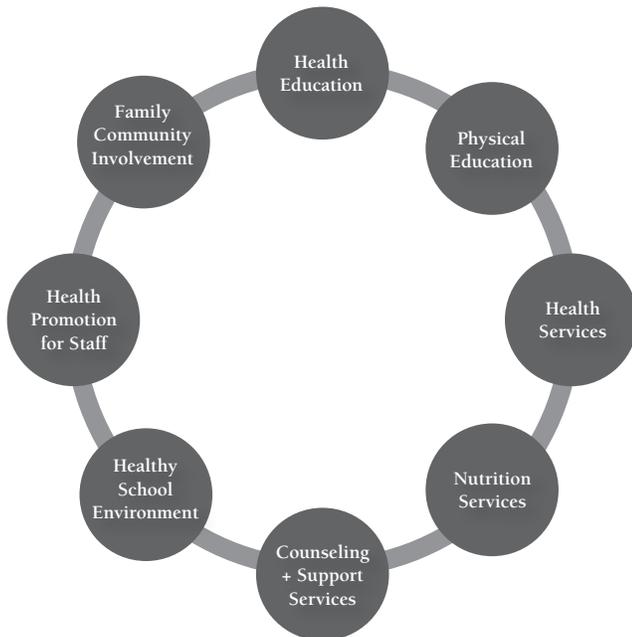
## The Parent Materials Provided Are:

- **Family Letter (English and Spanish)**—Introductory letter is available to download at [HealthyEating.org/NP4/FamilyLetter](http://HealthyEating.org/NP4/FamilyLetter)
- **Family Homework (English and Spanish)**—Included in student workbook select lessons (tear-out)

Recognizing the importance of communication with families, we have developed an introductory *Family Letter*, which provides a brief overview of the *Nutrition Pathfinders* curriculum and encourages family participation. The *Family Homework* provides students with the opportunities to practice the skills they are learning in the classroom and engages families to be involved with their students' learning.

## Coordinated School Health

Coordinated School Health (CSH) is recommended by CDC as a strategy for improving students' health and learning in our nation's schools. This coordinated school health framework centers around eight critical, interrelated components:



Individually, each of these components can contribute to students' health and well-being. However, when all of the individual components work together to support adoption of health-enhancing behaviors, students' health and learning are improved.

### What is USDA's MyPlate?

In 2011 the U.S. Department of Agriculture (USDA) released the latest icon representing their food guidance system, MyPlate. It is based on the same food grouping system that has been the foundation of nutrition education since the turn of the century, attesting to the system's effectiveness. Food groupings have endured because they have simplified the complicated world of nutrition.

The current food groupings and recommended servings from each group are outlined in the Dietary Guidelines for Americans. This Dairy Council of California program aligns with these dietary guidelines.

The icon is intentionally simple. It was designed to remind consumers to eat a variety of foods from all five food groups at mealtimes. A strength of MyPlate is its depiction of a meal. Research strongly supports the benefits of shared family meals, so this icon has the potential to be an effective reinforcement of that healthy habit.

MyPlate is a "symbol" designed to raise awareness of healthy eating choices; it is not intended as a teaching tool in and of itself, nor is it intended to change people's eating behaviors alone.

In the past food grouping systems focused only on ensuring sufficient amounts of essential nutrients. However, with a greater focus today on chronic disease prevention and the rising rates of obesity among our children as well as adults, a relevant food grouping system must also emphasize consuming only moderate amounts of added fat, sugar and sodium. Balancing calorie intake (foods) with calories expended (physical activity) becomes a priority. This is accomplished, in part, by increasing the amount of low-fat and fat-free milk products, fruits, vegetables, lean meats and whole grains in the diet. These are nutrient-dense foods that are naturally lower in calories and higher in essential nutrients.

Think of MyPlate as a puzzle. Food groups—which are made of foods that contain similar nutrients—represent the puzzle pieces. Like any other puzzle, the picture is incomplete if any piece is missing. The same is true of a nutritious diet. Each food group is equally important because it plays a different role in good health. Foods from all of the food groups are needed to form the foundation of a healthy diet. This is a positive, inclusive approach to healthy eating, as opposed to a focus only on foods to exclude or limit.

### What are the benefits of teaching students to use a food grouping system?

Rather than have to memorize the nutrient and calorie content of every food they eat, a food grouping system provides children with a quick and easy way to remember what is important to eat.

A food grouping system provides an easy-to-use "frame of reference" for students. It offers food-choice standards against which to compare their own choices (in some ways, it is a rubric) and it works for all students, regardless of their situation, food preferences or cultural background.

### What basic principles of healthy eating are supported through a food grouping system?

- **Balance**—This refers to the amount of foods needed from each of the five food groups. The number of recommended servings from each food group varies; so, food choices must be balanced over a day's total food intake.
- **Variety**—In order to ensure a wide range of food choices that provide the broad range of nutrients children need for growth and development, daily food choices from all five food groups are encouraged. Children are further urged to sample a wide range of foods from within each food group.
- **Moderation**—Nutrient-rich foods, that is, those that are higher in essential nutrients while modest in calories, are encouraged as the foundation of a healthy diet. Children are cautioned to be moderate in their choices of foods higher in added fats, sugars or sodium. No foods are "forbidden," but some foods should be eaten in smaller amounts or less often.
- **Personalization**—One size does not fit all; there are endless combinations of food and physical activity choices that support a healthy lifestyle. A food grouping system supports individual's choices. Small steps that match a child's preferences and needs can be taken to improve their diet and lifestyle each day.



**“Extras:”** Some foods don’t fit into any group. These “extras” may be mainly fat or sugar—limit your intake of these:

- Foods that contain solid fat or added sugars, like sausage, biscuits, sweetened cereals or sour cream.
- Foods that contain only fats or sugars—like candy, soft drinks and chips.
- Use discretion when adding fats or sweeteners to foods—like sauces, salad dressings, sugars, jellies and margarine.

**Water:** While an important beverage for children to drink each day in response to thirst and for hydration, water does not belong to any food group, nor is it an “extra.”

**Popcorn:** While many associate popcorn with snack foods like chips, it is part of the Grains group. It is, in fact, fairly high in fiber. It is best, however, to eat popcorn plain.

**Animal crackers:** Despite their name, animal crackers are higher in added sugars and belong in the “extras.”

**Tomatoes:** Even though botanically they are a fruit, tomatoes are classified in the Vegetables group because they are most often eaten with, and prepared like, other vegetables. This is consistent with USDA’s food grouping system.

**Pickles:** While pickles are made from cucumbers—a vegetable—the processing destroys some of the nutrients. The final product is not rich in nutrients, and so becomes an “extra” food.

**Avocados:** Even though botanically they are a fruit, avocados are classified in the Vegetables group because they are most often eaten with, and prepared like, other vegetables. This is consistent with USDA’s food grouping system.

**Lemonade:** The high sugar content of lemonade makes it an “extra” food.

**Fruit Rolls:** The high sugar content of fruit rolls makes them an “extra” food. It is always best to eat whole fruits or 100 percent fruit juice.

**Pudding:** When made with milk, pudding belongs in the Dairy food group because of its high calcium content.

**Cocoa made with milk:** When made with milk, cocoa belongs in the Dairy food group because of its high calcium content. This is not the case when it is made with water; then it would be classified as an “extra.”

**Ice cream, milkshakes:** Because of its calcium content, both ice cream and milkshakes are classified in the Dairy food group. Lower-fat options are encouraged. This is consistent with USDA’s food grouping system.

**Eggs:** Many grocery stores have a refrigerated section called “Dairy and Eggs,” but these foods belong to separate food groups. Eggs come from hens, are classified in the Protein group and are a good source of protein.

**Beans:** Beans such as pinto, lima, split pea and lentil have been placed in two food groups: Protein; and Vegetables. There is justification for this dual placement based on the nutrient profile of beans. However, to simplify the food-classification process for students, we place beans only in the Protein group in this program. This is particularly important for students who may be vegetarians and are consuming beans as a primary protein and iron source.

**Bacon and Beef Jerky:** Even though they are derived from meat, both count as “extras.” Bacon primarily provides fat, and beef jerky is high in sodium.

**Tea/coffee:** These beverages contain no calories and no nutrients. For that reason, they are considered “extra” foods.

## Q Aren't food-choice guidelines and nutrition needs the same for children and adults?

**A** Children are unique in many ways—physically, intellectually, emotionally, socially and in their nutrition needs!

Some common **misperceptions** pertaining to the food-choice behaviors of children are:

- There are “good foods” and “bad foods.”
- All children need the same diet.
- All foods need to be low-fat.

Here's another view:

**All foods have a place in the eating experiences of children.** While some foods may be more nutritious than

others and should be encouraged, there are no forbidden foods. While all children need the same nutrients for good health, they do not need the same diet.

**Not all foods must be low-fat.** Children need calories for adequate growth and development. Each of the major food groups contributes specific nutrients, and each food group contains foods that vary in fat content. By eating a variety of foods from all food groups, children will obtain the nutrients they need while moderating their consumption of fat.

## Q What are some of the specific nutrition and health issues for children?

**A** **Adequate calories** are essential to ensure optimum growth and development of children. Diets that severely restrict food choices, calories and/or fat are not recommended for children. These diets may lack the nutrients needed for normal growth and development.

**Obesity**, on the other hand, is a significant health issue facing children today. According to USDA, 27 percent of children ages 6 to 11 years are considered obese. The best way for most children to lose weight is to become more physically active rather than to significantly restrict calorie intake. Contributing factors to childhood obesity include:

1. television viewing, which replaces physical activity and often encourages overeating
2. excessive intake of “extra” foods high in added fat, sugars and calories
3. overly large serving sizes at meals and snacks—whether at home or when eating out.

**Calcium** is critical for strong bones and teeth.

Children need two to four times more calcium per body weight than adults. Research shows that the more calcium consumed in childhood, the stronger their bones as adults.

**Taste** is the primary influence on a child's food choices. Help children learn to enjoy different tastes by exploring, preparing and tasting new foods.

**Physical activity and play** go hand-in-hand with healthy eating and are important to a child's development. Children who are active at play one to two hours a day can eat a wider variety and amount of food, making it easier to get the nutrients and calories they need to grow and learn.

## Q Are vegetarian diets appropriate for children?

**A** Generally, vegetarian diets that include some animal foods (particularly milk products and/or eggs) can meet the needs of growing children if the recommended amounts for each food group

are consumed. When choices are restricted solely to plant-based foods, it may be wise to consult with a physician or a registered dietitian to ensure that children get ample calories and essential nutrients.

## **Q** If a child is taking a vitamin/mineral supplement, does it really matter what he or she eats?

**A** There is more to foods than what we read on labels. Although foods are grouped according to major nutrients, there are other compounds in foods that are necessary for good health—some we know about; others, scientists are still exploring. Eating the recommended servings of food-group foods each day provides us with naturally nutrient-rich sources of energy

and key vitamins and minerals. A daily vitamin/mineral supplement that provides no more than 100 percent of the recommended dietary allowances may seem like “insurance” that we get enough nutrients, but it doesn’t replace the need for balanced food choices and nutrients from foods first.

---

## **Q** Some of my students seldom get enough to eat. How are they supposed to make plans for improvement when food isn’t available?

**A** Hunger is a major health concern. Although choices may be limited, students should be encouraged to identify and eat food-group foods that are available to them. Meal programs, such as school breakfast and school lunch, are excellent opportunities for students to plan and make nutritious selections.

School lunch menus are designed to contribute one-third of a child’s nutrient needs. School breakfast contributes 20 – 25 percent of a child’s daily needs. The key is to support any efforts the student makes to improve his or her daily food choices.

---

## **Q** What should I do if some of my students are lactose intolerant?

**A** Lactose intolerance, or the inability to digest milk sugar, is sometimes cited as an obstacle to children consuming dairy foods. Health professionals are specifically concerned that children who avoid dairy foods are not getting the calcium, protein, vitamin D and riboflavin they need for normal growth.

If dairy foods are not tolerated well (symptoms such as stomach cramps and diarrhea are common in children with lactose intolerance), the following suggestions should help:

- Choose dairy foods that contain less lactose, such as buttermilk, aged or ripened cheese or yogurt.
- Eat or drink dairy foods along with other foods at a meal or with snacks to slow digestion.
- Look for yogurt and frozen yogurt with “active culture” on the label. The cultures help to “digest” lactose.
- Eat or drink dairy foods in smaller amounts but more frequently throughout the day.
- Use milk and cheese in cooking.
- Check labels for lactose-reduced milk products, including milk, ice cream and American cheese slices.

In addition, other foods that provide some calcium are:

- tofu prepared with calcium salts
- small fish with soft bones, such as sardines
- mung and soy beans
- dark leafy greens such as bok choy, mustard, dandelion and turnip greens, collards, kale and broccoli; but not spinach, beet greens or chard from which the calcium is not well absorbed
- refried beans, baked beans and lima beans
- corn tortillas, if the corn has been prepared in a lime solution, which is a source of calcium.

**Teacher Note:**

Before you begin implementation of Nutrition Pathfinders in your classroom, you might want to take a few minutes and consider your own nutrition knowledge and beliefs. They could knowingly, or unwittingly, impact the information you impart to students as they work in the program. It is important to be able to separate “fact from fiction” when it comes to nutrition and physical activity information.

**Overview of Activity:**

- This assessment, administered *prior* to the implementation of the *Nutrition Pathfinders* program, will provide information about the knowledge and skills your students currently have in selecting healthy foods, as well as making good daily physical activity choices.
- The results can help you identify areas of the program that may need more emphasis or additional work through extension activities.
- The results also serve as a “benchmark” to establish baseline knowledge and against which student progress through the course of the curriculum can be measured.

**Nutrition Facts:**

- This program’s nutrition content is consistent with the principles advanced through the Dietary Guidelines for Americans, as reflected in the USDA’s *MyPlate* food icon.
- Key themes of the *Nutrition Pathfinders* program include **variety** (fourth-grade level) and **moderation** (fifth-grade level), with the fourth grade curriculum forming the foundation of knowledge and skills upon which the fifth grade curriculum builds. The concept of **balance** has been addressed in the third-grade curriculum, *Shaping Up My Choices*. As stated, the focus for the fourth-grade lessons is variety—that is, the need for adequate amounts of food each day from all five food groups.
- The Pre-Assessment activity addresses knowledge and skills such as:
  - Classifying individual foods into the five food groups and/or “extras.”
  - Assessing a day’s intake of food to determine if the recommended number of servings from each food group was met.
  - Identifying appropriate serving sizes of foods using hand symbol estimates.
  - Distinguishing between low level physical activities and moderate-vigorous level physical activities, and assessing if recommended levels of daily physical activity were met.
  - Identifying the main nutrient and its health benefit for each of the five food groups.

**Materials:** Student Workbooks  
Pencils

**Preparation:**

1. Review the Pre-Assessment activity in the workbook to ensure that you understand what students are to do and can provide clarifying instructions if necessary.
2. Gather materials.
3. Make copies of the family letter found at [HealthyEating.org/NP4/FamilyLetter](http://HealthyEating.org/NP4/FamilyLetter).

**Length of Pre-Assessment:**  
**35 – 45 minutes**

## Directions:

- Tell students that for the next few weeks they will be learning about healthy eating and physical-activity choices through a program called *Nutrition Pathfinders*. Before starting, though, it is important to find out what they already may understand about healthy eating and daily physical activity.
- Assure students that it's to be expected that there will be a lot of information that they don't already know or understand. They will certainly see gains in knowledge and improvement in healthy behaviors as a result of going through this program. Let the students know that they will NOT be graded on this activity.
- Tell students that they may come across some vocabulary words or terms in this activity that are unfamiliar. That's OK—they will be learning new vocabulary words with every lesson. If there is a word they don't recognize or understand today, they should not worry about it. They will understand it by the time they complete the program.

## Workbook Instructions:

- Tell students to turn to Page 3 in their workbook.
  - At the top of the page it says Pre-Assessment. Ask students to read the directions and answer the first three questions.
- Tell students to find the words “Balancing Food Choices.”
  - Read the directions below these words to the students.
  - Ask students to complete this activity and answer the question below on their own.
- Tell students to find the words “Serving Size” on Page 4 in their workbook.
  - Read the directions below these words to the students.
  - Review the example with the students.
  - Ask students to complete this activity on their own.

*Teacher Note: Most likely your students will ask you many questions as they negotiate through the Pre-Assessment workbook activities. It is important that you do not help them or answer any specific questions but rather encourage them to do their best work.*

4th Grade
Pre-Assessment

**Directions:**

- Answer the three questions below.
- Circle the correct answer.
  - How many food groups are there? a. Four  Five  c. Six d. Seven
  - Does a balanced dinner include five food groups? Yes  No
  - Do all foods fit in a food group? Yes  No

**Balancing Food Choices**

**Directions:**

- Review the list of foods that Drew ate yesterday.
- For each serving of food:
  - List each of Drew's food choices in the correct food-group column.
  - Once all foods are listed, total the number of servings Drew ate for the day for each food group.

**DREW'S DAILY MEALS**

**Breakfast**—oatmeal, ½ English muffin, jelly, strawberries  
**Lunch**—taco (tortilla, ground meat, cheese, lettuce), carton low-fat milk  
**Snack**—soft drink, crackers  
**Dinner**—roast beef, peas, baked potato, punch, sliced melon  
**Snack**—low-fat yogurt, graham crackers  
**All foods listed above are 1 serving.**

	Dairy Milk, Yogurt, Cheese	Vegetables	Fruits	Grains Breads, Cereals, Pasta	Protein Meat, Beans, Nuts	"extras"
	cheese	lettuce	strawberries	<b>Example:</b> Oatmeal	ground meat	jelly
	low-fat milk	peas	sliced melon	½ English muffin	roast beef	soft drink
	low-fat yogurt	baked potato		tortilla		punch
				crackers		
				graham crackers		
<b>Total Servings</b>						

- Have the recommended number of daily servings been met for each food group? (circle one) Yes  No   
 If not, what is missing? Drew needs 1 more serving from the Grains group.

**Serving Size**

**Directions:**

- Look at the pictures of the foods below.
- Look at the hand symbols and measurements below the pictures of the foods.
- Fill in the bubble for the correct serving size that matches the picture.

