

Instructor Information

Pyramid Plus is an activity based program that motivates and teaches teens to make nutrient-rich food choices. Pyramid Plus incorporates MyPyramid and the Dietary Guidelines to address nutrition topics of interest and relevance to teens. In order to use these materials to their fullest potential, please familiarize yourself with the information provided in this section prior to teaching the lessons.

AUDIENCE

- ★ Pyramid Plus is intended for teen and adult audiences.
- ★ The lessons are written for use with high school students but can be adapted to use with middle school students and adults.

LESSON PLANS

- ★ Approximately 45-60 minutes is required for each lesson.
- ★ “Going Further” activities allow for the lessons to be expanded to a longer length of time.
- ★ Lessons can be used independent of one another, but are designed to be used in sequence as part of a comprehensive nutrition unit.
- ★ Each lesson begins with a “reflection question” and ends with a “tip of the day” and review points.
- ★ Lessons are written to incorporate a wide variety of hands-on activity opportunities.
- ★ Most teaching materials are provided: posters, masters for student handouts/worksheets and overhead visuals, 50 Pyramid Plus Charts, MyPyramid Wheels. There are occasions where you will need to gather additional items.

Note: Additional Pyramid Plus Charts are available. FIRST 100 PER YEAR FREE, additional available for purchase. Call 503-229-5033 to request free charts. See catalog or go online www.oregondairyCouncil.org to purchase charts and supplemental resources.

NINE LESSONS ARE INCLUDED:

1. N-Rich the Pyramid
2. Eating Your Way Through the Pyramid
3. Navigating MyPyramid.gov
4. Label Lingo
5. Making Healthy Eating a Habit
6. Uncovering the Dietary Guidelines for Americans
7. Creating a Personal Nutrition Action Plan
8. Body Image
9. Quick and Easy Healthy Eating

ASSESSMENTS

Three fully developed assessments and a list of additional assessment ideas are included in this curriculum.

WHAT MAKES THE ‘PLUS’ IN PYRAMID PLUS?

Pyramid Plus lists foods in each food group according to how nutrient-rich they are. Nutrient-rich foods provide more nutrition for their calories and are generally lower in fat and added sugar.

A few things to note:

- ★ Vegetables and fruits in their fresh, frozen, canned in juice form are all high on the nutrient-rich scale and make for more nutrient-rich choices than juice, dried, or other selections. Therefore, it is important to stress that all of the vegetables and fruits listed in the first section (fresh, frozen, canned) are nutrient-rich food choices. In other words, don't get too hung-up on the difference in nutrition between spinach and beets, for example. Focus more on eating a variety of vegetables and fruits, mostly coming from the fresh, frozen, canned in juice form as opposed to the juice, dried, or sweetened forms. But again, all are nutrient-rich choices!
 - ★ In the Meat and Beans Group, foods are listed according to how nutrient-rich they are within each subcategory (lean meats, fish, poultry, beans and peas, seeds and nuts) with Other Meats being a less nutrient-rich subcategory.
 - ★ Dairy foods are listed according to their fat content, which affects calories, but all provide similar nutrition.
 - ★ Sometimes Foods are foods that are not nutrient-rich and are typically high in fat and added sugar.
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HOW IS A FOOD'S NUTRIENT-RICH RANKING CALCULATED?

There are several ways nutrient-rich rankings can be calculated, but all of the different methods try to reveal which foods provide the most nutrition per calorie. To create the food lists in the Pyramid Plus food chart, foods were analyzed to see how much of the 15 key nutrients they provide in 2,000 calories. In many cases, nutrient-rich rankings were calculated for several similar food products (such as frozen waffles and homemade waffles) and then averaged to find a nutrient-rich ranking.

Nutrient-rich/Nutrient density References:

1. Drewnowski A and Fulgoni V (III). Nutrient profiling of foods: creating a nutrient-rich food index. *Nutrition Reviews* 2008;66(1):23-39.
 2. Drewnowski A. Concept of a nutritious food: toward a nutrient density score. *American Journal of Clinical Nutrition* 2005;82:721-732.
 3. Zelman K and Kennedy E. Naturally nutrient rich. . . putting more power on American's plates. *Nutrition Today* 2004;40(2):60-68.
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WHY STRESS THE “NUTRIENT-RICH” CONCEPT?

Focusing on foods to eat (as opposed to foods not to eat), sends an empowering and positive message to teens. Adding the nutrient-rich concept takes food groups and the nutrition message to the “next level,” sparking new interest in nutrition and food.











