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## **Health Options**

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## Holiday berry has year-round applications

We tend to think of cranberries this time of the year since they have been part of the traditional celebration foods for Thanksgiving and Christmas holidays. Certainly, they fit well into the red and green colors associated with Christmas. Their bright red color even lends them to be used for stringing up as "cranberry leis" to decorate Christmas trees.

Although cranberries continue to retain their holiday food status, they have branched out to be used much more in various forms throughout the year. They are most widely used as cranberry juice drinks. And, more recently, dried cranberries have become the rage.

If you have ever tasted a fresh cranberry, you quickly learned that they are quite tart. Consequently, they must be sweetened or mixed with a sweet food or juice to be palatable. Much like the lemon, when cranberries are balanced with the right amount of sweetener, their wonderful flavor becomes apparent.

Although cranberry products are not exceptional sources of any particular nutrient, with the possible exception of added vitamin C, research has shown that they contain other compounds that provide some very specific health benefits. Nutrition and medical researchers are discovering that many fruits like cranberries contain beneficial non-nutrient chemical compounds.

These compounds are not essential components of the diet. In other words, we can live without them. But adding them to the diet provides benefits that are gradually being realized with ongoing research.

Population studies have indicated that fruits are important for long term health and we are now realizing that this is not only due to the nutrients that they contain.

For some time, both the public and the medical community believed that cranberry juice was beneficial for the treatment and prevention of urinary tract infections. This led to research to find evidence that could prove or refute the claims. Initially, it was suspected that the cranberry juice caused the urine to be more acidic, making it more difficult for microorganisms to grow in the urinary tract. More recently, this was disproved.

Research now indicates that cranberries contain various phytochemicals with names like anthocyanins, proanthocyanadins, and tannins. Recent research, published in October as a letter in the New England Journal of Medicine, indicated that the tannins in cranberry juice prevent E. coli bacteria from adhering to the cells that line the urinary tract. In essence, the bacteria can't hang on to cells and cause infection. Instead they just get flushed out with the urine.

Building upon this "bacterial hand-

hold" research, scientists at Tel Aviv University studied the effects of a cranberry extract on oral bacteria that can affect dental health. Not only do oral bacteria hold onto teeth and gums to cause problems, they also seem to adhere to each other to form what your dentist calls plaque. Anything that can reduce the ability of the bacteria to adhere to each other or to our teeth and gums, can benefit dental health.

These Israeli scientists found that a high molecular weight cranberry constituent prevented the coaggregation or "hand holding" of 49 out of 84 pairs of oral bacteria that they tested. This "test tube" research needs to be supported by further study in humans, but it looks promising.

The authors of the research caution that the high sugar content of commercially available cranberry juice drinks makes them unsuitable for oral hygiene use.

But, don't be surprised if cranberry extracts start showing up in dental products if additional research supports this preliminary study.

At this point, it is impossible to tell if there will be a practical application of cranberry extract for use in dental health. Who knows, it may work but turn your teeth red too. Maybe that will be the next rage. Colored teeth could catch on as tatoos and piercing fade out of style.

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