

Blueberries (American Survival Guide)

A compilation of information regarding the medicinal and nutritional properties of the blueberry.

Blueberries (*Vaccinium Myrtillus*) thrive quickly in acid soil with plenty of sunshine. Many Blueberries grow in patches of an acre or more when so allowed. The bushes do not have thorns.

Research shows that the American Indians would set fire to surrounding brush to clear the land for the Blueberry bushes to multiply, a practice that continues today.

There are 200 species of the *Vaccinium* family, most of which are found in the Northern Hemisphere. More than 35 species are found on the North American continent. All members of the *Vaccinium* family are edible.

The active ingredients in Blueberries are its flavonoids, specifically its anthocyanosides. Concentrated extracts of Blueberries contain 40% anthocyanosides. I am going to write more extensively of the medicinal qualities of the anthocyanosides, but first, I am going to lead in with something that I was taught in school back in the 60's. I don't want the reader to be put off or scared by the big word "anthocyanoside" so I will start with the grabber. The grabber for information about Blueberries will be the antiseptic properties of the berry and leaf.

Take Blueberries camping with you...the dried Blueberries have been used primarily for their astringent qualities in the treatment of diarrhea...as few as five or six of the dried berries can cure diarrhea.

Studies have shown that a decoction of Blueberries will sterilize

cultures of colon bacillus and of Ebert's bacillus in a 24 hour period. The latter is the Typhoid bacillus. Dried blueberries don't weigh much and are certainly worth carrying in a backpack. Blueberries are a natural remedy for persistent diarrhea and acute enteritis (inflammation of the small intestine) caused by a virus or bacteria, radiation enteritis caused by Xrays and intestinal fermentation.

Extract of Blueberry (available commercially under the name of Bilberry, the "Old English" name for Blueberry) has been found to be an antiviral in cell culture for herpes simplex virus II, influenza and vaccinia (cowpox) virus.

Extracts of blueberries have also been found to kill or inhibit growth of funguses, yeasts and bacteria, including *Trichomonas vaginalis* (an inflammation of the vagina that can be transmitted to males-causing itching and discharge in both sexes).

High levels of anthocyanosides (and you won't have to be a chemist or nutritionist to enjoy this) in the Blueberry are in no particular order of importance. I have tried to show many valuable properties of the Blueberry.

Flavonoids-Anthocyanosides belong to a family called flavonoids. Although not true vitamins, flavonoids have been given the name of Vitamin "P". The P stands for permeability and is responsible for collagen stabilization in the body. Collagen is the most abundant protein in the body, consisting of veins, tendons, ligaments and cartilage. Collagen is destroyed during the inflammation of arthritis, gout, periodontal disease as well as other conditions of inflammation involving the joints, connective tissues, bones and cartilage. Flavonoids not only aid in prevention of collagen destruction, but also add to the strength of such tissue. Blueberries, because of their high content of flavonoids, actually make the collagen stronger by adhesion and cross linking with the collagen. They improve circulation

and feed the capillaries by altering the ability of fluids and nourishment to pass through, inhibiting free radical damage and improving the tone of the entire vascular system by strengthening all of the veins and the arteries.

Blueberries benefit all capillaries, veins and the arteries and by doing so improve the circulation to the hands, feet, brain and heart. Blueberries are used to strengthen coronary arteries and varicose veins and help in reducing arteriosclerosis and plaque deposits.

Studies show that Blueberry should be useful in most inflammatory or degenerative conditions involving connective tissue (e.g. osteoarthritis, bursitis, cataracts, tendonitis, gout, rheumatoid arthritis, periodontal disease, glaucoma and diabetes retinal degeneration.) The flavonoids in Blueberries with their potential anti-oxidant and free radical scavenging action prevent free radical damage.

A decoction of Blueberry leaves has a long history in folk medicine in the treatment of diabetes. Such usage has been supported by research in which oral administration reduced elevated blood sugar levels-even when glucose was administered simultaneously.

