Cranberry

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This article is about a plant species. For the rock band, see The Cranberries. For other uses, see Cranberry (disambiguation).

Cranberry bush with fruit partially submerged

**Scientific classification**

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**Species**

Vaccinium erythrocarpum
Vaccinium macrocarpon
Vaccinium microcarpum
Vaccinium oxycoccos

Cranberries are a group of evergreen dwarf shrubs or trailing vines in the subgenus Oxycoccus of the genus Vaccinium. In some methods of classification, Oxycoccus is regarded as a genus in its own right.[1] They can be found in acidic bogs throughout the cooler regions of the northern hemisphere.

Cranberries are low, creeping shrubs or vines up to 2 metres (7 ft) long and 5 to 20 centimetres (2 to 8 in) in height.[2] They have slender, wiry stems that are not thickly woody and have small evergreen leaves. The flowers are dark pink, with very distinct reflexed petals, leaving the style and stamens fully exposed and pointing forward. They are pollinated by bees. The fruit is a berry that is larger than the leaves of the plant; it is initially white, but turns a deep red when fully ripe. It is edible, with an acidic taste that can overwhelm its sweetness.

Cranberries are a major commercial crop in certain American states and Canadian provinces (see cultivation and uses below). Most cranberries are processed into products such as juice, sauce, jam, and sweetened dried cranberries, with the remainder sold fresh to consumers. Cranberry sauce is regarded as an indispensable part of traditional American and Canadian Thanksgiving menus and some European winter festivals.[3]

Since the early 21st century within the global functional food industry, raw cranberries have been marketed as a "superfruit" due to their nutrient content and antioxidant qualities.[4][5]
Species and description


There are three to four species of cranberry, classified in two sections:

Subgenus Oxycoccus, sect. Oxycoccus

- **Vaccinium oxycoccos** or Oxycoccus palustris (Common Cranberry or Northern Cranberry) is widespread throughout the cool temperate northern hemisphere, including northern Europe, northern Asia and northern North America. It has small 5–10 mm leaves. The flowers are dark pink, with a purple central spike, produced on finely hairy stems. The fruit is a small pale pink berry, with a refreshing sharp acidic flavour.

- **Vaccinium microcarpum** or Oxycoccus microcarpus (Small Cranberry) occurs in northern North America, northern Europe and northern Asia, and differs from *V. oxycoccos* in the leaves being more triangular, and the flower stems hairless. Some botanists include it within *V. oxycoccos*.

- **Vaccinium macrocarpon** or Oxycoccus macrocarpus (Large cranberry, American Cranberry, Bearberry) native to northern North America across Canada, and eastern United States, south to North Carolina at high altitudes. It differs from *V. oxycoccos* in the leaves being larger, 10–20 mm long, and in its slightly apple-like taste.

Subgenus Oxycoccus, sect. Oxycoccoides

- **Vaccinium erythrocarpum** or Oxycoccus erythrocarpus (Southern Mountain Cranberry) native to southeastern North America at high altitudes in the southern Appalachian Mountains, and also in eastern Asia.

Cranberries are related to bilberries, blueberries, and huckleberries, all in Vaccinium subgenus Vaccinium. These differ in having stouter, woodier stems forming taller shrubs, and in the bell-shaped flowers, the petals not being reflexed.

Some plants of the completely unrelated genus *Viburnum* are sometimes inaccurately called "highbush cranberries" (*Viburnum trilobum*).

Cranberries are susceptible to false blossom, a harmful but controllable phytoplasma disease common in the eastern production areas of Massachusetts and New Jersey.
**Etymology and history**

The name cranberry derives from "craneberry", first named by early European settlers in America who felt the expanding flower, stem, calyx, and petals resembled the neck, head, and bill of a crane. Another name used in northeastern Canada is mossberry. The traditional English name for *Vaccinium oxycoccus*, fenberry, originated from plants found growing in fen (marsh) lands. In 17th century New England cranberries were sometimes called "bearberries" as bears were often seen feeding on them.

In North America, Native Americans were the first to use cranberries as food. Native Americans used cranberries in a variety of foods, especially for pemmican, wound medicine and dye. Calling the red berries Sassamanash, natives may have introduced cranberries to starving English settlers in Massachusetts who incorporated the berries into traditional Thanksgiving feasts. American Revolutionary War veteran Henry Hall is credited as first to farm cranberries in the Cape Cod town of Dennis around 1816. In the 1820s cranberries were shipped to Europe. Cranberries became popular for wild harvesting in the Nordic countries and Russia. In Scotland, the berries were originally wild-harvested but with the loss of suitable habitat, the plants have become so scarce that this is no longer done.

