

Hawthorn (*Crataegus laevigata*, *Crataegus oxyacantha*, *Crataegus monogyna*)

Parts used and where grown: Hawthorn is commonly found in Europe, western Asia, North America, and North Africa. Modern medicinal extracts use the leaves and flowers. Traditional preparations use the ripe fruit.

Historical or traditional use (may or may not be supported by scientific studies): Dioscorides, a Greek herbalist, used hawthorn in the first century A.D. Although numerous passing mentions are made for a variety of conditions, support for the heart is the main benefit of hawthorn.

Active constituents: The leaves, flowers, and berries of hawthorn contain a variety of bioflavonoid-like complexes that appear to be primarily responsible for the cardiac actions of the plant. Bioflavonoids found in hawthorn include oligomeric procyanidins (OPCs), vitexin, quercetin, and hyperoside. The action of these compounds on the cardiovascular system has led to the development of leaf and flower extracts, which are widely used in Europe.

Clinical actions: Hawthorn has numerous beneficial actions on the heart and blood vessels. It may improve coronary artery blood flow¹ and the contractions of the heart muscle.² Also, it may mildly inhibit angiotensin-

converting enzyme (ACE) and reduce production of the potent blood vessel-constricting substance angiotensin II. This reduces resistance in arteries and improves extremity circulation. The bioflavonoids in hawthorn are potent antioxidants.³ Hawthorn extracts may mildly lower blood pressure in some individuals with high blood pressure but should not be thought of as a substitute for cardiac medications for this condition. Clinical trials have confirmed hawthorn is beneficial for persons with stage II congestive heart failure.^{4 5} It has been shown to be as effective as the diuretic drug captopril for congestive heart failure.⁶ Congestive heart failure is a serious medical condition that requires expert management rather than self-treatment. Other studies have shown it may help those with stable angina.⁷

How much is usually taken? Extracts of the leaves and flowers are most commonly used by nutritionally oriented doctors. Hawthorn extracts standardized for total bioflavonoid content (usually 2.2%) or oligomeric procyanidins (usually 18.75%) are often used. Many nutritionally oriented doctors recommend 80–300 mg of the herbal extract in capsules or tablets two to three times per day.⁸ If traditional berry preparations are used, the recommendation is at least 4–5 grams per day or a tincture of 4–5 ml three times daily. Hawthorn may take one to two months for maximum effect and should be considered a long-term therapy.

Are there any side effects or interactions? Hawthorn is extremely safe for long-term use. People taking

prescription cardiac medications should consult with their prescribing doctor or an herbally oriented doctor before using hawthorn-containing products. Hawthorn is not contraindicated during pregnancy or lactation.

References:

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