



The ABCs of Healthy Eating

Objectives

Students will:

- Learn how their eating habits affect their physical and mental health.
- Learn why nutrition experts chose a pyramid to illustrate healthy eating recommendations.
- Identify food groups in the MyPyramid Guide.

Time Needed

50 minutes

Getting Ready

Read:

- Teacher Background Information

Make:

- *The MyPyramid Guide* overhead or use online www.mypyramid.gov
- The serving sizes chart from MyPyramid overhead or use online www.mypyramid.gov
- *Mípirámide* overhead (optional)

Have:

- Sample serving sizes of dry cereal, fruits, vegetables, etc. (optional)

Duplicate:

- *The MyPyramid Guide*
- *What is one serving?* chart from MyPyramid
- *Mípirámide Guide*
- *¿Que es una porción?* chart from *Mípirámide*

Curriculum Links

- Consumer Education
- Health
- Language Arts
- Spanish

OVERVIEW OF LESSON—This lesson teaches students the ABCs of healthy eating, with an emphasis on balance among food groups. Students will compare what they typically eat in one day to *The MyPyramid* food guidance system, and learn about the link between eating habits and their physical and mental health.

Activity Steps

1. Ask the students to stand. Ask all students who know somebody, a family member, friend, etc., who has heart disease or who has died of heart disease to sit down. Next ask students who know anyone who has cancer or who has died of cancer to sit down. Finally, ask those who know of anyone who has diabetes to sit down. (At this point, all or most of the students will be seated.) Note that poor eating habits are linked to the development of heart disease, cancer, and diabetes.

2. Discuss the following: Most teens do not believe their eating habits will affect their future health, but we know that unhealthy eating habits are linked to obesity, heart disease, stroke, high blood pressure, diabetes, and certain types of cancer. Even school-age children may have the beginning phases of heart disease. Poor eating habits can also contribute to:

- Dull and dry hair
- Pale and flaky skin
- Brittle nails
- Irritability and moodiness
- Poor concentration
- Problems with being underweight or overweight



3. Discuss the *MyPyramid Food Guidance System*, using the *MyPyramid* handout and overhead. Lead a discussion on the *MyPyramid* with the following:

■ **Why do you think health experts chose this graphic as a guide for Americans?**

(Answer: The USDA's MyPyramid food guidance system symbolizes a personalized approach to healthy eating and physical activity. It is meant to remind Americans to make healthful food choices and to be active every day. This guide debuted in 2005, and is the first food guidance system to include physical activity in its core recommendations.)

■ **What do you think all of the sections represent? (Review the different features of the MyPyramid)**

Activity: Activity is represented by the steps and the person climbing them, as a reminder of the importance of daily physical activity.

Variety: Variety is symbolized by the 6 color bands representing the 5 food groups of the Pyramid plus Oils. This illustrates that foods from all groups are needed each day for good health.

Moderation: Moderation is represented by the narrowing of each food group from bottom to top. The wider base stands for foods to choose more often (those with limited solid fats or added sugar); the narrower top area stands for foods to choose less often (those with more added sugars and solid fats).

Proportionality: Proportionality is shown by the different widths of the food group bands. The widths suggest how much food a person should choose from each group. (For example, the orange band represents grains, which should make up the biggest proportion of the diet.) The widths are just a general guide, not exact proportions.

Personalization: Personalization is shown by the person on the steps and the slogan "MyPyramid: Steps to a Healthier You"

Gradual Improvement: The Slogan, "Steps to a Healthier You", suggest that individuals can benefit from taking small steps to improve their diet and lifestyle each day.

■ **Review the different food groups:**

Using the Serving Size Overhead and Serving Size Handout, lead a discussion on the 5 food groups. *(If available, pass around examples of pre-measured serving sizes of cereals, fruits, vegetables, and other foods. The serving sizes should be based on the My Pyramid's recommended serving sizes.)*

■ **What are oils?**

(Answer: Oils are fats that are liquid at room temperature (such as oils used in cooking). Some common oils are: canola oil, corn oil, olive oil, soybean oil, sunflower oil. Foods naturally high in oils are nuts, olives, some fish and avocado. Foods that are mainly oil include mayonnaise, certain salad dressings, and tub margarine.)



