

CI Hosts First Cranberry Health Research Conference

Researchers from around the world gathered in Brewster, MA last month to review current and emerging research on cranberry and health.

This group of esteemed scientists presented data on a wide range of topics including brain aging, cancer, urinary tract health and diabetes. The conference was designed to be a working meeting that enabled researchers to interact with industry representatives and communications professionals to share knowledge and discuss the future direction of cranberry health research.

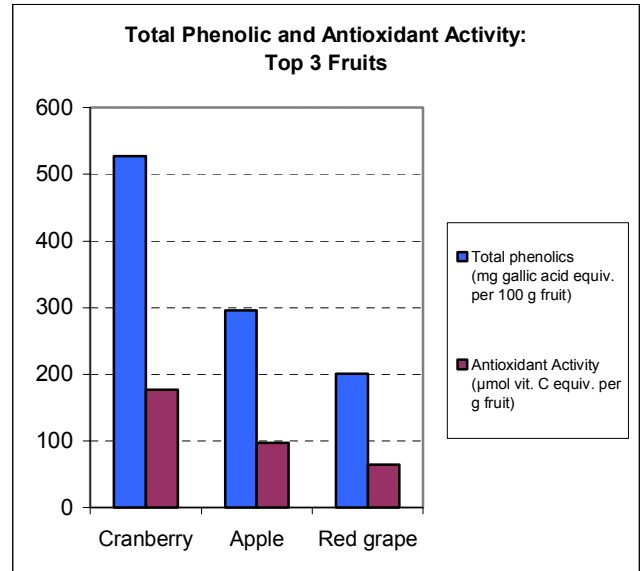
The Cranberry Health Research Conference was sponsored by the New Jersey Department of Agriculture and the Wisconsin Cranberry Board.

Cranberry Tops the List for Antioxidant Activity

Did you know that some of those very compounds that impart cranberry's vibrant color also work in the body to reduce the risk of certain chronic conditions? For years epidemiologic studies have linked diets high in fruits and vegetables, rich sources of antioxidant flavonoids and other phenols, to a variety of health benefits – including reduced risk for cardiovascular disease and certain cancers. New research confirms that cranberry leads the pack in antioxidant activity.

Cranberry vs. other common fruits

A study by Cornell University researchers, published in the *Journal of Agricultural and Food Chemistry*, reported cranberries have the highest phenolic content (measuring soluble free and bound phenols) and antioxidant activity compared to 10 other common fruits. The total phenol content of cranberry and antioxidant activity was nearly double that of apple, the next richest source tested, followed by red grape, strawberry, pineapple, banana, peach, lemon, orange, pear and grapefruit.



Source: Sun et al. *J Agric Food Chem*, Dec. 4, 2002;50(25).

Antioxidants for a healthy heart

Nutrients such as vitamin E and flavonoids, a type of phytonutrient that is a phenol, are known to be heart healthy primarily because of their antioxidant properties. Phenols found in fruits and vegetables are thought to defend against oxidation of low-density lipoproteins (LDL), the first step in developing the "clogged arteries" that often lead to cardiovascular disease. Numerous epidemiologic research and laboratory studies demonstrating cranberry's high antioxidant activity support this fruit's potential in reducing the risk for cardiovascular disease (particularly heart disease and stroke) – the leading cause of death in the United States.

Cancer fighting potential

For years researchers have been studying dietary sources of cancer fighting compounds, particularly in vibrantly colored fruits and vegetables. The recent 2002 Cornell University study showed that cranberries exhibit the highest inhibitory effect on the growth of human liver cancer cells compared to other fruits tested. According to the study authors, this growth-inhibiting effect, combined with the berry's high antioxidant activity, makes cranberries one of the most beneficial fruits for dietary cancer prevention.

Cranberries all year long

In addition to the promising studies mentioned above, cranberry's high antioxidant and phenol content is just part of the story. Cranberries also have a distinct flavonoid compound that actually blocks some harmful bacteria from attaching to cells and can help ward off urinary tract infections. This is one fruit that's not just color on the plate at Thanksgiving – but good for enjoying all year long!

