

Anatomy of MyPyramid

One size doesn't fit all

USDA's new MyPyramid symbolizes a personalized approach to healthy eating and physical activity. The symbol has been designed to be simple. It has been developed to remind consumers to make healthy food choices and to be active every day. The different parts of the symbol are described below.

Activity

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

Moderation

Moderation is represented by the narrowing of each food group from bottom to top. The wider base stands for foods with little or no solid fats or added sugars. These should be selected more often. The narrower top area stands for foods containing more added sugars and solid fats. The more active you are, the more of these foods can fit into your diet.

Personalization

Personalization is shown by the person on the steps, the slogan, and the URL. Find the kinds and amounts of food to eat each day at MyPyramid.gov.

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. The widths are just a general guide, not exact proportions. Check the Web site for how much is right for you.

Variety

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

Gradual Improvement

Gradual improvement is encouraged by the slogan. It suggests that individuals can benefit from taking small steps to improve their diet and lifestyle each day.



MyPyramid.gov
STEPS TO A HEALTHIER YOU



MyPyramid Food Intake Pattern Calorie Levels

MyPyramid assigns Individuals to a calorie level based on their sex, age, and activity level.

The chart below identifies the calorie levels for males and females by age and activity level. Calorie levels are provided for each year of childhood, from 2-18 years, and for adults in 5-year increments.

Activity level	MALES			Activity level	FEMALES		
	Sedentary*	Mod. active*	Active*		Sedentary*	Mod. active*	Active*
AGE				AGE			
2	1000	1000	1000	2	1000	1000	1000
3	1000	1400	1400	3	1000	1200	1400
4	1200	1400	1600	4	1200	1400	1400
5	1200	1400	1600	5	1200	1400	1600
6	1400	1600	1800	6	1200	1400	1600
7	1400	1600	1800	7	1200	1600	1800
8	1400	1600	2000	8	1400	1600	1800
9	1600	1800	2000	9	1400	1600	1800
10	1600	1800	2200	10	1400	1800	2000
11	1800	2000	2200	11	1600	1800	2000
12	1800	2200	2400	12	1600	2000	2200
13	2000	2200	2600	13	1600	2000	2200
14	2000	2400	2800	14	1800	2000	2400
15	2200	2600	3000	15	1800	2000	2400
16	2400	2800	3200	16	1800	2000	2400
17	2400	2800	3200	17	1800	2000	2400
18	2400	2800	3200	18	1800	2000	2400
19-20	2600	2800	3000	19-20	2000	2200	2400
21-25	2400	2800	3000	21-25	2000	2200	2400
26-30	2400	2600	3000	26-30	1800	2000	2400
31-35	2400	2600	3000	31-35	1800	2000	2200
36-40	2400	2600	2800	36-40	1800	2000	2200
41-45	2200	2600	2800	41-45	1800	2000	2200
46-50	2200	2400	2800	46-50	1800	2000	2200
51-55	2200	2400	2800	51-55	1600	1800	2200
56-60	2200	2400	2600	56-60	1600	1800	2200
61-65	2000	2400	2600	61-65	1600	1800	2000
66-70	2000	2200	2600	66-70	1600	1800	2000
71-75	2000	2200	2600	71-75	1600	1800	2000
76 and up	2000	2200	2400	76 and up	1600	1800	2000

*Calorie levels are based on the Estimated Energy Requirements (EER) and activity levels from the Institute of Medicine Dietary Reference Intakes Macronutrients Report, 2002.

SEDENTARY = less than 30 minutes a day of moderate physical activity in addition to daily activities.

MOD. ACTIVE = at least 30 minutes up to 60 minutes a day of moderate physical activity in addition to daily activities.

ACTIVE = 60 or more minutes a day of moderate physical activity in addition to daily activities.

MyPyramid

Food Intake Patterns

The suggested amounts of food to consume from the basic food groups, subgroups, and oils to meet recommended nutrient intakes at 12 different calorie levels. Nutrient and energy contributions from each group are calculated according to the nutrient-dense forms of foods in each group (e.g., lean meats and fat-free milk). The table also shows the discretionary calorie allowance that can be accommodated within each calorie level, in addition to the suggested amounts of nutrient-dense forms of foods in each group.

Daily Amount of Food From Each Group												
Calorie Level ¹	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200
Fruits ²	1 cup	1 cup	1.5 cups	1.5 cups	1.5 cups	2 cups	2 cups	2 cups	2 cups	2.5 cups	2.5 cups	2.5 cups
Vegetables ³	1 cup	1.5 cups	1.5 cups	2 cups	2.5 cups	2.5 cups	3 cups	3 cups	3.5 cups	3.5 cups	4 cups	4 cups
Grains ⁴	3 oz-eq	4 oz-eq	5 oz-eq	5 oz-eq	6 oz-eq	6 oz-eq	7 oz-eq	8 oz-eq	9 oz-eq	10 oz-eq	10 oz-eq	10 oz-eq
Meat and Beans ⁵	2 oz-eq	3 oz-eq	4 oz-eq	5 oz-eq	5 oz-eq	5.5 oz-eq	6 oz-eq	6.5 oz-eq	6.5 oz-eq	7 oz-eq	7 oz-eq	7 oz-eq
Milk ⁶	2 cups	2 cups	2 cups	3 cups	3 cups	3 cups	3 cups	3 cups	3 cups	3 cups	3 cups	3 cups
Oils ⁷	3 tsp	4 tsp	4 tsp	5 tsp	5 tsp	6 tsp	6 tsp	7 tsp	8 tsp	8 tsp	10 tsp	11 tsp
Discretionary calorie allowance ⁸	165	171	171	132	195	267	290	362	410	426	512	648

1 Calorie Levels are set across a wide range to accommodate the needs of different individuals. The attached table "Estimated Daily Calorie Needs" can be used to help assign individuals to the food intake pattern at a particular calorie level.

2 Fruit Group includes all fresh, frozen, canned, and dried fruits and fruit juices. In general, 1 cup of fruit or 100% fruit juice, or 1/2 cup of dried fruit can be considered as 1 cup from the fruit group.

3 Vegetable Group includes all fresh, frozen, canned, and dried vegetables and vegetable juices. In general, 1 cup of raw or cooked vegetables or vegetable juice, or 2 cups of raw leafy greens can be considered as 1 cup from the vegetable group.

