

Teacher Guide

5th
Grade

Nutrition Education
Program





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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 fifth-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*, which is the foundation for this program, and its companion program for fourth grade, also titled *Nutrition Pathfinders*.

The program provides fifth-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: Fuel Up, Be Fit!

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

1. Identify the five food groups plus “extra” foods and classify individual foods according to food group.
2. Identify the main nutrient for each food group.
3. Explain the health benefit that each main nutrient supports.
4. Identify the amount of moderate-vigorous level physical activity recommended each day.
5. Classify a variety of activities as low level or moderate-vigorous level.

Lesson 2: Balance Brigade

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

1. Explain the importance of eating balanced meals every day.
2. Analyze a set of breakfast meals and assess their adequacy using the “3 out of 5” model.
3. Analyze a set of lunch/dinner meals and assess their adequacy using the “5 out of 5” model.
4. Plan a balanced meal.
5. Explain why drinking sufficient amounts of water each day is important for hydration.

Lesson 3: Serving Signs

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. Relate the hand symbols for serving size to household measures.
3. Identify the number of servings from each food group needed daily.
4. Distinguish single, half and double servings of food-group foods.

Lesson 4: Food and Physical-Activity Forecasters Day #1—My Balanced Day

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

1. Complete a food and physical-activity record for the first of three days, correctly classifying foods and physical activities.
2. Explain the connection between food choices (energy in) and physical activity (energy out).
3. Explain why nutritious snacks should be part of daily food choices.
4. Identify foods that are “extras” and explain why they are not in a food group.
5. Develop personal goals for physical activity and healthy food choices.

Lesson 5: Food and Physical-Activity Forecasters Day #2—Fast-Food Finders

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

1. Complete a food and physical activity record for the second of three days, correctly classifying foods and physical activities.
2. Explain the importance of 60 minutes of moderate-vigorous physical activity each day.
3. Advocate for healthy choices in restaurant menu offerings.
4. Analyze a day's physical activity for adequate minutes of appropriate levels of activity; make adjustments as needed to meet daily requirements.

Lesson 6: Food and Physical-Activity Forecasters Day #3—Anatomy of an Advertisement

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

1. Complete a food and physical-activity record for the last of three days, correctly classifying foods and physical activities.
2. Understand the different influences that advertising, media and packaging can have on his or her food choices.
3. Analyze advertisements used for foods and beverages to determine their truthfulness and effectiveness.
4. Develop an advertisement that truthfully yet effectively promotes the health benefits of a food-group food.

Lesson 7: My Plan!

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

1. Analyze the completed food and physical-activity record; identify foods and/or activities to add or trade that would allow him or her to meet the daily requirements.
2. Explain why it is important to choose balanced meals and adequate levels of moderate-vigorous physical activity each day.
3. Develop a personal plan to improve his or her food and activity choices at home; identify at least two goals and how he or she will achieve those goals.
4. Explain moderation and why it is important to eat moderate amounts of “extra” foods, which may be higher in fats, sugars or calories.

The Teacher Materials Provided Are:

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

- **Teacher Guide**
- **Transparencies**
- **Website**
 - master color documents of transparencies
 - 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 up 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/. 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/NP5.

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/.
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.

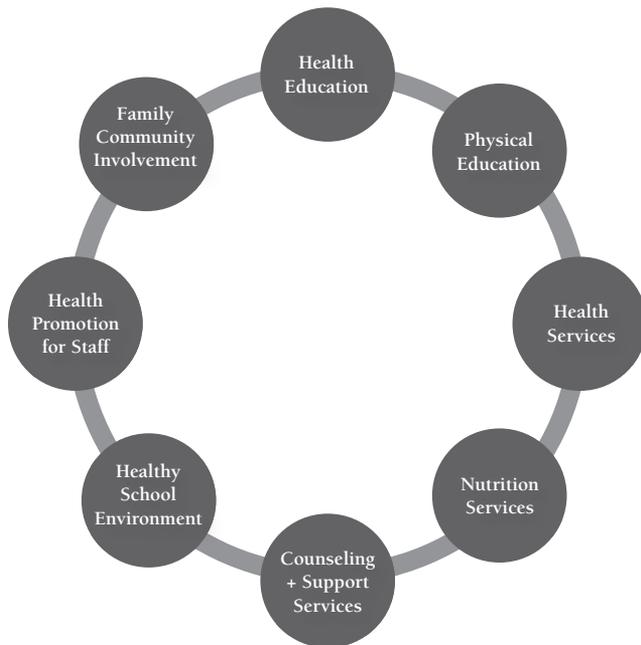
The Parent Materials Provided Are:

- **Family Letter (English and Spanish)**—Introductory letter is available to download at HealthyEating.org/NP5/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 its 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. *Nutrition Pathfinders*, a 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 fats, sugars 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, vegetables, fruits, whole grains and lean meats 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 having 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 food 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, 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 that are 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 choices. Small steps that match children's preferences and needs improve their diets and lifestyles each day.



“Extras:” Some foods don’t fit into any group. These “extras” may be mainly fats or sugars—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 “extras.”

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

Animal crackers: Despite their name, animal crackers are high 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 is classified as an “extras.”

Ice cream, milkshakes: Because of their 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, 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. 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 fats, 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.

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 their 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, try other foods that provide some calcium:

- 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 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 two *Nutrition Pathfinders* program include **variety** (fourth-grade level) and **moderation** (fifth-grade level), with the fifth-grade curriculum building on knowledge and skills addressed in the fourth-grade curriculum. The concept of **balance** has been addressed in the third-grade curriculum, *Shaping Up My Choices*. As stated, the focus for the fifth-grade lessons is **moderation**; that is, the need to make the core of your food choices those with little or no added fats or sugars. Foods with large amounts of added fats or sugars can be chosen less often or in smaller quantities.
- 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, assessing if recommended levels of daily physical activity were met and adjusting physical activity, as needed, to meet daily recommended amounts.
 - Analyzing a meal for food groups represented, main nutrients in each food group and health benefit of the main nutrient.

Materials: Student Workbooks

Pencil

Preparation:

1. Review the Pre-Assessment activity in the student 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/NP5/FamilyLetter.

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

Directions:

1. 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*. Explain to students that they may have completed a similar program called *Nutrition Pathfinders* in fourth grade, and this is the next level of that program. Before starting, though, it is important to find out what they already may understand about healthy eating and physical activity.
2. Assure students that it's to be expected that there will be 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.
3. 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.

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.

Workbook Instructions:

1. 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.
2. 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.

5th Grade Pre-Assessment

Directions:

1. Answer the three questions below.
2. Circle the correct answer.

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

Balancing Food Choices

Directions:

1. Review the list of foods that Chelsey ate yesterday.
2. For each serving of food:
 - a. List each of Chelsey's food choices in the correct food-group column.
 - b. Once all foods are listed, total the number of servings Chelsey ate for the day for each food group.
 - c. Write the main nutrient and health benefit for each food group.
 - d. Answer the questions below the chart.

CHELSEY'S DAILY MEALS

Breakfast—muffin, tomato juice, low-fat yogurt
Lunch—½ whole-wheat tuna sandwich (slice of bread, tuna, mayonnaise), grapes, carrot sticks, celery sticks, carton low-fat milk
Snack—bag of chips, sports drink
Dinner—stir-fry (tofu, vegetables), rice, sliced melon, almond cookie, low-fat milk
Snack—pretzels, punch
All foods listed above are 1 serving.

	Dairy Milk, Yogurt, Cheese	Vegetables	Fruits	Grains Breads, Cereals, Pasta	Protein Meat, Beans, Nuts	"extras"
	low-fat yogurt	tomato juice	grapes	Example: muffin	tuna	mayon- naise
	low-fat milk	carrot sticks	melon	slice of bread	tofu	chips
	low-fat milk	celery sticks		rice		sports drink
		vegetables		pretzels		cookie
						punch
Total Servings	3	4	2	4	2	5
Main Nutrient	Calcium	Vitamin A	Vitamin C	B-vitamins	Protein	none
Health Benefit	Strong bones and teeth	Healthy eyes and skin	Healing	Energy	Strong muscles	none

3

- 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 the activity on their own.
- 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.
- Do not review answers with students, as there is material in the Pre-Assessment that has not yet been taught.

1. Have the recommended number of daily servings been met for each food group? (circle one) Yes No

If not, what is missing? 2 servings of Grains

2. What food could you add? Examples: crackers, granola

3. What is the main nutrient and health benefit of any food group that Chelsey missed?

MAIN NUTRIENT HEALTH BENEFIT

B-vitamins Energy

Serving Size
Directions:
 1. Look at pictures of the foods below.
 2. Look at the hand symbols and measurements below the pictures of the foods.
 3. Fill in the bubble for the correct serving size that matches the picture.

Example: Look at the two slices of whole-wheat bread below.
 If you ate two slices of bread (two flat hands' worth), you had 2 servings.

		
EXAMPLE: Whole-wheat bread	Apple	Low-fat milk
		
Two flat hands (2 slices)	One handful (1/2 medium apple)	One fist (1 cup)
<input type="radio"/> 1/2 serving <input type="radio"/> 1 serving <input checked="" type="radio"/> 2 servings	<input checked="" type="radio"/> 1/2 serving <input type="radio"/> 1 serving <input type="radio"/> 2 servings	<input type="radio"/> 1/2 serving <input checked="" type="radio"/> 1 serving <input type="radio"/> 2 servings
		
Peanut butter	String cheese	Lettuce
		
One thumb (1 tablespoon)	Pointer finger (1 1/2 ounces)	Two fists (2 cups)
<input type="radio"/> 1/2 serving <input checked="" type="radio"/> 1 serving <input type="radio"/> 2 servings	<input type="radio"/> 1/2 serving <input checked="" type="radio"/> 1 serving <input type="radio"/> 2 servings	<input type="radio"/> 1/2 serving <input checked="" type="radio"/> 1 serving <input type="radio"/> 2 servings

4

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 following list of activities for each of the students.
 2. Fill in the appropriate bubble that shows if a student did or did not meet his or her physical-activity requirement for the day.
 3. For those students who have not met their physical-activity requirements for the day, add an activity and the amount of time they would need to help them meet their requirement.








Met Physical-Activity Recommendations	Did Not Meet Physical-Activity Recommendations	
<input type="radio"/>	<input checked="" type="radio"/>	Example: Kris: • 40 minutes dancing • 30 minutes shopping • 15 minutes walking Activity: <u>Ride a bike</u> Time: <u>20 minutes</u>
<input type="radio"/>	<input checked="" type="radio"/>	Jeff: • 45 minutes playing softball • 20 minutes playing video games • 30 minutes on the computer Activity: <u>Playing tag</u> Time: <u>15 minutes</u>
<input checked="" type="radio"/>	<input type="radio"/>	Tori: • 40 minutes playing soccer • 20 minutes playing tetherball • 15 minutes walking • 30 minutes watching television • 15 minutes on the computer Activity: _____ Time: _____
<input checked="" type="radio"/>	<input type="radio"/>	Kyle: • 20 minutes skateboarding • 40 minutes playing basketball • 60 minutes watching television Activity: _____ Time: _____

5

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 36 – 37 of their student 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 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/NP5/FamilyLetter) in your next email communication to parents. Encourage them to review the letter themselves.

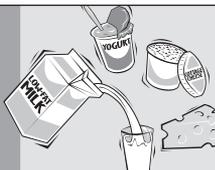
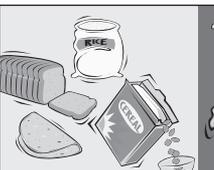
Teacher Note:

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 student progress through the course of the program can be measured.

