

Apples are part of the rose family and grow on small, deciduous trees. They are a small round fruit with crunchy flesh that has a sweet or tart flavor depending on the variety. There are more than 7,500 varieties of apples with a range of characteristics. Apples have five seed pockets, or carpels, containing seeds. The number of seeds per carpal indicates the vigor and health of the tree. While wild apples grow from seeds, domestic apples are grown by taking cuttings from a tree and grafting into a rootstock to ensure the same characteristics. It takes four to five years for apple trees to produce their first fruit.
Pilgrims brought apples seeds and cuttings to the United States from Europe. Apples are grown in almost every state making the United States the world's second-leading producer after China. Crops ripen at different times of the year and harvested by hand. Commercial producers cover
apples in wax made from natural ingredients after cleaning to preserve the freshness and minimize bruising and damage to the skin.

The whole fruit can be eaten, except for the seeds, which contain small amounts of cyanide, a toxin that can cause adverse reactions if ingested in large amounts. When sliced, the exposure to air turns the apple flesh brown. To avoid this reaction, put the slices in water with lemon, or apple juice. Apples can be eaten fresh, cooked, baked, canned, dried or juiced. Fermented juice can be made into cider or vinegar.
Apples are low in calories and free of fat, sodium and cholesterol, and the skin is rich in dietary fiber. They are also high in antioxidants that lower the risk of a variety of cancers, stroke, asthma and diabetes. Nutrients are lost when apples are commercially processed into applesauce and juice.

## Types and Varieties

BRAEBURN - orange to red skin over a yellow to green background; juicy and crisp with a firm texture; tart and sweet flavor; best for eating fresh and baking; late fall crop.
CORTLAND - crimson skin over a pale yellow background with short dark stripes; soft, white flesh; sweet flavor; excellent dessert apple; fall crop.

EMPIRE - red skin with juicy, crisp, white flesh; mild tart and sweet flavor; excellent for eating fresh, baking and cooking; fall crop.
FUJI - yellow to green skin with red highlights; firm and crisp texture; tart and sweet flavor; best for eating fresh and baking; late fall crop.

GALA - pink to orange stripes over yellow background; crisp and aromatic flesh with a sweet flavor; best for fresh eating and applesauce; early fall crop.
GOLDEN DELICIOUS - yellow to light-green, delicate skin; firm white flesh that holds shape when cooked or baked; mellow sweet flavor; all-purpose apple; fall crop.
GRANNY SMITH - bright green, hard skin; crisp and juicy flesh; extremely tart flavor; good for fresh eating and salads.

MCINTOSH RED - Rough skin with mixed red and green background; juicy, white flesh; sweet, mild flavor; good all-purpose apple; early fall crop.
RED DELICIOUS - Thin, red skin with fine-grained white flesh; mildly sweet flavor; best for fresh eating and apple sauce; fall crop.

## Selection and Buying Tips

Choose apples with smooth, firm skin and rich coloring. Avoid apples that have bruises or cuts and keep them separate from the good ones. An apple that has been bruised releases ethylene gas and can decrease the shelf life of other apples. An overripe apple will have mealy flesh.
Apples can be stored in the refrigerator for up to two weeks and can be left on the shelf for up to 48 hours. For long-term storage, keep good apples in a dry, cool place without touching. Apple slices freeze well in plastic bags or containers.
According to the Environmental Working Group's "Dirty Dozen" list, apples are among the top 12 fruits and vegetables on which pesticide residues have been most frequently found. Organic apples should be selected to minimize pesticide intake. Alternatively, apples should be thoroughly rinsed in cold water while scrubbing the skin for several skins.


## Culinary Uses

- Put apple slices in a bowl of cold water with a spoonful of lemon juice to avoid browning. Try apple juice instead to help preserve the apple flavor.
- Add apple pieces to salads for a refreshing crunch. Try dehydrated/dried apples in trail mix.
- Baked or stewed apple dishes are a tasty side with chicken and other meats.
- Apples can be baked into pies, muffins and breads.
- Flavor apple dishes with cinnamon, clove, ginger or vanilla to enhance the taste.


## Fun Facts

- More than 2,500 varieties of apples are grown in the United States, but only the crabapple is native to North America.
- Apples are eaten with honey at the Jewish New Year of Rosh Hashanah to symbolize a sweet new year.
- In Greek mythology, the apple is considered sacred to Aphrodite. To throw an apple at someone was to symbolically declare one's love; to catch it was to show one's acceptance for that love.
- Johnny Chapman (1774-1845), known as Johnny Appleseed, was an American pioneer who planted apple trees on over 100,000 square miles by the time of his death.
- The largest apple picked weighed three pounds.

