

Cranberries

- I. What is it & how does it grow?
 - A. Cranberries are a perennial plant that produces fruit and is related to bilberries, blueberries and huckleberries.
 - B. They grow on low creeping shrubs or vines up to 2 meters long and 5 to 20 cm high.
 1. The small evergreen leaves are actually smaller than the mature cranberry.
 2. The plant stems are slender and wiry stems.
 3. The flowers are dark pink and are pollinated by domestic honey bees.
 4. The fruit is initially white, and turns a deep red when fully ripe.
 - C. They are grown in acidic bogs throughout the cooler parts of the Northern Hemisphere.
 - D. Contrary to popular belief, cranberries do not grow underwater or even in the water. The area is flooded at the time of harvest.
 - E. The majority of cranberries are harvested in September and October through a wet harvest or a dry harvest.
 1. A wet harvest involves flooding the beds so that the fruit floats and can be corralled to load into trucks.
 2. The dry harvest has a picking machine go through and take the cranberries off.
 3. Dry harvesting costs more but is generally preferred for cranberries that will be sold fresh since there is less bruising of the fruit in this process. About 5-10% are harvested this way.
 4. Fresh cranberries generally appear in markets between October and December.

II. History of the cranberry

A. The name cranberry comes from the term “cranberry” from early Dutch and German settlers in America. Two theories on the origin of “cranberry” exist...

1. They thought that the flower, stems, and petals resembled the head, neck, and bill of a crane.
2. Either that, or they thought it was a favorite food of cranes.

B. It has also been called “mossberry” (Northeastern Canada) and “fenberry” (traditional English). They’ve also been called “bounceberries” because they bounce when ripe.

C. Some Native Americans referred to the red berries as “sassamanash” while other tribes called it “ibimi” meaning *bitter berry*.

D. In North America, Native Americans were the first to use cranberries as food often using maple syrup and honey to sweeten the berry’s tangy flavor.

1. Pemman, a traditional survival ration, high-energy food, involved drying venison, and pounding it into a meal. Then it was mixed with melted fat and dried/powdered cranberries. When prepared correctly, it could be stored for long periods of time.
2. Native Americans brewed cranberry poultices to draw poison from arrow wounds and in tea to “calm nerves”.
3. Native Americans used the juice in dyes for rugs, blankets and clothing

E. They introduced cranberries to the English settlers in Massachusetts who then incorporated the cranberries into the Thanksgiving feast.

F. American revolutionary war veteran, Henry Hall, was credited with being the first to farm cranberries in the Cape Cod town of Dennis.

III. Health Benefits of the cranberry

- A. Fresh cranberries contain the most health benefits, followed by dried, and then cranberry juice
- B. Cranberries help to reduce urinary tract infections.
 - 1. Before an infection can start the bacteria must latch on to and penetrate into your urinary tract walls,
 - 2. Cranberries have proanthocyanidins or PACs which prevent the bacteria from adhering.
- C. These anti-adhesion properties of the cranberry may also help inhibit bacteria associated with gum disease and stomach ulcers.
- D. Helps to prevent kidney stone formation. Cranberries contain quinic acid that prevents calcium and phosphate ions from forming stones.
- E. Cranberries are packed with phytochemicals and antioxidants
 - 1. In a study done, cranberries were compared to 19 other common fruits and were found to have the highest number of antioxidants.
 - 2. Antioxidants and phytochemicals protect our bodies from harmful molecules our bodies make and are exposed to every day.
- F. Cranberries are good source of vitamin C, another antioxidant, that helps our immune systems stay strong.
- G. Cranberries are a good source of manganese. Manganese is a mineral that ensures healthy bone structure, bone metabolism, and helps in building essential enzymes for building bones.
- H. Cranberries are an excellent source of dietary fiber, which helps to keep things moving through your digestive system and helps lower cholesterol levels

- I. Cranberries are a good source of vitamin K, which plays an important role in helping your blood to clot normally.
 1. Some studies have also indicated that it helps to maintain strong bones in the older adult.
 2. Several studies have confirmed that cranberry juice does NOT interfere with blood thinning medications so continue having that glass of juice every morning!
- J. Cranberries continue to be the subject of much research, particularly with heart disease, blood pressure and cholesterol levels...stay tuned!