Food List					
 <p>What about water?</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 or juice with your meals.</p>	 <p>Dairy – Milk, Yogurt, Cheese</p> <p>Main Nutrient = _____</p> <p>Why your body needs it:</p> <p>Fat-free, low-fat (1%) or reduced fat (2%) milk</p> <p>Fat-free, low-fat (1%) or reduced fat (2%) flavored milk</p> <p>Fat-free or low-fat yogurt</p> <p>Mozzarella or string cheese</p> <p>Cottage cheese</p> <p>Frozen yogurt</p> <p>Whole milk</p> <p>Milkshake</p> <p>Hot chocolate made with milk</p> <p>Pudding, custard or flan</p> <p>Cheese</p> <p>Ice cream</p>	 <p>Vegetables</p> <p>Main Nutrient = _____</p> <p>Why your body needs it:</p> <p>Fresh, frozen or canned vegetables</p> <p>Artichoke Peas</p> <p>Bok choy Peppers</p> <p>Broccoli Potato</p> <p>Cabbage Spinach</p> <p>Cactus Squash</p> <p>Carrots Sweet potato, yam</p> <p>Cauliflower</p> <p>Corn Tomato</p> <p>Green beans Zucchini</p> <p>Lettuce or salad</p> <p>Vegetable juice</p> <p>Vegetable soup</p> <p>Salsa</p> <p>Tomato sauce or pizza sauce</p> <p>Oven-baked fries</p> <p>Hash browns</p>	 <p>Fruits</p> <p>Main Nutrient = _____</p> <p>Why your body needs it:</p> <p>Fresh, frozen or canned fruits</p> <p>Apple Banana</p> <p>Apricot</p> <p>Berries: Blueberries, raspberries, strawberries</p> <p>Cherries</p> <p>Citrus: Grapefruit, orange, tangerine</p> <p>Grapes</p> <p>Kiwi</p> <p>Mango</p> <p>Melon: Cantaloupe, honeydew, watermelon</p> <p>Papaya Pineapple</p> <p>Pear Plum</p> <p>Peach</p> <p>100% Fruit juice</p> <p>Mixed fruit or fruit cocktail</p> <p>Raisins, cranberries, dried fruit</p>	 <p>Grains – Breads, Cereals, Pasta</p> <p>Main Nutrient = _____</p> <p>Why your body needs it:</p> <p>Bread (whole grain)</p> <p>Rice</p> <p>Spaghetti, macaroni or other pasta</p> <p>Oatmeal or other cooked cereal</p> <p>Cereal (dry)</p> <p>Whole-grain or graham crackers</p> <p>Tortilla (flour or corn)</p> <p>Bagel or English muffin</p> <p>Pita bread</p> <p>Hamburger or hot dog bun</p> <p>Popcorn</p> <p>Pretzels</p> <p>Pancake or waffle</p> <p>French toast</p> <p>Combread or biscuit</p> <p>Mexican sweet bread</p> <p>Muffin</p> <p>Granola, granola bar</p> <p>Snack crackers</p>	 <p>Protein – Meat, Beans, Nuts</p> <p>Main Nutrient = _____</p> <p>Why your body needs it:</p> <p>Dry beans: Black, Pinto; Garbanzo, Red; Lima, White</p> <p>Fish or shrimp</p> <p>Refried beans</p> <p>Chili</p> <p>Egg</p> <p>Chicken or turkey</p> <p>Hamburger</p> <p>Beef steak</p> <p>Pork chop</p> <p>Ham</p> <p>Fried chicken or fried fish</p> <p>Lunch meat</p> <p>Hot dog</p> <p>Peanut butter</p> <p>Nuts or seeds</p> <p>Sausage, pepperoni, chorizo</p>
	Servings per day = <input type="text"/>	Servings per day = <input type="text"/>	Servings per day = <input type="text"/>	Servings per day = <input type="text"/>	Servings per day = <input type="text"/>
No Nutrients = No Health Benefit					
Soft drinks Syrup, honey or sugar Mustard or ketchup Candy Salad dressing or mayonnaise Margarine	“extras” Cream cheese or sour cream Whipped cream Butter	“extras” Pickles, olives or relish Fried onion rings Fast-food french fries Potato chips or corn chips	“extras” Jam or jelly Fruit roll or fruit snack Fruit drink or punch Fruit gelatin	“extras” Cookies, cake or pie Toaster pastry Doughnut or pastry	“extras” Bacon Beef jerky
	36			37	

Overview of Lesson:

- This lesson provides students a review of basic facts about healthy food and daily physical-activity choices.
- Students will review the names of the five food groups, representative foods from each group, the main nutrient that foods in a given group share and the health benefit of that nutrient.
- They will review common foods eaten that do not belong to any food group, which are called “extras.”
- Finally, they will review the importance of daily physical activity, the different intensity levels of physical activity and the amount recommended daily.
- The aim is to balance the amount of calories they eat, or energy going into their bodies, with the amount of moderate-vigorous level physical activity they do, or the amount of energy they are using.

Student Objectives:

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

1. Identify the five food groups plus “extra” foods and classify individual foods according to food group.
2. Identify the main nutrient for each food group.
3. Explain the health benefit that each main nutrient supports.
4. Identify the amount of moderate-vigorous level physical activity that he or she needs each day.
5. 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: Comprehension

Objective 4: Knowledge

Objective 5: 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)

- 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 other.
 - 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 each food group is 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

- “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, basketball.
- It is recommended that children be physically active (moderate or vigorous levels) at least 60 minutes each day.

Materials:

- Student Workbooks
- Pencils
- Index cards (one per student)
- Poster paper/construction paper (7—one for each food group, one for “extra” foods and one for physical activity)
- Additional resources available on your login page at HealthyEating.org.

Preparation:

Teacher Note: Based on your students' performance on the Pre-Assessment, you may opt to shorten the time spent on numbers 1, 2 and 4 in the Step-by-Step Procedures.

1. Familiarize yourself with the food groups and the foods that are classified into them.
2. Review the kinds of foods depicted as “extras.”
3. Review the Main Nutrients and Their Health Benefits document, available on your login page at **HealthyEating.org**, which contains key information you will need to successfully implement this lesson.
4. Gather materials.
5. Prepare index cards and construction paper that will be posted around the room. Write examples of one or two foods from each food group; the five main nutrients; the health benefit of each main nutrient; and a sampling of moderate-vigorous level physical activities. Use the chart in Step-by-Step Procedures on Page 19 to help you. Reference the Food Grouping document housed as a resource on Dairy Council of California's website for ideas on food-group foods to use.

Length of Lesson: 60 minutes

Anticipatory Set:

1. Introduction:

- Share some of the following fun facts about food choices we make every day:
 - Lemons contain more natural sugar than strawberries.
 - Apples are 25 percent air—it's why they float.
 - There are over 300 varieties of natural cheeses in the United States.
 - The only real food U.S. astronauts are allowed to take into space is pecans.
 - In Japan the most popular pizza topping is squid.
 - The most popular salad dressing is Ranch.
 - Every day, a bird eats half its weight in food. So why do people say that a poor eater “eats like a bird”? If that were the case, a 50-pound child would eat 25 pounds of food every day!
- Tell students that through the *Nutrition Pathfinders* curriculum, they will learn some useful and practical facts about food and physical activity.
- Explain to students that more and more often as they get older they will be the ones deciding which foods to eat and when. Ask them to name some of the reasons we choose the foods we do (tastes good, easy to prepare, inexpensive). Remind them that one important factor for choosing foods should be because they're healthy. Answer: food-group foods help their bodies grow and be strong and free from sickness.
- Remind students that another healthy habit to practice is getting daily physical activity. Ask students to share with a partner what they did yesterday for physical activity—at school, at home, at a nearby park, etc.
- Explain to students that food and activity choices can affect how much energy they have, as well as their ability to stay free from sickness, maintain healthy weights 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. 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:

Teacher Note: Vocabulary cards are available for download on your login page at HealthyEating.org.

Teacher Note: Vocabulary words, in many cases, will be repeated in multiple lessons. You may choose to review words more briefly in later lessons.

- Ask students to turn to Page 39 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.

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

“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—activities that do not make your heart beat fast. Examples include sitting or walking at a slow pace.

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

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.

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.

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 My Food Group 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 My Food Group 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.
 - 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 you the nutrients you need every day to help your 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 them 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 Group 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: candy, soft drinks, potato chips, cookies.

3. Ask students to turn to Page 38 in their workbook and look at the Main Nutrients and Their Health Benefits chart. (Optional) Project the Main Nutrients and Their Health Benefits document from the Dairy Council of California website 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 little 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 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.
- Ask students to turn to Pages 36 – 37 in their student workbook.
- Tell them that they will need to fill in the information for the Main Nutrient and Why your body needs it blanks for each food group at the top of each column on these two pages.
- Point to the blue row on the Main Nutrients and Their Health Benefits document. (Use reference chart below.)

- The main nutrient for the Dairy food group is calcium, which helps give you strong bones and teeth.
- Repeat for each of the food groups in the table below.

FOR TEACHER REFERENCE ONLY

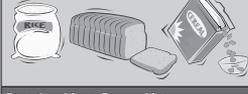
Food Group	Main Nutrient	Health Benefit
Dairy	Calcium	Strong bones and teeth
Vegetables	Vitamin A	Healthy skin and eyes
Fruits	Vitamin C	Healing
Grains	B-vitamins	Energy
Protein	Protein	Strong muscles

4. Explain to students that physical activity has many benefits and is important for many reasons.
- Daily physical activity helps keep your body healthy, and your heart strong. Plus it helps you to build strong muscles and grow strong bones.
 - Being physically active each day also helps you learn and concentrate better.
- ✓ 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 raise their hand if they have noticed their heart beating faster when they do moderate-vigorous level physical activity like running or playing a sport.
- Tell students that, in some cases, it is good to be involved in low level activities such as reading; however, this time does not count toward the recommended 60 minutes of daily moderate-vigorous level physical activity.
- ✓ 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, at home, before and after school, during school and at recess. Being physically active even 10 to 15 minutes at a time is good.

Main Nutrients and Their Health Benefits

FOOD GROUP	MAIN NUTRIENT	WHY YOUR BODY NEEDS IT
Dairy – Milk, Yogurt, Cheese 	Calcium	Strong bones and teeth 
Vegetables 	Vitamin A	Healthy skin and eyes 
Fruits 	Vitamin C	Healing 
Grains – Breads, Cereals, Pasta 	B-vitamins	Energy 
Protein – Meat, Beans, Nuts 	Protein	Strong muscles 
“extras” 	No nutrients	No health benefit

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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/

ACTIVITY #2: NUTRIENT MNEMONIC

Materials needed: One sheet of paper and a pen or pencil per group.

- **Divide** the students into groups of two to four.
- **Tell** the students you are holding a contest to see which group can come up with the most creative mnemonic to help them remember the food-group food main nutrients.
 - A mnemonic is when you take the first letter of each word from the phrase or saying you would like to remember and you make a sentence out of it.

EXAMPLE: FOOD GROUPS

Sentence	Food Groups
<i>David's</i>	Dairy
<i>Very</i>	Vegetable
<i>Friendly</i>	Fruits
<i>Gardener</i>	Grains
<i>Plants</i>	Protein

- **Students** will need to come up with a mnemonic for the nutrients for each food group.
 - **Nutrients:**
 - **Calcium**
 - **A** (vitamin A)
 - **C** (vitamin C)
 - **B** (B-vitamins)
 - **Protein**
- You can use the winning mnemonic as a review throughout the program to help the students remember the food-group food nutrients.

ACTIVITY #3: MY FAVORITE ACTIVITY

Materials needed: Drawing paper (one piece per student); pencil; markers

- **Pass** out one piece of paper to each student.
- **Tell** the students to fold the paper in half.
- On the inside of their folded paper, have the students title one side “Low Level” and the other side “Moderate-Vigorous Level.”
- Each student will draw two to three low level physical activities on the appropriate side labeled “Low Level” and draw two to three of their favorite moderate-vigorous level physical activities on the side labeled “Moderate-Vigorous Level.”
- On their paper, have the students write the recommended number of minutes of physical activity they should do each day.
- **Students** can title and draw anything related to physical activity on the front cover and use the mini booklet for reference throughout the program.

Overview of Lesson:

- In this lesson, students will review or learn how to choose a balanced breakfast using what is termed the “3 out of 5” model.
- They will also learn that a “5 out of 5” model is used to choose a balanced lunch and dinner.
- They will analyze pre-set meal choices, and modify to balance as necessary. The importance of balanced meals for growth, development and well-being will be stressed.
- The principle of moderation will be reinforced through a review of “extra” foods, which provide minimal nutrients while often being high in fats, sugars and calories.

Student Objectives:

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

1. Explain the importance of eating balanced meals every day.
2. Analyze a set of breakfast meals and assess their adequacy using the “3 out of 5” model.
3. Analyze a set of lunch/dinner meals and assess their adequacy using the “5 out of 5” model.
4. Plan a balanced meal.
5. Explain why drinking sufficient amounts of water each day is important for hydration.

 *Highlights a student objectives concept.*

Level of Cognition

Objective 1: Comprehension

Objective 2: Analysis

Objective 3: Analysis

Objective 4: Synthesis

Objective 5: Comprehension

Nutrition Facts:

- 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 balanced breakfast is *not* a random selection of any three food groups. It is important to select from these specific groupings.