A NOTE ON FOOD RECORDS

Even though keeping a Food Record is sometimes labor intense for students, it is the best way to analyze a diet and identify areas where change is needed. Therefore, it is a vital component to any nutrition program.

Encourage students to put their best effort into their Food Records and stress the importance of keeping them as accurately as possible. Suggest that they record what they eat/drink as soon as possible after it is consumed. Make sure they understand that they need to be honest about what they record and that their grade relates to completing the Food Record and not to what they eat.

NUTRITION ANSWERS TEENS WANT TO KNOW

Q:	Sometimes I hear people talk about “servings” of foods and sometimes I see amounts in “cups” and “ounces.” Can you explain this to me?
A:	In the past, nutrition experts talked about food in terms of servings. Servings were defined as the amount of a food that supplied a certain amount of nutrients. The problem was that most people didn’t know how much of a particular food was equal to one “serving”. Times have changed and now food amounts are described by cups and ounces. Since everyone can use measuring cups and scales or read Nutrition Facts labels to find out what a cup or ounce of a food looks like, we no longer use the term servings. Pyramid Plus and MyPyramid give total amounts of food, in cups or ounces, you should eat every day. This should not be confused with number of servings, as they translate to different amounts of food.
Q:	What are phytochemicals and antioxidants?
A:	Both phytochemicals and antioxidants work to make our bodies healthy and fight disease. Antioxidants, including vitamins A, C, and E, prevent or repair ongoing damage that occurs as our body’s cells make and use energy. Phytochemicals are naturally occurring plant chemicals that may help prevent some diseases, including cancer and heart disease. Phytochemicals are found in fruits, vegetables, whole grains, and beans and seeds.
Q:	How many carbs should I eat?
A:	First we have to define “carbs.” Many people use the word “carbs” to describe the Grains group. Actually, carbohydrates are found in fruits, some vegetables (such as corn, potatoes, squash, and peas), milk and yogurt, beans, and grains. So instead of worrying about how many carbs you should eat, use the MyPyramid Wheel to find the number of calories that is right for you. Then find your daily food recommendations for each of the food groups and use the numbers to guide your food choices.
Q:	I’ve seen the word “probiotics” on food packages. What does that mean?
A:	Sometimes called “gut bugs,” probiotics are living bacteria and yeasts that promote intestinal health and increase our immunity. Probiotics are found in foods such as yogurt or cheese and can be purchased as dietary supplements. For more information on probiotics, visit: http://www.oregondairycouncil.org/resources/free_downloads/downloads/probiotic_odc.pdf
Q:	I’m an athlete and need to know what to drink. Any suggestions?
A:	If you exercise for 90 minutes or less, water is usually the best choice. Athletes need water before, during, and after exercise to replace the water lost in sweat. Electrolytes are also lost in sweat. In most cases, electrolytes can be replenished by a nutrient-rich post-game meal. If you exercise vigorously for more than 90 minutes, you might consider chocolate milk to help your muscles re-fuel or a sports drink to replace electrolytes.

