



- **Latin Name:** *Vaccinium macrocarpon*
- **Active Ingredient:** Proanthocyanidins, Anthocyanidin
- **CAS No.:**
- **Test method:** UV-VIS
- **Specifications:** 4:1, 5:1, 10:1, 16:1, 18:1, 20:1, 25:1, 36:1, 40:1, 50:1

Product Description:**Name :** Cranberry Extract**Source:** Cranberry**Botanical Name :** *Vaccinium macrocarpon***Extract part:** Berry**Composition Ratio :** 36:1**Appearance:** Fine Purple Red powder**Country of origin:** P.R. China**Source**

Cranberries are a group of evergreen dwarf shrubs or trailing vines with very distinct reflexed petals dark pink flowers and edible deep red berries as fruit that widely in acidic bogs throughout the cooler regions of the northern hemisphere. The plants are in the subgenus *Oxycoccus* of the genus *Vaccinium*.

There are two main species refer to Cranberries, *Vaccinium oxycoccos* in central and northern Europe and *Vaccinium macrocarpon* in America. Cranberries are a major commercial crop in certain American states and Canadian provinces. Nowadays Cranberries have been marketed as a "superfruit" attribute to their nutrient content and antioxidant qualities.

Cranberry extract offers a host of antioxidants and nutrients highlighted by the antioxidative compound Proanthocyanidins (Pycnogenol). In medical terms, Cranberry extract commonly used treat urinary complications. Cranberry extract might also play a role in stomach ulcer treatment. Due to the multiple vitamins and minerals present in cranberries, they can make a healthy addition to a balanced diet.

The main bio-actives

Highly contained in Cranberry, Proanthocyanidins, a plant based compounds, are part of the bioflavonoid family of organic compounds. These compounds help stabilize collagen and elastin, the two principal proteins for formation of connective tissue and the structure of blood

vessels and muscle fibers, within the body. Possibly due to their effect on the structure of the blood vessels, supplemental proanthocyanidins can help reduce the edema in tissues following a face lift surgery, decreasing the recovery time by 15.8 to 11.4 days in a double-blind research. Additionally, the proanthocyanidins seem to have an anti-mutagenic activity in the body which could be very useful in treating diseases.

Effects

Antioxidant

There are an abundance of natural antioxidant compounds contained in cranberries and the oxidation resistance is heightened by proanthocyanidin which has strong scavenging effect to free radicals generated by different systems.

Proanthocyanidin supplements can help to treat both alcoholic and non-alcoholic fatty liver disease by suppressing the damaging liver peroxidation mechanisms associated with steatosis, and therefore delay or prevent the development of pathology that can lead to steatohepatitis, fibrosis, and cirrhosis, as well as the development of liver cancer.

According to the Nutritional Supplement Educational Centre, the use of cranberry pills are beneficial in reducing the risks for many diseases and cancers such as reduces low density lipoprotein oxidation which lowers the risk for heart disease through the reductions of blood sugar and lipids and the inhibition of inflammatory reaction.

UTI Prevention

Urinary tract infections affect the urinary system, including the bladder and urethra, caused by the development of bacteria. The standard treatment for UTI is antibiotic therapy, however rising clinical failure rates of trimethoprim-sulfamethoxazole due to bacterial resistance. However, according to article on Molecular Nutrition & Food Research, a group of proanthocyanidins (PACs) with A-type linkages were isolated from cranberry which exhibit bacterial antiadhesion activity against both antibiotic susceptible and resistant strains of uropathogenic P-fimbriated *Escherichia coli* bacteria. The National Center for Complementary and Alternative Medicine reports, cranberry extract may be an alternative preventative measure as it prevents urinary tract infections from reoccurring by stopping the bacteria from attaching to the cells that line the bladder.

Stomach Ulcer Treatment

Cranberry extract might help prevent stomach ulcers caused by the bacteria *helicobacter pylori*, known as the *H. pylori* infection. The *H. pylori* infection is usually asymptomatic and the bacterium is present in about half of the world's population, according to MayoClinic.com, which also states that early studies have shown that cranberry can reduce the bacteria's ability to live in the stomach. One such study, at the Beijing Institute for Cancer Research in 2005, observed the effect of cranberry juice on 189 subjects with the *H. pylori* infection. The study yielded positive results, thus concluding that regularly consuming cranberry can quell the infection in vastly affected areas.

Provides Nutrients

One 200 milligram cranberry extract pill provides about 50 percent of your recommended vitamin

C intake, which is vital for wound healing and disease prevention. Cranberry extract is also a good source of dietary fiber, contributing 9.2 grams -- providing relief from constipation, as well as blood sugar regulation. As part of a varied diet, cranberry extract can help boost your vitamin K and vitamins E levels, as well as provide essential minerals essential to bodily functions.

Application

Cranberry extract offers a host of antioxidants and nutrients highlighted by the antioxidative compound Proanthocyanidins (Pycnogenol). Marketed as a "superfruit", Cranberry extract is an excellent health-support supplement. Cranberries are prescribed for fevers, gastrointestinal problems and dropsy in by native America and European. Nowadays, Cranberries are known to have "anti-adhesion" properties that protect the body from certain harmful bacteria that cause urinary tract infections, stomach ulcers and gum disease.

In food processing, Pathogen levels in raw meat are reduced after the application of cranberry concentrate. These include significantly reduced growth of Salmonella, E. coli and other dangerous bacteria.

Side effects

According to a 2004 review by the "American Family Physician," 300 to 400 mg of cranberry extract twice daily is recommended. Overdose of ingestion might cause kidney stones, thinning of blood, nausea and infection.

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