■ What are fats?

(Answer: Solid Fats are fats that are solid at room temperature. Solid fats come from various animal foods and can be made from vegetable oils through a process call “hydrogenation”. Common solid fats are: butter, chicken fat, stick margarine, shortening, and pork fat (lard).

■ Do we need oils and fats?

(Answer: Everyone needs some fats and oils in their diet. It is best to choose unsaturated fats (those found in vegetable oils) and limit saturated fat (solid fats from animal sources and/or from vegetable oils that have been hydrogenated).

Discuss Discretionary Calories: These are extra calories individuals choose to eat or drink that are above their essential nutrient needs.

■ What kinds of foods would fit into “discretionary” calories?

(Answer: Higher fat and/or higher sugar foods such as, butter, sauces, gravies, sugar, syrup, candy, soda and other sweetened drinks, whole milk, sweetened cereals, sweetened yogurt, cookies, and cakes, etc. In general, discretionary calories or “extra” calories should should be between 100-300 calories per day. If someone is physically active, this may be more.)

The servings recommended are based on a 2000 calorie diet

■ Does everyone need 2000 calories per day?

■ What if you need more calories?

■ What if you need less calories?

(Answer: If you need more or less than 2000 calories per day, you will need more or fewer servings in each of the food groups. The number of daily servings needed from each food group depends on a person’s size, age, gender, activity level, and growth needs.)

For a plan that is specific to their needs, students can log onto www.mypyramid.gov, enter their age, gender, and activity level and get a plan that reflects their calorie needs.

4. Ask students to write down on a piece of paper everything they ate yesterday, (including what they drank) and any physical activity they did. Have students identify the food group each food or drink represents using MyPyramid, or you can use the *Food Tracking Worksheet* from www.mypyramid.gov to classify the foods consumed. Following are some helpful hints:

A cheeseburger falls into—

Meat, Poultry, Dry Beans, Fish, Eggs, and Nuts group because of the hamburger patty.

Milk, Yogurt, and Cheese group because of the cheese.

Oils because of the mayonnaise or special sauce.

Bread, Cereal, Rice, and Pasta group because of the bun.



Discuss how students' eating and physical activity habits stack up against *The MyPyramid Food Guidance System*. Are there any food groups that students failed to eat from? (The typical person eats too few fruits and vegetables, and adolescents typically fail to eat enough foods from the **Milk, Yogurt, and Cheese Group**). What food groups did students get enough servings in? Did most students get the recommended 60 minutes of physical activity per day? Approximately how many calories did students get from "discretionary" calories?

Please note, this activity does not focus on specific serving sizes but instead emphasizes the importance of balance among food groups in a daily eating pattern. If the foods a person eats in one day tend to be from one food group more than another, it is not the end of the world. The key is to try to include foods from all food groups throughout the week.

Extensions

- **Optional Classroom Activity:** Hold class in a computer lab and have students go online to www.mypyramid.gov and enter individualized information based on gender and age.
- **Optional Classroom Activity:** Invite school nutrition staff to class to explain how cafeteria meals reflect *The MyPyramid*.
- **Optional Family Outreach Activity:** Ask students to look at the foods they have at home and categorize them by using *The MyPyramid*. Have them determine if all food groups are represented. Or ask them to discuss what they've learned in class with their family members or caregivers. Have them write a report detailing what they found and the results of any discussions with their family members or caregivers.

Teacher Background Information

Adolescents may be surprised to learn that unhealthy eating habits and a lack of physical activity not only have a long-term effect, but also take a toll on their bodies now. Autopsies on the arteries of school-age children (who died, for example, in automobile accidents) revealed that their arteries had already started clogging.