- A lunch and dinner is considered balanced if it contains “5 out of 5” of the food groups:
 - Dairy
 - Vegetables
 - Fruits
 - Grains
 - Protein
- The principle of **moderation** is underscored in this lesson—that is, the need to make the core of food choices those with little or no added fats or sugars. Foods with large amounts of added fats and sugars can be chosen less often or in smaller quantities. In other words, they can be eaten in **moderate** amounts.
- Mixed foods will be discussed in this lesson. Mixed foods contain more than one food group.
 - For example, a cheese omelet with mushrooms and tomatoes represents three food groups:
 1. Cheese from the Dairy group
 2. Eggs from the Protein group
 3. Mushrooms and tomatoes from the Vegetables group

Materials: Student Workbooks

Pencils

Additional resources available on your login page at HealthyEating.org.

Preparation:

1. Review the food groupings (the five food groups constitute a “5 out of 5” model used for a balanced lunch or dinner), as well as the “3 out of 5” model used when planning a balanced breakfast. 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 find a partner and to share with them a simple recipe they might have prepared with their families.
- Share with students an example: a bean and cheese burrito. This burrito needs the tortilla as a wrapper, the filling (beans), the cheese. If you're missing any of these ingredients the recipe is not complete.
- Tell students that balanced meals are like recipes; all of the parts of the meal need to be there to be complete.
- Explain to students that balanced meals need to follow the principle of **moderation** as well. That means being careful not to include several "extra" foods, which are generally low in nutrients and higher in calories. Such foods should be eaten just once in a while ... or in smaller portions.
- Tell students that in today's lesson they'll also be learning what they can do themselves at home to help ensure balanced meals. They can help their parents with household duties like shopping and planning/preparing meals. Now that they know how to build balanced meals, they can be a big help!

2. Vocabulary:

Note: Vocabulary cards are available for download on your login page at HealthyEating.org.

- Ask students to turn to Page 39 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 class read definition aloud as a group.
- Repeat this process with the remaining vocabulary words and terms.

Balanced—to eat foods from different food groups.

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

Moderation—making most of your food choices those with little or no added fats or sugars; eating fewer "extras."

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

"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 a "5 out of 5" model helps them to eat healthy, balanced meals, especially lunch and dinner. The "5 out of 5" model means that you choose one food from all of the five food groups to create a balanced meal.
 - Explain to students that it is important to eat a balanced lunch and dinner every day so that they eat from all five food groups, giving them all the main nutrients and calories, or energy, needed—especially for learning and being physically active.
 - Project the **Balanced Meals Lunch and Dinner documents** and ask students to look at them with you.
 - Explain to students that the first two pictures are a lunch and dinner.
 - As a class, **analyze** the lunch and dinner options.
 - Refer students to Pages 36 – 37 in their student workbook as needed.
 - Using the "5 out of 5" model, **determine** if the lunch and dinner options are balanced and **discuss** which food groups are represented.
 - As a class, select food(s) to make each of the meals balanced. **Write** the names of the food(s) and food group(s) next to the pictures.

Answers:

Lunch—not balanced. Dairy; Vegetables; Grains; Missing Fruits, Protein.

Dinner—not balanced. Dairy; Vegetables; Grains; Protein. Missing Fruits and also includes more than one "extra" food (cookies, soda, fast-food french fries).

2. Explain to students that it is important to eat a balanced breakfast every day to get the nutrients and energy needed to learn in school and be physically active.
 - Eating foods from the food groups helps you to get the main nutrients you need to be healthy.
 - Eating foods in moderation by making most of your food choices those with little or no added fats or sugars and limiting the amount of high-calorie "extra" foods eaten each day will also help you to get the main nutrients you need.
 - Ask students how they think their bodies would feel if they didn't eat breakfast. Call on a few students to act out their answers.

Possible answers: tired, hungry, frustrated, headachy.

- Ask students how their bodies feel when they eat a healthy, balanced breakfast. Call on a few students to act out their answers.

Possible answers: energetic, ready to learn, happy, awake.

3. Explain to students that a “3 out of 5” model helps them to eat a healthy, balanced breakfast.
- Write the groupings on the board and review with students.
 - Group #1—Grains
 - Group #2—Vegetables OR Fruits
 - Group #3—Dairy OR Protein
 - Ask students to think about what they ate today for breakfast.
 - Call on a few students to share what they ate and write the name of the food(s) under the appropriate food group. If a student did not have something from each of the three groups of food, ask the rest of the class to help come up with a food that would make this a balanced breakfast representing the “3 out of 5” model.

4. Project the Balanced Meals Breakfast document and ask students to look at it with you.
- Explain to students that there is a picture of one breakfast.
 - As a class, analyze the breakfast.
 - Refer students to Pages 36 – 37 in their student workbook as needed.
 - Using the “3 out of 5” model, determine if the breakfast is balanced and discuss which food groups are represented.
 - As a class select food(s) to make the breakfast balanced. Write the name(s) of the food(s) and food group(s) next to the pictures.
- Answer: Breakfast—not balanced. Grains; Fruits. Missing Dairy or Protein.*

5. 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 you 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 physically active.
 - Most of the water you need comes from the beverages you drink, like juice, water and milk.

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 or dinner to give them the fuel they need for most of the day.
2. Ask students to get into pairs.
3. Ask students to decide who will be the recorder and who will be the presenter in their pair.
4. Ask each pair of students to select their favorite balanced breakfast or dinner, making sure to use the “3 out of 5” model for their breakfast or the “5 out of 5” model for their dinner.
5. Ask the recorder for the pair to write down their selections so that the presenter can use it for their presentation. Give students three minutes to complete the activity.
6. Once all pairs have completed the activity, call on the presenter for each group to share one of their balanced meals.
7. As a class, analyze the meals to make sure they meet the criteria for a balanced breakfast or dinner. Discuss as necessary.

Lesson 2 Balance Brigade

Balanced Dinner

Directions:

1. Look at the dinner menu choices below.
2. Plan a balanced dinner using the “5 out of 5” model by choosing from the list below.
3. Write the foods you select in the “My Dinner” section.
4. Answer the questions below your selections.

DINNER MENU CHOICES	
<p>Main items:</p> <ul style="list-style-type: none"> Turkey and cheese sandwich (turkey, cheese, bread) Yogurt parfait (yogurt, fruit, granola) Cheeseburger (hamburger, cheese, lettuce, bun) Spaghetti with tomato sauce Cheese and crackers 	<p>Beverages:</p> <ul style="list-style-type: none"> Glass of low-fat chocolate milk Soft drink Glass of apple juice Water Glass of low-fat milk
<p>Side items:</p> <ul style="list-style-type: none"> Celery sticks Carrot sticks Apple 	<ul style="list-style-type: none"> Peach Peanut butter Hardboiled egg Slice of bread Cupcake

MY DINNER:

Answers will vary.

1. Does your dinner complete the “5 out of 5” food model? (circle one) **Yes No** **Answer varies.**
2. If **Yes**, good job! If **No**, what menu item(s) could you add to make your dinner balanced?
Answer varies.

Guided Practice:

Teacher Note: You can direct the students to resource Pages 36 – 37 in their Student Workbook to help them complete the lesson.

WORKBOOK INSTRUCTIONS:

- Tell the students to turn to Page 8 in their workbooks.
 - Ask the students to find the words “Balanced Dinner.”
 - Review the directions with the students.
 - Have the students complete this section on their own.
- Tell the students to find the words “Balanced Breakfast” at the top of Page 9.
 - Review the directions with the students.
 - Have the students complete this section on their own.

Assessment:

- Tell students to find the words “What I Learned” at the top of Page 10.
- 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: Announce to students that they will be keeping a record of their food and daily physical-activity choices over the next three days. Encourage them to pay attention to those choices so that they can remember them for their records.

Teacher Note: The next lesson (Lesson 3) requires you to bring in the following measuring utensils:

- 1 cup liquid measuring cup
- 1 cup and ½ cup dry measuring cups
- Measuring spoons

Balanced Breakfast

Directions:

- Fill out the first section using the “3 out of 5” model.
- Look at the breakfast menu choices below.
- Plan a balanced breakfast using the “3 out of 5” model by choosing from the list below.
- Write the foods you select in the “My Breakfast” section.
- Answer the questions below your selections.

1. What are the “3 out of 5” food-group groupings?

Grains <small>(food group name)</small>	+	Vegetables <small>(food group name)</small>	+	Dairy <small>(food group name)</small>	=	“3 out of 5”
		OR		OR		
		Fruits <small>(food group name)</small>		Protein <small>(food group name)</small>		

BREAKFAST MENU CHOICES

<p>Main items:</p> <ul style="list-style-type: none"> Cereal with milk Scrambled eggs with toast and jam Egg burrito (tortilla, eggs, cheese) Oatmeal Pancake with syrup Omelet (eggs, broccoli, cheese) Slice of ham 	<p>Beverages:</p> <ul style="list-style-type: none"> Water Glass of low-fat milk Orange juice Vegetable juice
--	---

Side items:

Cup of sliced strawberries	Carrots	Muffin
Banana	Yogurt	Toast
Bacon		

MY BREAKFAST:

Answers will vary.

- Is your breakfast a complete “3 out of 5” breakfast? (circle one) **Yes No Answer varies.**
- If **Yes**, great job! If **No**, how could you change your choices to make your breakfast complete?
Answer varies.

What I Learned

Directions:

- Set two goals below that will help you eat balanced meals every day.

Example: I will talk with my parents about breakfast every morning and trade foods to make it balanced; I will add one food-group food to my breakfast each morning until it is always balanced.

My Goals:

 - Goals will vary.

- Why is moderation important?

Moderation is important to limit the amount of high-calorie “extra” foods eaten each day.

Moderation is important to make sure you eat all five of the food groups and get the nutrients you need each day.

Family Homework:

- Tell students to turn to Page 11 in their student 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.
- Tell the students to have the adult sign their homework and return the signed sheets to class tomorrow.

Curriculum Connections

ACTIVITY #1: POWER UP YOUR BREAKFAST

- Tell the students to log on to the website below to reinforce the importance of a healthy breakfast. This interactive tool will allow students to build a healthy breakfast while reinforcing the “3 out of 5” model they learned in Lesson 2.
- HealthyEating.org/Interactives/

ACTIVITY #2: 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” model they have been learning about in Lesson 2.
- HealthyEating.org/Interactives/



Lesson 2: Balance Brigade



Name: _____ Return by: _____

Family Activity

Directions:

1. Interview an adult and ask what he or she usually eats for breakfast and dinner.
2. Write down the foods on the charts below and on the next page.
3. Place a check mark (✓) in the column that represents each food group.
4. Compare the foods in the meals to the “3 out of 5” model for breakfast and the “5 out of 5” model for dinner.
5. Together with the adult, determine if the meals were balanced by answering the questions below.

BREAKFAST							
Food and Beverage Choices	Grains	Vegetables	Fruits	Dairy	Protein	“extras”	
Food Name							
BEVERAGE							
YOUR TOTAL SERVINGS							

“3 OUT OF 5” MODEL MEANS:

1 serving from **Grains** – Breads, Cereals, Pasta
+
1 serving from **Vegetables OR Fruits**
+
1 serving from **Dairy** – Milk, Yogurt, Cheese **OR Protein** – Meat, Beans, Nuts

1. Was the breakfast balanced? (circle one) **Yes** **No**
2. If **Yes**, great job! If **No**, what would you like to add to make it balanced?

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Lesson 2: Balance Brigade



Name: _____ Return by: _____

DINNER							
Food and Beverage Choices	Dairy	Vegetables	Fruits	Grains	Protein	“extras”	
Food Name							
BEVERAGE							
YOUR TOTAL SERVINGS							

“5 OUT OF 5” MODEL MEANS:

1 serving from **Dairy** – Milk, Yogurt, Cheese
+
1 serving from **Vegetables**
+
1 serving from **Fruits**
+
1 serving from **Grains** – Breads, Cereals, Pasta
+
1 serving from **Protein** – Meat, Beans, Nuts

1. Was the dinner balanced? (circle one) **Yes** **No**
2. If **Yes**, great job! If **No**, what would you like to add to make it balanced?

Student signature: _____ Parent signature: _____

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Overview of Lesson:

- This lesson reviews with students the concept of right 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.
- The concept of half servings and double servings is reinforced.
- 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 using hand symbols as a comparison.
2. Compare the hand symbols for serving size to household measures.
3. Identify the number of servings from each food group needed daily.
4. Distinguish single, half and double servings of food-group foods.