**Cultivation**

**Geography and bog method**

Cranberries are a major commercial crop in the U.S. states of Massachusetts, New Jersey, Oregon, Washington, and Wisconsin, as well as in the Canadian provinces of British Columbia, New Brunswick, Ontario, Nova Scotia, Prince Edward Island, Newfoundland and Quebec. Wisconsin is the leading producer of cranberries, with over half of U.S. production.[8] Massachusetts is the second largest U.S. producer. A very small production is found in southern Argentina and Chile, the Netherlands,[9] and Eastern Europe.[citation needed]

Historically, cranberry beds were constructed in wetlands. Today cranberry beds are constructed in upland areas with a shallow water table. The topsoil is scraped off to form dykes around the bed perimeter. Clean sand is hauled in to a depth of four to eight inches. The surface is laser leveled flat to provide even drainage. Beds are frequently drained with socked tile in addition to the perimeter ditch. In addition to making it possible to hold water, the dykes allow equipment to service the beds without driving on the vines. Irrigation equipment is installed in the bed to provide irrigation for vine growth and for spring and autumn frost protection.
Cultivation

Cranberry vines are propagated by moving vines from an established bed. The vines are spread on the surface of the sand of the new bed and pushed into the sand with a blunt disk. The vines are watered frequently during the first few weeks until roots form and new shoots grow. Beds are given frequent light application of nitrogen fertilizer during the first year. The cost of establishment for new cranberry beds is estimated to be about US$70,000 per hectare (approx. $28,300 per acre).

A common misconception about cranberry production is that the beds remain flooded throughout the year. During the growing season cranberry beds are not flooded, but are irrigated regularly to maintain soil moisture. Beds are flooded in the autumn to facilitate harvest and again during the winter to protect against low temperatures. In cold climates like Wisconsin, Maine, and eastern Canada, the winter flood typically freezes into ice, while in warmer climates the water remains liquid. When ice forms on the beds, trucks can be driven onto the ice to spread a thin layer of sand that helps to control pests and rejuvenate the vines. Sanding is done every three to five years.

Harvesting

Cranberries are harvested in the fall when the fruit takes on its distinctive deep red color. This is usually in September through the first part of November. To harvest cranberries, the beds are flooded with six to eight inches of water above the vines. A harvester is driven through the beds to remove the fruit from the vines. For the past 50 years, water reel type harvesters have been used. Harvested cranberries float in the water and can be corralled into a corner of the bed and conveyed or pumped from the bed. From the farm, cranberries are taken to receiving stations where they are cleaned, sorted, and stored prior to packaging or processing.

Although most cranberries are wet-picked as described above, 5–10% of the US crop is still dry-picked. This entails higher labor costs and lower yield, but dry-picked berries are less bruised and can be sold as fresh fruit instead of having to be immediately frozen or processed. Originally performed with two-handed comb scoops, dry picking is today accomplished by motorized, walk-behind harvesters which must be small enough to traverse beds without damaging the vines.

White cranberry juice is made from regular cranberries that have been harvested after the fruits are mature, but before they have attained their characteristic dark red color. Yields are lower on beds harvested early and the early flooding tends to damage vines, but not severely.

Cranberries for fresh market are stored in shallow bins or boxes with perforated or slatted bottoms, which deter decay by allowing air to circulate. Because harvest occurs in late autumn, cranberries for fresh market are frequently stored in thick walled barns without mechanical refrigeration. Temperatures are regulated by opening and closing vents in the barn as needed. Cranberries destined for processing are usually frozen in bulk containers shortly after arriving at a receiving station.
Food uses

Cranberries

About 95% of cranberries are processed into products such as juice drinks, sauce, and sweetened dried cranberries. The remaining are sold fresh to consumers.

