

Rediscover Cranberries!



The cranberry's tart, tangy taste is commonly enjoyed in juices, side dishes, baked goods, sauces and as a dried fruit snack. While consumers love the crimson berry's flavor, the versatile cranberry is one of the few fruits native to North America and boasts many health benefits.

The Can-Do Cranberry!

Nutrient dense cranberries provide vitamins, minerals and phytonutrients without providing an excess of calories (1 cup of raw cranberries has about 50 calories). Naturally fat-free and with very little sodium, cranberries easily fit within the Dietary Guidelines.

Phytonutrients are naturally derived plant compounds that possess antioxidant activity and a wide-range of benefits for human health. Cranberries contain phytonutrients, polyphenols and the flavanol, proanthocyanidin (PAC). The unusual A-type structure of the cranberry appears to be responsible for the anti-adhesive properties not found in other PAC-containing fruits and vegetables.¹ The PACs in cranberries help prevent the adhesion of certain harmful bacteria, including *E. coli*, associated with urinary tract infections (UTIs).^{2,3} They may also help to inhibit the bacteria associated with gum disease and stomach ulcers.⁴⁻⁷

Cranberry and Urinary Tract Health

Over 50 years of research shows that cranberries are associated with reduced risk of UTIs, a painful condition that afflicts some 11 million American women each year and costs over \$1.6 billion dollars annually to treat.⁸

The PACs found in cranberries inhibit the fimbrial adhesion of bacteria, including *E. coli*, to the urinary tract epithelium and therefore the subsequent reproduction required for infection.⁹⁻¹¹ It is these anti-adhesion powers that appears to prevent UTIs rather than the acidification of the urine as was previously hypothesized.⁹⁻¹¹

The serving size needed to offset an infection is modest. Recent reports show that one 8 oz. serving of cranberry juice cocktail prevented *E. coli* from adhering to the bladder cells in a group of volunteers. Additional findings published by Howell and Foxman reported that not only are cranberry PACs able to inhibit the adhesion of antibiotic susceptible bacteria, but resistant strains as well.¹² The authors also state that the anti-adhesion effect can last up to 10 hours after consumption, suggesting that two servings of cranberry juice cocktail a day, consumed at appropriate intervals, can exert their protective effect for nearly the entire day.

Cranberries and Heart Health

Cranberries can help to support cardiovascular health and are the perfect addition to a heart-healthy diet. Whole cranberries are a good source of dietary fiber, and all cranberry products contain flavonoids and polyphenolics, natural compounds that offer a wide range of potential heart health benefits.¹³

Flavonoids have been shown to function as potent antioxidants both *in vitro* and *in vivo* and may reduce the risk of atherosclerosis. Cranberries contain significant amounts of flavonoids and polyphenolic compounds that have been demonstrated to inhibit low density lipoprotein (LDL) oxidation and favorably affect platelet function.¹⁴⁻¹⁸ Ongoing research suggests that cranberries may offer a natural defense against atherosclerosis.

Cranberries and Ulcers

Similar to the ability to prevent the adhesion of bacteria to the urinary tract, cranberries may prevent adhesion of the bacteria *H. pylori* to the lining of the stomach. By preventing *H. pylori* bacteria from attaching to the stomach wall, cranberries can help reduce the risk of stomach ulcers. According to the

American Cancer Society, *H. pylori* bacteria is a major risk factor for stomach cancer.¹⁹ Recent research on digestive health suggests that cranberry juice can be as effective as probiotics in maintaining good digestive health. A double-blind trial at the University of Chile found a regular 6.8 oz. serving of 25% cranberry juice was as effective as a serving of probiotic in suppressing growth of *H. pylori* among asymptomatic children.^{4,5} The study also showed the potential for an increased benefit when cranberry and probiotics are combined.

Cranberries and Cancer Prevention

In 1996, laboratory studies conducted by the University of Illinois and published in *Planta Medica* demonstrated the potential anticarcinogenic properties of cranberries. More recently, researchers at the University of Western Ontario used an animal model to demonstrate that human breast cancer cells showed a significantly lower incidence of tumor development when the experimental group's diet was

supplemented with cranberries. Although these results are very preliminary, compounds in cranberries may prove to be a potent cancer fighter.²⁰⁻²²

Cranberries— Whole Body Benefits

A natural, wholesome fruit, cranberries provide myriad health benefits and all commonly enjoyed cranberry products contain the beneficial antioxidants. Research shows that 8 oz. of 25% cranberry juice cocktail provides the amount of antioxidants equivalent to 1½ cup fresh or frozen cranberries, 1 ounce sweetened dried fruit or ½ cup cranberry sauce.²³⁻²⁵ Any one of these types of cranberry-based products will be a healthy addition to a well-balanced diet.

For more information on the history and health benefits of the crimson cranberry, visit the Cranberry Institute at www.CranberryInstitute.org and for easy-to-follow recipes and cranberry facts, visit www.USCranberries.com.

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