

Apples in Appealing Ways Leader/Teacher Guide

Objectives:

- 1) Understand the health benefits of apples as part of a varied diet.
- 2) Discuss apple production in the Pacific Northwest.
- 3) Taste and compare several common apple varieties and apple recipes.
- 4) Learn how to store apples properly.

Supplies:

- 1) Tennis ball.
- 2) Map highlighting apple production in Oregon.
- 3) Apple Poster (Blue Varietal Poster available for purchase - \$2.00/poster - from <http://www.bestapples.com>).
- 4) Several different varieties of apples, sliced before the lesson for tasting.
- 5) Selected apple recipes prepared before the lesson for tasting.

Member Handouts:

- 1) FCD06-02 Apples in Appealing Ways-Member Handout.
- 2) FCD06-03 Apples in Appealing Ways Lesson Evaluation & Informed Consent Statement Letter.

Teaching Outline:	Key Messages/Activities
<p>Introduction: Apples have been a favorite fruit for many years. New apple varieties continue to be developed. The objectives of this lesson are to:</p> <ul style="list-style-type: none">• Understand the health benefits of apples as part of a varied diet.• Discuss apple production in the Pacific Northwest.• Taste and compare several common apple varieties and apple recipes.• Learn how to store apples properly.	<p><i>State objectives.</i></p>
<p>Ice Breaker:</p> <ol style="list-style-type: none">1) Have members share a favorite memory about apples.2) Have members share a favorite apple recipe.3) Have members work in small groups and brainstorm “apple sayings,” such as “An apple a day keeps the doctor away.”	<p><i>Choose one of the three ice-breaker activities or develop your own...</i></p>

<p>Have small groups report back their sayings. Here are some sayings. What other sayings did they think of?</p> <ul style="list-style-type: none"> • You are the apple of my eye. • Don't upset the apple cart. • As American as baseball and apple pie. • A piece of apple pie without the cheese is like a hug without the squeeze. • An apple doesn't fall far from the tree. • One rotten apple spoils the bushel. • The apple of my eye. 	
<p>History: Apples are very old and are mentioned in the Bible and in the history of ancient nations. It is believed that apples were grown in Neolithic times and were known to ancient cave dwellers. About 5,000 years ago, apples were gathered and stored. The Egyptians and Romans introduced apples to Britain. Early Americans brought apple seeds from Europe and planted trees in Massachusetts and Virginia. John Chapman became known as Johnny Appleseed because he planted apple seeds wherever he went.</p> <p>Apples were introduced into the Pacific Northwest by Captain Aemilius Simmons, who planted apple seeds at Fort Vancouver in the state of Washington. Previously, Captain Simmons attended a farewell banquet in his honor in London. At this party, a young lady slipped some apple seeds into his pocket and bade him plant them in the wilderness. Some time after his arrival at Fort Vancouver, he handed the seeds over to Dr. John McLoughlin, Chief Agent of the Hudson's Bay Company. Dr. McLoughlin, delighted by the gift, gave the seeds to his gardener to plant. His first tree produced only one apple, but the seeds of that single fruit bore future generations of hardier stock.</p> <p>When covered wagons traveled over the Oregon Trail westward, they carried apple trees and "scion wood" for grafting as part of their cargo. Often the family orchard was planted before the ground was broken for their log cabin that was to be home.</p> <p>Josiah Red Wolf, a Nez Perce leader and last survivor of the Nez Perce War, planted apple trees at Alpowa Creek near the Snake River in southeast Washington. He is probably the first Native American in what is now eastern Washington and Oregon known to have a European-style garden and orchard. Red Wolf's trees lived for decades.</p>	<p><i>Share highlights of the history of apples that you think will interest your group.</i></p> <p>The Egyptians and Romans introduced apples to Britain. Early Americans brought apple seeds from Europe.</p> <p>Apples were brought to the Pacific Northwest by Captain Aemilius Simmons who planted apple seeds at Fort Vancouver.</p> <p>Many pioneers brought apple trees on their trek west.</p> <p>Josiah Red Wolf, a Nez Perce leader planted apple trees.</p>