Vegetable Subgroup Amounts are Per Week												
Calorie Level	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200
Dark green veg.	1 c/wk	1.5 c/wk	1.5 c/wk	2 c/wk	3 c/wk	3 c/wk	3 c/wk	3 c/wk	3 c/wk	3 c/wk	3 c/wk	3 c/wk
Orange veg.	.5 c/wk	1 c/wk	1 c/wk	1.5 c/wk	2 c/wk	2 c/wk	2 c/wk	2 c/wk	2.5 c/wk	2.5 c/wk	2.5 c/wk	2.5 c/wk
Legumes	.5 c/wk	1 c/wk	1 c/wk	2.5 c/wk	3 c/wk	3 c/wk	3 c/wk	3 c/wk	3.5 c/wk	3.5 c/wk	3.5 c/wk	3.5 c/wk
Starchy veg.	1.5 c/wk	2.5 c/wk	2.5 c/wk	2.5 c/wk	3 c/wk	3 c/wk	6 c/wk	6 c/wk	7 c/wk	7 c/wk	9 c/wk	9 c/wk
Other veg.	3.5 c/wk	4.5 c/wk	4.5 c/wk	5.5 c/wk	6.5 c/wk	6.5 c/wk	7 c/wk	7 c/wk	8.5 c/wk	8.5 c/wk	10 c/wk	10 c/wk

4 Grains Group includes all foods made from wheat, rice, oats, cornmeal, barley, such as bread, pasta, oatmeal, breakfast cereals, tortillas, and grits. In general, 1 slice of bread, 1 cup of ready-to-eat cereal, or 1/2 cup of cooked rice, pasta, or cooked cereal can be considered as 1 ounce equivalent from the grains group. **At least half of all grains consumed should be whole grains.**

5 Meat & Beans Group in general, 1 ounce of lean meat, poultry, or fish, 1 egg, 1 Tbsp. peanut butter, 1/4 cup cooked dry beans, or 1/2 ounce of nuts or seeds can be considered as 1 ounce equivalent from the meat and beans group.

6 Milk Group includes all fluid milk products and foods made from milk that retain their calcium content, such as yogurt and cheese. Foods made from milk that have little to no calcium, such as cream cheese, cream, and butter, are not part of the group. Most milk group choices should be fat-free or low-fat. In general, 1 cup of milk or yogurt, 1 1/2 ounces of natural cheese, or 2 ounces of processed cheese can be considered as 1 cup from the milk group.

7 Oils include fats from many different plants and from fish that are liquid at room temperature, such as canola, corn, olive, soybean, and sunflower oil. Some foods are naturally high in oils, like nuts, olives, some fish, and avocados. Foods that are mainly oil include mayonnaise, certain salad dressings, and soft margarine.

8 Discretionary Calorie Allowance is the remaining amount of calories in a food intake pattern after accounting for the calories needed for all food groups—using forms of foods that are fat-free or low-fat and with no added sugars.

Estimated Daily Calorie Needs

To determine which food intake pattern to use for an individual, the following chart gives an estimate of individual calorie needs. The calorie range for each age/sex group is based on physical activity level, from sedentary to active.

	Calorie Range	
	Sedentary	Active
Children		
2–3 years	1,000	1,400
Females		
4–8 years	1,200	1,800
9–13	1,600	2,200
14–18	1,800	2,400
19–30	2,000	2,400
31–50	1,800	2,200
51+	1,600	2,200
Males		
4–8 years	1,400	2,000
9–13	1,800	2,600
14–18	2,200	3,200
19–30	2,400	3,000
31–50	2,200	3,000
51+	2,000	2,800

Sedentary means a lifestyle that includes only the light physical activity associated with typical day-to-day life.

Active means a lifestyle that includes physical activity equivalent to walking more than 3 miles per day at 3 to 4 miles per hour, in addition to the light physical activity associated with typical day-to-day life.



MyPyramid Food Guidance System Education Framework

Background:

The 2005 Dietary Guidelines for Americans are the basis for Federal nutrition policy. The MyPyramid Food Guidance System provides food-based guidance to help implement the recommendations of the Guidelines. MyPyramid was based on both the Guidelines and the Dietary Reference Intakes from the National Academy of Sciences, while taking into account current consumption patterns of Americans. MyPyramid translates the Guidelines into a **total diet** that meets nutrient needs from food sources and aims to moderate or limit dietary components often consumed in excess. An important complementary tool is the Nutrition Facts label on food products.

MyPyramid provides web-based interactive and print materials for consumers. In addition to the materials developed for consumers, MyPyramid also includes materials designed for professionals. These professional materials are intended for use by programs and agencies in developing consumer education materials; by nutritionists and educators as the basis for their education efforts; and by the media to assist them in understanding and reporting of Federal food guidance. They include:

- **Food Intake Patterns** that identify **what** and **how much** food an individual should eat for health. The amounts to eat are based on a person's age, sex, and activity level. These patterns have been published in the 2005 Dietary Guidelines
- **Education Framework** that explains **what changes** most Americans need to make in their eating and activity choices, **how** they can make these changes, and **why** these changes are important for health.
- **Glossary** that defines key terms used in the MyPyramid Food Guidance System documents.

This document includes the Education Framework and the Glossary.

Overview of MyPyramid Food Guidance System Education Framework:

The MyPyramid Education Framework provides specific recommendations for making food choices that will improve the quality of an average American diet. These recommendations are interrelated and should be used together. Taken together, they would result in the following changes from a typical diet:

- Increased intake of vitamins, minerals, dietary fiber, and other essential nutrients, especially of those that are often low in typical diets
- Lowered intake of saturated fats, *trans* fats, and cholesterol and increased intake of fruits, vegetables, and whole grains to decrease risk for some chronic diseases
- Calorie intake balanced with energy needs to prevent weight gain and/or promote a healthy weight

The recommendations in this Education Framework fall under four overarching themes:

- **Variety**—Eat foods from all food groups and subgroups.
- **Proportionality**—Eat more of some foods (fruits, vegetables, whole grains, fat-free or low-fat milk products), and less of others (foods high in saturated or *trans* fats, added sugars, cholesterol salt, and alcohol).
- **Moderation**—Choose forms of foods that limit intake of saturated or *trans* fats, added sugars, cholesterol, salt, and alcohol.
- **Activity**—Be physically active every day.

The Framework's recommendations are presented as key concepts for educators. The key concepts are organized by topic area: calories; physical activity; grains; vegetables; fruits; milk, yogurt, and cheese; meat, poultry, fish, dry beans, eggs, and nuts; fats and oils; sugars and sweets; salt; alcohol; and food safety. Under each topic area, information is presented on:

- **What** actions should be taken for a healthy diet,
- **How** these actions can be implemented, and
- **Why** this action is important for health (the key benefits).