Cranberries are normally considered too sharp to be eaten plain and raw, as they are not only sour but bitter as well.[10]

Cranberry juice is a major use of cranberries; it is usually either sweetened to make "cranberry juice cocktail" or blended with other fruit juices to reduce its natural severe tartness. Many cocktails, including the Cosmopolitan, are made with cranberry juice. At one teaspoon of sugar per ounce, cranberry juice cocktail is more highly sweetened than even soda drinks that have been linked to obesity.[11]

Usually cranberries as fruit are cooked into a compote or jelly, known as cranberry sauce. Such preparations are traditionally served with roast turkey, as a staple of English Christmas dinners, and the Canadian and US holiday Thanksgiving. The berry is also used in baking (muffins, scones and cakes). Less commonly, innovative cooks use cranberries to add tartness to savory dishes such as soups and stews.[10]

Fresh cranberries can be frozen at home, and will keep up to nine months; they can be used directly in recipes without thawing.[12]

Cranberry wine is made in some of the cranberry-growing regions of the United States and Canada from either whole cranberries, cranberry juice or cranberry juice concentrate.

Potential health effects

Nutrients and antioxidant capacity

Cranberries, raw

<table>
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<tr>
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<tr>
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<tr>
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<tr>
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<tr>
<td>- lutein and zeaxanthin 91 μg</td>
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<tr>
<td>Thiamine (vit. B$_1$) 0.012 mg (1%)</td>
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Riboflavin (vit. B₂) 0.02 mg (2%)
Niacin (vit. B₃) 0.101 mg (1%)
Pantothenic acid (B₅) 0.295 mg (6%)
Vitamin B₆ 0.057 mg (4%)
Folate (vit. B₉) 1 μg (0%)
Vitamin C 13.3 mg (16%)
Vitamin E 1.2 mg (8%)
Vitamin K 5.1 μg (5%)
Calcium 8 mg (1%)
Iron 0.25 mg (2%)
Magnesium 6 mg (2%)
Manganese 0.36 mg (17%)
Phosphorus 13 mg (2%)
Potassium 85 mg (2%)
Sodium 2 mg (0%)
Zinc 0.1 mg (1%)

Percentages are relative to US recommendations for adults.

Source: USDA Nutrient Database

Raw cranberries have moderate levels of Vitamin C, dietary fiber and the essential dietary mineral, manganese, as well as a balanced profile of other essential micronutrients.[13]

By in vitro measurement of the Oxygen Radical Absorbance Capacity with an ORAC score of 9,584 units per 100 g, cranberry ranks near the top of 277 commonly consumed foods in the United States.[14] However, there is no scientific evidence that ORAC bears any biological significance in the human body.[15]

**Phytochemicals**

Raw cranberries are a source of polyphenol antioxidants, phytochemicals under active research for possible benefits to the cardiovascular system and immune system, and as anti-cancer agents,[16][17] such as in isolated prostate cancer cells.[18] Although polyphenols have antioxidant effects in vitro, they can act as pro-oxidants in others.[clarification needed] In addition, it is uncertain whether polyphenols and flavonoids account for the benefits of diets rich in plant-derived foods.[17]

Cranberry juice contains a high molecular weight non-dializable material that might inhibit formation of plaque by Streptococcus mutans pathogens that cause tooth decay.[19] Cranberry juice components also may possibly influence formation of kidney stones.[20][21]

One study compared cranberries with twenty other fruits, showing that cranberries had a high amount of total polyphenols.[22] Cranberry tannins have laboratory evidence for anti-clotting properties and may prevent recurring urinary tract infections in women,[23] although the evidence in favor of cranberries' efficacy in treating UTIs is far from conclusive.[24] Raw cranberries and cranberry juice are abundant food sources of flavonoids such as proanthocyanidins, flavonols[25] and quercetin.[26][27] These compounds have shown possible activity as anti-cancer agents in vitro.[28][29][30][31][32] However, their effectiveness in humans has not been established, and is limited by poor absorption into cells and rapid excretion.
Potential anti-adhesion properties

There is potential benefit of cranberry juice consumption (300mL of cranberry juice per day) against bacterial infections in the urinary system. Laboratory research shows that a possible effect may occur from a component of the juice inhibiting bacterial attachment to the bladder and urethra.

The effect may not result from the acidic nature of polyphenols but possibly to a specific type of proanthocyanidin which is thought to inhibit adherence of Escherichia coli and other fimbriated bacteria to uroepithelial cells.