Additionally, teens can't feel their bones becoming thinner from eating too few calcium-rich foods; yet surveys indicate teenage girls consume only half of the calcium they need to prevent osteoporosis, a disease that thins the bones, makes them brittle, and leads to 1.5 million bone fractures each year.¹



Furthermore, inadequate nutrition during childhood can have a detrimental effect on children's cognitive development and on productivity in adulthood. There is evidence that chronically undernourished children attain lower scores on standardized achievement tests, are more irritable, have difficulty concentrating and have lower energy levels.²

Making healthier food choices begins with an understanding of how to incorporate *The MyPyramid* into students' daily lives.

¹ Gass, M., Dawson-Hughes, B., (2006). Preventing Osteoporosis-Related Fractures: An Overview. *The American Journal of Medicine*, Vol. 119 (4A), 3S-11S

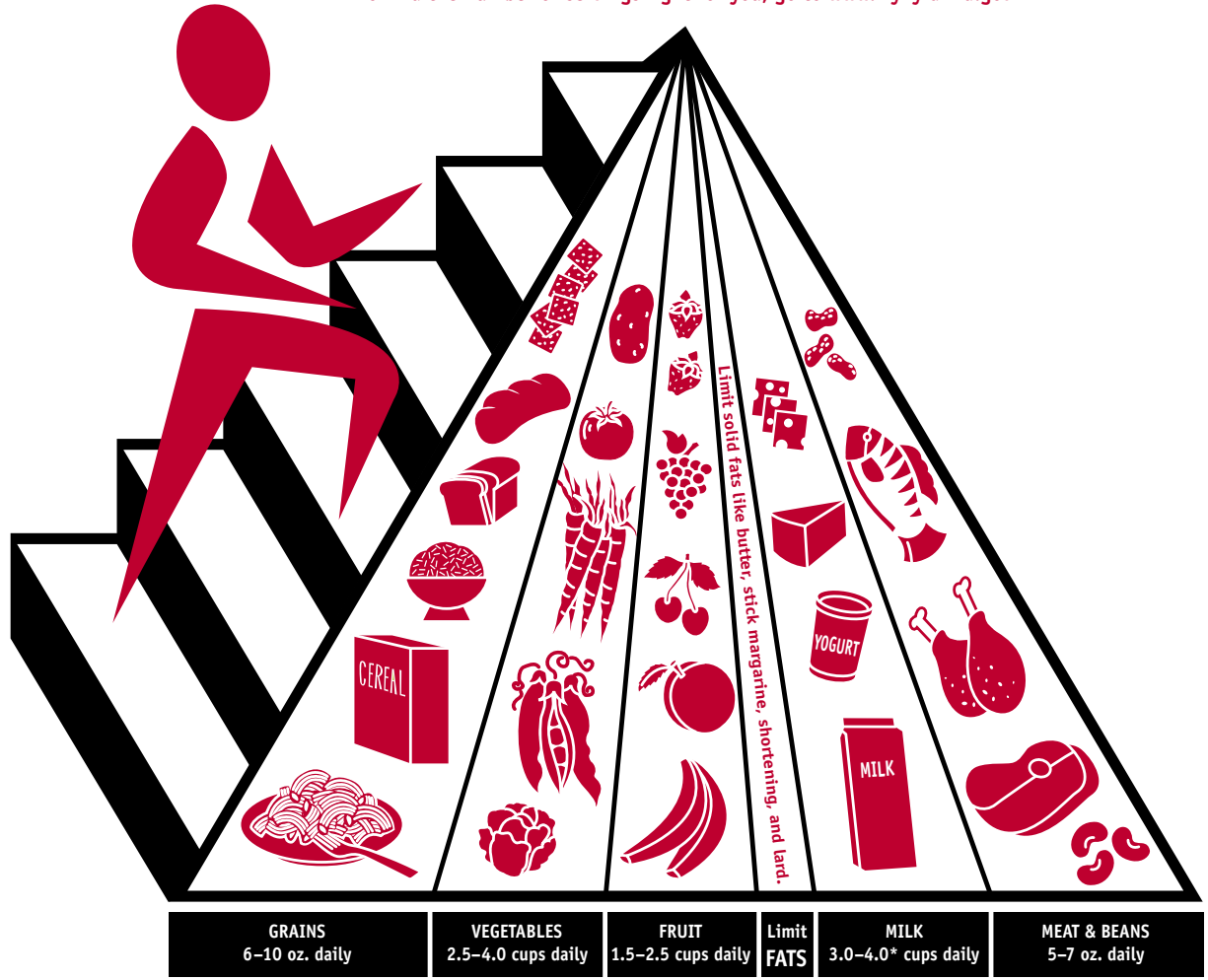
² Tufts University, Center on Hunger, Poverty, and Nutrition Policy, Statement on the Link Between Nutrition and Cognitive Development in Children, Tufts University, Medford, MA, 1994.