These key concepts are not intended as direct consumer messages, but rather as a framework of ideas from which professionals can develop consumer messages and materials.

MyPyramid Education Framework – Key concepts for educators

The major concept for each topic is in bold

CALORIES

WHAT	HOW	WHY
<p>Balance calorie intake from foods and beverages with calories expended.</p> <p>To prevent gradual weight gain with age, make small decreases in food and beverage calories and increase physical activity.</p> <p>Limit the amount of fats, added sugars, and alcohol consumed to stay within the discretionary calorie allowance.</p> <p>See the glossary for a definition and more information on discretionary calorie allowances. See the food intake patterns for specific discretionary calorie allowances at each calorie level.</p>	<p>Determine the number of calories needed for energy balance. These can be estimated from the 2005 Dietary Guidelines Table 3, or from EER formulas (see glossary).</p> <p>Strategies: Choosing versions of foods that are “nutrient dense” (with little or no solid fats or added sugars).</p> <p>Limiting the amounts of added sugars, fats and oils (especially solid fats), and alcohol consumed to keep discretionary calorie intake within the allowance for a selected food intake pattern.</p> <p>Substituting water, plain coffee, or tea as a beverage for beverages high in added sugars (such as regular sodas).</p> <p>Increasing physical activity level.</p> <p>If too many calories are consumed one day, consuming less the next day.</p>	<p>To maintain body weight in a healthy range</p>
<p>If weight loss is needed, aim for a slow, steady weight loss by decreasing calorie intake, while maintaining an adequate nutrient intake and increasing physical activity.</p>	<p>Following the food intake pattern at a calorie level identified for the person’s age and sex may result in weight loss. Food intake patterns are based on energy needs of a person with healthy weight. Thus, people who are overweight may be able to lose weight following the food intake pattern for their age and sex.</p> <p>Increasing physical activity level may also assist with weight loss.</p> <p>Those with a chronic disease or on medication should consult with a healthcare provider about weight loss strategies to ensure proper management of other health conditions.</p>	<p>To lose weight</p>

MyPyramid Education Framework – Key concepts for educators

The major concept for each topic is in bold

PHYSICAL ACTIVITY	WHAT	HOW	WHY
<u>Adults</u>	<p>Engage in regular physical activity and reduce sedentary activities.</p> <p>a) To reduce the risk of chronic disease, engage in at least 30 minutes of moderate- to vigorous-intensity physical activity above usual activity at work or home on most days of the week.</p> <p>b) To manage body weight and prevent gradual, unhealthy weight gain, engage in up to 60 minutes of moderate- to vigorous-intensity activity on most days of the week while not exceeding caloric intake requirements.</p> <p>c) To sustain weight loss, engage in at least 60 to 90 minutes of daily moderate-intensity physical activity while not exceeding caloric intake requirements.</p>	<p>Physical activity recommendations are above usual activity. Physical activity may include short bouts (10 minutes) to accumulate total time over the day.</p> <p>Some examples of moderate physical activity are walking briskly, mowing the lawn, dancing, swimming, or bicycling on level terrain. A person should feel some exertion but should be able to carry on a conversation.</p> <p>Some examples of vigorous physical activity are jogging, high-impact aerobic dancing, swimming continuous laps, or bicycling uphill. This type of activity results in a significant increase in heart and breathing rate.</p> <p>Strategies: Building more physical activity into daily routine at home and at work, such as walking or biking rather than driving.</p> <p>Choosing leisure activities that provide moderate to vigorous activity, such as outdoor walks or hikes, participating in sports, taking a fitness class at the gym, or playing actively with children.</p> <p>Planning a time for exercise in daily routine, such as time at the gym, an exercise class, or a brisk walk or run.</p>	<p>To increase total energy needs, which makes it easier to meet nutrient requirements.</p> <p>To help reduce the risk of chronic disease, as part of an overall healthy diet, to help prevent weight gain, and/or to sustain weight loss</p> <p>To improve physical fitness.</p>
<u>Children and adolescents</u>	<p>Engage in at least 60 minutes of physical activity on most, preferably all, days of the week.</p>	<p>Same as above.</p>	

MyPyramid Education Framework – Key concepts for educators

The major concept for each topic is in bold

GRAINS	WHAT	HOW	WHY
	<p>Make at least half of the total grains eaten whole grains.</p> <p>Consume 3 or more ounce-equivalents of whole-grain products per day.</p> <p>Since the recommended 3 ounce-equivalents may be difficult for young children to achieve, they should gradually increase the amount of whole grains in their diets. An ounce-equivalent of grains is about 1 slice of bread, 1 cup of ready-to-eat cereal flakes, or ½ cup of cooked pasta or rice, or cooked cereal.</p>	<p>Some examples of whole grains are brown rice, buckwheat, bulgur, oatmeal, wild rice, and whole wheat bread, crackers, pasta, and tortillas.</p> <p>Strategies: Checking the ingredient list on grain product labels. For many whole grain products, the words “whole” or “whole grain” will appear before the grain ingredient’s name.</p> <p>Checking the Nutrition Facts label for the fiber content of food products. Fiber content is a good clue to the amount of whole grain in the product.</p> <p>Choosing 100% whole grain breads, preferably, or mixed whole and white flour breads such as multi-grain or cracked wheat.</p> <p>Substituting whole grain choices for various types of refined grains eaten, such as breakfast cereals, breads, crackers, rice, and pasta.</p> <p>Adding whole grains to mixed dishes such as soups, stews, and casseroles.</p>	<p>To help reduce risk of coronary heart disease and other chronic diseases, as part of an overall healthy diet</p> <p>To provide dietary fiber</p> <p>To maintain adequate laxation</p>
	<p>Keep the total amount of grains eaten to the amount needed each day.</p> <p>For example, those needing 2000 calories per day¹ need about 6 ounce-equivalents of grains per day. See food intake patterns for other calorie levels.</p>	<p>Checking the portion sizes of the grain foods eaten often. For example, a whole bagel is 3 to 4 ounce-equivalents, and a portion of pasta (1 to 2 cups cooked) may be 2 to 4 ounce-equivalents.</p>	<p>To maintain caloric balance</p>

¹Those who may need about 2000 calories per day include some moderately active and active girls aged 9-13; moderately active girls aged 14-18; sedentary and some moderately active women aged 19-30; moderately active women aged 31-50; some active boys aged 4-8 and 9-13; some moderately active boys aged 9-13; and sedentary men over 50.