**Example:** Look at the bowl of lettuce below. If you ate the entire bowl (two fists' worth), you had 1 serving.

 <b>EXAMPLE: Lettuce</b>	 <b>Apple</b>	 <b>Low-fat milk</b>
Two fists (2 cups) 	One handful (½ medium apple) 	One fist (1 cup) 
<input type="radio"/> ½ serving <input checked="" type="radio"/> 1 serving <input type="radio"/> 2 servings	<input type="radio"/> ½ serving <input checked="" type="radio"/> 1 serving <input type="radio"/> 2 servings	<input type="radio"/> ½ serving <input checked="" type="radio"/> 1 serving <input type="radio"/> 2 servings

 <b>Bagel</b>	 <b>String cheese</b>	 <b>Peanut butter</b>
One flat hand (1 ounce) 	Pointer finger (1½ ounces) 	Two thumbs (2 tablespoons) 
<input type="radio"/> ½ serving <input checked="" type="radio"/> 1 serving <input type="radio"/> 2 servings	<input type="radio"/> ½ serving <input checked="" type="radio"/> 1 serving <input type="radio"/> 2 servings	<input type="radio"/> ½ serving <input checked="" type="radio"/> 1 serving <input type="radio"/> 2 servings

4. Tell students to find the words “Physical Activity” on Page 5 in their workbook.
- Ask students to answer the first question.
  - Read the directions below these words to the students.
  - Ask students to complete this activity and answer the questions below on their own.

5. Tell students to find the words “Main Nutrients and Health Benefits” on Page 6 in their workbook.
- Read the directions below these words to the students.
  - Review the example with the students.
  - Ask students to complete this activity on their own.
6. Do not review answers with students, as there is material in the Pre-Assessment that has not yet been taught.

**Physical Activity**

1. How many minutes each day should you have of moderate-vigorous physical activity? (fill in correct bubble)

15 minutes    30 minutes    45 minutes    60 minutes    75 minutes

**PHYSICAL ACTIVITY CHART**

**Directions:**

1. Look at the chart and add up the number of minutes of moderate-vigorous level physical activity each student did in one day.
2. Decide if a recommended amount of physical activity was met. Circle Yes or No.
3. If a student did NOT meet the recommended amount of minutes for the day, fill in an example of a moderate-vigorous level physical activity he or she could do.



STUDENT ACTIVITIES	Total minutes of Moderate-Vigorous Level Physical Activity for the day for each student	Did each student meet the recommended amount of Moderate-Vigorous Level Physical Activity for the day?	If not, what Moderate-Vigorous Level Physical Activity could each student add?
<b>Example:</b> <b>Greg:</b> • 30 minutes listening to music • 30 minutes swimming • 15 minutes playing a board game • 15 minutes reading	30	Yes <input checked="" type="radio"/> No <input type="radio"/>	Eg. Ride a bike
<b>Abby:</b> • 15 minutes rollerblading • 30 minutes walking her dog • 30 minutes playing soccer • 15 minutes dancing to music		Yes <input checked="" type="radio"/> No <input type="radio"/>	
<b>John:</b> • 45 minutes playing football • 30 minutes watching TV • 15 minutes playing video games • 15 minutes watching his brother play catch with his dog		Yes <input type="radio"/> No <input checked="" type="radio"/>	Eg. Skateboarding
<b>Sally:</b> • 30 minutes talking on the phone • 15 minutes playing basketball • 15 minutes chasing her brother • 30 minutes skateboarding		Yes <input checked="" type="radio"/> No <input type="radio"/>	

5

**Main Nutrients and Health Benefits**

**Directions:**

1. Read the paragraph below and fill in the blanks with the correct answers from the list to the right.

The five food groups are important to have every day because of the main nutrients and their health benefits. The Grains group's main nutrients are B-vitamins, and they are important to provide us with energy. The Fruits group's main nutrient is vitamin C. This nutrient is to make sure we can heal cuts and scratches. The reason we need the Vegetables group is for healthy skin and eyes and the main nutrient is vitamin A. Dairy provides calcium as its main nutrient, as well as many other nutrients our bodies need. The reason we need this nutrient is to build strong bones and teeth. The Protein group is important for strong muscles, and the main nutrient protein is how we get them.

**Possible Answers**

- protein
- vitamin A
- calcium
- B-vitamins
- vitamin C
- strong bones and teeth
- energy
- strong muscles
- heal
- healthy skin and eyes

6

## Closing:

1. Ask students how many knew some of the information but maybe not all. Ask students if they felt like they knew most of the information that was asked.
2. Tell students that as they go through each of the lessons in the *Nutrition Pathfinders* program they will check to make sure they understand the information and that they can use it to help make better eating and physical-activity choices.
3. Refer students to Pages 34 – 35 of their workbook. Tell students that these food-group lists can help them make good eating choices.
4. Tell students that the goal they want to achieve is to build their skills in choosing foods and physical activities that help them grow stronger, feel more energetic and perform better.
5. Give students the family letter that you've downloaded from the [HealthyEating.org](http://HealthyEating.org) website. Have them fill in the blanks and take this letter home to their families tonight so that they know about the *Nutrition Pathfinders* program their children are starting, and can support and assist them at home. Or include the link to the family letter (located at [HealthyEating.org/NP4/FamilyLetter](http://HealthyEating.org/NP4/FamilyLetter)) in your next email communication to parents. Encourage them to review the letter themselves.

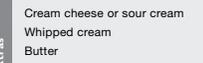
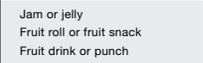
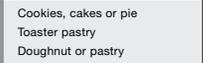
## Teacher Note:

Consider updating parents regarding the progress the class is making toward learning about healthy food and daily physical-activity choices through a classroom newsletter.

Consider saving the student workbooks at the completion of the program and sharing the results with parents. Possible ways to do this could include Open House or parent conferences.

This assessment, administered prior to the implementation of the *Nutrition Pathfinders* program, will:

- Provide information about the knowledge and skills your students have in selecting healthy foods, as well as making good physical-activity choices.
- Help you identify areas of the program that may need more emphasis or additional work through extension activities.
- Serve as a “benchmark” to establish baseline knowledge against which students progress through the course of the program can be measured.

Food List																									
 <p><b>What about water?</b></p> <p>Water does not belong in any food group, but next to air (oxygen), it is the most important substance you need to survive.</p> <p>Water plays many roles to keep you healthy. It helps you digest food. It carries nutrients throughout your body, and it helps to regulate your body temperature through perspiration.</p> <p>Most of the water you need actually comes from the beverages you drink—water, milk, juice. You also get water from some of the foods you eat. Some fruits, for example, are as much as 80 percent water! To be sure to get the water you need, drink water between meals and drink milk with your meals.</p>	 <p><b>Dairy – Milk, Yogurt, Cheese</b></p> <p>Main Nutrient = Calcium <b>Why your body needs it: Strong bones and teeth</b></p> <p>Milk fat-free lactose free low-fat (1%) reduced fat (2%)</p> <p>Milk, flavored fat-free low-fat (1%) reduced fat (2%)</p> <p>Yogurt fat-free low-fat</p> <p>Cheese cheddar cheese cottage cheese Monterey Jack cheese mozzarella or string cheese</p> <p>Dairy Desserts frozen yogurt ice cream pudding, custard or flan</p> <p>Calcium-fortified soy beverages</p>	 <p><b>Vegetables</b></p> <p>Main Nutrient = Vitamin A <b>Why your body needs it: Healthy skin and eyes</b></p> <p>Fresh, frozen or canned vegetables</p> <table border="0"> <tr> <td>artichoke</td> <td>peas</td> </tr> <tr> <td>bok choy</td> <td>peppers</td> </tr> <tr> <td>broccoli</td> <td>potato</td> </tr> <tr> <td>cabbage</td> <td>spinach</td> </tr> <tr> <td>cactus</td> <td>squash</td> </tr> <tr> <td>carrots</td> <td>sweet potatoes,</td> </tr> <tr> <td>cauliflower</td> <td>yams</td> </tr> <tr> <td>corn</td> <td>tomato</td> </tr> <tr> <td>green beans</td> <td>zucchini</td> </tr> <tr> <td>lettuce or salad</td> <td></td> </tr> </table> <p>Hash browns Oven-baked fries Salsa Tomato sauce or pizza sauce Vegetable juice Vegetable soup</p>	artichoke	peas	bok choy	peppers	broccoli	potato	cabbage	spinach	cactus	squash	carrots	sweet potatoes,	cauliflower	yams	corn	tomato	green beans	zucchini	lettuce or salad		 <p><b>Fruits</b></p> <p>Main Nutrient = Vitamin C <b>Why your body needs it: Healing</b></p> <p>Fresh, frozen or canned fruits</p> <p>apple apricot banana blueberries cantaloupe cherries grapefruit grapes honeydew kiwi mango orange papaya peach pear pineapple plum raspberries strawberries tangerine watermelon</p> <p>100% fruit juice Cranberries, raisins, dried fruit</p>	 <p><b>Grains – Breads, Cereals, Pasta</b></p> <p>Main Nutrient = B-Vitamins <b>Why your body needs it: Energy</b></p> <p>Breads bagel or English muffin bun or roll combread or biscuit pita bread tortilla (flour or corn)</p> <p>Cereals cereal oatmeal other cooked cereal</p> <p>Pasta macaroni noodles spaghetti, other pasta</p> <p>Rice, brown or white</p> <p>Snack grains granola, granola bar pancake or waffle popcorn pretzels whole-grain or graham crackers</p> <p><i>*Whole-grains are best</i></p>	 <p><b>Protein – Meat, Beans, Nuts</b></p> <p>Main Nutrient = Protein <b>Why your body needs it: Strong muscles</b></p> <p>Meat beef, hamburger chicken or turkey fish or shrimp ham lunch meat pork chop</p> <p>Beans black garbanzo kidney pinto refried beans white</p> <p>Nuts almonds peanuts, peanut butter walnuts</p> <p>Seeds pumpkin sunflower</p> <p>Chili Eggs Hummus Tofu</p>
artichoke	peas																								
bok choy	peppers																								
broccoli	potato																								
cabbage	spinach																								
cactus	squash																								
carrots	sweet potatoes,																								
cauliflower	yams																								
corn	tomato																								
green beans	zucchini																								
lettuce or salad																									
	Servings per day = 3	Servings per day = 3	Servings per day = 2	Servings per day = 6	Servings per day = 2																				
<b>No Nutrients = No Health Benefit</b>																									
Soft drinks Syrup, honey or sugar Mustard or ketchup Candy Salad dressing or mayonnaise Margarine	 <p>Cream cheese or sour cream Whipped cream Butter</p>	 <p>Pickles, olives or relish Fried onion rings Fast-food french fries Potato or corn chips</p>	 <p>Jam or jelly Fruit roll or fruit snack Fruit drink or punch Fruit gelatin</p>	 <p>Cookies, cakes or pie Toaster pastry Doughnut or pastry</p>	 <p>Bacon Beef jerky</p>																				
	34			35																					

## Overview of Lesson:

- This lesson provides students with a review of basic facts about healthy food and daily physical-activity choices.
- Students will review the names of the five food groups and representative foods from each group.
- They will review common foods eaten, called “extras,” that do not belong to any food group.
- Finally, they will review the importance of daily physical activity, the different intensity levels of physical activity and the amount recommended daily.

## Student Objectives:

Upon completion of this lesson, the student will be able to:

1. Identify the five food groups and classify individual foods according to food group.
2. Identify foods that are “extras” and explain why they are not in a food group.
3. Identify the amount of moderate-vigorous level physical activity they need each day.
4. Classify a variety of activities as low level or moderate-vigorous level.

✔ *Highlights a student objectives concept.*

## Level of Cognition:

Objective 1: Knowledge

Objective 2: Knowledge

Objective 3: Knowledge

Objective 4: Comprehension

## Nutrition Facts:

- The five food groups are associated with specific colors; this color designation carries through the entire curriculum:
  - Dairy (blue)
  - Vegetables (green)
  - Fruits (red)
  - Grains (orange)
  - Protein (purple)
- “Extra” foods have little or no nutritional value; there is no main nutrient associated with “extra” foods.
- Physical activity can be classified as:
  - Low level—examples include playing video games, playing a board game or working at a computer.
  - Moderate-vigorous level—examples include brisk walking, skateboarding, tetherball, running, soccer or basketball.
- It is recommended that children be physically active (moderate or vigorous levels) at least 60 minutes each day.

## Materials:

Student workbooks  
Pencils  
Poster paper  
4 in. x 4 in. pieces of paper for individual drawings for posters  
Glue  
Colored markers or crayons  
Master color documents and additional resources available on your login page at **HealthyEating.org**.

## Preparation:

1. Review the food guidance system in the teacher guide. Familiarize yourself with the food groups and the foods that are classified into them.
2. Review the kinds of foods depicted as “extras.”
3. Gather materials.

**Length of Lesson: 50 – 60 minutes**

## Anticipatory Set:

### 1. Introduction:

- Ask students how they decide what to eat at a meal or snack. Call on a few student volunteers.  
*Possible student answers: my mother tells me what to eat; the school lunch menu is set; I pick foods that taste good; I pick foods that are easy to carry in my backpack.*
- Explain to students that one important factor for choosing foods should be because they're healthy foods ... *foods that are healthy help their bodies grow and be strong and free from sickness. Give a personal example.*
- Ask students to raise their hands if they have learned about choosing healthy foods. Select one or two students who raised their hands to share what they know. *Possible student answers: There are five food groups; we need foods from each of those groups every day; these food-group foods help us grow and be strong; these foods help us to learn.*
- Ask students what they did yesterday for physical activity—at school, at home, at a nearby park, etc. Call on a few student volunteers.
- Explain to students that nutritious food choices and daily physical activity are important healthy habits to form. Food and activity choices can affect how much energy they have, as well as their ability to stay free from sickness and grow and develop strong and healthy bodies.
- Explain to students that in this lesson they are going to review some basic information about healthy eating and daily physical activity—the five food groups, the main nutrient and health benefit of each, why “extra” foods are not part of the *MyPlate*, and different levels and the amount of daily physical activity that they need each day. Point out that this information may be a review for many of them, but that we need to be sure everyone has a good understanding of “the basics.”

### 2. Vocabulary:

*Note: Vocabulary cards are available for download on your login page at [HealthyEating.org](http://HealthyEating.org).*

- Ask students to turn to Page 2 of their workbook to look at the glossary.
- Call on one student to read the definition aloud OR read the definition aloud yourself OR have the class read the definition aloud as a group.
- Repeat this process with the remaining vocabulary words and terms.

**“extra” foods:** foods that do not contain enough nutrients to fit into one of the five food groups.

**Food group:** a way to group the different foods we eat each day; a given food group will have the same main nutrient in common.

**Healthy:** foods or physical activities that help build strong bodies that are well, free from sickness.

**Low level physical activity:** an activity that does not make your heart beat fast. Examples include sitting or walking at a slow pace.

**Moderate-vigorous level physical activity:** an activity that makes your heart beat faster. Examples include walking at a fast pace, biking, running, swimming or jumping rope.

## Step-by-Step Procedures:

*Teacher Note: This symbol  represents a key concept that should be discussed as activities are being completed.*

1. Project the My Food Groups document and ask students to look at it with you. Ask students what they see. Solicit a few responses.  
*Possible answers: colors, groups, foods.*
  -  Explain to students how the My Food Groups chart uses colors to teach them about the healthy foods they need to eat every day.
    - the five columns represent the five food groups that they should eat from every day.
-  2. Explain to students that the pink oval represents “extras,” which are not part of the five food groups.
  - “Extras” do not give us the main nutrients we need every day to help our bodies grow strong and be healthy.
    - Eating some “extra” foods once in awhile is fine, but they are not needed every day like foods from the five food groups.
    - Too many “extra” foods may cause students to gain weight because of large amounts of fats, sugars or calories in those foods.
    - Review some of the “extra” foods shown on the My Food Groups document (potato chips, candy bar, soft drink, fruit roll).
    - Ask students to think about what they ate yesterday and if they might have eaten an “extra” food.
    - Call on a few students to share their answers.  
*Possible answers could include candy, soft drinks, potato chips, cookies.*
3. Explain to students that daily physical activity has many benefits and is important for many reasons.
  - Physical activity helps keep your body healthy and your heart strong and also helps you to learn and concentrate better.
  - It helps you build strong muscles and grow strong bones by making your bones and the muscles work against gravity or push against something like the ground when you are running or jumping.
  -  Explain to students that there are two levels of physical activity, and there are many different types of activities that they can do to help keep their bodies healthy.
    - Some activities are classified as low level, and these do not make your heart beat fast.

- Examples include sitting, slow walking or watching television.
- Some activities are classified as moderate-vigorous level, and these make your heart beat a little or much faster.
  - Examples include walking at a fast pace, riding a bike, running or jumping rope.
- Ask students to either bend down low if they think the following activity is low level or to stand up on their toes and reach up high with their arms if they think the following activity is moderate-vigorous level. Call out the following activities to the students: running, watching television, playing basketball, playing soccer, playing computer games.

*Answers: running—moderate-vigorous; watching television—low; playing basketball—moderate-vigorous; playing soccer—moderate-vigorous; playing computer games—low.*

- ✔ – Explain to students that the amount of time they spend being physically active each day is important. They need to have 60 minutes of moderate-vigorous level physical activity every day to keep their bodies healthy and fit.
- Brainstorm with students the types of activities they are currently doing that would be considered moderate-vigorous level.
- Remind students that they can get the 60 minutes of physical activity all at one time, or it can be spread out throughout the day, before and after school, during school and at recess. Being physically active even 10 to 15 minutes at a time is good.

**TEACHER NOTE:** This is a natural place to break in the lesson should you decide to teach this lesson in two class sessions.

## Check for Understanding:

Use the chart below to name the foods for the “Where Does It Belong?” game.

1. We are going to play a game called “Where Does It Belong?”

### Game Directions:

- Teacher will say the name of a food and then the students will determine “where the food belongs.”
  - The student will need to state:
    1. If the food is a food-group food.
    2. What food group it belongs in OR if the food is not a food-group food, that it is an “extra.”
  - Discuss as needed, having students help each other if their answers are not correct.
- Repeat, naming all of the foods listed in the table below.