³ Quinn, D., Calvin, M., and Kushner, A. [1997]. National Research Council's New Report Recasts Dietary Requirements for Calcium and Related Nutrients. National Academy of Sciences, National Academy of Engineering.

MyPyramid

STEPS TO A HEALTHIER YOU

To find the number of servings right for you, go to www.MyPyramid.gov



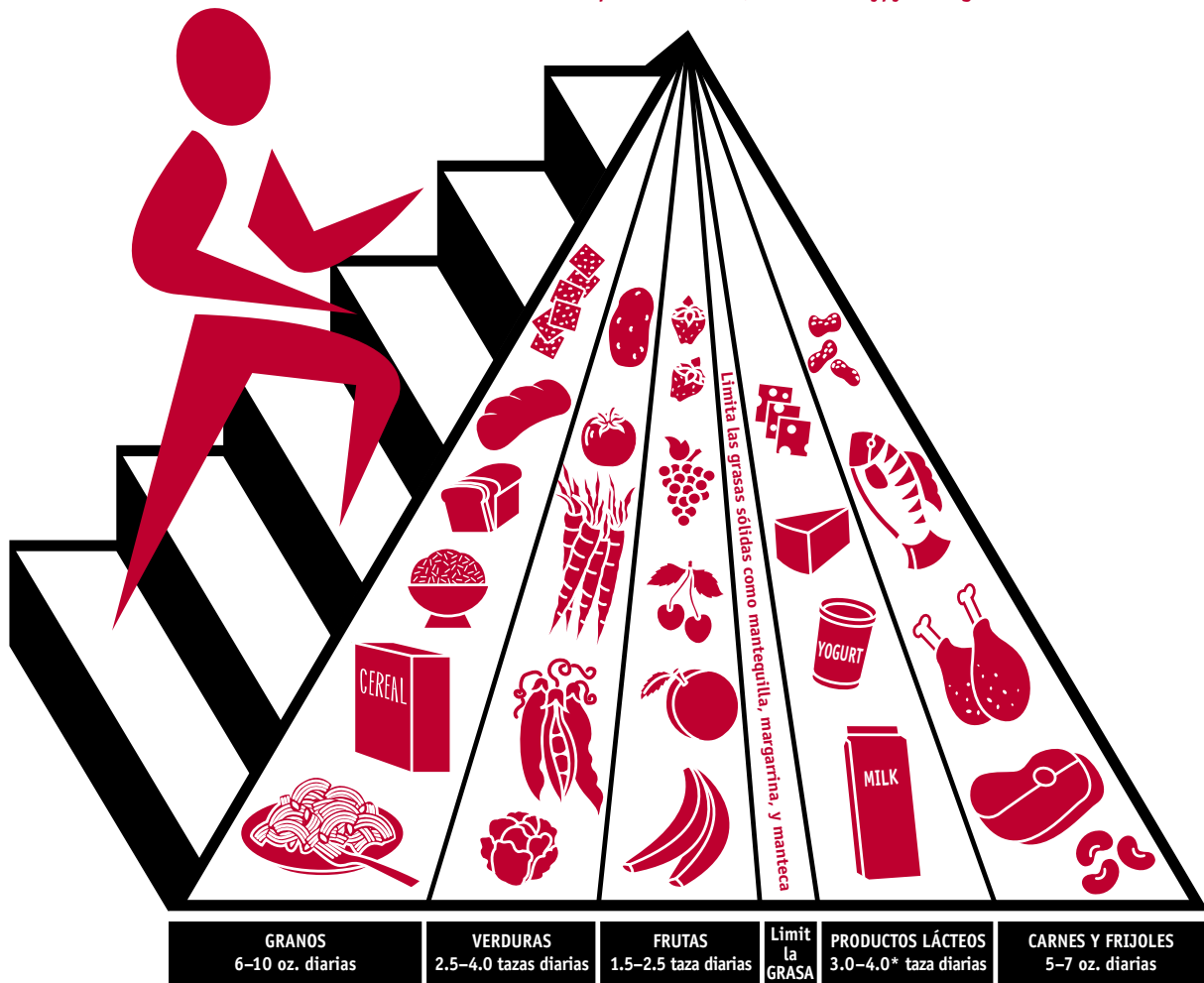
Adapted from MyPyramid, the U.S. Department of Agriculture
Center for Nutrition Policy and Promotion