	<p>Tell me about energy drinks. Will they help me do better in school and activities?</p>
	<p>Energy drinks are usually high in calories and low in nutrients, putting them on the low end of the nutrient-rich spectrum. Plus, energy drinks typically contain large doses of caffeine for a short-lasting energy buzz that might cause you to feel shaky or have trouble concentrating. And, some energy drinks contain herbal supplements which may or may not have been studied for safety.</p>
	<p>I like nutrition bars. Is that okay and are some better than others?</p>
	<p>Nutrition bars can fit into a healthy diet, but be careful not to get into the habit of replacing nutrient-rich, balanced meals with nutrition bars. Nutrition bars are convenient when you're on-the-go, but even the most nutritious bars do not provide all the vitamins, minerals, antioxidants and phytochemicals found in fresh, healthy foods. When choosing a nutrition bar, look for a mix of carbohydrates, protein, and fat, and check the label to make sure there is no saturated fat or trans fat and less than 300 mg of sodium.</p>
	<p>My friend makes whey protein smoothies. Are they healthy?</p>
	<p>Whey is one of the two major proteins found in cow's milk. As part of a nutrient-rich diet, whey protein can help increase lean muscle tissue and boost the immune system. Whey protein is most useful for athletes who are maintaining and building muscle tissue and for older adults who are at risk of losing muscle tissue. For more information on whey protein, visit: http://www.oregondairycouncil.org/resources/healthy_eating/Wheyconsumer.pdf</p>
	<p>Give me the skinny on fats. I'm confused!</p>
	<p>Fats are an important part of our diet. Fats provide energy for our bodies at rest and during low-intensity exercise. They are also a source of essential nutrients, including fat-soluble vitamins. Not all fats are created equal. Polyunsaturated and monounsaturated fats are healthy fats and are found in olive oil, canola oil, safflower oil, and nuts. Fatty fish, flax seeds and leafy greens are excellent sources of healthy omega-3 fatty acids. Limit your intake of saturated fats and trans fats which contribute to heart disease. Saturated fats are found in high-fat animal products such as butter, cream, whole milk, and beef. Choose fat free or lowfat milk, yogurt, cheese, and lean beef for the same nutrients, but less fat and calories - a nutrient-rich choice. Processed foods often contain trans fats, which you can avoid by reading food labels and choosing foods with zero grams of trans fats and no "partially hydrogenated" oils in the ingredient list.</p>
	<p>One of my friends hardly ever eats. Could she have an eating disorder?</p>
	<p>Anyone can have an eating disorder and many people with eating disorders are very good at hiding them. Eating disorders take many forms, but teenagers are especially vulnerable to developing bulimia or anorexia. If you are concerned about your friend's behavior, tell a school counselor or trusted teacher. If you feel comfortable, you might want to talk to your friend, too. Let your friend know that you are concerned and ask if you can help. For more information on eating disorders, visit the National Eating Disorders Association at http://www.nationaleatingdisorders.org/</p>

Q:	Should I take a vitamin?
A:	If you regularly eat nutrient-rich foods from all five food groups and include healthy oils in your diet, you probably do not need to take a vitamin. That said, taking a basic multivitamin with minerals ensures that you get all the nutrients you need on a daily basis. If you take vitamins, look for a multivitamin with minerals and avoid supplements that provide only one or a few nutrients in a pill. These supplements often provide mega-doses that may or may not be safe when taken repeatedly.
Q:	I'm thinking of becoming a vegetarian. What should I know?
A:	Vegetarian diets can be healthful, but you need to make sure you are making well-balanced food choices. There are several types of vegetarian diets. Vegans are strict vegetarians who only eat foods from plant origin, including vegetables, fruits, grains, and nuts. Lacto-ovo-vegetarians exclude meat, fish, and poultry from their diets but include dairy products, eggs, and foods from plant origin. The more restrictive the vegetarian diet, the more closely you will need to watch your food choices to make sure you are getting enough protein, calcium, iron, vitamin D, zinc and B vitamins. If you are a lacto-ovo-vegetarian, it will be much easier to get all the nutrients you need. Before making the switch to a vegetarian diet, ask yourself why you are becoming a vegetarian and what foods you will allow in your diet. Then, educate yourself at http://www.mypyramid.gov/tips_resources/vegetarian_diets.html to make sure you do it right.
Q:	How much do I need to exercise?
A:	Teens need to get at least 60 minutes of moderate intensity exercise most days of the week, preferably every day. Moderate intensity means that you are exerting yourself and you feel your heart pumping, but you can still carry on a conversation. Swimming, brisk walking, jumping rope, dancing, bicycling, basketball, tennis, and soccer are all great ways to get the exercise you need. And, you don't have to get all 60 minutes at one time. If you jog for 30 minutes in the morning and play basketball for 30 minutes in the afternoon, you are getting enough exercise. The important thing is that you move your body every day!



PYRAMID PLUS TEACHING TIPS

- 1. Have students keep a nutrition folder, which you may want to collect at the end of each class period.**
- 2. Start a collection of food/drink containers with labels and magazines for use with various lessons.**
- 3. Stay positive with your message: eating healthy is something good you can do for yourself, not deprivation.**
- 4. Know your students' backgrounds and be sensitive to cultures and food traditions.**
- 5. Avoid labeling foods as "good" or "bad," both of which spark unhealthy attitudes regarding eating.**
- 6. Promote physical activity.**
- 7. Whenever possible, use props and visual aids, especially real food. And, encourage students to try new foods. Remember, food is the practical application of nutrition.**
Note: Using food for demonstration purposes is within food safety guidelines and does not require a Food Handler's Card.
- 8. Avoid making negative comments about the school cafeteria as it may be the main meal available for some students.**
- 9. Keep your information factual, not personal opinion.**
- 10. Be a great role model! Your students are watching you. Keep a Food Record yourself, drink water, be physically active, try new foods . . .**