

# Bilberry (*Vaccinium Myrtillus*)

## Bilberry Benefits

Bilberry has a long medicinal history in Europe. It has been used to treat anything from kidney stones to Typhoid fever. During World War 2 British pilots noted that Bilberry jam before a flight dramatically improved night vision. Modern research now supports these claims.

Bilberry contains anthocyanosides which are potent antioxidants which strengthen blood vessels and capillary walls, improve red blood cells, stabilize collagen tissues such as tendons, ligaments and cartilage and has cholesterol lowering effects. They also increase retinal pigments that allow the eye to tolerate light. In addition, it helps to maintain the flexibility of red blood cells, allowing them to pass through the capillaries and supply oxygen. The herb has been shown to be a vasodilator that opens blood vessels and lowers blood pressure. Since the eyes have a high concentration of capillaries, bilberry may be particularly helpful in improving eyesight. The herb has been shown to improve night vision, slow macular degeneration, prevent cataracts and diabetic retinopathy. Scientific studies have shown improvement in the eyesight, circulation, angina, stroke and atherosclerosis. It is also used to improve varicose veins and has anti-aging effects on collagen structures.

Individuals with hardening of the arteries, diabetes, high blood pressure or other conditions that increase the likelihood of damage to the small blood vessels in the eyes are more likely to have serious vision problems as a result of blood vessel damage. Note that bilberry is taken by mouth to treat eye problems. It is not used as an eye drop.

Oral bilberry preparations are also used to prevent and treat a condition known as chronic venous insufficiency, which occurs when valves in the veins that carry blood back to the heart are weak or damaged.

Blood may collect in the veins of the legs and lead to varicose veins, spider veins, or sores on the legs. More serious results can include blood clots in the legs. Because bilberry may strengthen the walls of all blood vessels in the body. It may also relieve hemorrhoids.

In the past, dried bilberries have been used to treat diarrhea because the tannins it contains (1.5% and as much as 10%) act as an astringent to the gastrointestinal tract. An astringent shrinks and tightens the top layers of skin or mucous membranes thereby reducing secretions, relieving irritation, and improving tissue firmness. Tea brewed from dried bilberry fruits has also been used to soothe a sore throat or sore mouth tissue.

In folk medicine, bilberry leaf has been used to treat a number of conditions including diabetes. Limited evidence from a few animal studies shows that it may have a decreasing effect on blood sugar. Additionally, in at least one study, an extract of bilberry leaves may also have lowered cholesterol levels in laboratory animals. Other laboratory and animal studies have tested

potential anticancer effects of bilberry. In a laboratory study, bilberry stopped the growth of both leukemic and colon cancer cells. While preliminary results suggest that anthocyanosides obtained from bilberries may also block the effects of an enzyme and other chemicals that promote tumor growth, much more study is needed. To date, no human clinical studies have confirmed any of these results from bilberry.

Recent research showed that Bilberry extract has promising anti-ulcer activity, both preventive and curative. It also has shown anti-cancer properties in animal experiments. When administered to diabetes patients, Bilberry normalized capillary collagen thickness and blood sugar levels in humans and animals.