✔ Highlights a student objectives concept.

Level of Cognition:

Objective 1: Application

Objective 2: Analysis

Objective 3: Knowledge

Objective 4: Comprehension

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:
 - 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 amount 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 one serving of food at a meal. In some cases, only one-half serving may be eaten.
 - For example, a whole sandwich with two slices of bread is equal to two 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 for 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.

Materials: Student Workbooks

Pencils

Measuring utensils: 1 cup liquid measuring cup; ½ cup and 1 cup dry measuring cups; measuring spoons

Additional resources are available on your login page at HealthyEating.org.

Preparation:

1. Review the Serving-Size Comparison Chart document available on your login page at HealthyEating.org; this reviews key information needed to successfully implement the lesson.
2. Gather materials.

Length of Lesson: 50 – 60 minutes

Anticipatory Set:

1. Introduction:

- Ask students to think about the sizes of some common objects:
 - A softball—Would it work to play softball with a basketball? (*No—too big.*) Would it work to play softball with a marble? (*No—too small.*)
 - An umbrella—Could you use a patio-furniture umbrella when it rains? (*No—too big and heavy to hold.*) Would it work to use a doll-size umbrella? (*No—too small; wouldn't keep you dry.*)
 - **Optional:** Compare to appropriate realia you may have brought in to share.
- Tell students that for each of these items to be used as they are intended, they need to be the right size. **Explain** that the same is true for serving sizes for the foods we eat at meals and snacks. Sometimes, serving sizes can be too small, and oftentimes serving sizes can be too large. They need to understand what the right-size servings are for foods.
- Some food groups require several servings in a day; some need only a few.
- Tell students that in today's lesson they'll learn some helpful hints for recognizing the right-size serving of many different foods. Additionally, they'll learn that in many cases half servings or double servings might be eaten. Finally, they'll learn the number of servings from each food group needed every day.

2. Vocabulary:

Note: Vocabulary cards are available for download on your login page at HealthyEating.org.

- Ask students to turn to Page 39 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.

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

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

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

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. Ask students to turn to Page 15 in their workbook and look at the Serving-Size Comparison Chart.

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

- Tell students that they are going to learn serving size today.
-  • **Explain** to students that they are going to learn about serving sizes and what hand symbols and household measures would match the food-group food to be equal to one-half, one, or two servings.
 - **Point** to the Serving-Size Comparison Chart. The hand symbols and measurements listed next to each of the foods represent one serving of food from that food group.
 - **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.
 - a. One fist or 1 measuring cup is equal to 1 serving of milk.
 - b. One pointer finger is equal to 1 serving of cheese like string cheese.
 - **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.
 - **Demonstrate** for the students that $\frac{1}{2}$ of a serving of yogurt would be one-half of a fist or $\frac{1}{2}$ cup, covering the bottom half of your fist up with your other hand or a piece of paper. Hold up a $\frac{1}{2}$ measuring cup.
 - **Demonstrate** for the students that a double serving, or 2 servings, of milk would be equal to two fists, holding up both fists. Hold up 2 one-cup measuring cups.
 - **Ask** one student to come to the front of the classroom to demonstrate for the other students what $\frac{1}{2}$ and 2 servings for the salad example are from the Serving-Size Comparison Chart for the Vegetables food group.

Answer: $\frac{1}{2}$ serving is equal to one fist; 2 servings are equal to four fists. (Student will need to ask for a helper to demonstrate this.) Show 2 one-cup measuring cups and explain that 4 one-cup measuring cups would be equal to 2 servings of salad.

- **Repeat** the step above, calling on a new student for each of the remaining food groups: Fruits—apple; Grains—dry cereal; and Protein—chicken.

Answers:

- *Apple— $\frac{1}{2}$ serving is equal to one-half of a fist or one-half measuring cup, and 2 servings is equal to two fists or 2 one-cup measuring cups.*
- *Dry cereal— $\frac{1}{2}$ serving is equal to one-half of a fist or $\frac{1}{2}$ measuring cup, and 2 servings is equal to two fists or 2 one-cup measuring cups.*

- *Chicken—½ serving is equal to one-half of a palm or about 1½ ounces, and 2 servings is equal to two palms or about 6 ounces.*
2. Explain to students that they need to eat more than one serving of food from all of the five food groups every day in order for their bodies to get the nutrients they need to stay healthy and strong.
- Direct students to turn to Pages 36 – 37 in their student workbook and fill in the number of servings for each of the food groups at the bottom of the chart as they discover the answers.
 - Point to the Dairy on the Serving-Size Comparison Chart. Tell students that they need to eat 3 servings from the Dairy food group each day to get enough of the main nutrient, calcium, 3 servings to have strong bones and teeth.
 - Repeat this process for each of the food groups listed in the chart.

Check for Understanding:

1. Ask students to turn to Page 15 in their workbook and look at the Serving-Size Comparison Chart.
2. Project the Sign That Serving document and ask students to look at it with you.
3. Tell the students that they are going to play a game called “Sign That Serving.”
4. Divide students into two teams—Team #1 and Team #2.
5. Assign a leader to each team.
6. Write Team #1 and Team #2 on the board to help keep score.
7. Use the chart below to play the game.
8. Explain to students that you will ask Team #1 a question about a serving size of a food from one of the five food groups, and they need to, as a group, discuss what hand symbol or household measure represents their answer. The leader will share the teams answer. If the answer is correct, Team #1 gets a point. If the answer is not correct, Team #2 gets a chance to steal the point by answering correctly. If neither group answers correctly, no points are awarded.
9. Play the game alternating between Team #1 and Team #2.
10. Stop after completing the Protein group.
11. Look at the total points after Protein to determine the winning team. If there is a tie, use the Mixed Food question as a tie breaker.

FOR TEACHER REFERENCE ONLY

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

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

Food Group	Serving Size of Food	Hand Symbol
Dairy	1 serving of string cheese	1 pointer finger
	½ serving of yogurt	½ fist or ½ cup
Vegetables	½ serving of broccoli	½ fist or ½ cup
	1 serving of salad	2 fists or 2 cups
Fruits	2 servings of an orange	2 fists or 2 cups
	1 serving of apple juice	1 fist or 1 cup
Grains	2 servings of sliced bread	2 flat hands
	1 serving of cooked oatmeal	Handful or ½ cup
Protein	1 serving of peanut butter	1 thumb or 1 tablespoon
	½ serving of a hamburger patty	½ palm
Mixed Food	1 whole peanut butter and jelly sandwich Bread = 2 servings Peanut butter = 1 serving	Bread = 2 flat hands Peanut butter = 1 tablespoon or 1 thumb

Guided Practice:

Teacher Note: You can direct the students to resource Pages 36 – 37 in their Student Workbook to help them complete the lesson.

WORKBOOK INSTRUCTIONS:

- Tell the students to turn to Page 16 in their workbook.
 - Ask the students to find the words “Sydney’s Servings.”
 - Review the directions with the students.
 - As a class, review and graph Sydney’s breakfast choices.
 - Have the students complete graphing the rest of Sydney’s meals on Page 17 on their own.

Teacher Note: Optional chart on Page 17 of the student workbook is available for download on your login page at HealthyEating.org.

Assessment:

- Tell students to find the words “What I Learned” at the bottom of Page 17.
- Ask the students to answer the questions in this section using the completed chart on Page 17.
- Once students complete the activity, have a few students share their answers and discuss.

Teacher Note: Remind students about their food and daily physical-activity records. Encourage them to pay attention to those choices so that they can remember them for their records.

Lesson 3 Serving Signs

Sydney's Servings
Directions:
 1. In the symbol column write or draw the correct hand symbol for the foods with blanks.
 2. As a class, review the foods and complete the bar graph on Page 17 for Sydney's breakfast.

SYDNEY'S DAILY MEALS

Breakfast—Egg Burrito	Serving Size	Symbol
Tortilla	1 tortilla	One flat hand
Eggs	2 servings	Two eggs
Cheese	1½ ounces	One pointer finger
Strawberries	1 cup	One fist
Glass of low-fat milk	1 cup	One fist
Lunch—Peanut Butter and Jelly Sandwich		
Bread	2 slices	Two flat hands
Peanut butter	1 tablespoon	One thumb
Jelly	1 serving	
Carrot sticks	½ cup	One handful
Punch	1 serving	
Snack—Crackers		
Crackers	½ cup	One handful
Dinner—Spaghetti with Tomato Sauce		
Spaghetti	½ cup	One handful
Tomato sauce	½ cup	One handful
Slice of bread	1 slice	One flat hand
Water	1 cup	One fist
Snack		
Apple	1 medium	One fist
Yogurt	1 cup	One fist

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- Continue to fill in the number of servings Sydney had today in the bar graph labeled “Servings Chart.”
- The servings will be filled in on top of each other as Sydney has more than one serving of food in the same food group.
- Use the completed bar graph below to answer the questions in the “What I Learned” section.
- You can use the chart on Page 15 as a reference.

SERVINGS BAR GRAPH

Number of Servings								
7								
6½								
6								
5½								One slice bread
5								Spaghetti
4½								
4								Crackers
3½								
3								Two slices bread
2½								Peanut butter
2								Two eggs
1½								Punch
1								Jelly
½								
Food Group	Dairy Milk, Yogurt, Cheese	Vegetables	Fruits	Grains Breads, Cereals, Pasta	Protein Meat, Beans, Nuts	“extras”		
Daily Recommended Number of Servings	3	3	2	6	2			

For each glass of water consumed, check a box:

What I Learned

- Did Sydney eat the right number of servings for each food group for the day? Explain. _____
No. Sydney didn't get enough vegetables.
- List three reasons why it may be difficult to get the right number of servings every day?
Example: We don't have any fruit I like at home.
 1. Answers will vary.
 2. _____
 3. _____

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Curriculum Connections

ACTIVITY #1: FOOD GROUP SERVINGS

Materials needed: One sheet of paper and a pen or pencil for each group.

- Tell the students you would like to hold a contest to find a way to remember the recommended number of daily servings for each food group.
- Write the following on the board:
 - Dairy—3
 - Vegetables—3
 - Fruits—2
 - Grains—6
 - Protein—2
- Tell the students they can work independently or in groups.
- They can create a rap, skit or poem.
- Have them perform their creations in class and have the class vote on the best one.

ACTIVITY #2: CAFETERIA CONNECTION

Materials needed: One index card and a pen or pencil for each student.

- **Speak** with the School Foodservice (SFS) Director and take a class on a field trip to the cafeteria.
- **Have** the SFS Director give a tour, explaining how the food is prepared and how they determine food serving sizes when preparing and distributing foods for the students.
- **Take** several copies of the school's lunch menu back to the classroom.
- **Assign** each student one food item from one day of the monthly menu.
- **Tell** the students that they will draw the hand symbol for 1 serving of the assigned food and write what the serving size is below the drawing.
- **Have the SFS Director** post the hand symbols above the food during lunch, and all of the students can practice the hand symbols at lunchtime.

Overview of Lesson:

- In this lesson the importance of healthy snacks as well as the need to limit calorie-rich but nutrient-poor food choices will be reviewed.
- The principle of moderation will be reinforced through a review of the first of three days in which they record all of their food and daily physical-activity choices.
- Using the principles of a balanced breakfast (“3 out of 5” model) and balanced lunch/dinner (“5 out of 5” model), along with the recommended number of daily servings from each food group, the students will analyze multiple food records as well as develop a plan for a full day’s balanced meals.
- Finally, students will assess physical activity completed to determine if daily recommended levels were achieved. The aim is to balance the amount of calories you eat, or energy going into your body, with the amount of moderate-vigorous level physical activity you do, or the amount of energy you are using.

Student Objectives:

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

1. Complete a food and daily physical-activity record for the first of three days, correctly classifying foods and physical activities.
2. Explain the connection between food choices (energy in) and physical activity (energy out).
3. Explain why nutritious snacks should be part of daily food choices.
4. Identify foods that are “extras” and explain why they are not in a food group.
5. Develop personal goals for healthy food choices.

 *Highlights a student objectives concept.*

Level of Cognition:

Objective 1: Comprehension

Objective 2: Comprehension

Objective 3: Comprehension

Objective 4: Knowledge

Objective 5: Synthesis

Nutrition Facts:

- The principle of **moderation** is underscored in this lesson; that is, the need to make the core of food choices those with little or no added fats or sugars. Foods with large amounts of added fats and sugars can be chosen less often or in smaller quantities. In other words, they can be eaten in **moderate** amounts.