Although promising for anti-bacterial activity, long-term consumption of cranberry juice has not been adequately proven to reduce urinary tract infections. However, there is preliminary evidence for possible effects against urinary tract infections in women. It is thought that cranberry proanthocyanidins are responsible for the apparent efficacy of consuming cranberry juice against urinary tract infections. Their mechanism of action may be related to inhibition of adherence of Escherichia coli to urothelial cells. Similar applications have not been successfully proven in other clinical trials of consuming cranberry juice or tablets by people with spinal cord injury associated with bladder catheterization, neurogenic bladder or infrequent urination, any of which may be associated with increased susceptibility to bacterial infections.

Research

In one clinical trial, cranberry juice significantly increased plasma antioxidant capacity, and decreased oxidized low-density lipoprotein and malondialdehyde at eight weeks compared to a placebo. However, cranberry juice consumption caused no significant improvements in blood pressure, glucose and lipid profiles, C-reactive protein, and interleukin-6. It was found that low-energy cranberry juice (Ocean Spray Cranberries, Inc, Lakeville-Middleboro, Mass. 2 cups/day) significantly reduced lipid oxidation and increased plasma antioxidant capacity in women with metabolic syndrome.

Possible contraindications

An autumn 2004 caution from the Committee on Safety of Medicines, the UK agency dealing with drug safety, advised patients taking warfarin not to drink cranberry juice after adverse effects (such as increased incidence of bruising) were reported, possibly resulting from the presence of salicylic acid native to polyphenol-rich plants such as the cranberry. However, during 2006-8, several reviews of case reports and pilot studies have failed to confirm this effect, collectively indicating no statistically significant interaction between daily consumption of 250 mL cranberry juice and warfarin in the general population. A gene (VKORC1, CYP2C9) has been shown to change warfarin sensitivity. This gene may also contribute to bruising susceptibility as a result of cranberries for carriers of the gene. A couple of possible cases of Warfarin interaction with cranberry have been reported.

Marketing and economics

History

The examples and perspective in this article may not represent a worldwide view of the subject. Please improve this article and discuss the issue on the talk page. In 1550, James White Norwood made reference to Indians using cranberries. In James Rosier's book "The Land of Virginia" there is an account of Europeans coming ashore and being met with Indians bearing bark cups full of cranberries. In Plymouth, Massachusetts, there is a 1633 account of the
husband of Mary Ring auctioning her cranberry-dyed petticoat for 16 shillings. In 1640's "Key Into the Language" Roger Williams described cranberries, referring to them as "bearberries" because bears ate them. In 1648, preacher John Elliott was quoted in Thomas Shepard's book "Clear Sunshine of the Gospel" with an account of the difficulties the Pilgrims were having in using the Indians to harvest cranberries as they preferred to hunt and fish. In 1663, the Pilgrim cookbook appears with a recipe for cranberry sauce. In 1667, New Englanders sent to King Charles 10 barrels of cranberries, 3 barrels of codfish and some Indian corn as a means of appeasement for his anger over their local coining of the Pine Tree shilling. In 1669, Captain Richard Cobb had a banquet in his house (to celebrate both his marriage to Mary Gorham and his election to the Convention of Assistance), serving wild turkey with sauce made from wild cranberries. In the 1672 book "New England Rarities Discovered" author John Josselyn described cranberries, writing:

"Sauce for the Pilgrims, cranberry or bearberry, is a small trailing plant that grows in salt marshes that are overgrown with moss. The berries are of a pale yellow color, afterwards red, as big as a cherry, some perfectly round, others oval, all of them hollow with sower (sic) astringent taste; they are ripe in August and September. They are excellent against the Scurvy. They are also good to allay the fervor of hoof diseases. The Indians and English use them mush, boiling (sic) them with sugar for sauce to eat with their meat; and it is a delicate sauce, especially with roasted mutton. Some make tarts with them as with gooseberries."

"The Compleat Cook's Guide" published in 1683 made reference to cranberry juice. In 1703, cranberries were served at the Harvard University commencement dinner. In 1787, James Madison wrote Thomas Jefferson in France for background information on constitutional government to use at the Constitutional Convention. Jefferson sent back a number of books on the subject and in return asked for a gift of apples, pecans and cranberries. William Aiton, a Scottish botanist, included an entry for the cranberry in volume II of his 1789 work, Hortus Kewensis. He notes that Vaccinium macrocarpon (American cranberry) was cultivated by James Gordon in 1760. In 1796, cranberries were served at the first celebration of the landing of the Pilgrims, and Amelia Simmons (an American orphan) wrote a book entitled "American Cookery" which contained a recipe for cranberry tarts. In 1816, Henry Hall first commercially grew cranberries in East Dennis, Massachusetts on Cape Cod. In 1843, Eli Howes planted his own crop of cranberries on Cape Cod, using the "Howes" variety. In 1847, Cyrus Cahoon planted a crop of "Early Black" variety near Pleasant Lake, Harwich, Massachusetts. In 1860, Edward Watson wrote a poem called "The Cranberry Tart."

