Summary

The data from animal studies and clinical trials suggest that hawthorn extract may confer protective effects against various cardiovascular diseases. Antioxidant flavonoid components may be responsible for some of these beneficial effects. With increasing interest in applying hawthorn extract in preventing and treating cardiovascular diseases, continuing efforts are necessary to elucidate its pharmacological activities as well as clinical usefulness.

Wei-Tien Chang, Jenny Dao and Zuo-Hui Shao. *Hawthorn: Potential Roles in Cardiovascular Disease*. The American Journal of Chinese Medicine, Vol. 33, No. 1, 1–10.

In conclusion, these results suggest that there is a significant benefit from hawthorn extract as an adjunctive treatment for chronic heart failure.

Max H. Pittler, Katja Schmidt, Edzard Ernst. *Hawthorn Extract for Treating Chronic Heart Failure: Meta-analysis of Randomized Trials*. Am J Med. 2003;114:665–674.

Authors' conclusions

These results suggest that there is a significant benefit in symptom control and physiologic outcomes from hawthorn extract as an adjunctive treatment for chronic heart failure. Hawthorn extract for treating chronic heart failure (Review)

Chronic heart failure

Pittler MH, Guo R, Ernst E. Hawthorn extract for treating chronic heart failure. *Cochrane Database of Systematic Reviews* 2008, Issue 1. Art. No.: CD005312. DOI: This version first published online: 23 January 2008 in Issue 1, 2008.

Cardiovascular Disease

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Anti-inflammatory, Gastroprotective, Free-Radical-Scavenging, and Antimicrobial Activities

VANJA M. TADIC', SILVA DOBRIC', GORAN M. MARKOVIC', SOFIJA M. ĐOR {EVIC', IVANA A. ARSIC', NEBOJS`A R. MENKOVIC', AND TANJA STEVIC' Anti-inflammatory, Gastroprotective, Free-Radical-Scavenging, and Antimicrobial Activities of Hawthorn Berries Ethanol Extract. *J. Agric. Food Chem.* 2008, *56*, 7700–7709.

Jurga Bernatonienė, Rūta Masteikova1, Daiva Majienė, Arūnas Savickas, Egidijus Kėvelaitis, Rūta Bernatonienė, Katerina Dvoráčková, Genuvaitė Civinskienė, Raimundas Lekas, Konradas Vitkevičius, Rimantas Pečiūra. Free radical-scavenging activities of *Crataegus monogyna* extracts. *Medicina (Kaunas) 2008; 44(9)*.

Antimicrobial activity

Mehlika Benli, Nazife Yigʻit, Fatmaguʻl Geven1, Kerim Guʻney 3 and Uʻ mit Bingoʻ. Antimicrobial activity of endemic Crataegus tanacetifolia (Lam.) Pers and observation of the inhibition effect on bacterial cells. Cell Biochem Funct (2008).

Hypertension

David Kiefer, MD. Hawthorn: An Herb that Helps Hypertension. *Alternative Medicine Alert*. Jan 1, 2008.

Congestive heart failure

A number of studies have shown that extracts of the leaves, berries and flowers of hawthorn can be helpful in treating mild-to-moderate congestive heart failure, improving symptoms, exercise tolerance, and quality of life in these patients. Standardized extracts show promise as adjunctive agents for the treatment of left ventricular dysfunction, as measured by ejection fraction. A combination of hawthorn and camphor has also been studied. However, further study is needed to learn how hawthorn compares with prescription drugs that are usually used for heart failure and what happens when hawthorn and these drugs are taken at the same time.

Coronary artery disease, angina

Early research suggests that hawthorn may help decrease symptoms of angina. However, it has not been tested in combination with drugs that are considered to be standard treatments. More study is needed before hawthorn can be recommended for the treatment of coronary artery disease or angina.

Blood pressure

Preliminary research shows that hawthorn may help to decrease blood pressure in those with mildly high blood pressure (hypertension). Large, well-designed studies are needed before a recommendation can be made.

Low blood pressure on standing (orthostatic hypotension)

Preliminary trials have studied the efficacy of fresh hawthorn berries, camphor and a combination of both in treating orthostatic hypotension (a lowering of blood pressure that occurs when one goes from a lying down position to a standing position). The authors concluded that both the hawthorn berries and the camphor helped with

orthostatic hypotension. This trial was small and more research is needed before hawthorn can be recommended for the treatment of orthostatic hypotension.

Anxiety

Hawthorn in combination with other herbs may help to reduce anxiety and anxious mood. A randomized, controlled clinical trial of patients suffering from adjustment disorder studied the effects of Euphytose, a combination product containing hawthorn, on the treatment of anxious mood. Euphytose contained *Crataegus*, *Ballota*, *Passiflora*, *Valeriana*, *Cola*, and *Paullinia*. All patients received two tablets a day and were then evaluated after 28 days. The study found that Euphytose was better than placebo in the treatment of adjustment disorder with anxious mood. It is unknown if hawthorn specifically had beneficial effects.

The information in this monograph was prepared by the professional staff at Natural Standard, based on thorough systematic review of scientific evidence. The material was reviewed by the Faculty of the Harvard Medical School with final editing approved by Natural Standard.

To order Hawthorn extract pillules Please contact:

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