MyPyramid Education Framework – Key concepts for educators

The major concept for each topic is in bold

**VEGE-
TABLES**

WHAT	HOW	WHY
<p>Eat recommended amounts of vegetables, and choose a variety of vegetables each day.</p> <p>For example, those needing 2000 calories per day¹ need about 2 ½ cups of vegetables per day. See food intake patterns for other calorie levels.</p>	<p>Fresh, frozen and canned vegetables all count towards meeting vegetable intake goals. For canned vegetables, no salt-added is the best choice.</p> <p>Some vegetables that are rich in potassium include sweetpotatoes, beet greens, white potatoes, white beans, tomato products, soybeans, lima beans, winter squash, spinach, lentils, kidney beans, and split peas.</p> <p>Strategies: Including vegetables in lunch, dinner, and snacks.</p> <p>Preparing main dishes, side dishes, and salads that include vegetables.</p> <p>Adding vegetables to mixed dishes such as soups, stews, casseroles, and stir-fries.</p>	<p>To provide a variety of nutrients and dietary fiber in the diet</p> <p>To help reduce risk of chronic diseases, as part of an overall healthy diet. A diet rich in potassium may help to maintain healthy blood pressure.</p>
<p>Eat more dark-green vegetables, orange vegetables, and dry beans and peas.</p> <p>For example, those needing 2000 calories per day¹ need to eat 3 cups dark-green vegetables, 2 cups orange vegetables, and 3 cups of cooked dry beans and peas each week. See food intake patterns for other calorie levels.</p>	<p>Some examples of dark-green vegetables are broccoli, spinach, kale, romaine lettuce, spinach, and watercress.</p> <p>Some examples of orange vegetables are carrots, sweet potatoes, pumpkin, and winter squash.</p> <p>Some examples of dry beans and peas are kidney beans, pinto beans, split peas, chickpeas, lentils.</p> <p>Strategies: Adding dark-green or orange vegetables to soups, stews, casseroles, and stir-fries.</p> <p>Using romaine, spinach, or other dark leafy greens as salad greens, and eating green salads often.</p> <p>Choosing main dishes, side dishes, and salads that include cooked dry beans or peas.</p>	<p>To provide a variety of nutrients and fiber in the diet</p>

MyPyramid Education Framework – Key concepts for educators

The major concept for each topic is in bold

**VEGE-
TABLES,
continued**

WHAT	HOW	WHY
<p>Keep the amounts of starchy vegetables to the amount needed each week. For example, those needing 2000 calories per day¹ need 3 cups of starchy vegetables each week. See food intake patterns for other calorie levels.</p>	<p>Some examples of starchy vegetables are white potatoes, corn and green peas.</p> <p>Strategies: When eating potatoes, selecting a small sized portion, such as a small baked potato or a small order of French fries.</p> <p>Choosing a dark green or orange vegetable instead of potatoes, corn, or green peas more often.</p> <p>Choosing a green salad instead of French fries more often.</p>	<p>To maintain caloric balance</p> <p>To provide a variety of nutrients and fiber in the diet</p>
<p>Choose a variety of other vegetables regularly. For example, those needing 2000 calories per day¹ need 6 ½ cups of other vegetables each week. See food intake patterns for other calorie levels.</p>	<p>Some examples of other vegetables include tomatoes, lettuce, green beans, celery, cabbage, onion, and mushrooms.</p> <p>Strategies: Including a variety of vegetables in meals regularly.</p>	<p>To provide a variety of nutrients and fiber in the diet</p>

¹Those who may need about 2000 calories per day include some moderately active and active girls aged 9-13; moderately active girls aged 14-18; sedentary and some moderately active women aged 19-30; moderately active women aged 31-50; some active boys aged 4-8 and 9-13; some moderately active boys aged 9-13; and sedentary men over 50.

MyPyramid Education Framework – Key concepts for educators

The major concept for each topic is in bold

FRUITS

WHAT	HOW	WHY
<p>Eat recommended amounts of fruit, and choose a variety of fruits each day.</p> <p>For example, people who need 2000 calories per day¹ need 2 cups of fruit per day. See food intake patterns for other calorie levels.</p>	<p>Canned*, frozen, and dried fruits all count towards meeting fruit goals.</p> <p>Some fruits that are rich in potassium include prune juice, bananas, cantaloupe, honeydew, prunes, dried peaches or apricots, orange juice, and plantains.</p> <p>Strategies: Using fruit in salads, toppings, desserts, and/or snacks regularly.</p> <p>Using fruit as a topping on cereal, pancakes, and other foods rather than sugars, syrups, or other sweet toppings.</p> <p>Selecting fruits that are in season to increase variety.</p> <p>Using canned*, frozen, and dried fruits as well as fresh fruits.</p> <p>*Light or heavy syrup adds sugar to canned fruits. Fruits canned in juice or water are a better choice.</p>	<p>To provide a variety of nutrients and fiber in the diet.</p> <p>To help reduce risk of chronic diseases, as part of an overall healthy diet. A diet rich in potassium may help to maintain healthy blood pressure.</p>
<p>Keep the amounts of fruit juice consumed to less than half of total fruit intake.</p>	<p>Some fruit juices, such as orange and prune juice, are rich in potassium. These are better choices when selecting fruit juice.</p> <p>Strategies: Choosing whole or cut-up fruits more often as snacks or with meals, instead of juice.</p> <p>Considering water as beverage choice.</p>	<p>To provide fiber in the diet</p>

¹Those who may need about 2000 calories per day include some moderately active and active girls aged 9-13; moderately active girls aged 14-18; sedentary and some moderately active women aged 19-30; moderately active women aged 31-50; some active boys aged 4-8 and 9-13; some moderately active boys aged 9-13; and sedentary men over 50.