### FOR TEACHER REFERENCE ONLY

SAMPLE FOOD	FOOD GROUP	“EXTRAS”
Tortilla	Grains	
Corn	Vegetables	
Mango	Fruits	
Fruit roll		“extras”
String cheese	Dairy	
Fast-food french fries		“extras”
Peanut butter	Protein	
Graham crackers	Grains	
Low-fat yogurt	Dairy	

## Guided Practice:

*Teacher Note: You can direct the students to resource Pages 34 – 35 in their workbook to help them complete the lesson.*

## WORKBOOK INSTRUCTIONS:

1. Divide the students into seven groups.
2. Tell the students to turn to Page 7 in their workbook.
  - Ask the students to find the words “Food and Physical-Activity Experts.”
  - Review the directions with the students.
    - Students will need to discuss the foods each of them will be drawing, draw their pictures on 4 in. x 4 in. pieces of paper and then glue on poster paper.
    - Students will have 20 minutes to complete this activity.
  - Ask students to complete this activity.
  - Students will be asked to present their posters as part of the anticipatory set for Lesson 2.
  - The assessment is at the end of the next lesson for a summary of both days.
  - Once students complete the activity, have a few students share their answers and discuss.

## Assessment:

*Teacher Note:*

- Student assessment of this information will occur at the end of Lesson 2, Nutrient Power! The posters prepared by the students and shared in the anticipatory set for that lesson are a good review of some key concepts.

## Curriculum Connections

### ACTIVITY #1: MYPLATE MATCH GAME

- Have students log on to the website provided below to play an interactive food grouping game. This interactive tool will reinforce the food-group foods and color associations the students were taught in Lesson 1, while helping them discover how many servings of food and how many minutes of moderate-vigorous physical activity they need every day.
- [HealthyEating.org/Interactives/](http://HealthyEating.org/Interactives/)

### ACTIVITY #2: PHYSICAL ACTIVITY CHARADES

- Tell the students that you are going to play Charades.
- Explain to students that they will be called up in pairs to the front of the classroom and given an activity.
- They must work together to “act out” the activity.
- The class will try to guess the activity and say whether it is a low level physical activity or a moderate-vigorous level physical activity.

*Below are some possible activities:*

- *Playing basketball: moderate-vigorous level*
- *Playing computer games: low level*
- *Dancing: moderate-vigorous level*
- *Jumping rope: moderate-vigorous level*
- *Playing tennis: moderate-vigorous level*
- *Listening to music: low level*
- *Watching TV: low level*

**Lesson 1** Healthy Me!

**Food and Physical-Activity Experts**

**Directions:**  
You have been assigned into one of seven groups—one for each food group, one for “extras” and one for physical activity. You will work as a team to make a poster of your assigned topic.

1. Gather poster paper and colored markers or crayons.
2. Title your poster the name of the food group, “extras” or physical activity, depending on which you have been assigned.

**Example:** DAIRY or PHYSICAL ACTIVITY

3. Each student should individually draw his or her favorite food or physical activity from the assigned group on a 4” x 4” piece of paper. All the drawings should be different. Label the name of the food or physical activity under the picture you draw.
4. Once you finish your drawing, glue it onto the poster.
5. Leave extra space at the bottom of the poster for the Lesson 2 activity.
6. Turn to resource Pages 34 – 35 to help you complete this activity.

**Example:**

Dairy

 Low-fat milk	 Low-fat yogurt
 String cheese	
 Hot cocoa with milk	 Sliced cheese

*Leave extra space at the bottom of the poster for the Lesson 2 activity.*

7

## Overview of Lesson:

- The main nutrient associated with each food group, as well as its health benefit, is reviewed.

## Student Objectives:

Upon completion of this lesson, the student will be able to:

1. Identify the main nutrient for each food group.
2. Explain the health benefit that each main nutrient supports.
3. Explain variety and why it is important to eat a wide variety of foods each day.
4. Explain why drinking sufficient amounts of water each day is important for hydration.

 *Highlights a student objectives concept.*

## Level of Cognition:

Objective 1: Knowledge

Objective 2: Comprehension

Objective 3: Comprehension

Objective 4: Comprehension

## Nutrition Facts:

- Foods within a given food group contain significant amounts of the same main nutrient.
  - Most foods in a given food group can be counted on to provide that nutrient—they are roughly equivalent in terms of their nutritional benefit and can be exchanged one for the another.
  - For example, milk, yogurt and cheese (all in the Dairy group) contain significant amounts of calcium, which is needed for healthy bones.
  - However, there are differences in other nutrients that specific foods may contain. Therefore, eating a variety of foods within a food group is desirable.
- The main nutrients for all of the food groups are reviewed in this lesson:

Food Group	Main Nutrient	Health Benefit
Dairy	Calcium	Strong bones and teeth
Vegetables	Vitamin A	Healthy skin and eyes
Fruits	Vitamin C	Healing
Grains	B-vitamins	Energy
Protein	Protein	Strong muscles

- Condiments like mayonnaise, mustard and ketchup are classified as “extra” foods.
- Water, while not placed in any of the five food groups, is an important beverage to consume throughout the day for hydration. Children should be aware that water is one of the best beverages to drink in response to thirst.

**Materials:** Student workbooks

Pencils

Food posters made in Lesson 1

Colored markers or crayons

Master color documents and additional resources available on your login page at **HealthyEating.org**.

## Preparation:

1. Review Main Nutrients and Their Health Benefits document; this reviews key information you will need to successfully implement this lesson.
2. Gather materials.

**Length of Lesson: 50 – 60 minutes**

## Anticipatory Set:

### 1. Introduction:

- Take out the posters that students created in the previous lesson.
- Pass out each poster to its student group.
  - For the Grains food group, have that group of students come to the front of the room with the poster.
  - Ask each student to say which grain food he or she picked as his or her favorite and when that food might be eaten.
- Repeat the process for each food-group poster. For “extra” foods, have students identify food-group foods they could trade for “extras.” For physical activity, have students share what they drew and the level of activity that represents.
- Explain to students that foods are grouped together in a specific food group because they have a specific nutrient in common. Today they’re going to review/learn more about those nutrients.

### 2. Vocabulary:

*Note: Vocabulary cards are available for download on your login page at [HealthyEating.org](http://HealthyEating.org).*

- Ask students to turn to Page 2 of their workbook to look at the glossary.
- Call on one student to read the definition aloud OR read the definition aloud yourself OR have the class read the definition aloud as a group.
- Repeat this process with the remaining vocabulary words and terms.

**Energy**—power or the ability to be active; foods (like fuel) are changed into energy to make our bodies run.

**Hydration**—water provided for a person to keep a correct fluid balance in his or her body.

**Main nutrient**—the most important nutrient we get from a certain food group.

**Nutrient**—what we get from food to help our bodies grow strong, develop and stay healthy.

**Protein**—substance found in foods we eat that our bodies need for growth and repair of tissues.

**Variety**—a range of different items from a specific group. For food groups, it implies eating several different foods each day from all five food groups.

**Vitamins and minerals**—substances found in the foods we eat that our bodies need for growth and to work properly.

## Step-by-Step Procedures:

*Teacher Note:* This symbol  represents a key concept that should be discussed as activities are being completed.

1. Project the Main Nutrients and Their Health Benefits document and ask students to look at it with you.

-  • Explain to students that the main nutrients in the foods within the food groups help their bodies stay healthy.
  - “Extra” foods have few or no nutrients to help their bodies grow strong and healthy.
  - Foods in the five food groups have main nutrients that do help their bodies grow strong and healthy.
- Explain to students that just as it takes fuel or gas to make a car run, they need foods from the five food groups every day to give them energy to keep their bodies running.
  - If they put nutrients into their bodies, it will help them to stay healthy and give them the energy they need to play and learn each day.
  - Each food group has a different main nutrient.
  - The main nutrients are vitamins, minerals and protein.
- Practice—Point to the blue row on the Main Nutrients and Their Health Benefits document. (Use reference chart below.)
  - Explain to students that the blue row represents the Dairy food group.
  - The main nutrient for this food group is calcium, which help grow strong bones and teeth.
  - Ask students to think about which foods give them calcium.
  - Call on a few students to share their answers.  
*Possible answers: yogurt, cheese, milk.*
- Repeat practice step above for each of the food groups using the table below.

-  • Discuss with students the variety of foods in each food group. Tell students that there are many foods in each food group, and that provides them with a variety of options. Even though each food group has a main nutrient, by selecting a variety of foods from each food group they also get many other nutrients their bodies need.

- To help students remember the main nutrients teach the following. You can project the graphic from the Dairy Council of California website.

– Cows Are Cooking Blueberry Pancakes

1. C—Calcium (Dairy)
2. A—Vitamin A (Vegetables)
3. C—Vitamin C (Fruits)
4. B—B-vitamins (Grains)
5. P—Protein (Protein)

-  2. Explain to students that they need to drink adequate amounts of water every day, especially between meals.

- Next to air, water is the most important substance needed to keep them alive.
- Water makes up more than two-thirds of their weight and helps them to digest food and carry the nutrients throughout their bodies.
- Water helps to regulate body temperature through perspiration or sweating, especially when they are physically active.

*TEACHER NOTE: This is a natural place to break in the lesson should you decide to teach this lesson in two class sessions.*

### FOR TEACHER REFERENCE ONLY

Color Band	Food Group	Sample Foods	Main Nutrient	Health Benefit	Possible Answers
Blue	Dairy	Low-fat milk, yogurt, string cheese	Calcium (which is a mineral)	Strong bones and teeth	<i>Helps to prevent cavities, helps me grow tall.</i>
Green	Vegetables	Peas, squash, celery	Vitamin A	Healthy skin and eyes	<i>Helps my hair grow, helps me to see well.</i>
Red	Fruits	Orange, kiwi, cantaloupe	Vitamin C	Healing	<i>Helps me to heal when I get a cut or a scratch.</i>
Orange	Grains	Pasta, tortilla, bagel	B-vitamins	Energy	<i>Helps give me energy to run, play at recess, play sports.</i>
Purple	Protein	Pork chop, tofu, almonds	Protein	Strong muscles	<i>Helps me to be a strong runner, helps me to be able to lift my arms and jump with my legs.</i>
Pink circle outside of food group chart	“Extras:” Not a food group	Cupcake, cookies, fast food French fries	No main nutrient	No health benefit	

## Check for Understanding:

*Teacher Note: You can direct the students to Pages 34 – 35 of their workbook to help them with this activity.*

### 1. Explain to students that they are going to play a game.

#### Game Directions:

- Divide the class in half and name them Team #1 and Team #2.
  - Choose a leader for each team.
  - Write Team #1 and Team #2 on the board for scoring purposes.
  - Write the four topics for questions on the board (food group, main nutrient, main nutrient health benefit, physical activity).
1. Refer students to Pages 34 – 35 in their workbook to help them with the game.
  2. Call on the leader from Team #1 and ask him or her to select a topic area.
  3. Using the questions in the chart below, allow the students to discuss their answer and have the student leader respond.
  4. If the leader answers the question correctly, award Team #1 one point.
  5. Check off each question as it is used.

6. If the group answers incorrectly, then call on the leader in Team #2 to answer the question. If that leader answers correctly, then award Team #2 one point.
7. If neither team answers correctly, no points are awarded. Review the correct answer with the students.
8. Repeat previous steps for each of the questions, alternating groups, until all topic areas and questions have been used.
9. Ask each team to answer the bonus question and give an extra point if they answer it correctly.
10. Consider offering the winning team the option to select 15 – 20 minutes of their favorite physical activity to do together as a class.

### FOR TEACHER REFERENCE ONLY

Food Group	Main Nutrient	Main Nutrient Health Benefit	Physical Activity
Question: What food group do celery and potatoes belong to? Answer: Vegetables food group.	Question: What is the main nutrient for the Fruits food group? Answer: Vitamin C.	Question: What main nutrient helps us to have healthy skin and eyes? Answer: Vitamin A.	Question: Watching television and playing video games are what level of physical activity? Answer: Low level.
Question: What food group do yogurt and string cheese belong to? Answer: Dairy food group.	Question: What is the main nutrient for the Dairy food group? Answer: Calcium.	Question: What main nutrient helps us to heal? Answer: Vitamin C.	Question: Running, playing basketball and swimming are what level of physical activity? Answer: Moderate-vigorous level.
Question: What food group do refried beans and hamburger belong to? Answer: Protein food group.	Question: What is the main nutrient for the Grains food group? Answer: B-vitamins.	Question: What is the main health benefit of calcium? Answer: To help us have strong teeth and bones.	Question: What is the amount of moderate-vigorous physical activity we need every day? Answer: 60 minutes.
Question: What food group do bananas and kiwi belong to? Answer: Fruits food group.	Question: What is the main nutrient for the Protein food group? Answer: Protein.	Question: What is the main health benefit of protein? Answer: To help us build strong muscles.	Question: What level of physical activity helps to keep our heart and muscles strong? Answer: Moderate-vigorous level.
Question: What food group do tortillas and bagels belong to? Answer: Grains food group.	Question: What is the main nutrient for the Vegetables food group? Answer: Vitamin A.	Question: What main nutrient helps give us energy? Answer: B-vitamins.	Question: What level of activity does not count for the 60 minutes of physical activity we need each day? Answer: Low level.

#### Bonus Question:

Why is it important to drink plenty of water every day?

Answer: Helps keep our bodies hydrated, helps the nutrients from the foods we eat to be carried throughout our bodies.

## Guided Practice:

*Teacher Note: You can direct the students to resource Pages 34 – 35 to help them complete the lesson.*

## Assessment:

1. Tell students to find the words “What I Learned” at the top of Page 8.
2. Have the students go back to their food and physical-activity posters and add the main nutrient and health benefit.
  - For the “extras” group, have the students write “no nutrients” and “no health benefits.”
  - For the physical-activity group, have them write the recommended number of moderate-vigorous minutes needed each day.

## WORKBOOK INSTRUCTIONS:

- Tell students to find the words “Pulling It Together” on Page 8.
- Review the directions with the students and have them complete the activity on their own.
- Once students complete the activity, have a few students share their answers and discuss.

**Lesson 2** Nutrient Power!

**What I Learned**

**Directions:**

1. With your previously assigned poster group, return to the poster you made in the previous lesson.
2. On the bottom of your poster, write the name of the main nutrient and the health benefit for the food group you were assigned.
  - a. If you were assigned “extras,” write “No Main Nutrients” and “No Health Benefits.”
  - b. If you had physical activity, write the recommended number of minutes needed each day.

**Pulling It Together**

1. Your best friend doesn't believe it is important to eat a variety of foods from all five food groups every day. Write a paragraph persuading your friend to eat a variety of foods from all five food groups every day.

To make sure he or she gets all the main nutrients he or she needs to grow strong and stay healthy.

Each of the five food groups has a different main nutrient that his or her body needs everyday.

Skipping a food group means he or she is skipping a main nutrient.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_
2. Choose a moderate-vigorous level physical activity that you will do at recess today.

Example: Play soccer

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

8

## Teacher Note:

- Ask students to bring 3 – 5 food labels for Lesson 4 to class tomorrow.
- Be sure to have them include food-group food labels.
- *Optional:* Bring in food items to use for serving-size comparison in tomorrow's lesson. *Example: one-half pint carton of milk, whole fruit (apple, orange), string cheese, tortilla or slice of bread.*

## Curriculum Connections

### ACTIVITY #1: CREATE A RECIPE

*Materials needed: Computer, pencils, paper*

- Tell the students to get into the groups they were assigned to when making their posters in Lesson 1.
- Tell the students that they will be creating their own recipes. Each group will choose a food in their assigned food group as their main ingredient.
- Tell students to research some recipes with their group to give them some ideas on what to create and what a recipe looks like.
  - The students can start at [HealthyEating.org/Recipes/](http://HealthyEating.org/Recipes/) to search for some recipes.
- *Optional*—Have the students make their recipes and hold a taste-test contest.

### ACTIVITY #2: FOOD GROUP ACROSTIC

*Materials needed: Paper (one per group), pencils*

- Divide the students into 9 groups.
- Assign each group a food group. Break up the multiple food-group names.
  - Food group assignments:
    - Milk
    - Vegetables
    - Fruits
    - Grains
    - Breads
    - Cereals
    - Meat
    - Beans
    - Nuts
- Tell the students they will be creating an acrostic using their food-group food name as their topic word.
- Tell each group to brainstorm 10 words or phrases that describe or remind them of their topic word.
- Their completed acrostic should be about their assigned word, and each line should begin with a letter from that word.



**Overview of Lesson:**

- This lesson reviews with students the concept of the correct serving sizes of foods—that is, enough to obtain the main nutrients provided by a particular food-group food and to satisfy hunger, yet not so large that excess calories are consumed.
- Students learn to compare serving sizes to hand symbols, which are an easy visual for students and give a reasonable estimate of the correct serving size.
- Students are also introduced to the recommended number of servings of each food group they should eat daily.

**Student Objectives:**

Upon completion of this lesson, the student will be able to:

1. Choose the right serving size for foods representing all five food groups by using hand symbols as a comparison.
2. Analyze the type and amounts of food-group foods in common mixed-food dishes.
3. Identify the number of servings from each food group needed daily.
4. Distinguish half, single and double servings of food-group foods.
5. Analyze a sample day's intake to determine if recommended numbers of servings from all food groups are met; adjust food choices to meet serving recommendations.

 *Highlights a student objectives concept.*

**Level of Cognition:**

Objective 1: Application

Objective 2: Analysis

Objective 3: Knowledge

Objective 4: Comprehension

Objective 5: Analysis

**Nutrition Facts:**

- Serving size is a term referenced in the California Health Education standards to denote an appropriate amount of a given food to eat at a meal or snack. This is the amount that provides a significant quantity of the main nutrient contributed by a given food group.
- The recommended number of servings for each of the food groups is as follows:
  - Dairy—3 servings
  - Vegetables—3 servings
  - Fruits—2 servings
  - Grains—6 servings
  - Protein—2 servings

These represent the minimum number of servings needed for growth and development. Individual student needs can vary depending on body size and activity levels.

*Note: These serving numbers are based on the total amounts of foods from each food group recommended in USDA's food grouping system.*

- A serving size that is too small may not provide enough nutrients needed for growth or adequate calories for energy. On the other hand, a serving size that is too large may contain too many calories and could fill students up so they don't eat the variety of food group foods they should.
- In some instances it may be appropriate to eat more than 1 serving of food at a meal. In some cases, only a ½ serving may be eaten.
  - For example, a whole sandwich with two slices of bread is equal to 2 servings from the Grains food group.
  - Only a ½ serving of milk may be used on top of dry cereal.
- Most adults, as well as children, have difficulty estimating an appropriate serving size.
  - Serving sizes are generally referenced as household measures (e.g., ½ cup, 1 cup, 1 tablespoon, etc.) or hand symbols.