Blueberries are widely used in Europe as an antihemorrhage agent in treatment of eye disease, including diabetic retinopathy. Blueberries prevent eye damage, preserve eyesight and are helpful in treating myopia (nearsightedness). Blueberry consumption may offer a great deal of protection against retinal degeneration (particularly diabetic retinopathy and diabetic cataracts). Blueberries may also offer significant protection against the development of glaucoma because of its collagen enhancing actions.

Blueberry protects eyesight by accelerating the production of retinal purple, a substance that is critical for good vision. Blueberry jam was given to Royal Air Force pilots who flew night missions during

World War II. They reported an increase in the ability to see at night, quicker adjustment to darkness, faster restoration of sight after being exposed to glare and improved ability to see in extremely bright daylight.

In Earl Mindell's book THE HERB BIBLE, he states that "European medical journals are filled with studies confirming bilberry's positive effect on vision. Unfortunately this herb has not received the attention it deserves in the American medical community." In Europe hundreds of tons of Blueberries are processed annually for use as an antihemorrhagic agent in treatment of eye and vascular diseases.

Blueberries inhibit blood platelets sticking together reducing blood clots. Platelet aggregation (sticking together) is associated with an increased risk of heart attack, phlebitis and stroke.

Included in the effects of the flavonoids, including anthocyanosides, is their ability to increase the Vitamin C levels in the individual cells thus increasing the body's auto immune activities.

Blueberries, because of their large percentage of anthocyanosides, decrease the permeability of the blood brain barrier, decreasing the ability of large molecules to pass into the brain. Increased blood brain permeability has been linked to auto immune diseases of the central nervous system, schizophrenia, cerebral hemorrhage, etc. The anthocyanosides inhibit destruction of the collagen of brain capillaries, thus helping to maintain and restore the brain's protection from pollutants and toxins.

In many experiments and studies, anthocyanoside extracts have been shown to have beneficial results by their action of muscle relaxation. This would be useful to people suffering from many forms of muscular cramping, including limbs and menstrual cramping.

Blueberries have not only been shown to reduce blood sugar levels, but also to reduce serum cholesterol and triglyceride levels. In animal studies, blueberries is known to to decrease greatly the development of atherosclerosis or arteriosclerosis even in cholesterol loaded animals. Either of these diseases is considered a large factor in stroke or angina and a major cause of high blood pressure.

A warm infusion of blueberries is a stimulating astringent for sore throats or sores in the mouth (including use after dental work.)

Because of the astringent properties of blueberries, they have been used to stop hemorrhage and have been used to treat hemorrhoids.

Current research indicates that blueberries may be useful in the future in treatment and prevention of ulcers. It is thought that this is due to the blueberry's empowering of the defensive barriers of the gastrointestinal mucous.

Blueberries can be purchased in capsule form or extracts, teas, or natural states. Lucky are the people who can pick their own.

The best method for preservation is drying. Place the blueberries in a food dehydrator, on a screen in a gas oven and use the pilot light only for drying, hang them with a needle and thread, or spread them on screens in the shade.

To make an infusion (tea) of blueberries or blueberry leaves, place 3 t. fresh blueberries or 1 tsp. dried in a non aluminum pan and cover with 2 cups of boiling water. Do not boil the herb itself. Let steep 15-20 min.

To make a decoction place 2 1/2 c. water in a non aluminum pan and add 1 tsp. dried or 3 tsp. fresh berries or leaves. Bring to just

below boiling point and simmer for 10-20 min.

To make a tincture, place leaves or berries in airtight non clear container. Cover with alcohol of at least 90 proof (vodka). Cover and place the bottle in a dark cool place. Shake 2-3 X a day. Amber bottles are preferred. Ready for use 2 wks. Keeps indefinitely. Add to warm or cold water or place on a sugar cube to administer. Dosage 10-30 drops per dose. Repeat 8-10 hrs later.