<p>In 1847, Henderson Lewelling (know for promoting the fruit industry in Iowa, Oregon, and California) came to Oregon in a covered wagon with his wife, children and 350 fruit trees that had survived the long journey. It is said that he took such good care of those trees on the trip that they were watered every day and only water that was left was given to his family. He brought apples, pear, quince, plum and cherry trees. He went into partnership with William Meek, who arrived with a bag of apple seeds and founded a nursery. By 1850, their first crop produced 100 apples. It was the time of the Gold Rush in California, and when they rushed to San Francisco with the apple crop, prospectors were so hungry for fresh fruit that he sold them for \$5 each. They used the money to build more orchards.</p> <p>In 1908 Sydney Babson traveled around Oregon seeking "just the right spot" to start his apple orchard. He carefully tended his tiny apple seedlings as he traveled. He believed that when his eyes beheld just the right location for his orchard, he would receive "a sign from God." Emerging from his tent one morning, he looked towards the beauty of Mt Hood. Sydney took this as the sign he was looking for and began to plant his apple orchard. Sydney devoted his life with single-minded purpose to these orchards for over 60 years. In 1960 he was named "Orchardist of the Year." Today, the Hood River Valley is one of the major growers of apples.</p>	<p>Henderson Lewelling and John Meek started one of the first nurseries in Oregon.</p> <p>Sydney Babson was one of the first to locate an orchard in the Hood River area.</p>
<p>Health Benefits: MyPyramid, the U.S. Department of Agriculture’s new food guide, recommends including 2 cups of fruit for a 2,000 calorie a day diet. A woman age 70 who gets less than 30 minutes of physical activity a day needs fewer calories, so should eat 1½ cups of fruit each day. An apple (or other fruit) the size of a tennis ball is approximately ½ cup.</p> <p>The goal is to choose a variety of fruits, including fresh, canned, frozen or dried. Go easy on fruit juices because they are higher in sugar and lower in fiber. Apples are a good fruit choice. They’re easy to carry for snacking and low in calories.</p> <p>Apples provide soluble fiber which helps prevent cholesterol buildup in the lining of the blood vessel walls, thus reducing the incidence of atherosclerosis and heart disease. The insoluble fiber in apples provides bulk, helping food move quickly through the digestive system. Just one medium apple provides 5 grams of fiber, or as much dietary fiber as a serving of bran cereal, or one-fifth of the recommended daily intake of fiber.</p>	<p><i>Summarize Health Benefits:</i> MyPyramid recommends 2 cups of fruit for people on a 2,000 calorie diet. Go to http://www.mypyramid.gov/ to get a personalized diet plan based on gender, age and activity level.</p> <p><i>Show tennis ball to illustrate approximately ½ cup serving of whole fruit.</i></p> <p>Apples are a good fruit choice because they are easy to carry and low in calories.</p> <p>Apples provide both soluble and insoluble fiber.</p>

<p>Apples contain flavonoids, a type of phytonutrient that may help prevent chronic illnesses. Apples appear to promote heart, lung, colon, liver and prostate health. Scientists believe antioxidants found in apples (and other fruits and vegetables) may ward off disease by countering oxygen’s damaging effects on the body. Whenever possible, don’t peel apples. Many of the antioxidants are found in the apple’s peel.</p> <p>Although researchers stress that even though some studies have been conducted in the laboratory rather than in clinical trials with humans, they have no hesitation in recommending apples as part of a healthy diet rich in a variety of fresh fruits and vegetables and whole grains. Research findings reinforce that there are more health benefits from whole foods than in dietary supplements which do not contain the same array of balanced complex components.</p>	<p>Apples contain flavonoids that may help prevent chronic illnesses.</p> <p>Researchers suggest eating more whole fruits and vegetables and whole grains. Apples are one of many choices to increase fruit intake.</p>
<p>Apple Production: The U.S. Apple Commission reports that 200 million cartons of apples are harvested around the country. More than 36 states produce apples. China is the apple producing leader, followed by the United States, Turkey, France, Italy, South Africa and Chile.</p> <p>Washington State is the largest apple producer in the United States with almost 6 billion pounds produced in 2004, or 60% of the apples produced nationwide. New York ranks second. Apples are the second most valuable fruit grown in the United States, following oranges.</p> <p>By comparison, Oregon produced only 166 million pounds in 2004 and 130 million pounds in 2005. The major apple producing areas in Oregon are along the Columbia Gorge, followed by the Willamette Valley.</p> <p>Umatilla County produced approximately half the apples in Oregon, followed by Hood River County which produced about 15% of Oregon’s apples. The Willamette Valley counties combined produced about the same amount of apples as Hood River County by itself. Almost all of Oregon’s apples were sold fresh.</p> <p>Almost one-half of the US apple crop is processed into apple products, such as apple juice, applesauce, apple pie filling and canned apple slices.</p>	<p><i>Summarize apple production. Add in local information.</i></p> <p>Washington State is the largest apple producer.</p> <p><i>Show Oregon map of apple producing counties. Umatilla County (blue) produces 50% of Oregon’s apples & Hood River County (red) produces 15%. The counties in yellow combined to produce 15% of the apples in Oregon.</i></p> <p>The major apple producing areas in Oregon are along the Columbia Gorge and in the Willamette Valley.</p> <p>About ½ of the US apple crop is processed into apple products.</p>