*Medical experts with the National Academy of Science now recommend that adolescents consume 1,300 milligrams of calcium per day. Because of this recommendation, Project LEAN recommends 3–4 servings every day from the Milk, Yogurt, and Cheese Group to help meet adolescents’ calcium needs. Calcium is needed to maintain bone strength. Eighty-five percent of a person’s bone structure is formed by age 14.³

MiPirámide

PASOS HACIA UNA MEJOR SALUD

Para ver las cantidades que tú necesitas, visita www.mypyramid.gov



Adaptado de MiPirámide, del Departamento de Agricultura de Los Estados Unidos

***Para Su Información:** Expertos en medicina de la Academia Nacional de Ciencias ahora recomiendan que los adolescentes consuman 1,300 miligramos de calcio cada día. Debido a esta recomendación, Project LEAN recomienda 3 a 4 porciones de leche y productos derivados de la leche cada día para ayudar a satisfacer las necesidades de calcio en los adolescentes. El calcio es necesario para el fortalecimiento de los huesos. El ochenta y cinco por ciento de la estructura ósea está formada a la edad de 14 años.³

What is One Serving?



Grains	Vegetables	Fruits	Milk	Meat & Beans
6–10 ounces per day (bread, cereal, rice, pasta)	2 1/2–4 cups per day	1 1/2–2 1/2 cups per day	3–4* cups per day	5–7 ounces per day
<i>Measured in ounces</i>	<i>Measured in cups</i>	<i>Measured in cups</i>	<i>Measured in cups</i>	<i>Measured in ounces</i>
Choose whole grains	Eat a variety and include dark green veggies, orange veggies and include dry beans and pintos.	Eat a variety. Choose fresh, frozen, canned or dried. Go easy on juice.	Choose fat-free or low-fat.	Choose low-fat or lean meats and poultry.
1 ounce is equal to: 1 slice bread 1 cup breakfast cereal 1/2 cup rice 1/2 cup pasta 1/2 cup cooked cereal	1 cup is equal to: 1 large baked potato or sweet potato 2 cups lettuce (romaine, spinach, iceberg)	1 cup is equal to: 1 medium mango 1 large banana 1 medium apple Medium bunch of grapes 2 plums	1 cup is equal to: 1 cup milk, soy milk, rice milk 1 cup yogurt 1/3 cup shredded cheese or 1 1/2 ounces of hard cheese	1 ounce is equal to: 1/4 cup of beans 1 ounce of cooked meat, fish, poultry 3–4 pieces of shrimp 3 thin slices of cold meat 10–12 almonds or cashews
	1/2 cup is equal to: 1/2 cup corn or 1/2 cob of corn 1/2 cup raw veggies (such as carrots, celery, broccoli) 1/2 cup green beans 1/2 cup tomatoes 1/2 cup tomato juice	1/2 cup is equal to: 1/2 grapefruit 1 small orange 1/2 cup 100% juice 1 peach 1/4 cup raisins 1/2 cup strawberries, blueberries, raspberries 1 kiwi 1/2 cup canned fruit	1/2 cup is equal to: 1/2 cup pudding (made with milk) 1/2 cup frozen yogurt	

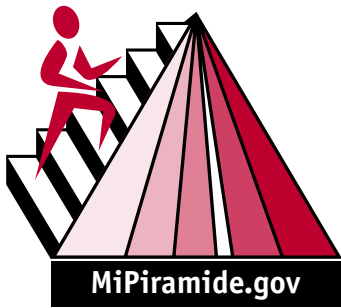
Find a Balance Between Food and Physical Activity.