- The recommended number of servings for each of the food groups is:
 - 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.

- 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; this can be accumulated throughout the day in several smaller segments of even 10 – 15 minutes.
- Physical activity can be classified as:
 - Low level—examples include playing video games, playing a board game and working at a computer
 - Moderate-vigorous level—examples include brisk walking, skateboarding, tetherball, running, soccer, basketball.

Materials: Student Workbooks

Pencil

Additional resources available on your login page at 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. If not using a white board for the Check for Understanding activity, Page 48, prepare a document with the game topics (Food Group, Main Nutrients, Main Nutrient Health Benefits, Physical Activity) to suit your technology options.
3. Gather materials.
4. Allow ample time to review daily food records with students at the end of the lesson.

Length of Lesson: 50 – 60 minutes

Anticipatory Set:

1. Introduction:

- **Explain** to students that balanced meals need to follow the principle of *moderation* as well. That means being careful not to include several “extra” foods, which are generally low in nutrients and high in calories. Such foods should be eaten just once in a while ... or in smaller portions.
- **Tell** students that in today’s lesson they’ll evaluate food and activity choices for an entire day to determine if:
 - The meals are balanced.
 - If the recommended number of servings of the five food groups were met.
 - If the recommended number of minutes of moderate-vigorous level physical activity was completed.
- **Tell** students that it is important to balance the amount of calories they eat, or energy going into their bodies, with the amount of moderate-vigorous level physical activity they do, or the amount of energy they are using.
- **Tell** students that they are going to be keeping a record of all of the foods they eat and physical activities they do for three days. **Explain** that they’ll be reviewing this record to identify healthy food and daily physical-activity choices they’ve made and/or areas where they might make better choices. Based on this record, they’ll be able to make a plan for improving their food and activity choices.

2. Vocabulary:

Note: Vocabulary cards are available for download your login page at HealthyEating.org.

- **Ask** students to turn to Page 39 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.

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

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

Moderation—making most of your food choices those with little or no added fats or sugars; eating fewer “extras.”

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

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

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 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.
 - **Discuss** with students that these snacks, or “mini-meals,” are a good way to get the main nutrients and calories they need to grow strong and healthy.
 - **Explain** that sometimes it may be hard to get all of the food-group foods they need each day at mealtimes, so snacks are a good way to complete the range of healthy foods they need each day.
2. **Explain** to students that sometimes they may eat foods for snacks that do not belong to one of the food groups.
 - These foods are “extras,” like cookies, chips, soft drinks and candy.
 - These foods do not have many nutrients and can be high in fats, sugars and calories.
 - **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.
-  3. **Explain** to students that today is the first of three days that they will begin keeping a record of all the foods they eat and the activities they do.
 - **Explain** to students that by keeping track of what they eat and their activities for three days they will be able to analyze their habits and make a plan to become healthier.
 - By writing down what they ate, it will help them to have a record to compare to what they should have eaten, especially the foods from the food groups and the correct number of servings for each food group each day, and be able to make necessary changes.
 - By writing down the types and amounts of activities they are involved in, it will also help them to compare to the recommended 60 minutes of moderate-vigorous level physical activity they should have and be able to make necessary changes.
 - They will eventually be setting goals to help them get the recommended number of servings from all five food groups, possibly trade “extra” foods for food-group foods and get the recommended number of minutes of moderate-vigorous level physical activity they need each day.
 - Once a goal is set, progress toward the goal is easy to monitor.

4. Explain to students that it is important to eat in moderation. Explain to students the connection between food choices (energy in) and physical activity (energy out); that is, if you eat more foods or calories and are not involved in moderate-vigorous level physical activity, it could cause you to gain weight and not be as healthy as you should be.
- It is good to try to eat the correct number of servings from each of the five food groups—not too few and not too many.
 - This will help you to eat just the right amount of calories each day.
 - This will also help you balance the amount of calories you eat, or energy going into your body, with the amount of moderate-vigorous level physical activity you do, or the amount of energy you are using.
 - It will also help you to get many different nutrients you need.

Daily Food and Beverage Record—Day 1

Teacher Note: Examples of complete and incomplete student Daily Food and Beverage Records are available on the Dairy Council of California website.

- Tell students to turn to Page 20.
- Tell the students that they will be keeping a daily record of all of the food they eat and physical activity they do for three days.
- Today is Day 1.
- Tell the students to fill out the Daily Food and Beverage Record—Day 1, with all of the foods they have eaten and physical activity they have done so far today.
- Give the students 10 minutes to fill out their forms.
- Walk around and help the students fill out their forms.

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

Directions:

1. You may turn to resource Pages 36 – 37 to help you complete the record.
2. Be sure to count each food-group food within all mixed foods.

Example: Bean and cheese burrito, cereal with milk.

Daily Food and Beverage Record—Day 1

	Food Name	Dairy	Vegetables	Fruits	Grains	Protein	"extras"
		Milk, Yogurt, Cheese			Breads, Cereals, Pasta	Meat, Beans, Nuts	
	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—Day 1

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	

Check for Understanding:

1. Explain to students that they are going to play a game called Food + Activity Trivia.

Teacher Note: A PowerPoint presentation of the game is available on your login page at HealthyEating.org.

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. 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 the bonus question worth 10 points: As a team, write down what the main nutrient is for “extra” foods and why.
 9. Review the answer and discuss as a class. Reward 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.

Guided Practice:

Teacher Note: You can direct the students to resource Pages 36 – 37 in their Student Workbook to help them complete the lesson.

WORKBOOK INSTRUCTIONS:

1. Tell the students to turn to Page 18 in their workbook.
 - Ask the students to find the words “Building My Daily Meals.”
 - Review the directions with the students.
 - Have the students complete this section on their own.

Teacher Note: This is practice for students learning to complete a daily food record.

2. Ask the students to find the words “My Menu Analysis” at the top of Page 19.
 - Review the directions with the students.
 - Have the students complete this section on their own.

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 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 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 health benefit of calcium? Answer: To help us have strong teeth and bones.	Question: What is the amount of moderate-vigorous level 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 nutrient for the Protein food group? Answer: Protein.	Question: What is the health benefit of protein? Answer: To help us have 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 you need each day? Answer: Low level.

Assessment:

- Tell the students to find the words “What I Learned” at the bottom of Page 19.
- 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 the students to turn to Page 21 in their student workbook and carefully pull out the sheet that says “Family Homework.”
- Explain to the students that tonight they are to complete the activity with an adult at home.
- Tell the students to have the adult sign their homework and return the signed sheets to class tomorrow.

Teacher Note:

- When the students arrive in class tomorrow, have them fill out the remainder of the foods they had eaten the day before on their Daily Food and Beverage Record—Day 1.
- Students will be starting Daily Food and Beverage Record—Day 2 as a part of Lesson 5.

My Menu Analysis

Directions:

1. Use the “My Balanced Day” breakfast, lunch and dinner menus that you created on Page 18 to tally the number of servings for each food and fill in the charts below.
2. Place a check mark (✓) in the “Number of Servings for Day” for each food in your menu into the correct food group. Breakfast has been done for you.
3. Fill in chart for Main Nutrient and Health Benefit for each food group listed.
4. You can use the chart on Pages 36 – 37 as a reference.

MY DAY'S MENU

Food Groups	Number of Servings for Day	Total	Main Nutrient	Health Benefit
Dairy – Milk, Yogurt, Cheese			Calcium	Strong bones and teeth
Vegetables			Vitamin A	Healthy eyes and skin
Fruits	✓		Vitamin C	Healing
Grains – Breads, Cereals, Pasta	✓		B-vitamins	Energy
Protein – Meat, Beans, Nuts	✓✓		Protein	Strong Muscles

Did you meet the daily recommended servings for each food group? (circle one) **Yes** **No**
If **No**, what could be added to balance your days' choices?

What I Learned

Directions:

1. Think about a food goal that you would like to achieve.
2. On the line below, write your goal.
3. On the lines below your goal, write why you would like to achieve this goal and how you plan to achieve it.

1. Goal: Goal will vary.

2. Why and how I plan to achieve the above goal:

Don't forget to fill in the rest of your daily record!

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Lesson 4

Food and Physical-Activity Forecasters Day #1—My Balanced Day

Building My Daily Meals

Directions:

1. In the boxes below, you will be building balanced meals.
2. Breakfast has been done for you.
3. Plan your own meals for lunch and dinner. Write your meal in the boxes titled “My Lunch” and “My Dinner” below.
4. Answer the questions below each of the three meals.
5. Be sure to review the breakfast meal for the “3 out of 5” model and use the “5 out of 5” model for lunch and dinner to make your meals are balanced!

MY BREAKFAST

Two eggs

Toast

Grapes



1. Which food groups are represented in the menu above? Protein; Grains; Fruits

2. Is your breakfast balanced? (3 out of 5) (circle one) Yes **No**

If **No**, what could you add?

MY LUNCH

Meals will vary.

1. Which food groups are represented in the menu above?

2. Is your lunch balanced? (5 out of 5) (circle one) **Yes** **No**

If **No**, what could you add?

MY DINNER

Meals will vary.

1. Which food groups are represented in the menu above?

2. Is your dinner balanced? (5 out of 5) (circle one) **Yes** **No**

If **No**, what could you add?

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FAMILY HOMEWORK

Lesson 4: My Balanced Day

Name: _____ Return by: _____



Family Activity

Directions:

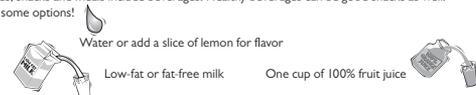
1. Interview an adult and ask what foods he or she ate from snacks today and what beverages he or she had. Be sure to record the beverages consumed all day—for breakfast, lunch, dinner and at snack times.
2. Write down all of the snacks and beverages.
3. Circle the snacks and beverages that are not part of a food group.
4. Next to any circled snacks and beverages, write a food or beverage from a food group to trade in place of the “extra.” Read about beverage substitutes below.

Snacks

Beverages

Many times, snacks and meals include beverages. Healthy beverages can be good snacks as well.

Here are some options!



Water or add a slice of lemon for flavor

Low-fat or fat-free milk

One cup of 100% fruit juice

Directions:

1. Ask the adult what he or she has done for physical activity for the day.
2. List the type of physical activity, the amount of time and the level of activity on the chart below.
3. Total only the minutes of moderate-vigorous level physical activity and write it in the box.

Physical Activity Today	How Many Minutes	Low Level or Moderate-Vigorous Level Physical Activity
Example: Jogging	15 minutes	Moderate-Vigorous Level
Total Number of Moderate-Vigorous Physical-Activity Minutes:		

1. Did he or she reach 60 minutes of moderate-vigorous level physical activity for today? (circle one) **Yes** **No**

2. If **Yes**, great work! If **No**, what else could he or she do to reach 60 minutes?

Student signature: _____ Parent signature: _____

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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/

ACTIVITY #2: THE PRESSURE OF SNACKS

- Tell the students they are going to practice some role playing around mealtime and snacks.
- Tell students you will be calling them up a few at a time and assigning them roles.
- Each group will be told a scenario, and they will need to act out the scenario showing the pressure friends can have on the foods they eat and how to deal with that pressure.

- **Scenario #1:** Four students are standing around after school, and there are candy bars for sale.

Some students have money and some don't. The kids who have money are pressuring those who don't to eat the candy bars with them even though they have some carrot sticks and crackers from lunch that they could eat. What will they do?

- **Scenario #2:** Four students are in the cafeteria eating lunch. There are food-group foods and “extras” to choose from.

Two of the students are choosing almost all “extra” foods and complaining about how tired they are and don't want to play at recess. They are trying to pressure their friends who are choosing food-group foods to choose the “extras” and just watch the activities at recess. How will they handle this situation?

- **Scenario #3:** Your class is having a classroom party to celebrate how well everyone has been doing in class so far this year. Four students are in charge of assigning everyone one food item to bring to the party. The class starts to get excited, and students shout what foods they would like to bring. The only problem is, they are all “extras.” How do you handle this? How can you convince the class to bring some food-group foods to the celebration?
- **Optional:** Have the students come up with their own scenarios and continue with the role playing.

