Handout

History:

Apples are very old and are mentioned in the Bible and in the history of ancient nations. 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.

Apples were introduced into the Pacific Northwest by Captain Aemilius Simmons, who planted apple seeds at Fort Vancouver in the state of Washington. 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.

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.

In 1847, Henderson Lewelling came to Oregon in a covered wagon with his wife, children and 350 fruit trees that survived the journey. 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 prospectors were so hungry for fresh fruit that they sold them for $5 each. They used the money to build more orchards.

In 1908 Sydney Babson traveled around Oregon seeking "just the right spot" to start his apple orchard. 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 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 produces approximately 15% of the apples grown in Oregon.

Health Benefits:

My Plate, the U.S. Department of Agriculture’s new food guide, recommends including 2 cups of fruit if you need 2,000 calories a day to maintain your weight. 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. The goal is to choose a variety of fruits, including fresh, canned, frozen or dried fruits. Try to limit 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. An apple (or other fruit) the size of a tennis ball is approximately ½ cup.
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.

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 counteracting oxygen’s damaging effects on the body. In apples, the antioxidants are concentrated in the skin, so don’t peel before eating.

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.

**Apple Production:**
The U.S. Apple Commission reports that 200 million cartons of apples are harvested around the country and that more than 36 states produce apples. China is the apple producing leader, followed by the United States, Turkey, France, Italy, South Africa and Chile.

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. By comparison, Oregon produced only 166 million pounds in 2004. The major apple producing areas in Oregon include the Willamette Valley and along the Columbia Gorge. 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 Oregon’s apples were sold fresh.

Almost one-half of the U.S. apple crops are processed into apple products, such as apple juice, applesauce, apple pie filling and canned apple slices. On average, Americans eat about 19 pounds of fresh apples a year and another 21 pound for pie, sauce, juice, and other cooked or preserved apples. This totals about one 40-pound box per year (one bushel). Research indicates that 98% of all consumers are apple eaters and 32% of them purchase apples on a weekly basis.

**Apple varieties:**
There are more than 7,500 different varieties grown in the world, with over 2,500 known varieties grown in the United States. 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 all growing in popularity.

**Selection and Storage:**
When selecting apples, press your finger against them to check for firmness. Choose apples that feel hard and don’t dent.

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.

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.

To minimize browning, dip apples in ascorbic acid solution. The U.S. Apple Association recommends dipping the cut apples in a solution of half lemon juice and half water.

**New Ways to Include Apples in the Diet:**

**Breakfast:**
- Add sliced apples to low fat yogurt or dip apple wedges.
- Mix shredded or diced apples into pancake or waffle batter.
- Top pancakes or waffles with applesauce.
- Add shredded apples to low fat muffin batter.

**Lunch:**
- Layer sliced apple in a deli-style sandwich.
- Add shredded apple to peanut butter or grilled cheese sandwich.
- Add chopped apples to chicken, tuna, pasta or potato salad.
- Add shredded apples to coleslaw.

**Dinner:**
- Top pizza with apple slices.
- Add grated apple to meatloaf or meatballs.
- Stir chopped apple and raisins into rice pilaf.
- Use apple slices in mixed green or spinach salad.
- Sauté sliced apples and shredded cabbage in apple cider.
- Add apple chunks to root vegetables and bake.
Leader Guide

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Goals
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) Several different varieties of apples, sliced before the lesson for tasting. (See below)

Member Handouts:
1) Appealing Ways-Member Handout.

Ice Breaker:
1) Have members share a favorite memory about apples.
2) Have members share a favorite apple recipe.

Choose one of the three ice-breaker activities

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.

Below are some suggestions:
The Egyptians and Romans introduce apples to Britain. Early Americans brought apple seeds from Europe.
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.

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.

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.

In 1847, Henderson Lewelling (known 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 also 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.
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.

Health Benefits:
My Plate, 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.

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.

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.

Sydney Babson was one of the first to locate an orchard in the Hood River area.

Summarize Health Benefits:
MyPyramid recommends 2 cups of fruit for people on a 2,000 calorie diet.

Show tennis ball to illustrate approximately ½ cup serving of whole fruit.

Apples are a good fruit choice because they are easy to carry and low in calories.

Apples provide both soluble and insoluble fiber.
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.

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.

**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. 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.


**Fuji** – 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.

**Rome Beauty** – 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.


**Criterion** – 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.


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


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).


Prepared