- Be physically active for at least 60 minutes most days of the week.

Know the limits on fats, sugars and salt (sodium).

- Make most of your fat sources from fish, nuts and vegetable oils.
- Limit solid fats like butter, stick margarine, shortening, and lard, as well as foods that contain these.
- Check the Nutrition Facts label to keep saturated fats, trans fat, and sodium low.
- Choose food and drinks low in added sugars. Added sugars contribute calories with few, if any, nutrients

*Reflects 1997 National Academy of Sciences calcium guidelines for adolescents. Adapted from MyPyramid.gov, the U.S. Department of Agriculture, Center for Nutrition Policy and Promotion



¿Que es Una Porción?

Granos	Verduras	Frutas	Productos Lácteos	Carnes Y Frijoles
6–10 onzas al día (pan, cereal, arroz, pasta)	2 1/2–4 tazas al día	1 1/2–2 1/2 tazas al día	3–4* tazas al día	5–7 onzas al día
Medido en onzas	Medido en tazas	Medido en tazas	Medido en tazas	Medido en onzas
Escoge granos integrales todos los días	Consume una variedad incluyendo verduras de color verde oscuro, color naranja y frijoles.	Consume una variedad de frutas incluyendo frutas frescas, congeladas, enlatadas, o secas. Limita el consumo de jugos.	Escoge productos lácteos bajos en grasa o sin grasa.	Escoge carnes y aves de bajo contenido de grasa o magras.
1 onza equivale a:	1 taza equivale a:	1 taza equivale a:	1 taza equivale a:	1 onza equivale a:
1 rebanada de pan 1 taza de cereal 1/2 taza de arroz 1/2 taza de pasta 1/2 taza de avena cocida	1 papa grande o camote 2 tazas de lechuga para ensalada	1 mango mediano 1 plátano 1 manzana mediana 2 ciruelas	1 taza de leche, leche de soya, leche de arroz 1 taza de yogurt 1/3 taza de queso desmenuzado 1 1/2 onzas de queso seco	1/4 taza de frijoles 1 onza de carne, pescado, o pollo cocinado 3–4 camarones 3 rebanadas delgadas de carnes frías 10–12 almendras o nueces
	1/2 taza equivale a:	1/2 taza equivale a:	1/2 taza equivale a:	
	1/2 taza de granos de maíz o 1/2 elote 1/2 taza de verduras (como zanahorias, apio, o brócoli) 1/2 taza de ejotes 1/2 taza de tomates 1/2 taza de jugo de tomate	1/2 de toronja 1 naranja pequeña 1/2 taza de jugo 100% de fruta 1 durazno 1/4 taza de pasitas 1/2 taza de de fresas, 1 kiwi 1/2 taza de de fruta enlatada	1/2 flan o pudín hecho con leche 1/2 taza de yogurt congelado	
Encuentra un equilibrio entre la alimentación y la actividad física <ul style="list-style-type: none"> Mantente físicamente activo por lo menos durante 60 minutos la mayoría de los días de la semana. 		Conoce los límites de las grasas, los azúcares y la sal (sodio). <ul style="list-style-type: none"> Escoge la mayor parte de fuentes de grasa de pescado, nueces, y aceites de vegetal. Limita las grasas sólidas como mantequilla, margarina, manteca, y comidas preparadas con estos. Lee las etiquetas de los alimentos—Datos de Nutrición, para limitar la grasa saturada, y sodio Escoge alimentos y bebidas bajos en azúcar. Los azúcares adicionales en los alimentos contribuyen calorías, con muy poco o nada de nutrientes. 		

*Basado en la recomendación sobre el consumo de calcio para los adolescentes de acuerdo con la Academia Nacional de las Ciencias.