

Bioactive compounds in cranberries and their biological properties.

[Côté J](#), [Caillet S](#), [Doyon G](#), [Sylvain JF](#), [Lacroix M](#).

Source

Research Laboratory in Applied Food Science, INRS-Institut Armand-Frappier, Laval, Quebec, Canada.

Abstract

Cranberries are healthy fruit that contribute color, flavor, nutritional value, and functionality. They are one of only three fruits native to America. Over the past decade, public interest for the North American cranberry (*Vaccinium macrocarpon*) has been rising with reports of their potential health benefits linked to the numerous phytochemicals present in the fruit--the anthocyanins, the flavonols, the flavan-3-ols, the proanthocyanidins, and the phenolic acid derivatives. The presence of these phytochemicals appears to be responsible for the cranberry property of preventing many diseases and infections, including cardiovascular diseases, various cancers, and infections involving the urinary tract, dental health, and *Helicobacter pylori*-induced stomach ulcers and cancers. Recent years have seen important breakthroughs in our understanding of the mechanisms through which these compounds exert their beneficial biological effects, yet these remain to be scientifically substantiated. In this paper these characteristics, as well as the antioxidant, radical scavenging, antibacterial, antimutagen, and anticarcinogen properties of cranberry major bioactive compounds are explained.