*Note: Refer to the serving-size comparison chart.*
- It is convenient to use hand symbols to approximate serving sizes. For example, the palm of your hand approximates the appropriate serving size for a piece of meat; a cupped handful for a serving of pasta or rice; your pointer finger approximates a serving of cheese.
 

*Note: There is not a hand-symbol equivalent for every food students may choose. The examples used are simply to provide guidance.*
- Mixed foods contain more than one food group.
  - For example, a cheese omelet with mushrooms and tomatoes represents three food groups: cheese from the Dairy group; eggs from the Protein group; mushrooms and tomatoes from the Vegetables group.

**Materials:** Student workbooks

Pencils

Blank paper—one sheet per student

Master color documents and additional resources available on your login page at [HealthyEating.org](http://HealthyEating.org).

**Preparation:**

1. Review the Serving-Size Comparison Chart; this provides key information you will need to successfully implement the lesson.
2. Gather materials.

**Length of Lesson: 45 – 55 minutes**

## Anticipatory Set:

### 1. Introduction:

- Ask students to think about different sizes of cars that they see and why a certain size car would be necessary for different uses.
  - For example, a small sports car that carries only two people might be great for someone who lives on his own, but wouldn't be practical for a parent who has to drive several children to and from school. It would be too small.
  - On the other hand, most families wouldn't need to drive a large truck. It might be hard to find parking spaces in which the truck would fit. It would be too large.
- Ask students if they can think of other examples of a car being too small or too large.
- Explain to students that it's the same with food. Some servings are too large; some are too small, some are just right.
  - Also, a different **number** of servings from each food group is needed each day. For some food groups, several servings in a day are recommended; for others, only a few servings are recommended.
- Tell students that in today's lesson they will learn some helpful hints for recognizing the right-size serving of many different foods, and the number of servings from each food group needed each day.

### 2. Vocabulary:

*Note: Vocabulary cards are available for download on your login page at [HealthyEating.org](http://HealthyEating.org).*

- Ask students to turn to Page 2 of their workbook to look at the glossary.
- Call on one student to read the definition aloud OR read the definition aloud yourself OR have the class read the definition aloud as a group.
- Repeat this process with the remaining vocabulary words and terms.

**Calorie**—a measure of the amount of energy provided by a food.

**Hand symbols**—a way to measure the amount of food by using your hand to compare to the proper serving size.

**Measure**—a way to find the amount of something ... in this case, food.

**Mixed foods**—those that contain more than one food group.

**Nutrient**—what we get from food to help our bodies grow strong, develop and stay healthy.

**Serving size**—the right amount of a given food to eat at a meal or snack.

## Step-by-Step Procedures:

*Teacher Note: This symbol  represents a key concept that should be discussed as activities are being completed.*

1. Project the Mixed Foods document and ask students to look at it with you.

 • Explain to students that sometimes the foods they eat are called mixed foods, which can contain one or more servings of different food groups.

– Mixed foods are a combination of more than one food group, like a quesadilla or a peanut butter and jelly sandwich.

– Mixed foods add variety to food choices and often represent favorite dishes from different cultures.

– Point to the quesadilla. Explain what makes a quesadilla a mixed food.

– Point to the peanut butter and jelly sandwich. Call on one or two students to tell the class what food groups are included in a peanut butter and jelly sandwich.

*Answer: bread—Grains food group; peanut butter—Protein food group; jelly—"extra," not in a food group.*

– Point to the baked potato with broccoli and cheese. Call on one or two students to tell the class what food groups are included in baked potato with broccoli and cheese.

*Answer: baked potato—Vegetables food group; broccoli—Vegetables food group; cheese—Dairy food group.*

2. Project the Serving-Size Comparison Chart document and ask students to look at it with you.

- Tell students that they are going to be serving superstars today.
- Refer students to Page 13 of their workbook.
- Explain to students that they are going to learn about serving sizes and hand symbols for the food-group food that equal 1 serving.
  - Point to the Serving-Size Comparison Chart.
  - Demonstrate and ask students to demonstrate with you the hand symbols that approximate the serving sizes listed for the Dairy food group as you describe them to the students.
    1. One fist is equal to 1 serving of milk.
    2. One pointer finger is equal to 1 serving of string cheese.
    3. *Optional: Compare to appropriate realia you may have brought in to share.*
  - Repeat the above process for each of the additional food groups—Vegetables; Fruits; Grains; and Protein.
  - Tell students that foods are rarely served or sold as 1 serving size. Sometimes foods are served as less than 1 serving but most of the time foods are served as more than 1 serving size.

- Explain to students that they are going to learn about serving sizes and hand symbols for the food-group food that equal a ½ serving.
  - As a class, look at the example of the dry cereal from the Serving-Size Comparison Chart for the Grains food group.
  - Demonstrate and have students demonstrate with you that a ½ serving of dry cereal would be one-half of a fist, covering the bottom half of your fist up with your other hand or a piece of paper.
- Explain to students that they are going to learn about serving sizes and hand symbol for the food-group that equal 2 servings.
  - Demonstrate and have students demonstrate with you that a double serving, or 2 servings, of dry cereal would be equal to two fists, holding up both fists.
  - Ask one student to come to the front of the classroom to demonstrate for the other students ½ and 2 servings for the salad example from the Serving-Size Comparison Chart for the Vegetables food group.

*Answer: ½ serving is equal to one fist; 2 servings are equal to four fists. (Student will need to ask for a helper to demonstrate this.)*

- Repeat the step above, calling on a new student for each of the remaining food groups—Fruits—apple; Dairy—cheese; and Protein—chicken.

*Answers: apple—½ serving is equal to one-half of a fist and 2 servings is equal to two fists; cheese—½ serving is equal to one-half of a pointer finger and 2 servings is equal to two pointer fingers; chicken—½ serving is equal to one-half of a palm and 2 servings is equal to two palms.*

Serving-Size Comparison Chart

FOOD	SYMBOL	COMPARISON	SERVING SIZE
<b>Dairy – Milk, Yogurt, Cheese</b>			
Cheese (string cheese)			Pointer finger 1½ ounces
Milk and yogurt (glass of milk)			One fist 1 cup
<b>Vegetables</b>			
Cooked carrots			One fist 1 cup
Salad (bowl of salad)			Two fists 2 cups
<b>Fruits</b>			
Apple			One fist 1 medium
Canned peaches			One fist 1 cup
<b>Grains – Breads, Cereals, Pasta</b>			
Dry cereal (bowl of cereal)			One fist 1 cup
Noodles, rice, oatmeal (bowl of noodles)			Handful ½ cup
Slice of whole-wheat bread			Flat hand 1 slice
<b>Protein – Meat, Beans, Nuts</b>			
Chicken, beef, fish, pork (chicken breast)			Palm 3 ounces
Peanut butter (spoon of peanut butter)			Thumb 1 tablespoon

13

3. Explain to students that they need to eat more than 1 serving of food for all of the five food groups every day in order for their bodies to get the nutrients they need to stay healthy and strong.
- Point to the blue row on the Serving-Size Comparison Chart.
  - Ask students to read the name of the food group and the number of servings listed.
  - Tell students that they need to eat 3 servings from the Dairy food group each day to get enough of the main nutrient, calcium, which they need each day to grow strong bones and teeth. *Optional: Refer back to the “Cows Are Cooking Blueberry Pancakes” from Lesson 2.*
  - Repeat this process for each of the food groups listed in the chart.
  - Tell students that sometimes eating more than 1 serving from a food group at a meal is appropriate. For example, a whole sandwich has two slices of bread, which is equal to 2 servings from the Grains food group.

### Check for Understanding:

1. Tell the students they are going to create their own serving-size comparison chart today.
2. Hand out a blank piece of paper to each student and ask them to trace their open hand with their pencil.
3. After all students have traced their open hand, ask them to circle the following parts of their hand and label each part they circle:
  - Pointer finger—1 serving of string cheese
  - Palm—1 serving of meat, chicken or fish
  - Thumb—1 serving of peanut butter
  - Whole hand—1 serving of bread
4. Post students’ work around the classroom and periodically have them give themselves a “high five” when they answer questions correctly throughout the program.

*Teacher Note: Students may ask you about the fact that their hands are different sizes, so their serving sizes might be different from that of a friend. Acknowledge that there will be small differences; the serving-size chart they are making will show the right sizes just for them!*

#### FOR TEACHER REFERENCE ONLY

Band Color	Food Group	Number of Servings Needed	Main Nutrient / Health Benefit
Blue	Dairy	3	Calcium / Strong bones and teeth
Green	Vegetables	3	Vitamin A / Healthy skin and eyes
Red	Fruits	2	Vitamin C / Healing
Orange	Grains	6	B-vitamins / Energy
Purple	Protein	2	Protein / Strong muscles

4. *Optional: Tell students that they may add the correct number of servings needed on the poster they made if theirs was one of the five food-group posters.*

**TEACHER NOTE:** This is a natural place to break in the lesson should you decide to teach this lesson in two class sessions.

## Guided Practice:

Teacher Note: You can direct the students to resource Page 13 to help them complete the lesson.

### WORKBOOK INSTRUCTIONS:

- Tell the students to turn to Page 9 in their workbook.
  - Ask the students to find the words “Serving Size.”
  - Review the directions with the students.
  - Ask students to complete the charts below on their own.
- Tell the students to find the words “Summing Up Sarah’s Servings” on Page 10 in their workbook.
  - Review the directions with the students.
  - Complete Sarah’s breakfast together as a class.
  - Ask the students to complete the chart by adding in the rest of Sarah’s meals and use the chart when completing the questions in the “What I Learned” section.

## Assessment:

- Tell students to find the words “What I Learned” at the bottom of Page 10 in their workbook.
- Review the directions with the students and have them complete the activity on their own.
- Once students complete the activity, have a few students share their answers and discuss.

Teacher Note:

- Collect food labels students brought to class.
- Ensure there are enough labels for Lesson 4 activity.

### Lesson 3 Serving Superstars

**Serving Size**

**Directions:**

- Look at the hand symbols and measurements below the pictures of the foods.
- Determine if each picture of the food is a ½ serving, 1 serving or 2 servings.
- Fill in the bubble for the correct serving size that matches the picture.
- Refer to the chart on Page 13 for help.

 <b>Apple</b>	 <b>Fish fillets</b>	 <b>Cereal, milk, berries</b>
One handful (½ medium apple)	Two palms (6 ounces)	Cereal: One fist (1 cup)      Milk: One fist (1 cup)      Berries: One handful (½ cup)
<input type="radio"/> ½ serving <input type="radio"/> 1 serving <input type="radio"/> 2 servings	<input type="radio"/> ½ serving <input type="radio"/> 1 serving <input type="radio"/> 2 servings	<input type="radio"/> ½ serving <input type="radio"/> ½ serving <input type="radio"/> ½ serving <input type="radio"/> 1 serving <input type="radio"/> 1 serving <input type="radio"/> 1 serving <input type="radio"/> 2 servings <input type="radio"/> 2 servings <input type="radio"/> 2 servings

 <b>Rice</b>	 <b>Carrots</b>	 <b>Macaroni, cheese</b>
One handful (½ cup)	One fist (1 cup)	Macaroni: One handful (½ cup)      Cheese: Two pointer fingers (3 ounces)
<input type="radio"/> ½ serving <input type="radio"/> 1 serving <input type="radio"/> 2 servings	<input type="radio"/> ½ serving <input type="radio"/> 1 serving <input type="radio"/> 2 servings	<input type="radio"/> ½ serving <input type="radio"/> ½ serving <input type="radio"/> 1 serving <input type="radio"/> 1 serving <input type="radio"/> 2 servings <input type="radio"/> 2 servings

**Summing Up Sarah's Servings**

**Directions:**

- Review the list of foods Sarah ate below.
- Fill in the number of servings Sarah had today in the chart labeled “Servings Chart.”

**SARAH'S DAILY MEALS**

**Breakfast**—cereal, milk, banana  
**Lunch**—½ turkey sandwich (one slice of bread, turkey, mayonnaise), carrot sticks, punch  
**Snack**—crackers  
**Dinner**—stir-fried chicken (chicken, noodles, vegetables), rice, water  
**Snack**—yogurt parfait (low-fat yogurt, strawberries, granola)  
**All foods listed above are 1 serving.**

**SERVINGS CHART**

	Dairy Milk, Yogurt, Cheese	Vegetables	Fruits	Grains Breads, Cereals, Pasta	Protein Meat, Beans, Nuts	“extras”
	milk	carrot sticks	banana	<b>Example:</b> Cereal	turkey	mayon- naisse
	low-fat yogurt	vegetables	strawberries	one slice bread	chicken	punch
				crackers		
				noodles		
				rice		
				granola		
<b>Total Servings</b>	2	2	2	6	2	2
<b>Daily Recommended Number of Servings</b>	3	3	2	6	2	

For each glass of water consumed, check a box:

**What I Learned**

**Directions:**

- Use the chart above to write the letter below.
- Write a letter to Sarah explaining the importance of eating the recommended number of servings from each food group every day. Include an example of a food group in which Sarah’s recommended amount of servings was not met. Identify a food that Sarah could add to meet her daily recommended amount.

Dear Sarah,

To make sure and receive all of the nutrients she needs to grow strong and stay healthy, \_\_\_\_\_

She didn’t meet the Daily Recommended number of servings for the Dairy group or \_\_\_\_\_

the Vegetables group. \_\_\_\_\_

Example of foods she could add: lettuce to her sandwich, cheese with her crackers. \_\_\_\_\_

Sincerely, \_\_\_\_\_

## Family Homework:

- Tell students to turn to Page 11 in their workbook and carefully pull out the sheet that says “Family Homework.”
- Explain to students that tonight they are to complete the activity with an adult at home.
- Briefly review the components of the assignment with the students.
- Tell the students to have the adult sign their homework and return the signed sheet to class tomorrow.

## Curriculum Connections

### ACTIVITY #1: GET OUT, GET SIGNING!

*Materials needed: Poster boards (one per group), pencils, markers*

- Tell the students they are going to create their own hand symbol charts.
- Divide the class into five groups.
- Assign each group a food group.
- Tell the students they are going to make a poster of hand symbols for their assigned food group.
- The posters must include:
  - Hand symbol drawings with drawings of the matching food next to them.
- Students can refer to Page 13 in their student workbooks for guidance.
- Once the students complete their posters, ask your local grocery store to hang the posters in the appropriate section of the store to help teach the community about serving sizes.

### ACTIVITY #2: MIXED FOODS

*Materials needed: Small poster boards (one per student), magazines, markers, glue*

- Tell the students they are going to make poster boards of mixed foods.
- Each student will look through magazines for mixed foods, cut them out and glue them onto their poster boards.
- Tell the students they will need to write the name of the food and all of the food groups that the picture contains below or on the side of the picture.
- Each student must find a minimum of three mixed foods for their poster.
- Once the posters are complete, have the students present their posters to the class.
- Hang posters around the classroom to remind students about mixed foods.
- **Optional**—If you do not have magazines to cut up, you can have the students draw the mixed foods.



**Lesson 3: Serving Superstars**



Name: \_\_\_\_\_ Return by: \_\_\_\_\_

**Family Activity**  
Serving sizes can be challenging. In this activity you will learn to compare serving sizes to hand symbols, which are easy visuals and give reasonable estimates of the correct serving sizes.

**Directions:**  
Teach someone in your family what the right-size serving is for each food at a meal using the hand symbol chart.

1. Write down the foods that were a part of your family's dinner. Fill in the hand symbols for all of the foods.
2. Show your family members what the correct serving size is for each food at the dinner table.
3. Have your family practice the hand symbols with you. Share the chart with your family as well.

Foods Eaten For Dinner	Hand Symbol For Foods	Food	Serving Size	Hand Symbol
<b>Example:</b> Burrito (cheese, beans, tortilla, salsa)	one pointer finger of cheese, one handful of beans, one flat hand for one tortilla, one-half of a handful of salsa	Dry cereal, milk, yogurt, vegetables	One fist 1 cup	
		Chicken, beef, fish, pork	Palm 3 ounces	
		Noodles, rice, oatmeal	Handful ½ cup	
		Salad	Two fists 2 cups	
		Peanut butter	Thumb 1 tablespoon	
		Cheese	Pointer finger 1½ ounces	
		Slice of whole-wheat bread	Flat hand 1 slice	

Student signature: \_\_\_\_\_ Parent signature: \_\_\_\_\_

11 

## Overview of Lesson:

- This lesson reviews the Nutrition Facts food label and its use as a tool to help make healthy food choices.
- There is a special focus on calcium as a nutrient to encourage in students' diets. This nutrient is often under-consumed by children and adolescents.
- The label information can help students identify nutrient-rich choices compared to higher calorie, nutrient-poor "extra" foods, as well as give them a better understanding of appropriate serving sizes.

## Student Objectives:

Upon completion of this lesson, the student will be able to:

1. Identify specific information on the Nutrition Facts food label: serving size, servings/container, calories per serving, and nutrients to encourage (especially calcium).
2. Locate the amount of calcium in different foods using the food label.
3. Analyze the food label to select foods that are good sources of calcium.

 *Highlights a student objectives concept.*

## Level of Cognition:

Objective 1: Knowledge

Objective 2: Knowledge

Objective 3: Analysis

## Nutrition Facts:

- Particular items on the food label to emphasize include:
  - the serving size
  - number of servings per container
  - calories per serving
  - percent daily values of key nutrients like vitamins and minerals we need to have in our diet.
- The information on food labels regarding the number of servings in a package is very important. The information on the Nutrition Facts food label about calories, vitamins and minerals applies to a single serving of the food, not the entire package or bag.
- For more detailed information about the components of a food label, review the Anatomy of a Food Label document.
- Some packaged food products are made with sugar substitutes or non-nutritive sweeteners. The fact that they are lower in sugar and/or calories does not necessarily make them healthier options. The Nutrition Facts label should still be checked to see what nutrients are contained in the food.
- Note that there are many healthy food choices that do not have food labels (e.g., fresh produce, meats). Generally, labels appear on packaged foods that are stocked primarily in the center aisles of grocery stores.

Low-fat milk

Nutrition Facts		
4 servings per container		
Serving size		1 cup (245g)
Amount Per Serving		<b>105</b>
<b>Calories</b>		
%Daily Value*		
Total Fat	2.5g	4%
Saturated Fat	1.5g	8%
Trans Fat	0g	
Cholesterol	15mg	5%
Sodium	130mg	5%
Total Carbohydrate	13g	4%
Dietary Fiber	0g	0%
Total Sugars	12g	
Includes	0g	Added Sugars 0%
Protein	8g	
Vitamin D	2.5mcg	25%
Calcium	300mg	30%
Iron	0.12mg	0%
Potassium	397mg	10%

\*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

**Materials:** Student workbooks

Pencils

Index cards—Label the cards as follows: ½ cup; 3 servings per container; 110 calories; 4% Calcium; 8% iron; 7g protein.