ACTIVITY #3: 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:
 - **Basketball**—moderate-vigorous level
 - **Playing computer games**—low level
 - **Dancing**—moderate-vigorous level
 - **Jumping rope**—moderate-vigorous level
 - **Tennis**—moderate-vigorous level
 - **Listening to music**—low level
 - **Watching TV**—low level

Overview of Lesson:

- The principle of moderation will be reinforced through a review of the second of three days in which students record all of their food and daily physical-activity choices.
- The principles of a balanced breakfast (“3 out of 5” model) and balanced lunch/dinner (“5 out of 5” model), along with the recommended number of daily servings from each food group, will be emphasized.
- Making healthy food decisions when eating out, specifically at fast-food restaurants, is highlighted.
- Finally, students will assess physical activity completed to determine if the daily recommended levels were achieved.

- It is very common for children and their families to eat one or more of their meals at a fast-food restaurant as often as once a week. Healthy food choices from the five food groups are available in many such restaurants; however, care must be taken to:
 - Choose only moderate amounts of the many “extra” foods that are often made available
 - Pay close attention to the serving sizes of the foods purchased. Many times portions are sold that are two to three times larger than a recommended serving.
- By choosing carefully, excess calories that may lead to unwanted weight gain could be avoided.

Student Objectives:

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

1. Complete a food and daily physical-activity record for the second of three days, correctly classifying foods and physical activities.
2. Explain the importance of 60 minutes of moderate-vigorous physical activity each day.
3. Advocate for healthier food options available in restaurants.
4. Analyze a day’s physical activity for adequate minutes of appropriate levels of activity; make adjustment as needed to meet daily requirements.

 *Highlights a student objectives concept.*

Level of Cognition:

Objective 1: Comprehension

Objective 2: Knowledge

Objective 3: Evaluation

Objective 4: Analysis

Nutrition Facts:

- A lunch and dinner is considered balanced if it contains “5 out of 5” of the food groups:
 - Dairy
 - Vegetables
 - Fruits
 - Grains
 - Protein
- The principle of moderation is underscored in this lesson. It is important to eat a variety of foods from all five food groups each day to ensure that the broad range of nutrients is eaten.

Materials: Student Workbooks

Pencils

Additional resources available on your login page at HealthyEating.org.

Preparation:

1. Review the food groups as well as the recommended number of daily servings from each food group. This is key information you will need to successfully implement the lesson.
2. Review the Main Nutrients and Their Health Benefits chart.
3. Gather materials.

Length of Lesson: 50 – 60 minutes

Daily Food and Beverage Record—Day 2

1. Explain to students that today is the second of three days that they will be keeping a record of all the foods they eat and the activities they do.

• Remind the students that by keeping track of what they eat and their physical activities for three days they will be able to analyze their habits and make a plan to become healthier.

– Tell the students to fill out the Daily Food and Beverage Record—Day 2 on Page 24 with all of the foods they have eaten and physical activities they have completed so far today.

– *Teacher Note:* You can direct the students to resource Pages 36 – 37 to help them complete the lesson.

– Give students 10 minutes to fill out their forms.

– Walk around and help students fill out their forms.

Anticipatory Set:

1. Introduction:

- Write the three statements below on the board.
- Tell students that they are going to look at three statements that are myths (that is, statements that are not true). They are to rewrite these statements so that they are facts.
 - Healthy foods are not available at fast-food restaurants.
 - Serving sizes have become smaller over the past 20 years.
 - Milk is not a beverage choice available at fast-food restaurants.
- Explain to students that sometimes there are misperceptions about foods in fast-food restaurants, so they'll be spending some time today learning more about them.
- Explain to students that balanced meals *can* be chosen at fast-food restaurants, though it's sometimes more difficult. Tell students that in many fast-food restaurants, serving sizes are two to three times larger than recommended. Also, most menus include several choices of "extra" foods. So, it's important to search out food-group foods from the menus.

2. Vocabulary:

Note: Vocabulary cards are available for download your login page at HealthyEating.org.

- Ask students to turn to Page 39 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.

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

Moderation—making most of your food choices those with little or no added fats or sugars; eating fewer "extras."

Nutritious—a food containing minerals, vitamins or other nutrients needed for good health.

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

Daily Food and Beverage Record—Day 2							
	Food Name	Dairy Milk, Yogurt, Cheese	Vegetables	Fruits	Grains Breads, Cereals, Pasta	Protein Meat, Beans, Nuts	"extras"
		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—Day 2			
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	

Step-by-Step Procedures:

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

1. Ask students to raise their hands if they ever eat meals outside of their home at fast-food restaurants.
 - Call on a few students to share.
 -  - Explain to students that sometimes when they eat at restaurants, especially fast-food types, the meals do not have foods from every food group.
 - It is important when eating these types of meals that they try to eat foods from all five food groups instead of or before eating “extra” foods.
2. Ask students what types of foods and beverages they typically eat and drink at a fast-food restaurant.
 - Call on a few students to share their answers.

Possible answers: hamburger, fast-food french fries, tacos, burrito, pizza, sub sandwich, chips, kid’s meal, soda.
 - Ask students if any of these foods are “extra” foods.

Possible answers: fast-food french fries, soda, chips, cookies.
 - Tell students that oftentimes there are nutritious options to choose at fast-food restaurants. Call on one student to remind the class, from the vocabulary terms, what nutritious means.
 - Ask students what food-group foods are available at the fast-food restaurants that are nutritious and that they may be able to trade for foods such as fast-food french fries and sodas, which are “extras.”

Possible answers: salad, milk, fruit.

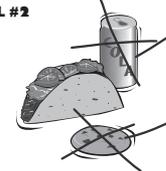
Check for Understanding:

1. Project the Make It Healthier document and ask students to look at it with you.
2. Explain to students that as a class they are going to analyze three fast-food meals to help make the meals healthier choices.
3. As a class look at each meal on the Make It Healthier document.
4. As a class, cross out the one or two “extra” foods or beverages they want to replace with food-group foods. Keep in mind that you want to have a balanced meal that includes foods from all five food groups—the “5 out of 5” model.
5. Draw a line to the food-group food that will replace a crossed-out “extras.” Analyze to make sure you have a balanced meal that includes one food from each of the five food groups. If it is not a balanced meal, draw a line from the meal to a food or foods in the box to make this a balanced meal.

Answers: See teacher answer key.

Lesson 5: Food and Physical-Activity Forecasters

Make It Healthier

<p>SAMPLE MEAL # 1</p> <p>Hamburger (meat, bun)</p> <p>Low-fat milk</p> <p>Fast-food french fries</p> 	<p>MAKE IT HEALTHIER WITH ...</p> <p>Yogurt</p> <p>Carrot and celery sticks</p> <p>Salad</p> <p>Low-fat milk</p> <p>Corn</p> <p>Apple</p> <p>Fruit and yogurt cup</p> <p>String cheese</p> 
<p>SAMPLE MEAL # 2</p> <p>Taco (tortilla, beef, lettuce, tomato)</p> <p>Cookie</p> <p>Soda</p> 	<p>CLASS MEAL</p> <p>Turkey Sub (turkey, lettuce, sandwich roll)</p> <p>Chips</p> <p>Grapes</p> 

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Curriculum Connections

ACTIVITY #1: FOOD GROUP SERVINGS

Materials needed: Teacher to create five shopping lists with all food groups represented.

- Call the manager of your local grocery store and arrange for a tour.
- Tell the students they will be put into 5 or 6 groups and be given a shopping list.
- Tell the students they will be given a tour of the grocery store to learn how stores are set up, and then they will go off in their groups and find all of the items on their list. Afterward, they will return all of the items to their proper place.
- When you get back to the classroom, have the students write a summary of what they learned. How was the grocery store laid out? Was there a reason for having items in a certain place? Did they find their items easily? Was there anything they had trouble with? How would they arrange the grocery store to make items easy to find? Draw a schematic.

ACTIVITY #2: BREAKING BARRIERS

- Tell the students that it can be difficult to eat healthy sometimes because “barriers” often complicate their choices.
- Tell the students that you will be dividing the class into groups and giving them each a script that they will act out in class. You can find the scripts on your login page at HealthyEating.org.
- The scripts are being supplied to give the students a “situation” that they may encounter in real life.
- Tell the students that they are not to follow the script word for word. They should come up with their own scenario, using the script as a guide.
- Tell the students they will be given 20 minutes to assign each other parts and practice their skit.
- Let the students know that they may adjust, or modify, skits to fit their creative needs.
- Have the students perform their skits in front of the class and then discuss how they handled the situations.

Overview of Lesson:

- The students will record all of their food and physical-activity choices for the third day of the three-day record.
- Students will learn some of the principles and techniques used in advertising and will have the chance to analyze sample ads for their positive and negative characteristics.
- They will also have the chance to create their own ad for a food, incorporating some of the positive information that they have learned about nutrients and their health benefits.

Student Objectives:

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

1. Complete a food and physical-activity record for the last of three days, correctly classifying foods and physical activities.
2. Understand the different influences that advertising, media and packaging can have on their food choices.
3. Analyze advertisements used for foods and beverages to determine their truthfulness and effectiveness.
4. Develop an advertisement that truthfully yet effectively promotes the health benefits of a food-group food.

 *Highlights a student objectives concept.*

Level of Cognition:

Objective 1: Comprehension

Objective 2: Comprehension

Objective 3: Analysis

Objective 4: Synthesis

Nutrition Facts:

- The main nutrients for all of the food groups are reviewed in this lesson:

FOR TEACHER REFERENCE ONLY

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

- “Extra” foods have little or no nutritional value; there is no main nutrient associated with “extra” foods.
- Advertisers often use a range of techniques to persuade consumers (that includes your students) to purchase their food products. Children are exposed to over 10,000 food ads every year ... frequently for foods that are considered “extras.” Advertisers may secure celebrity or professional-athlete endorsements; promise a “bargain” or “deal”; promise quick, dramatic results (lose weight, feel more energy, etc); suggest that eating the product will make you more popular; promise better taste. Note that these techniques can be used to promote healthy products as well as less nutrient-rich foods.
- Advertising techniques include:
 - Health and/or nutrition claims
 - Graphics
 - Endorsements by authorities or celebrities
 - Persuasive language
 - Facts, numbers and statistics

Your students need to be aware of these persuasive techniques and understand how to separate fact from hype.
- Valid information to guide food product purchases is available, even sifting through the “hard sell” techniques. Your students should look for specific health or nutritional benefits that can be backed by facts or evidence from credible health authorities, not personal testimonials.

They should question advertising that promises too much, too quickly. If something sounds too good to be true, it probably is.

Materials: Student Workbooks
Pencils
Poster paper
Color markers or crayons
Additional resources available on your login page at HealthyEating.org.

Preparation:

1. Review the advertisements provided.
2. Review the kinds of foods depicted as “extras.”
3. Review Main Nutrients and Their Health Benefits document, available on your login page at HealthyEating.org; this contains key information you will need to successfully implement this lesson.
4. Gather materials.

Length of Lesson: 60 minutes

Daily Food and Beverage Record—Day 3

1. Explain to students that today is the third and last day of three days that they will be keeping a record of all the foods they eat and the physical activities they do.
 - Remind the students that by keeping track of what they eat and their physical activities for three days they will be able to analyze their habits and make a plan to become healthier.
 - Tell the students to fill out the Daily Food and Beverage Record—Day 3 on Page 28—with all of the foods that they have eaten and physical activities they have completed so far today.

Teacher Note: You can direct the students to resource Pages 36 – 37 to help them complete the lesson.

- Give students 10 minutes to fill out their forms.
- Walk around and help students fill out their forms.

Anticipatory Set:

1. Introduction:

- Ask students to think about advertisements they have seen on television, in magazines or on the Internet for different food products or beverages or restaurants.
 - Call on a few students to share one of their favorite commercials or advertisements for a specific food or restaurant.

Note: If you don't get a good range of examples, cue students by asking if they remember seeing a commercial for their favorite fast-food restaurant, for chips, for cookies, for soda. Then, ask if they have seen commercials or ads for whole-grain bread, chicken, green beans, apples. Hopefully, they will have seen some of each.
 - Ask students if the food they mentioned is a healthy one, based on belonging to one of the five food groups, or if it is an “extra” food.
 - Ask students if they liked the commercial or advertisement. If yes, why? Did the advertisement make them want to buy the product?
- Tell students that the basic purpose of advertising is to persuade someone to purchase a specific product. In today's class, they will be discussing advertising for food products.
- Tell students that today they will learn about ways of advertising that can effectively persuade a person to purchase or choose a specific food product.

Daily Food and Beverage Record—Day 3

	Food Name	Dairy Milk, Yogurt, Cheese	Vegetables	Fruits	Grains Breads, Cereals, Pastas	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—Day 3

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	

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2. Vocabulary:

Note: Vocabulary cards are available for download on your login page at HealthyEating.org.

