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Blueberries: Big on Health

BY WINSTON J. CRAIG

Blueberries stand out in the marketplace since blue is not all that common among fruits and vegetables. But blueberries not only provide rich color, they are also big on health. Native to North America, blueberries belong to the heath family which also includes cranberries, azaleas and rhododendrons.

Blueberries range in size from a small pea up to about one-half inch in diameter. When ripe, the berries range in color from blue to maroon to dark-bluish purple. The skin surrounds a semi-transparent flesh that contains tiny seeds. Cultivated berries have a mildly sweet taste when mature, while wild blueberries are a little tart and have a tangy flavor. Wild blueberry bushes are normally smaller species and are known as low-bush blueberries.

Blueberries can be consumed fresh, dried or frozen, or they can be processed into jelly, jam or pies. Blueberries are also commonly added to muffins, cereals and snack food items. Blueberries have virtually no fat and are very low in calories. With only 80 calories per cup of berries, they make a delicious dessert. They contain good levels of vitamins C and K, and manganese. They are a good source of soluble fiber and have a low glycemic index. This makes them a good fruit for those with diabetes. They also contain a good level of the carotenoids lutein and zeaxanthin, which are necessary for good eye health. Regular consumption of blueberries and other fruits rich in these carotenoids can lower your risk of age-related macular degeneration, the primary cause of vision loss in older adults.

The anthocyanins in blueberries, which give the berries their reddish-blue color, possess anti-inflammatory properties and are powerful antioxidants preventing free radical damage in cells. Along with many other antioxidants in blueberries, these compounds play a role in protecting against certain cancers and cardiovascular disease—and may slow cognitive decline in aging. Blueberries may help keep you mentally younger. Diets rich in blueberries can significantly improve both the learning capacity and motor skills of aging animals.

Eating blueberries may reduce the risk of colon and other cancers. Blueberries contain a variety of polyphenolic flavonoids such as pterostilbene, anthocyanins, ellagic acid, kaempferol and resveratrol, which block metabolic pathways that can lead to cancer and inhibit cancer cell proliferation. Levels in wild blueberries do exceed the values found in commercial high-bush species.

Blueberries contain the same pigments found in cranberries that help prevent or reduce urinary tract infections. These pigments reduce the ability of E. coli bacteria to adhere to the mucosal lining of the urinary tract.

Animal research has shown that blueberries may also help to lower blood lipids and maintain normal blood pressure levels. The anthocyanins help blood vessels relax, and increase production of nitric oxide essential for blood pressure regulation. Feeding blueberries to animals lowered brain damage in experimental stroke. With dried and frozen blueberries available, one can eat blueberries all year long.

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