Paper bag

Food labels brought by students

Master color documents and additional resources available on your login page at **HealthyEating.org**.

## Preparation:

1. Review the Anatomy of a Food Label document so you know where pertinent information is located.
2. Print out copies of sample food labels from website if needed for Step-by-Step group activity.
3. Gather materials.
4. Prepare index cards for the Check for Understanding activity as listed above in Materials.

**Length of Lesson: 50 – 60 minutes**

## Anticipatory Set:

### 1. Introduction:

- Ask students where they've seen a food label on a package. *Possible answers: side of package, back of box or can.*
- Ask students if they have seen their parents look at packages to read the labels when they have been out shopping at the grocery store.
- Tell students that their families were being smart shoppers by using food labels as tools to help them make food choices.
- Tell students that when making decisions about foods, they should consider the nutrient content, along with good taste or cost.
- Tell students that they're going to learn about servings, calories, and the calcium in foods by using labels.

### 2. Vocabulary:

*Note: Vocabulary cards are available for download on your login page from [HealthyEating.org](http://HealthyEating.org).*

- Ask students to turn to Page 2 of their workbook to look at the glossary.
- Call on one student to read the definition aloud OR read the definition aloud yourself OR have the class read the definition aloud as a group.
- Repeat this process with the remaining vocabulary words and terms.

**Calcium**—main nutrient from the Dairy food group that builds strong bones and teeth.

**Calorie**—a measure of the amount of energy provided by a food.

**Grams**—a way of measuring weight. The nutrient content of foods is often shown in gram measures.

**Nutrition Facts food label**—a table printed on the outside of food packages that tells about the calorie and nutrient content of the food inside.

**Servings per container**—the number of the right-size servings contained in the package. Many times there is more than 1 serving per container.

**Serving size**—the right amount of a given food to eat at a meal or snack.

## Step-by-Step Procedures:

*Teacher Note: This symbol  represents a key concept that should be discussed as activities are being completed.*

1. Project the Anatomy of a Food Label document and ask students to look at it with you.
  -  Explain to students the parts of a Nutrition Facts food label, which contains information or facts about the food in the package or box.
    - Almost all food packages found in the grocery store have a Nutrition Facts food label.
    - It is usually on the back or side of the package and easy to find.
    - Most of the time, fresh foods, like meat, fruits and vegetables, do not have a Nutrition Facts food label.
    - Labels give you information that can help you decide what to choose as part of an overall healthy eating plan.
    - Review the parts of the sample label from the overhead document with students.
    - **Recommended:** Show an example of a label on a real box or package of food.
  - Activity:
    - Divide students into three to five groups, depending on the number of food labels collected.
    - Hand out at least five food labels to each group.
      - a. If there is not a sufficient number of actual food labels, **print off** the sample food-label document from the website and make one copy for each group.
    - Explain to students that they are going to be using the food labels to learn more about the information they provide.
    - Ask students to locate the following on the food label while pointing to the Anatomy of a Food Label document.
      - a. **Servings per container**—shows how many servings there are in the package or box. Tell students to organize their food labels from the lowest number of servings per container to the highest number of servings per container.
        1. Ask students to share who had the highest number of servings and who had the lowest number of servings.
      - b. **Serving size**—helps them see how much food is in a serving. Tell students to organize their food labels from the largest serving size to the smallest serving size. Discuss.
      - c. **Calories**—the calories are listed for 1 serving. Tell students to organize their food labels from the lowest amount of calories to the highest amount of calories. Discuss.

- d. Tell students that they are going to skip some of the facts on the Nutrition Facts food label. Ask students to locate the word **Calcium**. The amount of calcium on the label is measured in percent of the daily total, which needs to be 100 percent. Tell students to organize their food labels from the highest amount of calcium to the lowest amount of calcium. Discuss.
- e. Ask students to remind you of the health benefit of calcium.

*Answer: Strong bones and teeth.*

- Tell students that checking the labels on foods can alert them when a food is high in something like added sugar so they can make healthy decisions.

**TEACHER NOTE:** This is a natural place to break in the lesson should you decide to teach this lesson in two class sessions.

## Check for Understanding:

1. Project the Fill in the Blank ... Food Label document.
  - Explain to students that they are going to become experts in knowing the different parts of a food label.
  - Ask six students to come to the front of the class and pick one index card out of the bag.
  - Ask each student to look at their index card, read it out loud to the class and then write where that information would be found on the blank food label. If the student is unsure, encourage asking their classmates for help.
  - After all six students have completed their task, ask students what food group this food belongs to, what is the main nutrient and its health benefit.

*Answers: Protein food group; protein; strong muscles; 7 grams.*

- Ask students if this food is a good source of calcium and how they discovered their answer.

*Possible answers: No, it is not a good source of calcium because the label says 4%, because beans are not in the Dairy food group.*

- Ask students the following questions:

- What food would be a good source of calcium?

*Possible answers: milk, yogurt, cheese, string cheese, cottage cheese.*

- Why is calcium important for our bodies?

*Answer: Builds strong bones and teeth.*

### Lesson 4: Label and Nutrient Trackers

#### Fill in the Blank ... Food Label

#### Pinto beans, canned



Nutrition Facts		
3 servings per container		
Serving size	1/2 CUP	
Amount Per Serving		
Calories	110	
%Daily Value*		
Total Fat	0g	0%
Saturated Fat	0g	0%
Trans Fat	0g	
Cholesterol	0mg	0%
Sodium	410mg	18%
Total Carbohydrate	20g	7%
Dietary Fiber	5g	18%
Total Sugars	<1g	
Includes	0g	Added Sugars 0%
Protein	7 g	
Vitamin D	0mcg	0%
Calcium	60 mg	4%
Iron	1.6 mg	8%
Potassium	450mg	10%

\*The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

## Guided Practice:

Teacher Note: You can direct the students to resource Pages 34 – 35 of their workbook to help them complete the lesson.

## WORKBOOK INSTRUCTIONS:

- Tell the students to turn to Page 15 in their workbook.
  - Ask the students to find the words “Label and Nutrient Trackers.”
  - Review the directions with the students.
  - Ask students to complete this activity on their own.

## Assessment:

- Tell students to find the words “What I Learned” on Page 15.
- Review the directions with the students and have them complete the activity on their own.
- Once students complete the activity, have a few students share their answers and discuss.

## Family Homework:

- Tell students to turn to Page 17 in their workbook and carefully pull out the sheet that says “Family Homework.”
- Explain to students that tonight they are to complete the activity with an adult at home.
- Briefly review the components of the assignment with the students.
- Tell the students to have the adult sign their homework and return the signed sheet to class tomorrow.

### Label and Nutrient Trackers

**Directions:**

- Review each food label on Page 14.
- Circle the calcium on each label on Page 14.
- Answer the questions below.

- What is the serving size for raisins? 1/4 cup
- Which food contains 160 calories? potato chips
- Which food has 4 servings per container? low-fat milk
- Which food has the highest amount of calcium? low-fat milk  
How much calcium does it have? 30mg
- How many servings of broccoli would you have to eat to get the same amount of calcium as in one glass of milk? 1 glass of milk = 30%; 1 serving of broccoli = 3%; 30 ÷ 3 = 10 servings

### What I Learned

**Directions:**

Your parents may not understand why it is important to look at a food label.

- Below, explain what you would say to your parents about why it is important to look at a food label.
- Be sure to include examples from a food label to support your explanation. You can use a sample label from Page 14 or one that you brought in.

To get information that can help them decide what to choose as part of an overall healthy eating plan.

To find out the amount of nutrients in a food.

To compare foods and determine which one would be a better source of specific nutrients.

To determine the appropriate serving size of the food and how many servings per package or container.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

15 



Lesson 4: Label and Nutrient Trackers

Name: \_\_\_\_\_ Return by: \_\_\_\_\_



### Family Activity

**Directions:**

- Ask your child to circle each of the following on the Nutrition Facts food label.
  - Serving size
  - Number of servings per container
  - Calories per serving
  - Main nutrients, especially calcium
- Ask your child the following:
  - What food group does yogurt belong to? Dairy
  - What is the main nutrient of that food group? Calcium
  - What is the health benefit of that main nutrient? Strong bones and teeth
- Pick four items from your refrigerator and four items from your cupboard.
  - Organize foods from the highest amount of calcium to the lowest amount of calcium using the Nutrition Facts food labels.
  - In the boxes below, write the answers for the food with the highest and lowest amount of calcium on the Nutrition Facts foods labels.

Low-fat vanilla yogurt

Nutrition Facts	
1 serving per container	
Serving size	6 oz (170g)
Amount Per Serving	
Calories	140
% Daily Value*	
Total Fat 2g	3%
Saturated Fat 1.5g	3%
Trans Fat 0g	
Cholesterol 10mg	2%
Sodium 150mg	3%
Total Carbohydrate 24g	6%
Dietary Fiber 0g	0%
Total Sugar 23g	46%
Includes: 11g Added Sugars	22%
Protein 8g	16%
Calcium 291mg	29%
Iron 0%	0%
Potassium 370mg	8%

\*Percent Daily Values are based on a diet of other people's secrets.

Food with the highest percentage of calcium

Name of food \_\_\_\_\_

Food group \_\_\_\_\_

Serving size \_\_\_\_\_

Servings per container \_\_\_\_\_

Percent calcium \_\_\_\_\_

Food with the lowest percentage of calcium

Name of food \_\_\_\_\_

Food group \_\_\_\_\_

Serving size \_\_\_\_\_

Servings per container \_\_\_\_\_

Percent calcium \_\_\_\_\_

Think of foods you can eat every day that provide calcium. Write down foods at home or that you can buy at the store that are sources of calcium. Use this list and the labels on foods at home for ideas.

**Parents, add these to your shopping list!**

Fruit with yogurt dip

Crackers with cheese

Pudding

Fruit and yogurt smoothie

Bean and cheese burrito

Quesadilla with salsa

Fruit, cheese and whole-wheat crackers

Oatmeal made with milk

My own idea: \_\_\_\_\_

Student signature: \_\_\_\_\_ Parent signature: \_\_\_\_\_

17 

## Curriculum Connections

### ACTIVITY #1: BONE UP ON MILK QUIZ

- Have students log on to the website provided below to play an interactive game about milk. This interactive tool will test their knowledge about Dairy while reinforcing the importance of including Dairy in their diet.
- [HealthyEating.org/Tools/](https://www.healthyeating.org/tools/)
- **Optional**—After the students take the Milk quiz, have the students get into groups, choose another food group and make up their own quiz!
  - Once the quizzes are complete, they can test each other on their knowledge of the benefits of all five food groups.

### ACTIVITY #2: CHARACTER CHALLENGE

- Tell the students that they are each going to create (draw) a character to represent a specific food.
- Tell each student to choose one food.
- Each student will create a character to represent their chosen food.
- Each character should also represent the health benefit of their chosen food. They could even give their character a “superpower.”

*Example: Draw a milk carton pulling a tractor with its teeth.*



**Overview of Lesson:**

- In this lesson, students will learn to plan a balanced dinner with a **variety** of foods from each food group.
- They will analyze pre-set meal choices and modify to balance as necessary.
- They will learn that snacks provide an important opportunity to round out their recommended servings from the five food groups.
- “Extra” foods, which provide minimal nutrients while often being high in calories, will be reviewed.

**Student Objectives:**

Upon completion of this lesson, the student will be able to:

1. Select a balanced dinner using the “5 out of 5” model.
2. Explain why a balanced dinner is important.
3. Differentiate between nutritious snacks and those that provide no nutrients.
4. Explain why nutritious snacks should be part of daily food choices.
5. Identify the recommended amount of moderate-vigorous level physical activity they need each day.
6. Classify a variety of activities as low level or moderate-vigorous level.

 *Highlights a student objectives concept.*

**Level of Cognition:**

Objective 1: Synthesis

Objective 2: Comprehension

Objective 3: Comprehension

Objective 4: Comprehension

Objective 5: Knowledge

Objective 6: Comprehension

**Nutrition Facts:**

- A dinner is considered balanced if it contains at least one food from each of the five food groups:
  - Dairy
  - Vegetables
  - Fruits
  - Grains
  - Protein
- Balancing in this way will ensure that students are consuming nutrient-rich food choices, which contain the range of main nutrients that they need for normal growth and development.

- The principle of **variety** is underscored in this lesson. Not only is it important to eat foods from all five food groups each day, but it is desirable to eat a **variety** of foods within each food group. Beyond the main nutrients, foods in each group contribute a wide range of other important and necessary nutrients. Their intake is best ensured when children consume a broad range of foods. Varied choices may also represent their family traditions.
- Snacks are important to students’ overall nutrient intake each day. Many students fill up at mealtimes and can’t get all of the main nutrients they need through their meals alone. Choices for snacks, or these “mini-meals,” should come mainly from food-group foods. “Extra” foods that may provide a large number of calories without many nutrients should be eaten only occasionally.
- There are some popular snack foods that are often **misclassified** as “extras” or assigned to an incorrect food group. For clarification, refer to Page 6 of the teacher guide.
- Mixed foods contain more than one food group.
  - For example, a cheese omelet with mushrooms and tomatoes represents three food groups: cheese from the Dairy group; eggs from the Protein group; mushrooms and tomatoes from the Vegetables group.

**Materials:** Student workbooks

Pencils

Master color documents and additional resources available on your login page at [HealthyEating.org](http://HealthyEating.org).

**Preparation:**

1. Review the food groupings. This is key information you will need to successfully implement the lesson.
2. Gather materials.

**Length of Lesson: 50 – 60 minutes**

## Anticipatory Set:

### 1. Introduction:

- Ask students to think about dinners they have at home, at a friend's house or at a restaurant.
  - Ask a few students to name some of their favorite foods they eat at dinner.  
*Possible answers: spaghetti and meatballs, beef stir-fry, burritos, baked chicken, pork chops.*
- Tell students that some of those choices have included mixed foods.
  - They have learned that mixed foods have foods from more than one food group.
- **Explain** to students that they're going to learn how to build a balanced dinner using a variety of foods from every food group.
- Tell students that another time when they need to make nutritious food choices is snack time. Ask a few students to share one of their favorite snacks.
  - Ask students if the food shared is a food-group food. (If yes, which group) or an “extra” food.
  - **Explain** to students that it is best to choose snacks that are food-group foods. In this lesson they'll talk about some healthier snack choices.

### 2. Vocabulary:

*Note: Vocabulary cards are available for download on our login page at [HealthyEating.org](http://HealthyEating.org).*

- Ask students to turn to Page 2 of their workbook to look at the glossary.
- Call on one student to read the definition aloud OR read the definition aloud yourself OR have the class read the definition aloud as a group.
- Repeat this process with the remaining vocabulary words and terms.

**Balanced**—to eat foods from different food groups.

**“extra” foods**—foods that do not contain enough nutrients to fit into one of the five food groups.

**Main nutrient**—the most important nutrient we get from a certain food group.

**Snack**—a mini-meal; food eaten between meals.

**Variety**—a range of different items from a specific group. For food groups, it implies eating several different foods each day from all five food groups.

**“5 out of 5” model**—a balanced lunch or dinner that contains at least one food from each of the “5 out of 5” food groups: Dairy; Vegetables; Fruits; Grains; Protein.

## Step-by-Step Procedures:

*Teacher Note: This symbol  represents a key concept that should be discussed as activities are being completed.*

1. **Explain** to students that it is important to eat balanced meals, like dinner, every day to get the nutrients and energy they need to learn in school and be physically active. It is also important to eat healthy snacks during the day to get the recommended number of servings from all the food groups.
  - Having balanced meals means eating a variety of foods from the food groups.
  - Eating foods from the food groups helps them get all the nutrients they need to be healthy.
  - Eating a **variety** of foods, or different foods from each of the food groups, also helps us to get the nutrients we need each day.
  - Ask students what might happen to their bodies if they didn't eat foods from the Dairy food group every day and what main nutrient they would be missing.  
*Possible answers: break bones, cavities in teeth, might not grow as tall as we should; calcium.*
  - Ask students how they would feel if they didn't eat foods from the Vegetables food group every day and what main nutrient they would be missing.  
*Possible answers: hard to see; dull skin, not glowing; vitamin A.*
  - Ask students what might happen to their bodies if they didn't eat foods from the Fruits food group every day and what main nutrient they would be missing.  
*Possible answers: cuts might hurt longer, scratches would not heal; vitamin C.*
  - Ask students how they would feel if they didn't eat foods from the Grains food group every day and what main nutrient they would be missing.  
*Possible answers: tired, no energy, hard time thinking and playing; B-vitamins.*
  - Ask students how they would feel if they didn't eat foods from the Protein food group every day and what main nutrient they would be missing.  
*Possible answers: weak, not strong, small muscles; protein.*
- Tell students that it takes a combination and variety of all these foods and nutrients every day to keep us strong and healthy.
- To help students remember the main nutrients, **review** the following. You can project the graphic from the Dairy Council of California website.
  - Cows Are Cooking Blueberry Pancakes
    1. C—Calcium (Dairy)
    2. A—Vitamin A (Vegetables)
    3. C—Vitamin C (Fruits)
    4. B—B-vitamins (Grains)
    5. P—Protein (Protein)

2. Explain to students that a “5 out of 5” model helps them to eat healthy, balanced meals, especially lunch and dinner.
3. Explain to students that snacks are an important part of the food they eat each day.

*Teacher Note:* You can direct the students to resource Pages 34 – 35 in their workbook to help them with the following activity.