- Ask students to turn to Page 39 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.

Advertise—to give information to a person about a product or event. This can be shared through media like television or the Internet, on billboards, on food packages and more.

Commercial—a paid advertisement or promotional announcement, which can be communicated through television, radio or the Internet.

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

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

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

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.

Persuade—to urge or advise a person to do something such as purchase a specific food product.

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

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.  **Explain** to students that today they will learn what types of things may influence their food choices, how to recognize the advertising techniques used to persuade them to buy the products and how to determine if the claims being made about health are true.
 - Ask students to raise their hands if they ever eat foods such as cereal or sports beverages that are endorsed, or recommended, by celebrities or athletes.
 - Call on a few students to share.
 - **Explain** to students that sometimes they eat foods and drink beverages because of the advertisement. It is important to consider the actual food to make sure it is a food-group food instead of considering only other parts of the advertisement such as claims or celebrities.
 -  **Explain** to students that advertisers often use specific techniques to persuade them to buy and eat their products. These techniques can be used for food-group foods or “extra” foods which are higher in calories and low in main nutrients.
 - Ask students to think about advertisements they have seen on television that have a celebrity or athlete who is promoting a certain food or beverage.
 - Call on a few students to share who that person is, what the food is and what food group the food or “extra” belongs in. Ask the student what that person is trying to sell.
 - Project the sample milk advertisement.
 -  **Explain** to students that valid information on packages is important to helping them make the decision to eat a food or drink a beverage.
 - Tell students that they should look for specific health and/or nutritional benefits that can be backed by facts or evidence from credible sources. Point to any examples that are shown on the posted sample advertisement
 - Other techniques they should look for are graphics; endorsements by authorities or celebrities; persuasive language; facts, numbers and statistics. Point to any examples that are shown on the posted sample advertisement.
 - Project the sample Flat Snaxs advertisement and repeat the discussion above.

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 Orange Soda advertisement document and ask students to look at it with you.
2. Review the following techniques on the advertisement with the students and explain to them that knowing these elements will help them when they make their own advertisement later in the lesson.
 - a. Health and/or nutrition claims
 - b. Graphics
 - c. Endorsements by authorities or celebrities
 - d. Persuasive language
 - e. Facts, numbers and statistics

Guided Practice:

Teacher Note: You can direct the students to resource Pages 36 – 37 in their Student Workbooks to help them complete the lesson.

WORKBOOK INSTRUCTIONS / ASSESSMENT

1. Tell the students to find the words “Create an Ad” on the top of Page 27.
 - Let students know they will have 20 minutes to complete their project.
 - Divide the students into five groups.
 - Assign each group a food group.
 - Review the directions with the students.
 - Have the students create their own commercial or poster advertisement.
 - Once students complete the activity, have a few students share their project and discuss.

Lesson 6	Food and Physical-Activity Forecasters Day #3—Anatomy of an Advertisement
Create an Ad	
Directions:	
<ol style="list-style-type: none">1. You will be placed into one of five groups, and you will be assigned a food group.2. Choose a food from your assigned food group and decide whether to create a commercial (skit) or a poster advertisement for your product.3. You will need to include the nutrients and the health benefits of your chosen food.4. Be sure to include some of the advertising techniques you learned in class.5. Be prepared to share your project.	
Notes for creating an ad:	
1. Foods that could be used for the ad:	<u>Example: Oranges</u> _____ _____
2. Nutrients and health benefits of the chosen food:	<u>Example: Vitamin C, Healing</u> _____ _____
3. Describe how you will incorporate the advertising techniques discussed in class:	Health and/or nutrition claims: <u>Example: Eat more oranges to heal your cuts and scrapes.</u> Graphics: <u>Example: Picture of kids eating oranges. Some will be healthy and scrape free, while others not eating oranges will have cuts and bandaids.</u> Endorsements by celebrities: <u>Example: Quote from famous singer about how they love oranges.</u> Persuasive language: <u>Example: Eat oranges for a good time and healing benefits.</u> Facts, numbers and statistics: <u>Example: Four out of five orange eaters heal more quickly.</u>
<i>Don't forget to fill in the rest of your daily record!</i> 27	

Family Homework:

- Tell students to turn to Page 29 in their student 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.
- Tell students to have the adult sign their homework and return the signed sheets to class tomorrow.

Curriculum Connections

ACTIVITY #1: HEROIC FOODS

Materials needed: One sheet of paper and a pen or pencil for each student.

- Tell the students they will be creating a character or superhero for an advertisement.
- Each student will be assigned a food group.
- Each student must choose a food from their assigned food group and create a character for an advertisement around that food.

Example: Broccoli—Broccoli is high in vitamin A, and the health benefit is healthy skin and eyes. The student might draw a broccoli crown that equips the superhero with x-ray vision to melt away “extra” foods whenever they come in contact.

- The students will need to draw their own character or superhero and create a slogan explaining who the character is and what power she/he possesses.

ACTIVITY #2: MAGAZINE EDITOR

Materials needed: Six pieces of paper (per student), scissors, staples, pencils and markers

Teacher Note: This activity may require more than one class session.

- Tell the students they will be creating their own magazine.
- Give each student six pieces of paper and have them cut them all in half.
- Have each student put his or her 12 pages together and staple three times on the left-hand side to create a book.
- Write the following topics on the board:
 - Food-group foods
 - Physical activity
 - “Extras”
 - Labels
 - Serving sizes
 - “3 out of 5” model
 - “5 out of 5” model
 - Snacks
 - Main nutrients and their health benefits
- Tell the students to choose at least three topics from the board or create their own food or physical activity topic (to be approved by the teacher prior to beginning).
- Tell the students they will be creating “articles” in their magazines around their chosen topics, and creating advertisements to go along with them.
- Requirements for project:
 - Name your magazine and write it on the cover.
 - Create a front page for your magazine.
 - Include at least three “articles” from the chosen topics (minimum of two pages each).
 - Create at least three advertisements for your magazine.



Lesson 6: Anatomy of an Advertisement



Name: _____ Return by: _____

Family Activity

Directions:

- Choose a television commercial or magazine advertisement that you have seen for a food, beverage or restaurant.

(NAME OF FOOD, BEVERAGE OR RESTAURANT)
- With an adult, analyze the commercial or advertisement using the checklist below.

ADVERTISEMENT TECHNIQUES CHECKLIST
Describe the health and/or nutrition claims.
Describe the graphics used.
Who endorsed your chosen product?
Describe the persuasive language used.
What facts, numbers and statistics were used?
- Answer the question below together.

Would you buy this product because of the advertisement?

Why or why not? _____

Go to HealthyEating.org to find more foods to try with your family.

Student signature: _____ Parent signature: _____

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Overview of Lesson:

- In this lesson students will be reviewing and analyzing a three-day food 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 over the course of the three days.
- They will suggest adjustments to their records if they did not meet the recommendations.
- Finally, they will make a plan for improving their food and daily physical-activity choices that includes one or two personal goals.

Student Objectives:

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

1. Analyze the completed food and daily physical-activity records; identify foods and/or activities to add or trade that would allow him or her to meet the daily requirements.
2. Explain why it is important to choose balanced meals and adequate levels of moderate-vigorous physical activity each day.
3. Develop a personal plan to improve his or her food and activity choices at home; identify at least two goals and how he or she will achieve those goals.
4. Explain moderation and why it is important to eat moderate amounts of “extra” foods, which may be higher in fats, sugars or calories.

 *Highlights a student objectives concept.*

Level of Cognition:

Objective 1: Analysis

Objective 2: Comprehension

Objective 3: Synthesis

Objective 4: Comprehension

Nutrition Facts:

- 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 lunch and dinner is considered balanced if it contains “5 out of 5” of the 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 recommended number of servings for each of the food groups is:
 - 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.

- The principle of **moderation** is underscored in this lesson—that is, the need to make the core of food choices those with little or no added fats or sugars. Foods with large amounts of added fats and sugars can be chosen less often or in smaller quantities. In other words, they can be eaten in **moderate** amounts.
- 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 “mini-meals,” should come mainly from food-group foods.
- It is recommended that children be physically active (moderate and vigorous levels) at least 60 minutes each day.

Materials: Student Workbooks

Pencils

Poster board or butcher paper

Colored markers

Additional resources available on your login page at HealthyEating.org.

Preparation:

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

Length of Lesson: 60 minutes

Anticipatory Set:

1. Introduction:

- Ask students to look over the food and activity records on Pages 20, 24 and 28 in their student workbooks that they have brought in to class today.
 - Ask a few students to share something unusual or interesting about their records
Possible answers: ate a meal in a restaurant; was at a party at a friend's house; tried a new food for the first time; 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 one or more of the days they kept their records. Tell them that if that's the case, 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 physical activity.
 - Ask students if they found it hard to eat the recommended servings of all five food groups each day or if it was hard to complete 60 minutes of moderate-vigorous physical activity. Call on a few students to share difficulties or barriers they may have met.
Possible answers: didn't like the taste of some of the foods served at meals; some food-group foods weren't available at home; went out to eat and not all food groups were choices; didn't have time for physical activity after school.
- Tell students that today they will be analyzing their records to see if they:
 - Ate the recommended number of servings from each of the five food groups.
 - Completed at least 60 minutes of moderate-vigorous levels of physical activity.
- Remind students that healthy food choices and moderate-vigorous daily physical activity are important habits to establish to stay healthy.
- Tell students that today they will also be making a personal plan for themselves as to how they can improve their daily food or physical-activity choices. If it was hard to make some healthier decisions, in their plans they can explain how they decided to manage that.

2. Vocabulary:

Note: Vocabulary cards are available for download on your login page at HealthyEating.org. The words for this lesson are all review. You can choose to move straight ahead to the Step-by-Step Procedures if you feel your students have a good understanding of these words. If reinforcement is indicated, review the words as has been done in previous lessons.

- Ask students to turn to Page 39 of their workbooks to review 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.

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

“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.

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

Moderation—making most of your food choices those with little or no added fats or sugars; eating fewer “extras.”

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

Nutritious—a food containing minerals, vitamins or other nutrients needed for good health.

Physical activity—any activity that causes your heart to beat faster.

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

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.

Step-by-Step Procedures:

1. Explain to students that you are going to do a brief review of what they have learned in the *Nutrition Pathfinders* program.
 - Ask students for the main way foods are classified into the five food groups.
Answer: by their main nutrient.
 - Remind students that it is important to eat foods in moderation and to make most of their food choices those with little or no added fats or sugars.
 - Ask students to share some foods that do not belong in the five food groups and why they are considered “extras.”
Possible answers: sodas, chips, cookies; because they are higher in fats, sugar, calories and/or sodium and do not have many main nutrients.
 - Explain to students that it is important to eat the recommended number of servings of foods from the five food groups and when not meeting the recommended number of food-group servings each day, they can trade out some of the “extras” they may be eating for foods in the food groups to help meet the recommended number of servings. Ask students why this is important.
Answer: give us the main nutrients we need to grow and be strong.

- Ask students how they can measure servings of foods.
Possible answers: using measuring cups and/or hand symbols.
 - Review a few of the hand servings and measuring tools with the students comparing to ½, 1 and 2 serving(s) of one or two of the foods in each food group.
- Ask students why eating a **balanced breakfast** is important.
Answer: to help us have the energy we need to play, be physically active and learn in school.
 - Ask students to tell you what the name of the model for a balanced breakfast is called.
Answer: the “3 out of 5” model.
 - Call on one or two students to tell you the “3 out of 5” food groups that would make up a healthy, balanced breakfast.
- Ask students why eating balanced meals, like lunch and dinner, is important.
Answer: to help us get all the main nutrients we need to be healthy.
 - Ask students to tell you the name of the model for a balanced lunch or dinner.
Answer: the “5 out of 5” model.
 - Call on one or two students to tell you the “5 out of 5” food groups that would make up a healthy, balanced lunch or dinner.
- Ask students why snacks are important.
Possible answers: help us to “fill in the gaps” if we are not eating enough of the recommended number of servings from each of the five food groups every day; help us to get the food we need from the five food groups; help us to get all the nutrients we need each day to keep our bodies strong and healthy.
 - Call on one student for each of the food groups and ask them to share the main nutrient and the health benefit for that main nutrient.

- Call on one student to tell you the level of activity that does not count toward the required amount of physical activity each day and to give you an example.
Answer: low level; watching TV, playing video games, taking a nap.
- Call on one student to tell you another level of activity that counts toward the required amount of physical activity each day and to give you an example.
Answer: moderate-vigorous level; playing tennis, jogging, playing tag.
- Call on one student to remind the class how many minutes of moderate-vigorous physical activity they need to get each day.
Answer: 60 minutes.