Cranberry sales in the United States have traditionally been associated with holidays of Thanksgiving and Christmas. Until the 1930s most of the crop was sold fresh. In the U.S., large scale cranberry cultivation has been developed as opposed to other countries. American cranberry growers have a long history of cooperative marketing. As early as 1904, John Gaynor, a Wisconsin grower, and A.U. Chaney, a fruit broker from Des Moines, Iowa, organized Wisconsin growers into a cooperative called the Wisconsin Cranberry Sales Company to receive a uniform price from buyers. Growers in New Jersey and Massachusetts were also organized into cooperatives, creating the National Fruit Exchange that marketed fruit under the Fatmor brand. The success of cooperative marketing almost led to its failure. With consistent and high prices, area and production doubled between 1903 and 1917 and prices fell. In 1918, US$54,000 was spent on advertising, leading to US$1 million in increased sales.

With surplus cranberries and changing American households some enterprising growers began canning cranberries that were below-grade for fresh market. Competition between canners was fierce because profits were thin. The Ocean Spray cooperative was established in 1930 through a merger of three primary processing companies: Ocean Spray Preserving company, Makepeace Preserving Co, and Cranberry Products Co. The new company was called Cranberry Canners, Inc. and used the Ocean Spray label on their products. Since the new company represented over 90% of
the market, it would have been illegal (cf. antitrust) had attorney John Quarles not found an exemption for agricultural cooperatives. As of 2006, about 65% of the North American industry belongs to the Ocean Spray cooperative. (The percentage may be slightly higher in Canada than in the U.S.)

A turning point for the industry occurred on November 9, 1959, when the secretary of the United States Department of Health, Education, and Welfare Arthur S. Flemming announced that some of the 1959 crop was tainted with traces of the herbicide aminotriazole. The market for cranberries collapsed and growers lost millions of dollars. [10][48] However, the scare taught the industry that they could not be completely dependent on the holiday market for their products: they had to find year-round markets for their fruit. They also had to be exceedingly careful about their use of pesticides.

After the aminotriazole scare, Ocean Spray reorganized and spent substantial sums on product development. New products such as cranberry apple juice blends were introduced, followed by other juice blends.

A Federal Marketing Order that is authorized to synchronize supply and demand was approved in 1962. The order has been renewed and modified slightly in subsequent years, but it has allowed for more stable marketing. The market order has been invoked during six crop years: 1962 (12%), 1963 (5%), 1970 (10%), 1971 (12%), 2000 (15%), and 2001 (35%). Even though supply still slightly exceeds demand, there is little will to invoke the Federal Marketing Order out of the realization that any pullback in supply by U.S. growers would easily be filled by Canadian production.

Prices and production increased steadily during the 1980s and 1990s. Prices peaked at about $65.00 per barrel (29 ¢/kg—A cranberry barrel equals 100 pounds or 45.4 kg.) in 1996 then fell to $18.00 per barrel (8.2 ¢/kg) in 2001. The cause for the precipitous drop was classic oversupply. Production had outpaced consumption leading to substantial inventory in freezers or as concentrate.

Cranberry handlers (processors) include Ocean Spray, Cliffstar Corporation, Northland Cranberries Inc.[Sun Northland LLC], Clement Pappas & Co., Decas Cranberry Products as well as a number of small handlers and processors.[49]

References

6. ^ "borealforest.org". Lakehead University Faculty of Natural Resources Management.
Cranberries: In-depth nutrient analysis

Oxygen Radical Absorbance Capacity of Selected Foods – 2007; Nutrient Data Laboratory, Agricultural Research Service, United States Department of Agriculture, November 2007

"Studies force new view on biology of flavonoids", by David Stauth, EurekAlert!. Adapted from a news release issued by Oregon State University


Cancer Research Society Newsletter : The Cranberry – A Natural and Delicious Antidote


Seeram NP, Adams LS, Zhang Y, et al. (December 2006). "Blackberry, black raspberry, blueberry, cranberry, red raspberry, and strawberry extracts inhibit growth and stimulate


Further reading

Books


External links

Wikibooks Cookbook has a recipe/module on Cranberry

Wikimedia Commons has media related to: Cranberries

Wikisource has the text of the 1905 New International Encyclopedia article Cranberry.