<p>On average, Americans eat about 19 pounds of fresh apples a year and another 21 pounds for pie, sauce, juice, and other cooked or preserved apples. This totals about one 40-pound box per year (one bushel). Research says 98% of all consumers are apple eaters and 32% of them purchase apples on a weekly basis.</p>	<p>The average American eats one bushel of apples a year.</p>
<p>Apple varieties: There are over 7,500 different varieties grown in the world, with over 2,500 known varieties grown in the U.S. One hundred apple varieties are grown commercially in the U.S.</p> <p>In the U.S., the most popular varieties continue to be the Red Delicious, Golden Delicious and Granny Smith. Fuji, Gala, Braeburn, Jonagold, Cameo and Pink Lady are growing in popularity. In Umatilla County, Oregon’s largest apple producer, the main commercial varieties include Red and Golden Delicious, Gala, Fuji, Braeburn, Granny Smith and Pink Lady apples.</p> <p><u>Red Delicious</u> – Bright to dark red skin sometimes striped. Heart-shaped. Mild, sweet, crunchy and juicy. The favorite eating apple. Available year-round. Originated in Peru, Iowa.</p> <p><u>Granny Smith</u> – Bright green with pink blush. Tart, tangy, crisp, and juicy. Very good for cooking, salads, and eating fresh. Available year-round. Originated in Australia.</p> <p><u>Golden Delicious</u> – Golden to yellow-green color. Mellow, sweet all-purpose apple with a thin delicate skin and firm flesh. Great for baking, salads & eating fresh. Flesh stays white longer than other apples. Maintains its shape and rich, mellow flavor when baked or cooked. Available year-round. Originated in Clay County, West Virginia.</p> <p><u>Gala</u> – Yellow-orange with red striping. Heart-shaped. Rich, full sweet flavor, crisp and juicy with a tender skin. Very good for eating fresh or in salads and for applesauce. Available August through March. Originated in New Zealand.</p> <p><u>Fuji</u> – Yellow-green with red highlights to very red. Very sweet and crunchy with a tender skin. Best used fresh, but holds its texture when baked. Available year-round. Originated in Japan.</p> <p><u>Rome Beauty</u> – Bright red skin, slightly juicy, crisp flesh, and slightly tart flavor. Called the “baker’s buddy” – used primarily for cooking, their flavor grows richer when baked or sautéed. Great for pies. Available September through July. Originated in Rome Township, Ohio.</p>	<p><i>Show and discuss the various apple varieties available in your local supermarket or fruit stand. Use the Blue Varietal poster to show and describe the 12 main varieties grown in the Pacific Northwest. Refer to the handout “Recommended Uses for Apple Varieties.”</i></p> <p><i>You may find other varieties available locally. You can find information about them on the US Apple Association website: http://www.usapple.org</i></p> <p>There are many varieties of apples available – but the most popular continue to be the Red and Golden Delicious and Granny Smith.</p>

