

Pear

Grow

Pear is a fruit of the Rose family (*Rosaceae*) and genus *Pyrus*. There are thirty known species of pears. Three species of pears are important for edible fruit production. The common pear, *Pyrus communis* or European Pear, is cultivated mainly in Europe and North America. *Pyrus pyrifolia* is grown mainly in eastern Asia and is known as the Nashi, Asian or Apple Pear. The Ya Pear, *Pyrus bretschneideri*, is also cultivated in Asia. Other pear species are used as rootstocks for European or Asian pear trees and as ornamental trees, such as the Bradford Pear and Willow-leaved Pear, found across North Carolina.¹⁻³

Fun Fact: Growers must plant two pear varieties to facilitate cross-pollination so the trees will bear fruit.³

The heavy, well-drained soil and slightly elevated sloping ground along with warm days and cool nights help California, Oregon and Washington grow 95 percent of U.S. pears. Pears bloom early and the flowers can be damaged in low-lying areas.¹⁻²

In North Carolina, pear production is limited due to the likelihood of late spring frosts and the possibility of Fire Blight, a bacterial disease that can kill pear trees. Newer varieties of pear trees, such as Moonglow and Magness, have been bred to become increasingly blight tolerant.³

Fun Fact: The pear tree has glossy leaves and white flowers grouped in *corymbs*, which are pollinated to become edible fruit.¹

Choose

Pears are harvested by hand when the fruit is mature but green. To slow ripening, pears are cooled during storage and transport. Always choose pears that are firm. An easy way to ensure they are ready to eat is by gently applying pressure to the neck of the pear with your thumb. If the pear gives way to light pressure, it is ripe. The color of a ripe pear will depend on its variety. Brown speckling is normal. Be careful of too ripe or bruised pears.^{1,4-5}



Store

Pears are in season August-October in North Carolina. They ripen quickly once they have been picked from the tree. Pears ripen from the inside out. If a pear is not yet ripe, you can store it in a paper bag at room temperature. Or you can store it next to apples or other produce that emit natural ethylene gas, which hastens ripening. If a pear is ripe, store in the coldest part of the refrigerator (32-35°F). Pears give off and absorb odors so avoid storing near cabbage, carrots, celery, potatoes, or onions.^{1-2,4-5}

Fun Fact: Pear tree wood is the preferred material for the creation of high-quality woodwind instruments.¹

Use

Pears are great fresh as a snack, in a salad, or as part of other recipes, sweet or savory. They can be used as a substitute in any dish that uses apples, as a way to enjoy a change of flavor. Pears are processed into canned pears, fruit cocktail, juice concentrate, baby food and dried pears. Before preparing or eating, always wash fruit very well under clean, running water. Hint: Try to keep the peel intact when eating pears as it contains most of the pears' fiber and antioxidants.

Pear

Teach

Pears originated in south eastern Europe. The early Romans cultivated 50 varieties of pears and planted them across Europe. The first pear tree was planted in the U.S. in 1620. Today, there are more than 3,000 varieties of pears grown throughout the world.¹⁻²

Characteristics of the top pear varieties in the U.S.:

- Bartlett - red or green, bell-shaped, turns from green to yellow and is very sweet and juicy when ripe, most common variety
- Anjou - red or green, oval-shaped, smooth and thick skin, does not change color when ripe - remains light green
- Bosc— brown-green colored skin that does not change as it ripens, rougher skin, good baking pear
- Comice - green-yellow in color often with a red blush, color remains when ripe, very round, short neck and stem
- Concorde - elongated shape, very sweet, light green color that remains when ripe, distinct vanilla flavor
- Forelle - red and green skin, smaller in size than other pears, crisp, tangy flavor
- Seckel - smaller pear, crunchy, ultra-sweet
- Starkrimson - red in color, aromatic, juicy, and sweet with floral essence²⁻⁴

Class Activity - *Pear Inspections*

Materials Needed:

- Variety of pears—whole and samples for tasting
- Paper plates and napkins
- White board and markers or smartboard

Steps: *Use food safety steps. Wash hands and produce.

1. Assign students to working groups. Provide a variety of pears to each group.
2. Instruct each group to list as many observations of their pear varieties as they can (i.e., what color it is, how it smells, feel, etc.).
3. Create a chart on the white board or smartboard for the class to record their observations for all to see.
4. Discuss the similarities and differences as a class.

Eat

What a pear!

One medium pear has about 100 calories, is low in sodium and fat and is cholesterol free. It is an excellent source of fiber and a good source of copper. Pears are also a source of vitamin C, potassium, lutein and zeaxanthin.^{4,6}

Fun Fact: Pears were introduced to the west, where they are typically now grown, during the Gold Rush.¹

Soluble fiber helps lower blood cholesterol. Insoluble fiber aids in digestion. Copper helps our bodies produce energy in all cells, develop connective tissue, myelin and melanin, and make hemoglobin, which is needed to carry oxygen in red blood cells. It also serves as part of many body enzymes. Vitamin C helps form collagen to hold muscles, bones and tissues together, keeps our gums healthy, protects us from infections and bruising, aids in healing, helps our body absorb iron and folate from plants, and acts as an antioxidant to prevent cell damage. Potassium helps regulate fluid and mineral balance in the body, maintain normal blood pressure, transmit nerve signals and contract muscles. Phytochemicals act as antioxidants preventing or repairing cell damage. Zeaxanthin and lutein are carotenoids that may help maintain healthy vision.⁷

Fun Fact: Due to their sweet flavor, the ancient Greek author Homer described pears as “gifts from gods”.²

Find

For more pear facts and resources, visit:

1. California Harvest of the Month, <http://harvestofthemonth.cdph.ca.gov>
2. Wisconsin Department of Public Instruction, School Nutrition, <https://dpi.wi.gov/school-nutrition/programs/fresh-fruit-vegetable>
3. North Carolina Extension, www.ces.ncsu.edu
4. Pear Bureau Northwest, <https://usapears.org>
5. U.S. Department of Agriculture, Food and Nutrition Service, www.fns.usda.gov
6. USDA Food Composition Databases, <http://ndb.nal.usda.gov>
7. Academy of Nutrition and Dietetics, www.eatright.org