- Explain to students that in this lesson they are going to be building a balanced dinner meal.
  - Explain to students that it is important to eat a balanced dinner so that they eat from all five food groups that have all the main nutrients and calories, or energy, needed—especially for learning and being physically active.
  - Write the following sample dinners on the board or refer to the document on the website:
    1. Bean and cheese burrito with a glass of apple juice.
    2. Vegetable and chicken stir-fry with a fruit salad.
    3. Hamburger on a bun with lettuce and tomatoes, yogurt and applesauce.
    4. Pasta with tomato sauce and meatballs.
    - Explain to students that they are going to be a Dinner Detective. Some of these dinners are balanced and will give them the calories, or energy, and nutrients they need to play and be physically active. **Remind** students that they need to be physically active for at least 60 minutes every day.
    - Some of the dinners listed on the board are balanced because they contain “5 out of 5” food groups; however, some of the dinners are not balanced because they do not contain “5 out of 5” food groups.
    - Ask students to turn to a partner and discuss whether the dinners listed on the board are balanced or not balanced.
    - Call on one student at a time to come up to the board to either put a circle around a balanced dinner that represents the “5 out of 5” model OR place an X through a dinner that is not balanced. Explain to their classmates the reason for their decision. As a class discuss the answer if needed.
4. Explain to students that sometimes they eat foods that do not belong to one of the food groups for snacks.
- These foods are “extras” like cookies, chips, soft drinks and candy.
  - These foods do not have many nutrients and may be high in fats or sugars.
  - Explain to students that if they sometimes eat foods for snacks that are “extra” foods they should try to trade those for snacks from the food groups.
  - Explain to students that they should eat “extras” as snacks only once in awhile.

**TEACHER NOTE:** This is a natural place to break in the lesson should you decide to teach this lesson in two class sessions.

**Correct answers:**

*Balanced dinner representing the “5 out of 5” model:*

- a. Hamburger on a bun with lettuce and tomatoes, yogurt and applesauce.

*Not a balanced dinner representing the “5 out of 5” model:*

- a. Bean and cheese burrito with a glass of apple juice; missing Vegetables food-group food.
- b. Vegetable and chicken stir fry with a fruit salad; missing Grains and Dairy food-group foods.
- c. Pasta with tomato sauce and meat balls; missing Fruits and Dairy food-group foods.

## Check for Understanding:

1. Project the Dinner and Snack Menu document and ask students to look at it with you.
2. Explain to students that they are going to be Dinner Detectives and Smart Snackers. They are going to build a healthy, balanced dinner and select snacks from the food groups to give them the fuel they need to learn and be physically active.
3. Call on one student or group of students at a time to tell you what they would like to put on the menu for the one of the categories (Main Dish, Side Dish, Beverage or Dessert). Let them decide which food group their food goes into and write the name of the food and food group in the appropriate place on the menu.
4. Ask students to look at and analyze the menu items and food groups. Ask students to answer the following questions:
  - Are all five food groups listed?
  - Are any food groups missing? If yes, what food could they add to a category on the menu to make this a balanced dinner?
  - Why it is important that they eat balanced dinners?

*Possible answers: Because a balanced dinner gives you foods from all five food groups; because a balanced dinner gives you all the main nutrients you need; because a balanced dinner helps to give you the energy you need to learn, be physically active, grow strong and be healthy.*

- What would they like to put on the snack menu that belongs to a food group, and what is the name of the food group in which their snack belongs?
- Why it is important to select snacks from the food groups most of the time?

*Possible answers: Because snacks from the food groups help to give you the energy and nutrients you need to be healthy and physically active; because snacks from the food groups have less fat and sugar than those snacks that are "extra" foods.*

5. Ask students to do the following:
  - Stand up (but not say anything) if they know how many minutes they should be physically active each day but not to say anything. On the count of three, ask students to say how many minutes.

*Answer: 60 minutes every day of moderate-vigorous physical activity.*

- Sit down if they can name at least one physical activity that is moderate-vigorous level. Call on a few students to share their answers, making sure the physical activity they name is indeed moderate-vigorous level.

*Possible answers: jumping rope, jogging, running, playing soccer, playing basketball.*

## Guided Practice:

*Teacher Note: You can direct the students to resource Pages 34 – 35 of their workbook to help them complete the lesson.*

## WORKBOOK INSTRUCTIONS / ASSESSMENT:

1. Tell the students to turn to Page 19 in their workbook.
  - Ask the students to find the words "What's on the Menu?"
  - Review the directions with the students.
  - Ask students to complete this activity on their own.

Lesson 5
Dinner Detectives and Smart Snackers

**What's on the Menu?**  
You have just bought a restaurant and you want to create something special for your new grand opening.

**Directions:**

1. On the lines below, create a new dinner special for your menu. Be sure to list all of the foods and beverages required to complete this special meal.
2. Tally the foods you have represented in your meal. Fill in a bubble for each serving.
3. Determine what is missing to make the meal balanced.

1. Create a new dinner special:

**Example:** \_\_\_\_\_ Glass of low-fat milk

Spaghetti with meat sauce \_\_\_\_\_

Side salad \_\_\_\_\_

Small bowl of mixed fruit \_\_\_\_\_

2. Tally the foods you have represented in your dinner:

Dairy	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vegetables	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fruits	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grains	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Protein	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
"extras"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. If your dinner is balanced, with all "5 out of 5" food groups represented, great job! Write the word "**balanced**" on the lines below.

If your dinner is not balanced, what food(s) could you add to make it a "5 out of 5" balanced meal? Name the food group, main nutrient(s) and health benefit(s) of the food(s) you added.

Need to add:	Food Group:	Main Nutrient and Health Benefit:
<u>Answers will vary</u>	_____	_____
_____	_____	_____
_____	_____	_____

19

2. Tell students to find the words “What I Learned” on Page 20 in their workbook.

- Review the directions with the students and have them complete the activity on their own.

Once students complete the activity, have a few students share their answers and discuss.

3. Ask the students to find the words “Super Snacks.”

- Review the directions with the students.
- Ask the students to complete this activity on their own.

## Family Homework:

- Tell students to turn to Page 21 in their workbook and carefully pull out the sheet that says “Family Homework.”
- Explain to students that tonight they are to complete the activity with an adult at home.
- Briefly review the components of the assignment with the students.
- Tell the students to have the adult sign their homework and return the signed sheet to class tomorrow.

### What I Learned

You always give information on your restaurant’s menu so that your guests have all of the facts they need in order to make healthy choices.

#### Directions:

1. Explain to your guests why your new dinner special on Page 19 should be a part of your guests’ choice. Be sure to include why it is important to eat a balanced dinner.

To help them eat a balanced meal. \_\_\_\_\_

To make sure they get all of the main nutrients their body needs. \_\_\_\_\_

To help their bodies grow strong and be healthy. \_\_\_\_\_

\_\_\_\_\_

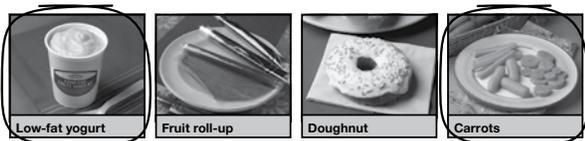
\_\_\_\_\_

\_\_\_\_\_

### Super Snacks

#### Directions:

1. Look at the snack choices below.
2. Circle all the snacks that are healthy.



1. Why are the snack(s) you circled a healthy choice?

They are healthy choices because they are food-group foods and will provide you with the main nutrients you need.

\_\_\_\_\_

\_\_\_\_\_

2. Which snack(s) in the pictures above are not food-group food(s)? What could you trade for a healthier choice?

Food: fruit roll-up Trade: Example: apple

Food: doughnut Trade: Example: crackers

### Lesson 5: Dinner Detectives and Smart Snackers

Name: \_\_\_\_\_ Return by: \_\_\_\_\_



### Student Activity

#### Directions:

1. Write down the foods and beverages you ate for dinner tonight on the Food and Beverage Record below.

DINNER FOOD AND BEVERAGE CHOICES	Dairy	Vegetables	Fruits	Grains	Protein	*extras
	Milk, Yogurt, Cheese			Breads, Cereals, Pasta	Meat, Beans, Nuts	
Food Name	Serving	Serving	Serving	Serving	Serving	Serving
DINNER						
BEVERAGE						
YOUR TOTAL SERVINGS						

For each glass of water consumed, check a box:

### Family Activity

#### Directions:

1. With your child, review the foods he or she ate for dinner.
2. Student—Interview the adult, asking him or her the following questions and recording his or her answers:
  - a. Did you like the dinner? \_\_\_ Why or why not? \_\_\_\_\_
  - b. Would you change anything in this meal? \_\_\_ If yes, what? \_\_\_\_\_
  - c. With your child, try to determine if this was a balanced meal. Ask your child what makes a balanced dinner using the “5 out of 5” model. If it was not a balanced dinner, what needs to be added to it to make it balanced? \_\_\_\_\_
  - d. Did you help prepare the meals when you were a child? \_\_\_\_\_
  - e. What was your favorite meal as a child? Describe the meal and foods. \_\_\_\_\_

### Our Family Plan

The first and most important place where healthful food attitudes and habits are learned is in the home. Children learn best by doing—so let’s get them more involved! Set up a goal that your family would like to work on.

1. Fill in the blanks below.

\_\_\_\_\_ and \_\_\_\_\_ will make the following healthy choices this week.

2. Select the healthy choices you will work on for your goal:

- Cook together
- Drink fewer soft drinks and more milk and water
- Be more physically active
- Have all five food groups at dinner
- Plan meals together
- Choose food-group foods for snacks
- Other: \_\_\_\_\_

Student signature: \_\_\_\_\_ Parent signature: \_\_\_\_\_

## Curriculum Connections

### ACTIVITY #1: SNACK SHACK

- Tell the students to log on to the website below to practice choosing healthy snacks. This interactive tool will give the students an opportunity to practice choosing snacks from food-group foods.
- [HealthyEating.org/Interactives/](http://HealthyEating.org/Interactives/)

### ACTIVITY #2: WHERE DO THEY COME FROM?

*Materials needed: Maps of the world (one per group), markers*

- Divide the class into groups of two to three students.
- Assign each group five foods, one from each food group.
- Each group will need to research the assigned foods to answer the following questions:
  - Where did they come from?
  - Who is currently the main producer?
  - Where do they consume the food the most?
- Groups will color code and mark on the map the answer to the questions above for each of their assigned foods.
- Have the groups present their findings to the class.

## Overview of Lesson:

- In this lesson students will learn the importance of eating a balanced breakfast every morning.
- They will be introduced to the consequences of skipping breakfast—in terms of how they feel, how they perform in school, and whether they have sufficient energy for daily physical activity.
- The students will review or learn how to choose a balanced breakfast using what is termed the “3 out of 5” model.

*Teacher Note: Students will also be completing a one-day food and physical-activity record, to be assigned during this lesson.*

## Student Objectives:

Upon completion of this lesson, the student will be able to:

1. Explain the importance of eating a balanced breakfast every day.
2. Select a balanced breakfast using the “3 out of 5” model.
3. Analyze a daily physical-activity record and substitute moderate-vigorous for low levels of physical activity as needed to meet daily requirements.

✔ Highlights a student objectives concept.

## Level of Cognition:

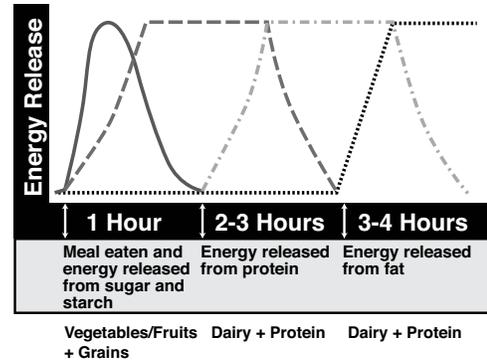
Objective 1: Comprehension

Objective 2: Knowledge

Objective 3: Analysis

## Nutrition Facts:

- Encouraging students to eat breakfast (whether at home or at school) is one of the most important things we can do to improve their health and their ability to achieve. Classroom attention, attendance and achievement improve with breakfast.
- A breakfast is considered balanced if it contains “3 out of 5” of the following food groupings:
  - Grains (complex carbohydrates that are used by the body more slowly)
  - Vegetables OR Fruits (simpler carbohydrates that supply quick energy)
  - Dairy OR Protein (protein and fat for sustained energy release and to promote satiety)
- A breakfast comprised of these food groups will have the macronutrients—protein, fat and carbohydrates—to provide for sustained energy release throughout the morning. A breakfast meeting these criteria will ensure that students are consuming a variety of nutrient-rich food choices. A **balanced breakfast is not a random selection of any three food groups. It is important to select from these specific groupings.**



- Hunger is not a socioeconomic issue. Any student who skips or has no access to breakfast can suffer learning and health deficits. Families do not eat together as often for breakfast as they do for other meals, and children are often left to eat alone. School breakfast is the best option to provide students a balanced meal every school morning.
- The consequences of skipping breakfast or of having a breakfast that is not balanced can include:
  - Feeling hungry.
  - Lacking energy to participate in physical activities.
  - Inability to concentrate, sleepiness, fatigue.
  - Stomachache, headache.
  - Restlessness, fidgets, unacceptable behaviors.
- Physical activity and nutrient-rich food choices work together for good health.
  - Daily physical activity makes people feel more energetic and increases fitness levels.
  - It can improve attentiveness and ability to concentrate.
  - It keeps hearts strong and builds strong muscles and bones.
  - It also helps children and adults maintain a healthy weight.

**Materials:** Student workbooks  
Pencils  
Index cards (1 for each student)  
Small paper bags (4)  
Master color documents and additional resources available on your login page at [HealthyEating.org](http://HealthyEating.org).

## Preparation:

1. Review the “3 out of 5” model, as well as the Main Nutrients and Their Health Benefits chart. This is key information you will need to successfully implement the lesson.
2. Gather materials.
3. Label bags: Group #1—Grains; Group #2—Vegetables and Fruits; Group #3—Dairy and Protein; Group #4—Physical Activity.

**Length of Lesson: 50 – 60 minutes**

## Anticipatory Set:

### 1. Introduction:

- Ask all students who ate a food from the Grains food group at breakfast this morning to stand up.
  - Ask one or two students to share what food they had.
  - Tell students to sit down.
- Repeat the process for the Vegetables or Fruits food group.
- Repeat the process for the Dairy group OR Protein group.
- Ask students to stand if they ate a food from all three food groupings for breakfast.
  - Have one student share what he or she ate.
  - Congratulate the student if he or she had a balanced breakfast. That should fuel the students through the entire morning!
    - If student did not have “3 out of 5” breakfast choices, ask what they could add or trade to make it so.
  - Tell the students that in this lesson they will be learning how to choose a balanced breakfast that has the variety of nutrients he or she needs.
- Ask all students who participated in some kind of physical activity the previous afternoon or this morning to stand up.
  - Ask one or two students to share what activity they did.
  - Tell students to sit down.
- Ask all students who ate a “3 out of 5” breakfast AND participated in a physical activity to stand up.
  - Tell the students that this is what the class is striving for—healthy, balanced meals with a variety of foods from the five food groups AND moderate-vigorous physical activity every day. This is our goal and today’s lesson will help us achieve that goal!

### 2. Vocabulary:

*Note: Vocabulary cards are available for download on your login page at [HealthyEating.org](http://HealthyEating.org).*

- Ask students to turn to Page 2 of their workbook to look at the glossary.
- Call on one student to read the definition aloud OR read the definition aloud yourself OR have the class read the definition aloud as a group.
- Repeat this process with the remaining vocabulary words and terms.

**Breakfast**—the first meal of the day, often after many hours without food.

**Nutrient**—what we get from food to help our bodies grow strong, develop and stay healthy.

**Variety**—a range of different items from a specific group. For food groups, it implies eating several different foods each day from all five food groups.

“3 out of 5” model—a balanced breakfast contains at least one food from each of the “3 out of 5” food groups: Grains; Vegetables OR Fruits; Dairy OR Protein.

## Step-by-Step Procedures:

*Teacher Note: This symbol  represents a key concept that should be discussed as activities are being completed.*

1. Explain to students that it is important to eat a balanced breakfast every day to get the nutrients and energy they need to learn in school and be physically active.
  - Just as a car takes fuel to run, bodies need fuel from the foods to move around.
  - After a good night of sleep, bodies need to be refueled, and a balanced breakfast is the perfect way to accomplish that.
  - Ask students how they think their bodies would feel if they didn’t eat breakfast. Call on a few students to share their answers.

*Possible answers: tired, hungry, frustrated, headachy.*
  - Ask students to demonstrate, while sitting at their desks, what this would look like.
  - Ask students to share some examples of what they might not be able to do during the day if they don’t eat breakfast.

*Possible answers: learn well, play at recess because they are too tired and don’t have any energy, listen to the teacher, be happy.*
  - Ask students how their bodies feel when they eat a healthy, balanced breakfast. Call on a few students to share their answers.

*Possible answers: energetic, ready to learn, happy, awake.*
  - Ask students to stand up next to their desks and demonstrate what this would look like.

2. Explain to students that a “3 out of 5” model helps them to eat a healthy, balanced breakfast. Write the groupings on the board. The groupings are as follows:
  - Group #1—Grains
  - Group #2—Vegetables OR Fruits
  - Group #3—Dairy OR Protein
    - Tell the class that they are going to learn a new cheer.
    - Ask the girls (or half of the class) to stand up and repeat these words after you—“Fuel me up with three ...”  
Ask them to sit down.
    - Ask the boys (or the other half of the class) to stand up and repeat these words after you—“out of five for breakfast!” Ask them to sit down.
    - As a class, say the cheer together two or three times, making sure that each group stands up during their section of the cheer and then sits down.
    - Review the three groupings of foods written on the board.

3. Write the following sample breakfasts on the board or refer to the document on the website:

1. Scrambled eggs and rice.
2. Slice of cheese pizza with a glass of orange juice.
3. Doughnut with a soda and apple.
4. Whole-grain cereal with milk and strawberries.
5. Celery with peanut butter and a yogurt.
6. Pancakes with syrup and a glass of milk.

*Teacher Note: A variety of foods can be eaten for breakfast, including rice, sandwiches, pizza and leftovers. It is acceptable for students to eat non-traditional foods for breakfast.*

- Tell students that it is important to eat a variety, or different foods from each of the food groups, so that they can experience many different flavors and get all the nutrients they need each day.
- Explain to students that some of these breakfasts are balanced and will give them the energy they need to play and be physically active until lunchtime.
- Some of the breakfasts listed on the board are balanced because they contain “3 out of 5” food groups; however, some of the breakfasts are not balanced because they do not contain choices from each of the specific “3 out of 5” food groupings.
  - a. Group #1—Grains
  - b. Group #2—Vegetables OR Fruits
  - c. Group #3—Dairy OR Protein
- Call on one student at a time to come up to the board to either put a circle around a balanced breakfast that represents the “3 out of 5” model OR place a line through a breakfast that is not balanced. Explain to their classmates the reason for their decision. As a class discuss the answer if needed.