Germplasm Resources Information Network: Sect. Oxycoccus and Sect. Oxycoccoides

University of Massachusetts Amherst Cranberry Station for information on cranberry research

Cranberry Library Page Hosted by the University of Wisconsin-Madison

Wikimapia An overhead view of a cranberry farm near Wisconsin Rapids, Wisconsin

Cranberry research at Rutgers, The State University of New Jersey

University of Massachusetts Cranberry Station Hosted by the University of Massachusetts - Amherst

Categories: Berries Flora of Alaska Native American cuisine Vaccinium

This page was last modified on 29 October 2012 at 12:20.
CRANBERRY (from crane + berry). A name given to the fruit of a few creeping, vine-like species of the genus Vaccinium, family Ericaceæ. The smaller cranberry (Vaccinium oxycoccus) grows wild in the peaty bogs and marsh lands of the temperate and colder regions of both Europe and America. The larger cranberry (Vaccinium macrocarpon) is native in similar situations in the United States, and is extensively cultivated for commercial purposes in Massachusetts, New Jersey, Wisconsin, and a few other Northern States. The cranberry is a firm, red, acid berry, of good keeping quality, and is used for sauce, tarts, and the like. In the improved commercial culture of cranberries, natural swamps or bogs are selected which can be drained by open ditches and flooded when desired. The native moss and swamp growth are removed, and the peat covered two to four inches deep with sand. The vines are planted about 14 inches apart, cuttings 6 to 8 inches in length being used. The sand keeps down the weeds, makes cultivation easy, and helps retain the moisture in the soil below. Additional sandings are given every four or five years, which keep the vines short and close. In some localities sanding is omitted altogether. The object of flooding is to protect the vines in winter and from early fall and late spring frosts, to destroy insects, prevent drought, and protect against fire. The berries are gathered preferably by hand, but often with special rakes and combs. There are three principal types of cultivated varieties, determined by the form of the berries — bell-shaped, bugle-shaped, and cherry-shaped — with many varieties of each. In 1900, 987,516 bushels of cranberries were marketed in the United States.

The cowberry or mountain cranberry (Vaccinium vitis-idaea) is common in both Europe and America, and, like Vaccinium oxycoccus, is gathered and sold in considerable quantities, but is not cultivated. The shrub Viburnum opulus is known as the high-bush cranberry. The fruit is tart, but is of little value, and is seldom eaten. The Tasmanian cranberry is the fruit of Astroloma humifusum, of the natural order Epaeridaceæ.
Cookbook: Cranberry

The cranberry is a small sour fruit. It is so sour that most people can't stand to eat fresh cranberries alone. Cranberries contain edible seeds and plenty of air. Cranberry juice has been shown to reduce bladder infections in a nursing home environment. Cranberries are popular as juice, dried fruit, and a jam or jelly called cranberry sauce — all with added sugar of course. One single growers' cooperative, Ocean Spray, controls 70% of the cranberry crop.

Selection
Ripe cranberries will bounce if they are in good condition. They should be shiny and plump and range in color from bright light red to dark red. Shriveled berries or those with brown spots should be avoided. Cranberries do not ripen after harvest.

Storage
Store fresh cranberries in a tightly-sealed plastic bag in the refrigerator. As with all berries, if one starts getting soft and decaying, the others will quickly soften and decay also. Be sure to sort out the soft ones if you plan to store them for more than a few days. Fresh cranberries may last up to 2 months in the refrigerator. Cooked cranberries can last up to a month in a covered container in the refrigerator. Washed cranberries may be frozen for up to 1 year in airtight bags.

Preparation
No matter what preparation method you choose, cook cranberries only until they pop; overcooking gives them a bitter taste. Since cranberries are almost 90% water, do not thaw frozen cranberries before cooking them. Thawing will cause the fruit to break down, resulting in soft berries. Cranberries may be baked with a sweetener to make a topping or sauce. They are also good chopped with oranges to make a relish.

For baked goods, first slice the cranberries open. Add all sugar from the recipe, and probably quite a bit more. Let this mixture soak in the refrigerator so that the sugar gets into the cranberries.

More: Ingredients Fruits