IV. Fun Facts

- A. Wisconsin is the leading producer of cranberries in the US, producing almost 57%. Massachusetts is the second leading producer with 28%.
 1. The average cranberry grower in WI has 70 acres
 2. The average grower in MA has about 20 acres
 3. WI growers typically have higher yield per acre due to the varieties grown and the flat rectangular fields left behind by glaciers
- B. The cranberry is Wisconsin's state fruit...
 1. In 1860 Edward Sackett of NY came to Berlin WI to inspect some land.
 2. He found 700 acres of wild cranberry vines and decided to cultivate his bogs.
 3. He sold his cranberries in Chicago for \$15 a barrel! A barrel of cranberries weighs about 100 pounds.
- C. White cranberries are not a different variety but rather are mature cranberries harvested just before turning the deep red color.
- D. Many cocktails, including the Cosmopolitan, are made using cranberry juice.

- E. The Delaware Indians of New Jersey used the cranberry as a symbol of peace.
- F. Cranberries, concord grapes, and blueberries are the only fruits that are native to North America.
- G. There are over 100 varieties of cranberries grown in North America.
- H. About 46,000 plants grow in one acre. Some cranberry beds in WI, MA and NJ have the same vines that were planted over 100 years ago!!
- I. Legend has it that cranberries were served at the first Thanksgiving dinner and 91% of people follow the tradition to this day.
- J. If you strung all the cranberries produced in North America last year, they would stretch from Boston to Los Angeles more than 565 times.
- K. Seven out of ten cranberries sold in the world today are purchased by Ocean Spray
- L. Americans consume around 400 million pounds of cranberries a year. About 80 million pounds are gobbled up during Thanksgiving time.
- M. In a gallon of juice there are 4, 400 cranberries
- N. About 95% of cranberries are processed into products such as juice, sauce, and sweetened dried cranberries, with the remainder being sold fresh.
- O. During the days of wooden ships and iron men, cranberries were a favorite of American sailors...possibly because it prevented the dreaded scurvy due to its vitamin C content.
- P. American soldiers during world war II used about one million pounds of dehydrated cranberries a year to stay healthy and energized.

- V. Selection, Storage, Preparing, and Cooking
- A. Cranberries have an acidic taste that can overwhelm its sweetness. However, when cooking, you can neutralize the acid by adding $\frac{1}{4}$ teaspoon of baking soda. You will find you need less sugar that way.
 - B. Truly fresh cranberries will bounce if you drop them and are quite firm to the touch
 - C. The deeper red the color, the more highly concentrated some health benefits are.
 - D. A 12 ounce bag of fresh cranberries will typically yield about three cups, or $2\frac{1}{2}$ cups chopped
 - E. Store fresh cranberries in the refrigerator in a tightly sealed plastic bag for up to 2 months.
 - F. Do not wash cranberries until you are ready to use as moisture will cause them to spoil faster. Likewise to not wash before freezing.
 - G. Cooked cranberries can last up to a month in the refrigerator. If a liquor is added to the mixture, it can last up to a year in the refrigerator.
 - H. Fresh whole berries may last up to a year in the freezer.
 - I. Try substituting with dried cranberries when recipe calls for raisins.
 - J. Make a trail mix with almonds, peanuts, raisins, dried cranberries, and maybe a little dark chocolate!
 - K. Toss a little extra flavor on top of your oatmeal or other cereal in the morning
 - L. Add dried cranberries to cookies, muffins, and bread.

VI. Activities

- A. Compare cranberry juice and cranberry juice cocktail**
- B. Prepare Roasted Cranberry Quesadillas**
- C. Make cranberry ice candle or the cranberry candle float**
- D. Demonstrate cranberry cut-outs using canned cranberry jelly.**
- E. Make Cranberry Hootycreeks gift jar, then do a drawing to give it away.**
- F. Give samples of cranberry yeast bread**