

Asian Pears

Grow

Asian pears are a fruit that grows on a tree. It is a member of the *Rosaceae*, or rose, family. Other members of the *Rosaceae* family include roses, blackberries, strawberries, apples, cherries, and peaches. *Pyrus pyrifolia* is the Asian Pear, also called the Apple, Oriental or Nashi Pear.¹⁻²

At least two varieties of pears need to be planted for adequate pollination to occur. Pears grow best in places with good air flow and heavier soil. Pear trees will die if they are planted in a soil that is very wet. Plant pear trees in well-drained, fertile soil with a pH of 5.9-6.5. Trees should be spaced 10-15 feet apart. Pears bloom earlier in the spring so frost damage is a concern. Pears should be planted on a site higher than the surrounding area to help protect from frost. Being on higher ground will also help the tree foliage dry quicker from dews or rain. Most of the U.S. commercial pear production occurs in California, Oregon, and Washington due to the climate (warm days and cool nights). Fire blight is a disease caused by a bacteria that can kill entire fruit trees under the right conditions. To help, thin fruit to 2-3 per cluster with clusters being a hand width apart. Also, as a prevention, fire blight resistant varieties can be grown.¹⁻³

Fun Fact: There are 30 different types, or species, of pears and 3,000 varieties of pears worldwide.¹

Choose

Pick a Peck of Pears

Asian pears are in peak season from the beginning of August through the end of October.¹ Unlike other pear varieties, ripe Asian pears are hard and do not soften over time. Select Asian pears that are fragrant and unbruised with little or no brown spots.⁴ To harvest the pears, hold the fruit gently and use an upward, twisting motion to avoid damaging the fruit or stem.²⁻³

Unlike other pears, Asian pears ripen well while on the trees. After being picked, pears are kept in a cool room to slow down their ripening process. They will begin to ripen when they reach room temperature.²⁻³



Store

Asian pears can be eaten when picked. Store firm fruit at room temperature up to 1 week. Then, use immediately or refrigerate in the coldest part of the refrigerator. Ripe pears give to gentle pressure. Pears give off and absorb odors. Keep pears away from cabbage, carrots, celery, potatoes and onions. Asian pears should be stored at 32°F and in high humidity to avoid water loss.^{2-3,5}

Fun Fact: The wood from the pear trees is commonly used to make woodwind instruments, like the flute, oboe, or clarinet.¹

Use

Fruits and vegetables should always be washed before they are eaten. Wash Asian pears under cold, running water. Asian pears can be eaten raw, on their own or part of a dish, like a salad or sandwich. Most of the fruit's fiber is found in the skin, so pears are best eaten with the skin on. Pears can be eaten like apples, around the stem, with special care not to eat the seeds. Asian pears can also be baked, cooked into jams or sauces, made into pear butter, pickled, dried into chips, or used in desserts, like pies or tarts.⁴⁻⁵

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Teach

Pears have 7 parts, including the stem, shoulder, skin, flesh, core, seeds and calyx. Pear seeds should not be eaten. Other parts, like the flesh and skin, are important to eat and provide health benefits.¹

Fun Fact: Pears are historical. They were one of the first fruit trees to be harvested, dating back to the Roman Empire.¹

Class Activity:

Have students identify the parts of an Asian pear.

Materials Needed:

- Sheet of labels and marker
- Paper plates
- Pears, cut in half - stem to calyx (Each pair of students should have one half of a pear.)
- Knife and cutting board
- Lemon juice (Bowl if dipping pears in juice or pastry brush, if brushing juice on pear)
- Flat toothpicks (7 per pair)

Steps:

1. Create sets of 7 labels for each pair of students. Write the following on the right-hand side of the label: stem, shoulder, skin, flesh, core, seed, and calyx. Wrap the label around the toothpick to create a "flag".
2. Just before the activity, cut the pears and dip in or brush lemon juice on them to prevent browning.
3. Distribute sets of flags, pears, and plates to each pair of students.
4. As a class, walk students through pushing the flags into the corresponding part of the pear. For the stem, instruct them to place a flag where it would go, since not every student would be able to have a stem.

Guide: The **stem** is at the very top and connects the pear to the tree. The **shoulders** are at the top on either side of the stem. The **skin** is the outer covering, typically a different color from the juicy inside (**flesh**). The **seeds** are within the **core**, or center of the pear. The **calyx** is at the center of the bottom.¹

Eat

One medium (2½ inch diameter) Asian pear has about 50 calories and offers 8% of the Daily Value for vitamin C. Asian pears are a good source of fiber, free of fat and cholesterol and very low in sodium. Asian pears are also a source of vitamin K, potassium and lutein.⁴⁻⁵

Fun Fact: All Asian pears should be considered self-incompatible, which means another Asian pear cultivar must be planted as a companion for pollination. Some are cross-incompatible, which means they will not pollinate each other. Growers must ensure the cultivars will be planted will cross-pollinate and their flowering periods overlap.³

Vitamin C helps form collagen to hold muscles, bones and tissues together, protects us from infections and bruising, aids in healing, keeps our gums healthy, helps our body absorb iron and folate from plants, and acts as an antioxidant to prevent cell damage. Soluble fiber helps lower blood cholesterol. Insoluble fiber aids digestion. Vitamin K helps our body clot blood and make proteins needed for our blood, bones and kidneys. Potassium helps regulate fluid and mineral balance in the body, maintain normal blood pressure, transmit nerve signals and contract muscles. Lutein helps maintain normal vision.⁶

Fun Fact: Asian pear orchards are growing in popularity; an increasing number of trees have been planted and will be producing fruit within a few years.²⁻³

Find

For more Asian pear facts and resources, visit:

1. Harvest of the Month, California Department of Public Health, <http://harvestofthemonth.cdph.ca.gov/>
2. North Carolina State Extension, www.ces.ncsu.edu
3. Clemson University Cooperative Extension, www.clemson.edu
4. Produce for Better Health Foundation, <https://fruitsandveggies.org>
5. U.S. Department of Agriculture, Food and Nutrition Service, www.fns.usda.gov
6. Academy of Nutrition and Dietetics, www.eatright.org