*Correct answers:*

*Balanced breakfast representing the “3 out of 5” model:*

- a. Slice of cheese pizza with a glass of orange juice.
- b. Whole-grain cereal with milk and strawberries.

*Not a balanced breakfast representing the “3 out of 5” model:*

- a. Scrambled eggs and rice; missing a Vegetable or Fruit food-group food.
- b. Doughnut with a soda and apple; missing a Grains food-group food and missing Dairy or Protein food-group food.
- c. Celery with peanut butter and a yogurt; missing Grains food-group food.
- d. Pancakes with syrup and a glass of milk; missing Vegetables or Fruits food-group food.

**TEACHER NOTE:** This is a natural place to break in the lesson should you decide to teach this lesson in two class sessions.

## Check for Understanding:

1. Explain to students that they are going to be expert builders today. They are going to build a healthy, balanced breakfast to give them the fuel they need to start off the day.
2. Hand out one index card to each student.
3. Assign the class, by quarters, into each of the following groups:
  - Group #1—Grains Experts
  - Group #2—Vegetables OR Fruits Experts
  - Group #3—Dairy OR Protein Experts
  - Group #4—Physical Activity Experts
4. Tell students that they are experts in their assigned food group.
  - For Groups 1, 2 and 3, tell students to write their favorite breakfast food from their assigned food group on their index card.
    - For Group #2 and Group #3, explain to students that they need to pick their favorite breakfast food for only one of the food groups (Vegetables OR Fruits; Dairy OR Protein).
  - Group #4—Tell half of the students to write their favorite moderate-vigorous physical activity on their index card and the other half to write their favorite low level physical activity on their index card.
5. Place the four labeled lunch bags at the front of the classroom.
6. When all students have completed writing on their index cards, ask them to place their card in the bag for their assigned group.
7. Call on one student to come to the front of the class and select one index card out of each of the four bags, or pull the index cards yourself to build a complete breakfast that gives the necessary fuel to be physically active every day.
8. Discuss as a class to reinforce that they have selected a balanced breakfast that represents the “3 out of 5” model and that having a balanced breakfast like this every day will give them the energy and fuel their bodies need to be physically active.
9. Share the name of the physical activity on the card and ask students if this is a low level or moderate-vigorous level physical activity.
10. Check in with students by asking them to remind you how many minutes they need to be physically active every day.

*Answer: 60 minutes every day of moderate-vigorous level physical activity.*

## Guided Practice:

Teacher Note: You can direct the students to resource Pages 34 – 35 of their workbook to help them complete the lesson.

## WORKBOOK INSTRUCTIONS:

- Tell the students to turn to Page 23 in their workbook.
  - Ask the students to find the words “Is It Balanced?”
  - Review the directions with the students.
  - Ask students to complete this activity on their own.
- Ask the students to find the words “Physical Activity.”
  - Review the directions with the students.
  - Ask the students to complete this activity on their own.

## Assessment:

- Tell students to find the words “What I Learned” on Page 24 of their workbook.
- Review the directions with the students and have them complete the activity on their own.
- Once students complete the activity, have a few students share their answers and discuss.

### Lesson 6 Fuel Up With Breakfast!

**Is It Balanced?**

**Directions:**

- Review the three breakfast options below.
- Circle the breakfast that is the best choice, using the “3 out of 5” model as a guide.
- Answer the question below the pictures. You will need to refer back to the pictures for help.

**Picture #1**



Slice of whole-wheat bread, peanut butter, melon, low-fat yogurt

**Picture #2**



Omelet (eggs, vegetables, cheese), apple juice

**Picture #3**



Oatmeal with nuts, water

1. Write two sentences describing why the breakfast you picked was the best choice.

It is the only choice that contains foods from the “3 out of 5” model.

---

**Physical Activity**

**Directions:**

- Look at the chart below and add up the number of minutes of moderate-vigorous level physical activity each student did in one day.
- Decide if the recommended amount of physical activity was met. (circle one) **Yes No**
- If the student did NOT meet the recommended number of minutes for the day, fill in an example of a moderate-vigorous level physical activity that he or she could do.

STUDENT ACTIVITIES	Total minutes of Moderate-Vigorous Level Physical Activity for the day for each student	Did each student meet the recommended amount of Moderate-Vigorous Level Physical Activity for the day?	If not, what Moderate-Vigorous Level Physical Activity could each student add?
<b>Example:</b> <b>Frank:</b> • 30 minutes playing video games • 15 minutes skateboarding • 30 minutes playing football	45	Yes <input checked="" type="radio"/> No	Eg. Play basketball
<b>Kelly:</b> • 45 minutes playing soccer • 15 minutes watching TV • 15 minutes walking home from school • 30 minutes playing tag with her brother		<input checked="" type="radio"/> Yes No	
<b>Mary:</b> • 45 minutes shopping • 15 minutes playing cards • 15 minutes running to catch up with her mother		Yes <input checked="" type="radio"/> No	Eg. Play soccer
<b>David:</b> • 15 minutes rollerblading • 30 minutes dancing • 30 minutes playing tennis		<input checked="" type="radio"/> Yes No	

**What I Learned**

**Directions:**

- Read the letter below that Abby wrote to you.
- On the lines underneath the letter, give Abby advice on her problem.

Hi,

I am 9 years old, and lately I have been really tired. I can't seem to concentrate when I am in school. I get up every morning at 7:30 a.m., take a shower and brush my hair and teeth. I race off to school, which starts at 8 a.m. I am never late! Once I'm in class, I get distracted easily, and I can't seem to pay attention to what my teacher is saying. By recess, I am so tired, all I do is watch my best friends play soccer.

After school, I have to walk my sister home. When we get home, we watch TV and play games on the computer until my parents get home and make us dinner. Because we are so busy watching TV and playing on the computer, we don't really have time to be physically active.

I am tired and feeling so sluggish and uninterested. Help! How can I pay more attention in class and not feel so tired all of the time?

Sincerely,  
Abby

**Dear Abby,**

Abby is tired and distracted because she doesn't eat breakfast.

Abby could get up earlier to make sure she has time to eat a healthy breakfast, foods from the “3 out of 5” model.

Abby should trade watching TV or playing computer games for moderate-vigorous physical activity.

Abby should eat a food-group food snack after school to give her the energy she needs to be physically active.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

*Best of luck!*

## Daily Records:

- Tell students to fill out their Daily Food and Beverage Record on Page 29 with what they have consumed so far for the day. Fill out the Daily Physical-Activity Record at the bottom of the page.
- Let the students know that they will need to remember what they eat and the physical activity they do for the rest of the day to completely fill out their record for tomorrow's lesson.

## Family Homework:

- Tell students to turn to Page 25 in their workbook and carefully pull out the sheet that says "Family Homework."
- Explain to students that tonight they are to complete the activity with an adult at home.
- Briefly review the components of the assignment with the students.
- Tell the students to have the adult sign their homework and return the signed sheet to class tomorrow.

### Directions:

- You may turn to resource Pages 34 – 35 to help you complete the record.
- Be sure to count each food-group food represented in all mixed foods.  
Examples: Bean and cheese burrito, cereal with milk.

### Daily Food and Beverage Record

	Food Name	Dairy Milk, Yogurt, Cheese	Vegetables	Fruits	Grains Breads, Cereals, Pasta	Protein Meat, Beans, Nuts	"extras"
	Serving	Serving	Serving	Serving	Serving	Serving	Serving
BREAKFAST	Records will vary						
	BEVERAGE						
LUNCH							
	BEVERAGE						
SNACK(S)							
	BEVERAGE						
DINNER							
	BEVERAGE						
Total Daily Servings							
Daily Recommended Number of Servings		3	3	2	6	2	

For each glass of water consumed, check a box:

### Daily Physical-Activity Record

Low Level Physical Activity	Minutes	Moderate-Vigorous Level Physical Activity	Minutes
Records will vary			
Total Low Level Physical-Activity Minutes		Total Moderate-Vigorous Physical-Activity Minutes	
Recommended Number of Minutes		60	

29



### Lesson 6: Fuel Up With Breakfast!

Name: \_\_\_\_\_ Return by: \_\_\_\_\_



### Student Activity

1. Sometimes you or someone in your family may not eat breakfast. What might make it hard to eat breakfast every day?

2. Check the reasons why eating breakfast is important:

- Helps you learn better  Helps keep your body at a healthy weight  
 Helps you be less absent and tardy  Improves your scores on tests  
 Helps you be less tired, sleepy or cranky \*answer at bottom of page

### Family Activity

1. A balanced breakfast has foods from "3 out of 5" of the food-group groupings to give you energy all morning. Pick three foods, including at least one from each of the following food groups:

- Grains \_\_\_\_\_
- Vegetables OR Fruits \_\_\_\_\_
- Dairy OR Protein \_\_\_\_\_

2. List three ideas for ways you and your family members can make time to have breakfast every day:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

### HELPFUL HINTS FOR BUSY PARENTS

- Make breakfast the last thing you do in the morning.** Children are ready to eat once they are fully awake.
- Join your child for breakfast.** Children learn best by your example of positive behavior.
- Mix up breakfast.** Dinner fare can become breakfast food. How about leftover pizza or pasta for breakfast?
- Keep breakfast simple.** Try quick "go-together" foods like cereal and milk, toast with peanut butter, a hard-cooked egg and bagel.

Students, circle foods you would like to have at home for breakfast.

Try something different, fun and easy for your family:

- |                        |                                   |                                     |
|------------------------|-----------------------------------|-------------------------------------|
| Fruit, fresh or canned | Fruit smoothie                    | Toaster waffle with fruit or yogurt |
| String cheese          | Oatmeal with applesauce           | Cereal with milk and fruit          |
| Hard-cooked eggs       | Peanut butter and banana sandwich | Quesadilla                          |
| Yogurt                 |                                   |                                     |

Other: \_\_\_\_\_

Remember to check [HealthyEating.org/Recipes](http://HealthyEating.org/Recipes) for tips, recipes and snack ideas.

Student signature: \_\_\_\_\_ Parent signature: \_\_\_\_\_

25

All five answers are correct.

## Curriculum Connections

### ACTIVITY #1: EXPERT MEAL MAKERS

- Tell the students to log on to the website below to practice choosing healthy meals: breakfast, lunch and dinner. This interactive tool will give the students an opportunity to practice the “3 out of 5” and the “5 out of 5” models they have been learning about in Lessons 5 and 6.
- [HealthyEating.org/Interactives/](http://HealthyEating.org/Interactives/)

### ACTIVITY #2: BREAKFAST CONTEST

*Materials needed: Cafeteria menus for the month (one per student), paper (one per student), and pencils*

- Give each student a monthly cafeteria menu
- Randomly choose two breakfasts. As a class, review the chosen breakfasts to see if they comply with the “3 out of 5” model learned in Lesson 6.
- In groups, or individually, have the students create a “3 out of 5” breakfast that they would like to eat in the cafeteria.
- If the School Foodservice department agrees, hold a contest and feature the winning breakfast one morning!
- Take a field trip to the cafeteria to taste test the winning creation before it debuts.

**Overview of Lesson:**

- In this lesson, students will be reviewing and analyzing a completed Daily Food and Beverage Record and Daily Physical-Activity Record.
- They will determine if they have met the recommended number of daily servings for the five food groups as well as the recommended amount of daily physical activity. They will suggest adjustments to their records if they failed to meet the recommendations.
- Finally, the number of “extra” foods eaten will be tracked; tradeoffs for more nutrient-rich foods will be encouraged if the number of “extra” foods eaten was high.

**Student Objectives:**

Upon completion of this lesson, the student will be able to:

1. Analyze daily food and physical-activity choices.
2. Compare foods and/or activities to recommendations; recommend additions or substitutions that would allow them to meet the daily requirements.
3. Explain **variety** and why it is important to eat a wide **variety** of foods each day.

 *Highlights a student objectives concept.*

**Level of Cognition:**

Objective 1: Analysis

Objective 2: Analysis

Objective 3: Comprehension

**Nutrition Facts:**

- Balancing in this way will ensure that students are consuming nutrient-rich food choices, which contain the range of main nutrients that they need for normal growth and development. Many foods traditional to other cultures are part of the five food groups and contribute to the overall recommended servings for the day.
- The recommended number of servings for each of the food groups is as follows:
  - Dairy—3 servings
  - Vegetables—3 servings
  - Fruits—2 servings
  - Grains—6 servings
  - Protein—2 servings

These represent the minimum number of servings needed for growth and development. Individual student needs can vary, depending on their body size and activity levels.

*Note: These serving numbers are based on the total amounts of foods from each food group recommended in USDA's food grouping system.*

- The principle of **variety** is underscored in this lesson. Not only is it important to eat foods from all five food groups each day, but it is also desirable to eat a **variety** of foods within each food group. Beyond the main nutrients, foods in each group contribute a wide range of other important and necessary nutrients. Their intake is best ensured when children consume a broad range of foods.
- Snacks are important to students' overall nutrient intake each day. Many students fill up at mealtimes and can't get all of the main nutrients they need through their meals alone. Choices for snacks, or these “mini-meals,” should come mainly from food-group foods. “Extra” foods that may provide a large number of calories without many nutrients should be eaten only occasionally.
- It is recommended that children be physically active (moderate and vigorous levels) at least 60 minutes each day.

**Materials:** Student workbooks

Pencils

Master color documents and additional resources available on your login page at [HealthyEating.org](http://HealthyEating.org).

**Preparation:**

1. Review the food groupings as well as the recommended number of servings from each food group daily. This is key information you will need to successfully implement the lesson.
2. Gather materials.

**Length of Lesson: 45 – 55 minutes**

## Daily Records

*Teacher Note: Sample of a complete and incomplete student Daily Food and Beverage Records are available on your login page at [HealthyEating.org](http://HealthyEating.org).*

Explain to students that today is the last lesson in *Nutrition Pathfinders*, and they will be completing their plans to help them make healthy food and activity choices every day, even after the program is finished.

- Ask students to turn to Page 29 of their student workbooks and complete their Daily Food and Beverage and Daily Physical-Activity Record using their Family Homework sheet from Lesson 6. Daily records can also be downloaded from the website.
- Walk around and help the students fill out their forms.

## Anticipatory Set:

### 1. Introduction:

- Ask students to look over the completed food and activity records on Page 29 of their student workbooks.
  - Ask a few students to share something unusual or interesting about their records.
  - Ask if anyone ate in a restaurant.
  - Explain to students that often restaurants serve more than 1 serving of foods ordered. Students can use hand symbols to determine the number of servings of foods they are served at the restaurant.
  - Ask students if anyone went to a party at a friend's house or tried a new food for the first time. Ask if anyone played in a team-sport competition.
  - Ask students if any of them skipped a meal or were unable to participate in any physical activity on the day they kept their record. Tell them that they'll have a chance today to plan how they might have adjusted their choices so that they would meet the daily recommendations for food and daily physical activity.
- Tell students that today they will be analyzing their records to see if they 1) ate the recommended number of servings from each of the five food groups, and 2) completed at least 60 minutes of moderate-vigorous physical activity.
- Remind students that healthy food choices and moderate-vigorous levels of daily physical activity are important habits to establish to stay healthy.

## 2. Vocabulary:

*Note: Vocabulary cards are available for download on your login page at [HealthyEating.org](http://HealthyEating.org).*

- Ask students to turn to Page 2 of their workbooks to look at the glossary.
- Call on one student to read the definition aloud OR read the definition aloud yourself OR have the class read the definition aloud as a group.
- Repeat this process with the remaining vocabulary words and terms.

**Balanced**—to eat foods from different food groups.

**“extra” foods**—foods that do not contain enough nutrients to fit into one of the five food groups.

**Serving number**—the number of servings needed each day from the five food groups to ensure that the recommended amount of the main nutrients is obtained.

**Snack**—a mini-meal; food eaten between meals.

**Variety**—a range of different items from a specific group. For food groups, it implies eating several different foods each day from all five food groups.

## Step-by-Step Procedures:

*Teacher Note: This symbol  represents a key concept that should be discussed as activities are being completed.*

1. Explain to students that it is important to eat a variety or a range of different foods from all five food groups.
  - Ask students why it would be good to try several different foods from the same food group instead of always eating the same food from a food group.

*Possible answers: give you a variety of foods, main nutrients and different flavors.*
  - Tell students that a variety of foods will not only give you a variety of flavors, but it will also give you a variety of textures, like soft, crisp, crunchy, and many more.
  - Optional: Refer back to the “Cows Are Cooking Blueberry Pancakes” from Lesson 2.
  - Ask students to raise their hand if they especially liked a food and took more than 1 serving. Remind students that they can use their hand symbols to determine 1 serving of a food.
    - Call on a few students to share their answers.
    - Ask students to show you the hand symbol for 1 serving of the food they referenced.
  - Ask students to raise their hand if there was a food at a meal that they chose not to eat.
    - Call on a few students to share their answers.
    - Ask students why they chose not to eat those foods.

2. **Explain** to students that they are going to play a game similar to the game they played in Lesson 2.

**Game Directions:**

- Divide the class in half and name them Team #1 and Team #2.
- Choose a leader for each group.
- Write Team #1 and Team #2 on the board for scoring purposes.
- Write the four topic areas for questions on the board (“3 out of 5” model, serving size, “5 out of 5” model, physical activity).

1. **Call** on the leader from Team #1 and **ask** him or her to select a topic area.
2. Using the **questions** below, allow the students to discuss their answer and have the student leader respond.
3. If the leader answers the **question** correctly, award Team #1 one point.
4. Check off each question as it is used.
5. If the team answers incorrectly, call on the leader in Team #2 to answer the question. If that leader answers correctly, award Team #2 one point.
6. If neither team answers correctly, no points are awarded. Review the correct answer with the students.
7. **Repeat** steps 1 – 5 for each of the questions, alternating teams, until all topic areas and questions have been used.
8. **If there is a tie, use this bonus question worth 10 points:** As a team, **write** down the main nutrient for “extra” foods and why.
9. Review the answer and discuss as a class. **Award** points if all answers for the team were correct.
10. Consider offering the winning team the option to select 15 – 20 minutes of their favorite physical activity to do together as a class.