<p><u>Braeburn</u> – Greenish-gold with red sections to nearly solid red. Spicy, tart, crisp, aromatic and juicy. Very good for pies. Available October through August. Originated in New Zealand.</p> <p><u>Criterion</u> – Bold yellow, often with a red blush. Juicy and honey-sweet (sometimes called the candy apple), its flesh resists browning after cutting. Perfect for salads and fruit trays. Available October through March. First found in Parker, Washington.</p> <p><u>Newton Pippin</u> – Greenish apple. Aromatic and tangy – a top choice for applesauce and pies. Available September through June. Originated in Long Island, New York.</p> <p><u>Jonagold</u> – Yellow-green base with a blush stripe. A tangy-sweet flavor that is a blend of the Jonathan and Golden Delicious. Excellent for eating fresh and pies. Available September through April. Originated in New York.</p> <p><u>Cameo</u> – Red stripes over a creamy background. A sweet, tart apple with a firm texture. The best all around apple for eating fresh, pies, sauce, and baking. Available October through August. Originated in Dryden, Washington.</p> <p><u>Pink Lady</u> – Yellow in color with a pink blush. Known for its sweet-tart taste and firm, crisp flesh. Great for cooking or eating fresh. Available October through June. Originated in Australia.</p> <p>Check these websites for descriptions of additional varieties: http://www.usapple.org or http://www.applejournal.com/use.htm</p>	
<p>Selection and Storage: When selecting apples, press your finger against them to check for firmness. Choose apples that feel hard and don't dent.</p> <p>Store apples in a covered container in the refrigerator to maintain crispness. Apples stored in the refrigerator keep for about 6 weeks. When no refrigerator space is available, keep apples in as cool a place as possible and line the basket with aluminum foil or plastic to prevent moisture loss. Keep out of direct sunlight.</p> <p>Apples easily absorb flavors and odors from other fruits and vegetables, so store them away from other fruits and vegetables. Apples also release a gas (ethylene) that causes green vegetables and leafy greens to ripen (and spoil) more quickly.</p> <p>To minimize browning after cutting, the U.S. Apple Association recommends dipping apples in a solution of 50% lemon juice and 50% water.</p>	<p><i>Summarize storage tips.</i></p> <p>Check for firmness.</p> <p>Store in refrigerator for up to 6 weeks.</p> <p>Keep apples away from green vegetables and leafy greens.</p> <p>Minimize browning with lemon juice and water.</p>

<p>Apple Uses:</p> <p><i>"I know the look of an apple that is roasting and sizzling on the hearth on a winter's evening, and I know the comfort that comes of eating it hot, along with some sugar and a drench of cream... I know how the nuts taken in conjunction with winter apples, cider, and doughnuts, make old people's tales and old jokes sound fresh and crisp and enchanting." Mark Twain</i></p>	<p><i>Read this quote from Mark Twain.</i></p> <p><i>Share tips for including apples in the diet. Refer to the member handout for suggestions. Ask participants for ways they include apples in their diet.</i></p> <p><i>Taste apple recipes included in "Apple Recipes" handout or other favorite apple recipes. You could invite members to each bring their favorite apple recipe.</i></p>
<p>Storing and Preserving Apples: For information on freezing, canning or drying apples request the following publications from your county Extension office:</p> <ul style="list-style-type: none"> SP 50-446 Preserving Apples SP 50-455 Preserving Fruit Juices and Apple Cider SP 50-616 Fruit Pie Fillings PNW 397 Drying Fruits and Vegetables (\$1.50) PNW 199 Canning Fruits (\$1.00) PNW 214 Freezing Fruits and Vegetables (\$1.00) FS 147 Picking and Storing Apples & Pears (\$1) 	<p><i>Share information on obtaining OSU Extension publications on canning, freezing and drying as appropriate for your group.</i></p>
<p>Summary: Apples are a very old fruit, but new research suggests that the adage "An apple a day keeps the doctor away" may have some truth. With over 2,500 different apple varieties grown just in the United States there are ample opportunities to include apples in a varied diet rich in grains, fruits and vegetables as suggested in the USDA Dietary Guidelines for Americans.</p>	
<p>Evaluation: Distribute the "Informed Consent Statement" and evaluation form. Read aloud the "Informed Consent Statement" and give participants 5 minutes or so to complete the evaluation. Collect the evaluations and return them to your local county Extension Office.</p>	

References:

Apple Journal. <http://www.applejournal.com/use.htm> (details hundreds of apple varieties).

Dole 5 A Day. <http://www.dole5aday.com> (learn how to include more fruits in your diet through information and recipes at this site).

OSU Extension Service, *Commodity Data Sheet – Apples*, April 2005.
<http://ludwig.oreg.onst.edu/econinfo/CDSFiles/cds05/Apples.pdf> (statistics on Oregon Apple Production by year and county).

Science Daily. *Disease-fighting Chemicals in Apples Could Reduce the Risk of Breast Cancer, Cornell Study in Rats Suggests*.
<http://www.sciencedaily.com/releases/2005/03/050309110724.htm> (includes this article and links to other articles on current research into the health benefits of apples).

Steps to a Healthier You. <http://www.mypyramid.gov/> (check out your individual My Pyramid at this website).

U.S. Apple Association, 8233 Old Courthouse Road, Suite 200, Vienna, VA 22182.
<http://www.usapple.org> (check her for more information about apples grown in the United States).

Washington Apple Commission. PO Box 18, Wenatchee, WA 98807.
<http://www.bestapples.com> (learn more about Pacific Northwest Apples at this site).

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