

Blueberries are among the wild shrubs that produce edible berries – with others being cranberries, bilberries and cowberries. These berries are known for having important health benefits. These days blueberries can be cultivated or picked wild. Wild blueberries are slightly smaller than cultivated berries.



Uses and popularity

Blueberries have gained increasing attention over the years. USDA reports indicate that between the years of 1994 and 2003, annual U.S. consumption of fresh blueberries rose approximately 160 percent.

This gain in attention likely is the result of increased recognition of the potential human health benefits of regular blueberry consumption.

Blueberries are used in jellies, jams and pies. They are baked into muffins and are an ingredient in many other snacks and delicacies. A more recent use of blueberries includes blueberry juice.

Health benefits of blueberries

The healthful aspects of blueberries are believed to stem from the diverse range of phytochemicals contained within them. As a result, the healthful properties of blueberries include:

- Anti-oxidant
- Anti-cancer
- Anti-neurodegenerative
- Anti-inflammatory

Because of these properties, many studies have been conducted to further explore the potential relationship between the components found in blueberries and chronic diseases.

What are phytochemicals?

Phytochemicals, commonly referred to as phytonutrients, are naturally occurring non-nutritive (not required in the diet like nutrients) constituents of fruits and vegetables. They are said to be bioactive and are considered to have beneficial effects on human health.

Cancer risk

The extracts and components of berry fruits, particularly blueberries, have been studied in regard to their roles in cancer prevention. Several different cancers have been investigated, including oral, breast, colon and prostate cancers.



Different berry extracts (including blueberry extract) have been effective in inhibiting the growth of major types of cancers. The greater the concentration of berry extract, the greater the inhibition in all cancers.

When 10 different extracts of fruits and berries were tested, blueberry extract exhibited the greatest effect on colon cancer. All the extracts were more effective at higher concentrations.



Blueberries have antioxidant phytonutrients called anthocyanidins. They are common plant pigments that neutralize free radicals in cells. They work their protective magic by preventing free-radical damage within the cells. Anthocyanins, a type of anthocyanidin, are blue-red pigments found in blueberries. They improve the entire vascular system and enhance the effects of vitamin C. Out of several berry extracts tested, the anthocyanin extract was found to be the most effective in inhibiting cancerous cell growth.

Based on research on cell cultures and laboratory animals, as well as population studies, a higher intake of fruits and vegetables, including berries, translates to lower risks for most types of cancer.



Blueberries

Heart disease risk

Research has shown regular consumption of fruits and vegetables lowers the risk for developing heart disease. A study examined the effects of blueberry consumption in relation to heart disease risk. Those who consumed blueberries on a regular basis had the greatest benefits and lowest risk factors for heart disease.

Alzheimer's disease risk

The consumption of blueberries is believed to play a role in delaying the development of neurodegenerative diseases, such as Alzheimer's disease. Several studies in laboratory animals show promising results. Blueberry extract given to laboratory animals reversed some age-related neuronal degeneration and resulted in better spatial recall.



Gastrointestinal health

The consumption of berries also has been suggested to play a role in gastrointestinal health. Some of the components in blueberries can inhibit the growth of several intestinal pathogens, such as Salmonella and Staphylococcus. All berries are effective in inhibiting the growth of Heliobacter pylori – a bacterial infection that can lead to peptic ulcer disease.

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