Guided Practice:

Teacher Note: You can direct the students to resource Pages 36 – 37 in their Student Workbooks to help them complete the lesson.

WORKBOOK INSTRUCTIONS:

1. Tell the students to turn to Pages 31 – 32 in their workbooks.
 - Tell the students that they will need to use their three Daily Food and Beverage Records for this next exercise.
 - Tell the students their three Daily Food and Beverage Records and three Daily Physical Activity Records can be found on Pages 20, 24 and 28.
 - Review the directions with the students.
 - Have the students complete the exercise on their own.
 - Walk around the classroom to help and answer questions when needed.

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

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

- Ask students why being physically active each day is important.
Answer: to help keep our bodies strong and healthy.

Assessment:

- Tell the students to find the words “Goal: How did you do?” on Page 32.
- Have the students complete the exercise on their own.
- Once students complete the activity, have a few students share their answers and discuss.

Check for Understanding:

1. Copy the “Our Class Goal” black-line master from Page 54 of your Teacher Guide.
2. Follow the directions below.
 1. **Appoint** a lead for each table/group of students and have them **total up** all of the servings for each of the food groups that they had for Day #3 and the number of minutes of low and moderate-vigorous physical activity and **write** those numbers on a piece of paper.
 2. **Call** on each lead to tell you the number of servings their group had for each of the food groups and the number of minutes of low and moderate-vigorous physical activity. **Write** those numbers on the chart in the appropriate box.
 3. **Determine** the number of recommended servings for each of the food groups you should have as a class per day (for example, Dairy = 3 servings per day x 25 students = 75 servings per day) and write that number on the chart in the appropriate box.
 4. As a class, **total up** all of the servings for each of “extras” that you had for Day #3 and write that number on the Our Class Goal chart in the appropriate box.
 5. As a class, **total up** all of the minutes of moderate-vigorous level physical activity you had for Day #3 and write that number on the chart in the appropriate box.

Lesson 7
My Plan!

My Plan!
Directions:

1. Review your 3 daily food and physical-activity records.
2. Fill in the chart below with information from your 3 daily records on Pages 20, 24 and 28.
3. Fill in the total number of servings for each food group for each day.
4. Fill in the number of minutes for moderate-vigorous physical activity for each day.
5. Circle **Yes** or **No** in the “Met Daily Recommended Amount” column.
6. Answer the questions below the chart and at the top of Page 32 by using the chart and your daily food records.

Food Group/extras	Daily Recommended Number	Day 1 (see Page 20)	Met Daily Recommended Amount	Day 2 (see Page 24)	Met Daily Recommended Amount	Day 3 (see Page 28)	Met Daily Recommended Amount
Dairy	3		Yes or No		Yes or No		Yes or No
Vegetables	3		Yes or No		Yes or No		Yes or No
Fruits	2		Yes or No		Yes or No		Yes or No
Grains	6		Yes or No		Yes or No		Yes or No
Protein	2		Yes or No		Yes or No		Yes or No
“extras”							
Total Minutes Moderate-Vigorous Physical Activity	60 minutes		Yes or No		Yes or No		Yes or No

1. Were there any food group(s) for which you did NOT meet the daily requirements? List them below.

DAY 1	DAY 2	DAY 3
-------	-------	-------

Answers will vary based on personal records

2. What food-group foods could you add to make your days more balanced? Refer to number 1 above.

Food Group	Food or Beverage Choice
Example: Dairy	Yogurt

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3. Circle any day(s) that you did not meet your daily requirements for moderate-vigorous level physical activity.

DAY 1	DAY 2	DAY 3
-------	-------	-------

4. Name one or two moderate-vigorous level physical activities and the amount of time needed to add to your day(s) to reach the daily requirements.

Day: _____ Activity: _____ Minutes: _____

Day: _____ Activity: _____ Minutes: _____

Day: _____ Activity: _____ Minutes: _____

GOALS: How did you do?

1. Refer back to your personal goals on Page 10 for how to make improvements.

Answers will vary.

2. Did you meet your goals? Explain.

Answers will vary.

3. Would you like to add or change a goal? Explain.

Answers will vary.

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6. Determine the number of recommended moderate-vigorous level physical activity minutes you should have as a class per day and write that number on the chart in the appropriate box.
7. As a class, **total up** all of the minutes of low level physical activity you had for Day #3 and write that number on the chart in the appropriate box.
8. As a class compare the number of minutes of moderate-vigorous and low physical activity.
9. As a class, **set a goal and a timeline** as to when you would like to try to accomplish that goal.

The class goal does not have to be at the recommendation. Set realistic goals; small steps to meeting the recommendations count too!

Note: if recommendations have been met then this is cause to celebrate and encourage maintaining the recommendation.

Possible goal example:

- *In two weeks, our class will meet the recommended number of servings for one of the five food groups, lower the amount of “extras” we eat and lower the amount of low level physical activity we do.*
 - *In four weeks, our class will meet the recommended number of servings for three of the five food groups, lower the number of “extras” we eat by X percent and increase the number of minutes of moderate-vigorous level physical activity we do.*
 - *In six weeks, our class will meet and/or maintain the recommended number of servings for all five of the food groups, lower the amount of “extras” we eat by X percent and meet the recommended number of minutes of moderate-vigorous level physical activity.*
10. **Explain** to students that you will be keeping track of the foods they eat, the number of servings you eat and the amount and level of physical activity periodically and then will check to see if they are meeting the goals they set as a class.

Optional: Graph the results on a large piece of paper to hang in the classroom.

Teacher Note: Consider possible rewards or celebrations that reinforce the principles taught in the program for reaching the class goal(s).

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/

ACTIVITY #2: COMMUNITY SERVICE

Materials needed: Six to nine poster boards, pencils, markers

- **Divide** the students into six to nine groups.
- **Assign** each group one concept that was learned during this program.

Example concepts:

- *Food-group foods*
- *Physical activity*
- *“Extras”*
- *Labels*
- *Serving sizes*
- *“3 out of 5” model*
- *“5 out of 5” model*
- *Snacks*
- *Main nutrients and their health benefits*
- Tell the students they will be creating a poster around their assigned concept to teach the rest of the school and their community about nutrition and/or physical activity.
- Post the posters around school and have students explain posters and concepts to other students at lunch and recess.
- Ask your local grocery store to post the posters around the store to teach the community about healthy eating!

ACTIVITY #3: MEAN, MEDIAN AND MODE

Teacher Note: Students may do this activity as frequently as you would like: weekly, semi-monthly or once a quarter.

- **Divide** the class into groups of four to five students.
- **Have** the students turn to Page 31 of their student workbooks.
- **Have** each group make a chart and gather the daily amounts for each food group, for each student.
- **Have** the students find the mean, median and mode for each food group, each day.

Our Class Goal

	Dairy Milk, Yogurt, Cheese	Vegetables	Fruits	Grains Breads, Cereals, Pasta	Protein Meat, Beans, Nuts	“extras”	Moderate- Vigorous Level Physical Activity	Low Level Physical Activity
Class Total Day #3								
Recommended Daily Servings and Physical Activity Minutes								
Class Goal								
Progress Toward Goal Week #1								
Progress Toward Goal Week #2								
Progress Toward Goal Week #3								
Progress Toward Goal Week #4								
Progress Toward Goal Week #5								
Progress Toward Goal Week #6								

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 two *Nutrition Pathfinders* programs include **variety** (fourth-grade level) and **moderation** (fifth-grade level), with the fifth-grade curriculum building on knowledge and skills addressed in the fourth-grade curriculum. The concept of **balance** has been addressed in the third-grade curriculum, *Shaping Up My Choices*. As stated, the focus for the fifth-grade lessons is **moderation**—that is, the need to make the core of your food choices those with little or no added fats or sugars. Foods with large amounts of added fats or sugars can be chosen less often or in smaller quantities.
- 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 level physical activities, assessing if recommended levels of daily physical activity were met and adjusting physical activity, as needed, to meet daily recommended amounts.
 - Analyzing a meal for food groups represented, main nutrients in each food group and health benefit of the main nutrient.

Materials: Student Workbooks
Pencil

Preparation:

1. Review the Post-Assessment activity in the student 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 33 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 34 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 questions below on their own.

5th 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 Bret ate yesterday.
- For each serving of food:
 - List each of Bret's food choices in the correct food-group column.
 - Once all foods are listed, total the number of servings Bret ate for the day for each food group.
 - Write the main nutrient and health benefit for each food group.
 - Answer the questions below the chart.

BRET'S DAILY MEALS

Breakfast—toaster pastry, low-fat milk
Lunch—hot dog, bun, canned fruit, brownie
Snack—string cheese, snap peas
Dinner—spaghetti (noodles, tomato sauce, meatballs), green salad, French bread, soft drink
Snack—apple
All foods listed above are 1 serving.

	Dairy Milk, Yogurt, Cheese	Vegetables	Fruits	Grains Breads, Cereals, Pasta	Protein Meat, Beans, Nuts	"extras"
Example: Low-fat milk		snap peas	canned fruit	bun	hot dog	toaster pastry
string cheese		tomato sauce	apple	noodles	meatballs	brownie
		green salad		French bread		soft drink
Total Servings	2	3	2	3	2	3
Main Nutrient	Calcium	Vitamin A	Vitamin C	B-vitamins	Protein	none
Health Benefit	Strong bones and teeth	Healthy eyes and skin	Healing	Energy	Strong muscles	none

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- Have the recommended number of daily servings been met for each food group? (circle one) Yes No
 If not, what is missing? Dairy; Grains
- What food could you add? Examples: yogurt, bagel, crackers
- What is the main nutrient and health benefit of any food group that Bret missed?

MAIN NUTRIENT	HEALTH BENEFIT
<u>Calcium; B-vitamins</u>	<u>Strong bones and teeth; energy</u>

Serving Size

Directions:

- Look at 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.

 EXAMPLE: String cheese	 Green beans	 Low-fat chocolate milk
Pointer finger (1½ ounces) 	One handful (½ cup) 	One fist (1 cup) 
<input type="radio"/> ½ serving <input checked="" type="radio"/> 1 serving <input type="radio"/> 2 servings	<input checked="" type="radio"/> ½ serving <input 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
 Chicken breast	 Orange juice	 2 slices of bread
Palm (3 ounces) 	One handful (½ cup) 	Two flat hands (2 halves) 
<input type="radio"/> ½ serving <input checked="" type="radio"/> 1 serving <input type="radio"/> 2 servings	<input checked="" 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 checked="" type="radio"/> 2 servings

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4. Tell students to find the words “Physical Activity” on Page 35 in their workbook.
- Read the directions below these words to the students.
 - Ask students to complete this activity and answer the questions below on their own.

Closing:

1. Collect workbooks.
2. Review correct answers with students.
3. Ask students how many of them think they know more about making healthy food and physical-activity choices now.
4. 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 daily physical activity throughout the year by using additional resources available at HealthyEating.org/Interactives/.

Physical Activity

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

15 minutes 30 minutes 45 minutes 60 minutes 75 minutes

PHYSICAL-ACTIVITY CHART

Directions:

1. Look at the following list of activities for each of the students.
2. Fill in the appropriate bubble that shows if the student did or did not meet his or her physical-activity requirement for the day.
3. For those students who have not met their physical-activity requirements for the day, add an activity and the amount of time they would need to help them meet their requirement.



Met Physical-Activity Recommendations	Did Not Meet Physical-Activity Recommendations
<input type="radio"/>	Example: <input checked="" type="radio"/>
<input checked="" type="radio"/>	<input type="radio"/>
<input checked="" type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input checked="" type="radio"/>

Dylan: • 45 minutes watching television
• 30 minutes on the computer
Activity: Eg. Play soccer Time: 15 minutes

Kayla: • 40 minutes swimming
• 30 minutes watching television
Activity: _____ Time: _____

Matt: • 30 minutes playing video games
• 60 minutes snowboarding
Activity: _____ Time: _____

Stacy: • 30 minutes shopping
• 20 minutes playing hula hoop
Activity: Eg. Dancing Time: 40 minutes

• 45 minutes playing tennis
• 15 minutes walking
• 20 minutes rollerblading
• 30 minutes playing cards
• 30 minutes cooking dinner
• 30 minutes listening to music

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

1. Answers will vary.
2. _____
3. _____
4. _____
5. _____

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K - 12 Curriculum



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