MyPyramid Education Framework – Key concepts for educators

The major concept for each topic is in bold

**MILK,
YOGURT,
AND
CHEESE**

WHAT	HOW	WHY
<p>Consume 3 cups of fat-free or low-fat (1%) milk, or an equivalent amount* of yogurt or cheese, per day.</p> <p><i>Children 2 to 8 years old</i>—Consume 2 cups of fat-free or low-fat milk, or an equivalent amount of yogurt or cheese, per day.</p> <p>Consume other calcium-rich foods if milk and milk products are not consumed.</p>	<p>Equivalent amounts for one cup of milk are 1 cup yogurt, 1 ½ ounce natural cheese, or 2 ounces of processed cheese.</p> <p>Lctose-free milk or drinking smaller amounts of milk at a time are options for those that are lactose intolerant.</p> <p>Other sources of calcium include calcium-fortified beverages, fortified breakfast cereals, sardines, or tofu made with calcium if milk and milk products are not consumed. The bioavailability of these non-dairy calcium sources may vary.</p> <p>The Nutrition Facts label provides information on the calcium content of food products.</p> <p>Strategies: Drinking fat-free (skim) or low-fat (1%) milk as a beverage.</p> <p>Using fat-free or low-fat milk or yogurt on cereal.</p> <p>Eating fat-free or low-fat yogurt as a snack.</p> <p>Choosing low-fat cheeses.</p>	<p>To provide the nutrients needed for bone health</p> <p>To provide a variety of nutrients in the diet while keeping saturated fat and cholesterol intake low</p>

¹Those who may need about 2000 calories per day include some moderately active and active girls aged 9-13; moderately active girls aged 14-18; sedentary and some moderately active women aged 19-30; moderately active women aged 31-50; some active boys aged 4-8 and 9-13; some moderately active boys aged 9-13; and sedentary men over 50.

MyPyramid Education Framework – Key concepts for educators

The major concept for each topic is in bold

**MEAT,
POULTRY,
FISH, DRY
BEANS,
EGGS,
AND NUTS**

WHAT	HOW	WHY
<p>Make choices that are low-fat or lean when selecting meats and poultry.</p>	<p>Lean meats poultry, fish, eggs, dry beans and peas, nuts, and seeds all count toward meeting meat and bean group goals.</p> <p>Strategies: Selecting meat cuts that are low in fat and ground beef that is extra lean (at least 90% lean).</p> <p>Trimming fat from meat and removing poultry skin before cooking or eating. Draining fat from ground meats after cooking.</p> <p>Using preparation methods that do not add fat, such as grilling, broiling, poaching, or roasting.</p> <p>Choosing lean turkey, roast beef, or ham or low-fat luncheon meats for sandwiches instead of fatty luncheon meats such as regular bologna or salami.</p>	<p>To provide a variety of nutrients in the diet while keeping saturated fat and cholesterol intake low</p>
<p>Choose a variety of different types of foods from this group each week. Include fish, dry beans and peas, nuts, and seeds, as well as meats, poultry, and eggs.</p> <p>Consider dry beans and peas as an alternative to meat or poultry as well as a vegetable choice.</p>	<p>Fish rich in omega-3 fatty acids* include salmon, trout, and herring.</p> <p>Some examples of dry beans and peas are kidney beans, pinto beans, split peas, chickpeas, and lentils.</p> <p>Strategies: Selecting fish as a choice from this group more often, especially fish rich in omega-3 fatty acids.*</p> <p>Choosing dry beans or peas as a main dish often.</p> <p>Choosing nuts as a snack, on salads, or in main dishes, to replace meat or poultry, not in addition to these.</p> <p>*Women who may become pregnant, pregnant women, nursing mothers, and young children should avoid some types of fish and eat types lower in mercury. For more information: www.cfsan.fda.gov/~dms/admehg3.html.</p>	<p>To provide a variety of nutrients in the diet including essential fatty acids and vitamin E</p>

MyPyramid Education Framework – Key concepts for educators

The major concept for each topic is in bold

MEAT, POULTRY, FISH, DRY BEANS, EGGS, AND NUTS, continued	WHAT	HOW	WHY
	Keep the overall amounts of foods eaten from this group within the amount needed each day. For example, people who need 2000 calories per day ¹ need 5 ½ ounce-equivalents per day. See food intake patterns for other calorie levels.	Strategy: Selecting appropriate portion sizes to meet recommendations.	To maintain caloric balance and keep saturated fat and cholesterol intake low

¹Those who may need about 2000 calories per day include some moderately active and active girls aged 9-13; moderately active girls aged 14-18; sedentary and some moderately active women aged 19-30; moderately active women aged 31-50; some active boys aged 4-8 and 9-13; some moderately active boys aged 9-13; and sedentary men over 50.

MyPyramid Education Framework – Key concepts for educators

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FATS AND OILS	WHAT	HOW	WHY
	<p>Choose most fats from sources of monounsaturated and polyunsaturated fatty acids, such as fish, nuts, seeds, and vegetable oils.</p> <p>Keep the amount of oils consumed within the total allowed for caloric needs.</p> <p>For example, people who need 2000 calories per day¹ can consume 27 grams of oils (about 7 teaspoons). See food intake patterns for amounts for other calorie levels.</p>	<p>Some examples of vegetable oils are canola, olive, peanut, soybean, corn, safflower, and sunflower oil.</p> <p>Strategies: Substituting vegetable oils for solid fats like butter, stick margarine, shortening, or lard.</p> <p>Substituting nuts for meat or cheese as a snack or as part of a meal.</p> <p>Choosing fish rich in omega-3 fats, such as salmon, trout, and herring. For FDA advisory about mercury in fish, see: www.cfsan.fda.gov/~dms/admehg3.html.</p>	<p>To provide essential fatty acids and vitamin E</p> <p>To maintain caloric balance. Fats and oils are high in calories.</p>
	<p>Choose fat-free, low-fat, or lean meat, poultry, dry beans, milk, and milk products.</p> <p>Choose grain products and prepared foods that are low in saturated and <i>trans</i> fat.</p> <p>Limit the amount of solid fats consumed to the amount within the discretionary calorie allowance, after taking into account other discretionary calories that have been consumed.</p> <p>For example, people who need 2000 calories per day¹ have a total discretionary calorie allowance of 267 calories. See food intake patterns for amounts for other calorie levels. See glossary for more information on discretionary calories.</p>	<p>The Nutrition Facts label can be used to select products that are lowest in saturated fat, <i>trans</i> fat, and cholesterol. <i>Trans</i> fat labelling is required as of 2006.</p> <p>Strategies: Limiting products containing saturated fats, such as ground and processed meats, full-fat cheese, cream, ice cream, and fried foods.</p> <p>Limiting foods containing partially hydrogenated vegetable oils, which contain <i>trans</i> fats, such as some commercially fried foods and some bakery goods. Partially hydrogenated vegetable oils are listed on ingredient labels of food products.</p> <p>Selecting baked, steamed, or broiled rather than fried foods most often.</p> <p>Selecting lean or low-fat foods most often. Solid fats that occur intrinsically in some foods are considered discretionary calories, as are solid fats added to foods.</p>	<p>To keep saturated fat, <i>trans</i> fat, and cholesterol intake low to reduce risk for heart disease, as part of an overall healthy diet</p> <p>To maintain caloric balance. Fats and oils are high in calories</p>

¹Those who may need about 2000 calories per day include some moderately active and active girls aged 9-13; moderately active girls aged 14-18; sedentary and some moderately active women aged 19-30; moderately active women aged 31-50; some active boys aged 4-8 and 9-13; some moderately active boys aged 9-13; and sedentary men over 50.