Calendar of Events

Nutrition Week: A Scientific and Clinical Forum, January 18-22, 2003, San Antonio, TX. For more information visit <http://www.nutritionweek.com/>.

Experimental Biology 2003: Translating the Genome, April 11-15, 2003, San Diego, CA. For more information visit: <http://www.faseb.org/meetings/eb2003/>.

American College For Advancement in Medicine: Spring Conference, May 14-18, 2003, Washington, DC. For more information visit www.acam.org

American Dietetic Association 2003 Food & Nutrition Conference & Expo: October 25-28, 2003, San Antonio, TX. For more information visit <http://www.eatright.org/fnce/2003.html>.

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Cranberry Institute Sponsored Research

Part of the Cranberry Institute's mission is to fund promising research into the health benefits of this Native American fruit. Research funded in 2002 includes the following:

- **Evaluation of Biologically Active Components in Cranberry,** Leslie Plhak and Kirk Parkin at the University of Wisconsin.
- **Antioxidant and Anticancer Activities of Cranberries and Cranberry Products,** Rui Hai Liu at Cornell University.
- **Efficacy of Cranberry Juice in a Sample of Cognitively Intact Older Adults: Neuropsychological Findings,** David Crew, David Harrison and Joseph Mix at Liberty University and VPI.
- **Salicylates in cranberries: A natural form of aspirin?,** Garry Duthie at Rowett Institute.

Hot off the Presses: The Latest Cranberry News

One Bright Berry: This potent little fruit packs great potential – and not just on your plate, November 15, 2002, *Health* magazine.

What's so great about cranberries besides their palate-piquing tartness? Eight ounces of cranberry juice cocktail morning and night can disable many of the antibiotic-resistant bacteria behind urinary tract infections. Some cranberry compounds may also fight the bugs that cause stomach ulcers, and the fruit's anti-inflammatory properties may guard against heart disease.

Curative Powers of Cranberry: Berry's natural compounds help fight bad bacteria's growing resistance to antibiotics, November 25, 2002, *Florida Today*: <http://www.floridatoday.com/!NEWSROOM/healthstoryA36362A.htm>.

Think again before you pass on the cranberry relish Thanksgiving Day. Scientists have spent years validating the old wives' tale that cranberry juice cures urinary-tract infections. Now, the National Center for Complementary and Alternative Medicine/National Institutes of Health, has announced the largest study to date, a four-year clinical trial, to determine just how much cranberry juice is effective in treating and preventing these painful, annoying infections that account for 9.6 million doctor visits annually.

More Sauce Please!, Researchers Offer Five Reasons to Have Another Serving of Cranberry Sauce, November 26, 2002, press release: <http://www.cranberryinstitute.org/news/PR/PR112602.htm>.

During Thanksgiving week, Americans will eat some 80 million pounds of cranberries. Recent research suggests that there are plenty of other reasons to decorate your plate with these rich, red American berries.

Stuffing Yourself Healthy, December 2, 2002, *Time* magazine: <http://www.time.com/time/magazine/article/0,9171,1101021202-393772,00.html>.

Before you get too stuffed—and guilt ridden—consider what you are about to eat on Thanksgiving.... Cranberry Sauce: Cranberries are high in vitamin C and condensed tannins, the heart-healthy compounds also found in red wine. An added bonus: research shows that cranberries reduce bladder infections by sweeping away bacteria that adhere to the urinary-tract lining.

More on Grand Berries, December 4, 2002, *Houston Chronicle*: <http://www.chron.com/cs/CDA/story.htm/food/1682275>.

Cranberries have tannins, compounds that keep bacteria from binding to cells, thus preventing them from multiplying and causing infections. Tannins are also antioxidants that bond with free radicals and reduce their energy level so they're less damaging to the body. Antioxidants may help prevent certain cancers and contribute to cardiovascular health.