



CRANBERRY

Health Benefits

- ◆ Cranberries contain high levels of antioxidants such as vitamin C that may help to protect against heart disease, cancer, and other diseases.
- ◆ One half cup of dried cranberries counts as 1 cup of fruit.

Fun Facts

- ◆ Cranberries are sometimes called bounce berries because they bounce when ripe.
- ◆ Cranberries are used as ingredients in over 1,000 food and beverage products.
- ◆ Cranberries are Wisconsin's leading fruit crop in terms of acreage and value.
- ◆ Only 5% of Wisconsin's cranberry crop is sold as fresh berries.

Home Grown History

Cranberries are a fruit that is native to North America. Native Americans used cranberries as a staple as early as 1550. They ate cranberries fresh, ground, or mashed with cornmeal and baked into bread. They also mixed berries with wild game and melted fat to form pemmican, a survival ration for the winter months. Maple sugar or honey was used to sweeten the berry's tangy flavor.



There are several theories of how the berry was named. European settlers named the fruit "crane-berry" because it appeared to be the favorite fruit of cranes or the blossom resembles the head and neck of the English crane. By 1620 the settlers learned how to use cranberries from Native Americans and by 1683 cranberry juice was made by the settlers.

In 1816, Captain Henry Hall became the first to cultivate cranberries in Massachusetts. He noticed that cranberries grew better when sand blew them over. In 1860, Edward Sackett of New York came to Berlin, Wisconsin to inspect some land. He found 700 acres of wild cranberry vines and he decided to cultivate his bogs.

During the early 1890's, the center of the Wisconsin cranberry industry shifted to the Cranmoor area, just west of Wisconsin Rapids. Later developments occurred in Black River Falls, Warrens, and Tomah. Cranberries are now grown in 20 counties across central and northern Wisconsin.

Student Activities

- ◆ Arrange for the class to work in small groups (3-5 students). Each group creates a recipe for a nutritious snack that uses cranberries or cranberry products. Have the group members write a recipe for their snack. The groups can volunteer to bring in their snacks for the class to enjoy.
- ◆ Divide students into groups. Each group will have 20 cranberries. Try bouncing the cranberries and then separate into containers – one for those that bounce and one for those that don't bounce. Collect initial data of sample weight and record it in a table. Run the trials every two days and record the data. Discuss why any changes may have occurred from one trial to the next. Did the number of berries that bounced increase or decrease during the later trials? Why? How were the berries stored? Did this have an influence on their quality?

Growing Cranberries in Wisconsin

The cranberry is Wisconsin's official state fruit. Cranberries grow as low-growing, trailing, woody evergreen vines. The cranberry plant produces a terminal bud containing both a shoot and flower. The buds are formed in later summer, the season before they open and grow. Therefore, the buds must survive through the winter in order to produce a crop the following year.

Cranberries flower in late June and early July. The blossom period lasts for three to four weeks depending on the weather. Pollen is transferred from flower to flower by wild bees, bumble bees, and native flies. Soon after pollination, the berry begins to develop. Cranberries are small and green at first, turning a dark red color between 75-100 days from flowering.

Cranberries that will remain fresh are harvested with a picking machine. These machines have tines that comb through the vines and catch the fruit that are then lifted onto a conveyor and into a bin. After harvest, fruit is dried in boxes and stored in refrigerated buildings.

Fruit that is destined for processing into juice, sauce, and dried cranberries is wet harvested. Beds are flooded with 8-10 inches of water. A machine with a circular beater mounted to the front is driven through the bed to remove the berries from the vines. The berries float to the water's surface, are corralled, and then pumped out of the bed to a waiting truck.

Beyond the Classroom

Ask students to note during their next trip to the grocery store the number of products that contain cranberries. Ask students to pay close attention to the produce and freezer sections and the cereal, juice, canned fruit, and snack aisles.

For More Information:

The Cranberry Marketing Committee:
<http://www.uscranberries.com>

Wisconsin State Cranberry Growers:
<http://www.wiscran.org/>

Classroom Cooking—Cranberry Smoothie

Makes 32 taste test servings (approximately ¼ cup)

Ingredients:

- 2 cups apple juice (100% fruit juice)
- 4 cups whole cranberries
- 2 large bananas
- 1 cup plain yogurt
- 5 Tbsp maple syrup
- ½ tsp cinnamon
- Paper cups

Directions:

1. Rinse cranberries and peel the bananas.
2. Combine ingredients and blend until smooth and uniform.
3. Serve in paper cups immediately.

Recipe accessed at <http://pbs.org/food>



Exploring Wisconsin Cranberries — Taste Test Activity

What You Will Need:

- Fresh cranberries, dried cranberries, cranberry juice, and cranberry sauce.
- *Home Grown: Tastes of WI* resource guide
- Taste test survey, paper and pencils

Activity:

- Have students observe, touch, smell, and taste each sample and make notes describing the different tastes. Extend the activity in class by comparing and contrasting the varieties and making a graph showing the likes and dislikes of the class.