MyPyramid Education Framework – Key concepts for educators

The major concept for each topic is in bold

SUGARS AND SWEETS	WHAT	HOW	WHY
	<p>Choose and prepare foods and beverages with little added sugars or caloric sweeteners.</p> <p>Keep the amount of sugars and sweets consumed within the discretionary calorie allowance, after taking into account other discretionary calories that have been consumed.</p> <p>For example, people who need 2000 calories per day¹ have a total discretionary calorie allowance of 267 calories. See food intake patterns for amounts for other calorie levels and glossary for more information on discretionary calories.</p>	<p>Added sugars include high fructose corn syrup, other syrups, sucrose, glucose, fructose, lactose, maltose, brown sugar, honey, molasses, fruit juice concentrates, and raw sugar added to food products.</p> <p>Strategies: Choosing water, fat-free milk, or unsweetened tea or coffee as a beverage most often.</p> <p>Limiting sweet snacks and desserts.</p> <p>Selecting unsweetened cereals; then if desired, adding sugar or other sweeteners only to taste.</p> <p>Choosing canned fruits in 100% fruit juice or water rather than syrup.</p>	<p>To maintain caloric balance while providing sufficient nutrients</p> <p>Sugars have calories but are low in nutritional value.</p>
	<p>Practice good oral hygiene and consume sugar- and starch containing foods and beverages less frequently.</p>	<p>Strategies: Brushing and flossing regularly.</p> <p>Drinking fluoridated water.</p> <p>Eating sugar and starch-containing foods less frequently.</p>	<p>To reduce the incidence of dental caries</p>

¹Those who may need about 2000 calories per day include some moderately active and active girls aged 9-13; moderately active girls aged 14-18; sedentary and some moderately active women aged 19-30; moderately active women aged 31-50; some active boys aged 4-8 and 9-13; some moderately active boys aged 9-13; and sedentary men over 50.

MyPyramid Education Framework – Key concepts for educators

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SALT

WHAT	HOW	WHY
<p>Choose and prepare foods with little salt.</p> <p>Keep sodium intake less than 2300 mg per day.</p> <p>At the same time, consume potassium-rich foods, such as fruits and vegetables. (See fruit and vegetable sections for “how” strategies.)</p>	<p>The Nutrition Facts label provides information on sodium content of foods.</p> <p>Processed meats and fresh chicken, turkey, and pork that have been enhanced with a salt-containing solution also have added sodium.</p> <p>Some food product labels say “no salt added” or “low sodium.” Foods with less than 140 mg sodium per serving can be labeled as low sodium foods.</p> <p>Strategies: Using the Nutrition Facts label to choose foods with less sodium. Some products that may vary widely in sodium content include frozen dinners, packaged mixes, cereals, cheese, breads, soups, salad dressings, and sauces.</p> <p>Preparing more foods from fresh ingredients, because most sodium in the food supply comes from packaged foods.</p>	<p>To reduce risk for hypertension, as part of an overall healthy diet</p>

MyPyramid Education Framework – Key concepts for educators

The major concept for each topic is in bold

ALCOHOL	WHAT	HOW	WHY
	<p>If one chooses to drink alcohol, consume it in moderation. Some people, or people in certain situations, should not drink.</p> <p>Keep consumption of alcoholic beverages within daily discretionary calorie allowance.</p> <p>For example, people who need 2000 calories per day¹ have a total discretionary calorie allowance of 267 calories. See food intake patterns for amounts for other calorie levels and glossary for more information on discretionary calories.</p>	<p>Moderate drinking means no more than 1 drink per day for women and 2 drinks per day for men. Twelve ounces of regular beer, 5 ounces of wine, and 1-½ ounces of 80-proof distilled spirits count as a drink.</p> <p>Alcoholic beverages contain calories. There are about 100 calories in 12 ounces of light beer, 5 ounces of table wine, or 1-½ ounces of 80-proof distilled spirits. Higher alcohol content or mixing alcohol with regular soft drinks, tonic water, fruit juice, or cream, increases the calories in the beverage.</p>	<p>To avoid the potential harmful health effects of more than moderate drinking</p> <p>To maintain caloric balance.</p> <p>Alcoholic beverages have calories but are low in nutritional value.</p>

¹Those who may need about 2000 calories per day include some moderately active and active girls aged 9-13; moderately active girls aged 14-18; sedentary and some moderately active women aged 19-30; moderately active women aged 31-50; some active boys aged 4-8 and 9-13; some moderately active boys aged 9-13; and sedentary men over 50.

MyPyramid Education Framework – Key concepts for educators

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NOTE: Food safety is not part of the food intake patterns but food safety messages are woven into appropriate sections of the consumer materials developed for MyPyramid. The following section provides an overview of food safety messages from the Dietary Guidelines.

FOOD SAFETY	WHAT	HOW	WHY
	<p>Clean hands, contact surfaces, and fruits and vegetables. To prevent cross-contamination, meat and poultry should not be washed or rinsed.</p> <p>Separate raw, cooked, and ready-to-eat foods while shopping, preparing, or storing foods.</p> <p>Cook foods to a safe temperature to kill microorganisms.</p> <p>Chill (refrigerate) perishable foods promptly and defrost foods properly.</p> <p>Avoid raw (unpasteurized) milk or any products made from unpasteurized milk, raw or partially cooked eggs, or foods containing raw eggs, raw or undercooked meat and poultry, unpasteurized juices, and raw sprouts.</p>	<p>Strategies for avoiding foodborne illness:</p> <p>Washing hands in hot soapy water before preparing food and after using the bathroom, changing diapers, and handling pets. Washing cutting boards, knives, utensils, and counter tops with hot soapy water after preparing each food item and before going on to the next one. Under clean, running water, scrubbing fresh produce briskly with hands or a brush to remove dirt and surface microorganisms, and drying after washing.</p> <p>Separating raw meat, poultry, and seafood from other food in the grocery-shopping cart. Storing raw meat, poultry, and seafood on the bottom shelf of the refrigerator so juices don't drip onto other foods. Not washing meat or poultry, to avoid cross contamination.</p> <p>Using a meat thermometer, which measures the internal temperature of cooked meat and poultry, to make sure that the meat is cooked all the way through.</p> <p>Refrigerating or freezing perishables, prepared food, and leftovers within 2 hours. Thawing food in the refrigerator, in an air-tight package under cold running water, or in the microwave.</p>	<p>To avoid microbial foodborne illness</p> <p>For more information visit www.fightbac.com</p>