“3 OUT OF 5” MODEL	SERVING SIZE	“5 OUT OF 5” MODEL	PHYSICAL ACTIVITY
<p><b>Question:</b> What meal do we use the “3 out of 5” model for?</p> <p><b>Answer:</b> Breakfast.</p>	<p><b>Question:</b> What is the hand symbol for 1 serving of string cheese?</p> <p><b>Answer:</b> One pointer finger.</p>	<p><b>Question:</b> What two meals are the “5 out of 5” model for?</p> <p><b>Answer:</b> Lunch and dinner.</p>	<p><b>Question:</b> How many minutes of moderate-vigorous physical activity do we need to get each day?</p> <p><b>Answer:</b> 60 minutes.</p>
<p><b>Question:</b> What are the three groupings of foods in the “3 out of 5” model?</p> <p><b>Answer:</b> Grains; Vegetables OR Fruits; Dairy OR Protein.</p>	<p><b>Question:</b> What is the hand symbol for 1 serving of bread?</p> <p><b>Answer:</b> One open hand or 1 slice.</p>	<p><b>Question:</b> What are the food groups in the “5 out of 5” model?</p> <p><b>Answer:</b> Dairy; Vegetables; Fruits; Grains; Protein.</p>	<p><b>Question:</b> Playing tag is what level of physical activity?</p> <p><b>Answer:</b> Moderate-vigorous level.</p>
<p><b>Question:</b> Why is it important to eat breakfast every day?</p> <p><b>Answer:</b> To get the energy we need to help our bodies grow strong and stay healthy; to learn and be physically active.</p>	<p><b>Question:</b> What is the serving size for 1 serving of peanut butter?</p> <p><b>Answer:</b> One thumb or 1 tablespoon.</p>	<p><b>Question:</b> Why is it important to have foods from all five food groups at lunch and dinner?</p> <p><b>Answer:</b> To help us get the main nutrients we need each day.</p>	<p><b>Question:</b> If you run for 30 minutes, play soccer for 15 minutes, and watch TV for 15 minutes, did you get enough moderate-vigorous level physical activity for the day? Explain your answer.</p> <p><b>Answer:</b> No—because you only did 45 minutes; you would need 15 more minutes.</p>
<p><b>Question:</b> If you eat something from the Dairy food group and the Fruits food group for breakfast, what group is missing to complete the “3 out of 5” model?</p> <p><b>Answer:</b> Grains.</p>	<p><b>Question:</b> What is the serving size for 1 serving of cooked carrots?</p> <p><b>Answer:</b> One fist or 1 cup.</p>	<p><b>Question:</b> If we have chicken, rice, broccoli and a glass of 100 percent fruit juice for dinner, what food group is missing to complete the “5 out of 5” model?</p> <p><b>Answer:</b> Dairy.</p>	<p><b>Question:</b> Listening to music is what level of physical activity?</p> <p><b>Answer:</b> Low level.</p>

- ✔ • Remind students that snacks are an important part of the food they eat each day.
  - The food they select for snacks helps them to get all the nutrients they need each day to keep their bodies strong and healthy.
  - It is important to choose snacks from the food groups.
  - Snacks that are “extra” foods do not provide the main nutrients needed and often times have high amounts of fats or sugars in them.
  - Ask students to look at their records to see if they ate any snacks that were “extras.”
  - Ask students to turn and share what they discovered with a partner.
  - Ask students to look at their records to see if they ate any snacks that were from the food groups.
  - Ask students to turn and share what they discovered with a partner. Make sure to share the main nutrient that food group provided and what it does for their body.

*TEACHER NOTE: This is a natural place to break in the lesson should you decide to teach this lesson in two class sessions.*

## Check for Understanding:

1. Project Joey’s Daily Record document and ask students to look at it with you. (*This is a sample record, available on the Dairy Council of California website, to be used as a tool to analyze with the students.*)
2. Explain to students that as a class you are going to complete and analyze Joey’s Daily Record—a full day’s record of food and activity—to determine if Joey ate all the foods he needed from the food groups and received plenty of moderate-vigorous level physical activity.
  - Review what Joey ate for breakfast, lunch, snacks, and dinner/dessert. As a class, total the servings of food that Joey ate for each of the food groups for the day and fill in the chart.  
*Answers: Dairy—2; Vegetables—3; Fruits—2; Grains—4; Protein—3*
  - Compare the total for the Dairy food group that Joey had to the total that you are supposed to eat each day.
  - Call on one student or group of students at a time to tell you if Joey had enough servings from the Dairy food group, and if he didn’t, how many more would he need to eat.  
*Answer: No, Joey would need to eat 1 more serving from the Dairy food group.*
  - Repeat for each of the remaining food groups (Vegetables; Fruits; Grains; Protein).  
*Answers: Vegetables = 0; Fruits=0; Grains = 2; Protein = 0.*
3. Ask students to look at the column on Joey’s Daily Record titled “extras.”
  - Ask students how many “extras” Joey had and fill in the number on the chart.  
*Answer: 3.*
  - Ask one or two students if there is an “extras” that Joey had this day that they would suggest he trade for a food-group food and to explain their answer to the class.  
*Possible answers: potato chips at lunch—Joey could have traded for some plain popcorn or crackers; cookies for dessert—Joey could have traded for a cup of pudding.*
4. Ask students to look at Joey’s Daily Record for the physical activities he recorded.
  - Ask students how many minutes of low level physical activity Joey had today and fill in the number on the chart.  
*Answer: 75 minutes.*
  - Ask students how many minutes of moderate-vigorous level physical activity Joey had today and fill in the number on the chart.  
*Answer: 45 minutes.*

- Ask students if Joey got the recommended amount of moderate-vigorous level physical activity. Call on one or two students to share their answer.

*Answer: Joey only got 45 minutes of moderate-vigorous level physical activity, which is 15 minutes less than he should have. Joey should have 60 minutes of moderate-vigorous level physical activity every day.*

- Ask students what Joey might be able to trade to make sure he gets 60 minutes of moderate-vigorous level physical activity this day. Call on one or two students to share their answer.

*Possible answers: Joey could have played basketball in the afternoon instead of playing video games; Joey could have done jumping jacks in the morning instead of watching television or done jumping jacks while watching television.*

5. Share with students that they will be analyzing their daily food and activity records much like they did with Joey's Daily Record to help them create a plan to be healthy and strong.

## Guided Practice:

*Teacher Note: You can direct the students to resource Pages 34 – 35 in their workbook to help them complete the lesson.*

## WORKBOOK INSTRUCTIONS:

1. Tell the students to turn to Page 28 in their workbook.
  - Ask the students to find the words “Food and Activity Choices.”
  - Review the directions with the students.
  - Ask students to complete this activity on their own.

## Assessment:

- Tell students to find the words “What I Learned” at the bottom of Page 28.
- Review the directions with the students and have them complete the activity on their own.
- Once students complete the activity, have a few students share their answers and discuss.

**Lesson 7** Healthy Habits—Putting It Together

**Food and Activity Choices**

**Directions:**

1. Review your Daily Food and Beverage Record and the Daily Physical Activity Record on Page 29 that you completed the day before.
2. Fill out the chart below, using your Daily Food and Beverage Record.

	Number of servings I consumed	Number of servings needed	If you did not meet the daily recommended number of servings, what could you do? Give examples.
Dairy – Milk, Yogurt, Cheese	Answers will vary		
Vegetables			
Fruits			
Grains – Breads, Cereals, Pasta			
Protein – Meat, Beans, Nuts			
“extras”			

**For each glass of water consumed, check a box:**

1. Write down the number of minutes of moderate-vigorous level physical activity using your Daily Physical-Activity Record and answer the questions below.
 

Answers will vary
2. Did you meet your recommended daily physical-activity time? (circle one)    **Yes**    **No**  
 If **Yes**, great job! If **No**, what could you do to reach the recommended daily physical-activity time?  
Answers will vary  
 \_\_\_\_\_  
 \_\_\_\_\_

**What I Learned**

1. Explain why it is important to eat a variety of foods each day. To make sure you get all the nutrients you need to grow strong and stay healthy.
2. Look at your daily food choices to determine where you need to set a goal, and then write your goal below.  
Answers will vary
3. Use your Daily Physical-Activity Record to set a goal for physical activity.  
Answers will vary

28

## Curriculum Connections

### ACTIVITY #1: CHEF FOR THE DAY

- Tell the students to log on to the website below to be a chef for the day! This interactive tool will give the students an opportunity to practice creating a virtual meal from beginning to end. They will choose the meal, collect the items and then create and serve the meal to fellow students.
- [HealthyEating.org/Interactives/](http://HealthyEating.org/Interactives/)

### ACTIVITY #2: ADVOCATE FOR HEALTH

*Materials needed: Paper (one per student), pencils*

- Tell the students to think of a food product they like to eat.
- Tell the students they are going to write a letter to the company of their chosen food product.
- Each student will write a letter about how much they like the food and ask a minimum of three questions about the healthfulness of the product. If the product is an “extra” food, have the student include some suggestions on how the company could improve its product.
- Mail the letters to the companies.

### ACTIVITY #3: GRAPH IT!

*Materials needed: One poster-size piece of paper, pencil*

- Once students have analyzed their food and activity records in Lesson 7, create a classroom graph to depict the total number of servings that the students had from each of the food groups and the number of minutes of moderate-vigorous physical activity they achieved.
- Compare the numbers to how many they should have had as a class.
- Make a classroom goal to achieve the recommended number of servings of each food group and the recommended number of minutes of moderate-vigorous physical activity.
- Revisit the graph in a set amount of time, such as weekly, semi-monthly or monthly.
- Be sure to have the students track their food and activity amounts the day before you will be graphing your goal.

**Overview of Activity:**

- This assessment, administered *after* the implementation of the complete *Nutrition Pathfinders* program, will provide information about the knowledge and skills your students have acquired regarding selecting healthy foods, as well as making good physical-activity choices.
- The results may help you identify areas of the program that need reinforcement or review, which you might address through suggested extension activities.

**Nutrition Facts:**

- This program's nutrition content is consistent with the principles advanced through the Dietary Guidelines for Americans, as reflected in the USDA's *MyPlate* food icon.
- Key themes of the *Nutrition Pathfinders* program include **variety** and **moderation**. The concept of balance has been addressed in the third grade curriculum, *Shaping Up My Choices*. The focus for the fourth-grade lessons is **variety**—that is, the need for adequate amounts of food each day from all five food groups.
- The Post-Assessment activity addresses knowledge and skills such as:
  - Classifying individual foods into the five food groups and/or “extras”;
  - Assessing a day's intake of food to determine if the recommended number of servings from each food group was met;
  - Identifying appropriate serving sizes of foods using hand-symbol estimates;
  - Distinguishing between low level physical activities and moderate-vigorous physical activities, and assessing if recommended levels of daily physical activity were met;
  - Identifying the main nutrient and its health benefit for each of the five food groups.

**Materials:** Student workbooks  
Pencils

**Preparation:**

1. Review the Post-Assessment activity in the workbook to ensure that you understand what students are to do and can provide clarifying instructions if necessary.
2. Remove any posted material in the classroom that may aid the students in completing the Post-Assessment.

*Note: You may choose to re-post materials supporting healthy eating and activity choices after the Post-Assessment is completed.*

*Note: It is each teacher's choice whether the Post-Assessment will be a graded activity.*

3. Gather materials.

**Length of Post-Assessment:  
35 – 45 minutes**

## Directions:

- Tell students that for the last few weeks they have been learning about healthy eating and physical-activity choices. Now that they have completed the *Nutrition Pathfinders* program, it is important to know what they have learned.
- Tell students not to look back in their student workbooks at previous work and answers.

## WORKBOOK INSTRUCTIONS:

- Tell students to turn to Page 30 in their workbook.
  - At the top of the page it says Post-Assessment. Ask students to read the directions and answer the first three questions.
- Tell students to find the words “Balancing Food Choices.”
  - Read the directions below these words to the students.
  - Ask students to complete this activity and answer the questions below on their own.

- Tell students to find the words “Serving Size” on Page 31 in their workbook.
  - Read the directions below these words to the students.
  - Review the example with the students.
  - Ask students to complete this activity on their own.

4th Grade Post-Assessment

**Directions:**

- Answer the three questions below.
- Circle the correct answer.

- How many food groups are there? a. Four  b. Five  c. Six  d. Seven
- Does a balanced dinner include five food groups?  Yes  No
- Do all foods fit in a food group? Yes  No

**Balancing Food Choices**

**Directions:**

- Review the list of foods that Kim ate yesterday.
- For each serving of food:
  - List each of Kim's food choices in the correct food-group column.
  - Once all foods are listed, total the number of servings Kim ate for the day for each food group.

**KIM'S DAILY MEALS**

**Breakfast**—breakfast sandwich (½ bagel, egg, ham), hashed brown potatoes, punch  
**Lunch**—peanut butter, crackers, celery sticks, cookies  
**Snack**—smoothie (low-fat yogurt, 100% fruit juice, berries), muffin  
**Dinner**—roasted chicken, noodles, green beans, green salad, low-fat milk  
**Snack**—tortilla, melted cheese, soft drink  
**All foods listed above are 1 serving.**

	Dairy Milk, Yogurt, Cheese	Vegetables	Fruits	Grains Breads, Cereals, Pasta	Protein Meat, Beans, Nuts	"extras"
	yogurt	potatoes	fruit juices	<b>Example:</b> ½ bagel	egg	punch
	low-fat milk	celery sticks	berries	crackers	ham	cookies
	cheese	green beans		muffin	peanut butter	soft drink
		green salad		noodles	chicken	
				tortilla		
<b>Total Servings</b>						

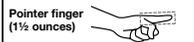
- Has the recommended number of daily servings been met for each food group? (circle one) Yes  No   
 If **No**, what is missing? 1 serving from the Grains group.

**Serving Size**

**Directions:**

- Look at the pictures of the foods below.
- Look at the hand symbols and measurements below the pictures of the foods.
- Fill in the bubble for the correct serving size that matches the picture.

**Example:** Look at the picture of the string cheese below. If you ate one string cheese (one pointer finger's worth), you had 1 serving.

 <b>EXAMPLE: String cheese</b>	 <b>Orange</b>	 <b>Low-fat chocolate milk</b>
 Pointer finger (1½ ounces)	 One handful (½ medium orange)	 One fist (1 cup)
<input type="radio"/> ½ serving <input checked="" type="radio"/> 1 serving <input type="radio"/> 2 servings	<input type="radio"/> ½ serving <input type="radio"/> 1 serving <input checked="" type="radio"/> 2 servings	<input type="radio"/> ½ serving <input checked="" type="radio"/> 1 serving <input type="radio"/> 2 servings

 <b>Whole-wheat bread</b>	 <b>Green beans</b>	 <b>Chicken</b>
 Two flat hands (2 slices)	 One fist (1 cup)	 Palm (3 ounces)
<input type="radio"/> ½ serving <input checked="" type="radio"/> 1 serving <input type="radio"/> 2 servings	<input type="radio"/> ½ serving <input checked="" type="radio"/> 1 serving <input type="radio"/> 2 servings	<input type="radio"/> ½ serving <input checked="" type="radio"/> 1 serving <input type="radio"/> 2 servings

- Tell students to find the words “Physical Activity” on Page 32 in their workbook.
  - Ask students to answer the first question.
  - Read the directions below these words to the students.
  - Ask students to complete this activity and answer the questions below on their own.
- Tell students to find the words “Main Nutrients and Health Benefits” on Page 33 in their workbook.
  - Read the directions below these words to the students.
  - Review the example with the students.
  - Ask students to complete this activity and answer the question below on their own.

## Closing:

- Collect workbooks.
- Review correct answers with students.
- Ask students how many of them think they know more about making healthy food and physical-activity choices now.
- Remind students that healthy food and physical-activity decisions are something they need to make every day, and that now they have the skills they need to make those decisions themselves.

### Teacher Note:

- Compare students’ completed Post-Assessments to their Pre-Assessments to assess their gains in knowledge. Teachers could include these student workbooks as part of their work displayed in portfolios at Open House. They could also be shared in parent conferences.
- You can continue to reinforce healthy eating and physical activity throughout the year by using additional resources available at [HealthyEating.org](http://HealthyEating.org).

**Physical Activity**

1. How many minutes each day should you have of moderate-vigorous physical activity? (fill in correct bubble)

15 minutes    30 minutes    45 minutes    60 minutes    75 minutes

**PHYSICAL-ACTIVITY CHART**

**Directions:**

- Look at the chart and add up the number of minutes of moderate-vigorous level physical activity each student did in one day.
- Decide if the recommended amount of physical activity was met. Circle Yes or No.
- If a student did NOT meet the recommended amount of minutes for the day, fill in an example of a moderate-vigorous level physical activity he or she could do.



STUDENT ACTIVITIES	Total minutes of Moderate-Vigorous Level Physical Activity for the day for each student	Did each student meet the recommended amount of Moderate-Vigorous Level Physical Activity for the day?	If not, what Moderate-Vigorous Level Physical Activity could each student add?
<b>Example:</b> <b>Grace:</b> • 30 minutes playing soccer • 30 minutes listening to music • 30 minutes on the computer	30	Yes <input checked="" type="radio"/> No <input type="radio"/>	Eg. Roller-skating
<b>Sam:</b> • 60 minutes playing football • 30 minutes watching television • 15 minutes walking		Yes <input checked="" type="radio"/> No <input type="radio"/>	
<b>Kelly:</b> • 20 minutes running • 20 minutes playing video games • 30 minutes rollerblading		Yes <input type="radio"/> No <input checked="" type="radio"/>	Eg. Dancing
<b>Emma:</b> • 30 minutes shopping • 45 minutes dancing • 20 minutes playing board games • 30 minutes playing tennis		Yes <input checked="" type="radio"/> No <input type="radio"/>	

32

**Main Nutrients and Health Benefits**

**Directions:**

1. Read the paragraph below and fill in the blanks with the correct answers from the list to the right.

The five food groups are important to have every day because of the main nutrients and their health benefits. The Dairy group provides calcium as its main nutrient as well as many other nutrients our bodies need. We need this nutrient to build strong bones and teeth. The Fruits group’s main nutrient is vitamin C. This nutrient is to make sure we can heal cuts and scratches. The Protein group is important for strong muscles, and the main nutrient protein is how we get them. The Grains group’s main nutrients are B-vitamins, and they are important to provide us with energy. The reason we need the Vegetables group is for healthy skin and eyes, and the main nutrient is vitamin A.

**Possible Answers**

- protein
- vitamin A
- calcium
- B-vitamins
- vitamin C
- strong bones and teeth
- energy
- strong muscles
- heal
- healthy skin and eyes



What food and physical-activity changes have you made since you began this program?

Answers will vary

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

33



## K - 12 Curriculum



HealthyEating.org