MyPyramid Education Framework —Glossary of Terms

Energy and Physical Activity Terms

Discretionary Calorie Allowance—The balance of calories remaining in a person’s estimated energy allowance, or EER, after accounting for the number of calories needed to meet recommended nutrient intakes through consumption of foods in low-fat or no added sugar forms. The discretionary calorie allowance may be used in selecting foods that are not in their most nutrient-dense form (e.g., whole milk rather than fat-free milk) or may be additions to foods (e.g., salad dressing, sugar, butter). Most discretionary calorie allowances are very small, between 100 and 300 calories, especially for those who are not physically active. For many people, the discretionary calorie allowance is totally used by the foods they choose in each food group, such as higher fat meats, cheeses, whole milk, or sweetened bakery products.

The discretionary calorie allowance can be used to:

- Eat more foods from any food group than the food guide recommends.
- Select forms of foods that contain solid fats or added sugars. Examples are whole milk, cheese, sausage, biscuits, sweetened cereal, and sweetened yogurt.
- Add fats or sweeteners to foods. Examples are sauces, salad dressings, sugar, syrup, and butter.
- Eat or drink items that contain only fats, caloric sweeteners, and/or alcohol, such as candy, soda, wine, and beer.

Estimated Energy Requirement—The EER represents the average dietary energy intake that will maintain energy balance in a healthy person of a given gender, age, weight, height, and physical activity level. The calorie levels for the food intake patterns were matched to age/sex groups using EERs for a person of average height, healthy weight, and sedentary activity level in each age/sex group. The sedentary level was selected in order to not overestimate calorie needs.

EER formulas for various age/sex groups (from IOM Dietary Reference Intakes macronutrients report, 2002):

Male 24 mos.: $EER=(89*WT-100)+20$

Female 24 mos.: $EER=(89*WT-100)+20$

Male 3-8: $EER=88.5-(61.9*AGE)+PA*(26.7*WT+903*HT)+20$

Female 3-8: $EER=135.3-(30.8*AGE)+PA*(10*WT+934*HT)+20$

Male 9-18: $EER=88.5-(61.9*AGE)+PA*(26.7*WT+903*HT)+25$

Female 9-18: $EER=135.3-(30.8*AGE)+PA*(10*WT+934*HT)+25$

Adult males: $EER=662-(9.53*AGE)+PA*(15.91*WT+539.6*HT)$

Adult females: $EER=354-(6.91*AGE)+PA*(9.36*WT+726*HT)$

Note: Heights (HT) are in meters, weights (WT) in kilograms. Physical activity (PA) coefficients for sedentary, low active, and active levels of physical activity are:

<u>Activity level</u>	<u>Sedentary</u>	<u>Low Active</u>	<u>Active</u>
MALES			
		PA Coefficient	
3 to 18 years old	1.00	1.13	1.26
Adults 19 and older	1.00	1.11	1.25
FEMALES			
3 to 18 years old	1.00	1.16	1.31
Adults 19 and older	1.00	1.12	1.27

MyPyramid Education Framework —Glossary of Terms

Activity levels for EER calculations—

Sedentary means a lifestyle that includes only the physical activity of independent living.

Low Active means a lifestyle that includes at least 30 minutes per day of moderate physical activity (equivalent to walking about 1.5 to 3 miles per day at 3 to 4 miles per hour) in addition to the activities of independent living.

Active means a lifestyle that includes at least 60 minutes per day of moderate physical activity (equivalent to walking more than 3 miles per day at 3 to 4 miles per hour) in addition to the activities of independent living.

Sedentary Behaviors—In scientific literature, sedentary is often defined in terms of little or no physical activity during leisure time. A sedentary lifestyle is a lifestyle characterized by little or no physical activity.

Moderate Physical Activity—Any activity that burns 3.5 to 7 kcal/min or the equivalent of 3 to 6 metabolic equivalents (METs) and results in achieving 60 to 73 percent of peak heart rate. An estimate of a person's peak heart rate can be obtained by subtracting the person's age from 220. Examples of moderate physical activity include walking briskly, mowing the lawn, dancing, swimming, or bicycling on level terrain. A person should feel some exertion but should be able to carry on a conversation comfortably during the activity.

Vigorous Physical Activity—Any activity that burns more than 7 kcal/min or the equivalent of 6 or more metabolic equivalents (METs) and results in achieving 74 to 88 percent of peak heart rate. An estimate of a person's peak heart rate can be obtained by subtracting the person's age from 220. Examples of vigorous physical activity include jogging, mowing the lawn with a nonmotorized push mower, chopping wood, participating in high impact aerobic dancing, swimming continuous laps, or bicycling uphill. Vigorous-intensity physical activity may be intense enough to represent a substantial challenge to an individual and results in a significant increase in heart and breathing rate.

MyPyramid Education Framework —Glossary of Terms

Fats and oils terms

Monounsaturated Fatty Acids—Monounsaturated fatty acids (MUFAs) have one double bond. Plant sources that are rich in MUFAs include vegetable oils (e.g., canola oil, olive oil, high oleic safflower and sunflower oils) that are liquid at room temperature and nuts.

n-6 PUFAs. Linoleic acid, one of the n-6 fatty acids, is required but cannot be synthesized by humans and, therefore, is considered essential in the diet. Primary sources are liquid vegetable oils including soybean oil, corn oil, and safflower oil.

n-3 PUFAs. α -linolenic acid is an n-3 fatty acid that is required because it is not synthesized by humans and, therefore, is considered essential in the diet. It is obtained from plant sources including soybean oil, canola oil, walnuts, and flaxseed. Eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) are long chain n-3 fatty acids that are contained in all fish and shellfish.

Polyunsaturated Fatty Acids—Polyunsaturated fatty acids (PUFAs) have two or more double bonds, and may be of two types, based on the position of the first double bond:

Saturated Fatty Acids—Saturated fatty acids have no double bonds. They primarily come from animal products such as meat and dairy products. In general, animal fats are solid at room temperature.

Trans fatty acids—*Trans* fatty acids, or *trans* fats, are unsaturated fatty acids that contain at least one non-conjugated double bond in the *trans* configuration. Sources of *trans* fatty acids include hydrogenated/partially hydrogenated vegetable oils that are used to make shortening and commercially prepared baked goods, snack foods, fried foods, and margarine. *Trans* fatty acids also are present in foods that come from ruminant animals (e.g., cattle and sheep). Such foods include dairy products, beef, and lamb.

Solid fats—Fats that are solid at room temperature, such as butter, lard, and shortening. These fats may be visible or may be a constituent of foods such as milk, cheese, meats, or baked products. Solid fats come from many animal foods and can be made from vegetable oils through hydrogenation. Solid fats are generally higher than oils in saturated and/or *trans* fatty acids. A few plant oils, including coconut oil and palm kernel oil, are high in saturated fats and for nutritional purposes should be considered to be the same as solid fats.

Oils—Fats that are liquid at room temperature, such as the vegetable oils used in cooking. Oils come from many different plants and from fish. Some common oils are: corn oil, soybean oil, canola oil, cottonseed oil, olive oil, safflower oil, sunflower oil, walnut oil, and sesame oil. Some foods are naturally high in oils, like nuts, olives, some fish, and avocados. Most oils are high in monounsaturated or polyunsaturated fats, and low in saturated fats. A few plant oils, including coconut oil and palm kernel oil, are high in saturated fats and for nutritional purposes should be considered to be the same as solid fats.

MyPyramid Education Framework —Glossary of Terms

Food pattern and food group terms

Daily Food Intake Pattern—Identifies the types and amounts of foods that are recommended to be eaten each day and that meet specific nutritional goals. Food Intake Patterns for the Food Guidance System are published in the 2005 Dietary Guidelines for Americans. These patterns provide recommendations at 12 calorie levels for amounts of food to each from each food group, subgroup, and oils, and the discretionary calorie allowance.

Nutrient-Dense Foods—Nutrient-dense foods are those that provide substantial amounts of vitamins and minerals and relatively fewer calories.

Discretionary Calorie Allowance—The balance of calories remaining in a person’s energy allowance, or EER, after accounting for the number of calories needed to meet recommended nutrient intakes through consumption of foods in low-fat or no added sugar forms. See Energy and Physical Activity section for more information.

Ounce-Equivalent—In the grains food group, the amount of a food counted as equal to a one-ounce slice of bread. In the meat, poultry, fish, dry beans, eggs, and nuts food group, the amount of food counted as equal to one ounce of cooked meat, poultry, or fish.

Whole Grains—Foods made from the entire grain seed, usually called the kernel, which consists of the bran, germ, and endosperm. If the kernel has been cracked, crushed, or flaked, it must retain nearly the same relative proportions of bran, germ, and endosperm as the original grain in order to be called whole grain.

Added Sugars—Sugars and syrups that are added to foods during processing or preparation. Added sugars do not include naturally occurring sugars such as those that occur in milk and fruits.

April 2005

How to get kids to eat 'yucky green stuff'

Vegetables can play an important role in helping control kids' weight gains while supplying important nutrients they need for growth and development.

But getting kids to eat them can be a challenge.

"To get kids to eat vegetables, they must be available when and where kids tend to eat, be very easy to eat, and taste good," said Joan Carter, RD, an instructor in the Department of Pediatrics at Baylor College of Medicine and a cordon-bleu trained chef.

To make vegetables more tempting to kids, Carter offers these tips:

- **Offer the new vegetable at the beginning of the meal** when small children are the hungriest. Serve vegetables in new combinations. Children tend to favor peas, potatoes, carrots, beans and corn. Mix these vegetables with others they are less likely to eat, such as broccoli and cauliflower.
- **Use a little fat, sugar and salt** to help make healthy foods more appealing to kids. "Kids are born liking sweet tastes, so use this to your advantage," Carter said. Cook carrots with a little sugar and chicken stock; make carrot slaw with raisins; top broccoli with low-fat cheese sauce; add grated vegetables like carrots or squash to home-baked muffins.
- **Prepare vegetables in new ways.** Try a stir-fry or add fresh vegetables to prepared soups. Mix in a vegetable with a favorite food, such as peas in macaroni and cheese or blend soft-cooked carrots into mashed potatoes. Add vegetables to pizza toppings or sauté minced veggies like broccoli and red pepper and add to spaghetti and pizza sauces, meat loaf and pureed soups. Make oven-baked sweet potato fries or bake this high-fiber, vitamin-A rich alternative to white potatoes with a touch of sugar, cinnamon and cloves.
- **Make eating veggies fun and easy.** For kids over the age of 4, make veggie kabobs with cherry tomatoes and cucumber slices or grab bags with baby carrots, broccoli "trees," and celery sticks and keep near low-fat dips or salsa on a child-level shelf in the refrigerator. Use cut-up pieces of vegetables to make a "smiley face" on mashed potatoes. Offer an edible spoon, such as a stalk of celery, to scoop up chili or stew.
- **Grow a family vegetable garden.**

And what if, despite your efforts, your children still turn up their noses at anything yellow, green or leafy?

"Don't give up," Carter said. "It may take some time before kids try a vegetable and it might take a lot of tries before they begin to like it."

The best advice is to continue to offer vegetables at each meal and encourage children to try one bite. If they don't like it, that's fine. Allowing young kids to stop at one bite can make trying new foods less scary, because forcing them to eat something they truly don't like will only make the situation worse.

Source: ARS/USDA Children's Nutrition Research Center, Baylor College of Medicine

A weighty matter: Rest between sets

If you lift weights, you will be interested in a new study that answers this heavy question: **How much rest is needed between sets?**

A University of Kansas study examined the effects of three different rest period lengths – 1 minute, 3 minutes, and 5 minutes – on subsequent set performance. Twenty-eight recreational weight trainers participated in this small study.

Results showed significantly fewer repetitions for the second set with all three rest intervals. In addition, the total work performed during the second set was significantly less with the 1-minute rest interval than it was with the 3-minute and 5-minute rest intervals.

While all of the second sets produced fewer repetitions, after both the 3-minute and 5-minute rest intervals, subjects were able to perform between 8 and 12 repetitions. Subjects were only able to perform 4 to 6 repetitions on the second set after just a 1-minute rest.

As the researchers point out in the *Journal of Strength and Conditioning*, rest intervals will depend on training goals. If your goal is to maintain the same number of repetitions in each set, then the rest interval may need to be longer than 5 minutes. But if the goal is 8 to 12 repetitions, a 3- to 5-minute rest should be adequate.

And if you have no idea what sets and reps are, you need to talk with your health and fitness director about beginning a weight program to build strength.