

New study findings suggest:

Key Nutritional Supplements May Dramatically Reduce Risk of Heart Disease

Over 70 million Americans are already known to have some form of cardiovascular disease.¹ And, according to the American Heart Association, the **first** sign of cardiovascular disease is often a heart attack or sudden death.²

Fortunately, a growing body of research supports the use of certain natural compounds to effectively lower heart disease risk factors.

Unique, All-Natural Formula Provides Real Cardiovascular Support

An extensive analysis of new scientific studies has led to the development of a unique, new [“heart-wise” formula](#) which combines four of the most protective heart nutrients with an absorption-enhancing ingredient. This powerful, synergistic combination includes:

- 1) **Sytrinol** (a proprietary blend of natural citrus polymethoxylated flavones with palm tocotrienols);
- 2) **Coenzyme Q10**;
- 3) **Full spectrum grape seed/skin extract**;
- 4) **Hawthorn extract**;
- 5) **Bioperine** (added for enhanced absorption).

A look at the science behind the ingredients in this exclusive formulation reveals multiple cardiovascular and heart-protective effects.

Sytrinol Offers Potent Cardiovascular System Protection

Sytrinol has demonstrated impressive, synergistic, cholesterol-lowering responses in both animal studies and preliminary human trials.^{6,7} The standard dosage for this clinically-proven citrus flavonoid-tocotrienol supplement is 300 mg per day.

Over 25 years of documented research provide evidence that the citrus PMFs (*polymethoxylated flavones*) found in Sytrinol can deliver heart health benefits.^{6,8} Like other flavonoids, PMFs deliver powerful antioxidant and anti-inflammatory activity, but PMFs far exceed other flavonoids in their ability to target heart health.

Research findings have confirmed that PMFs:

- Reduce levels of (1) **apo B**, (2) **total cholesterol**, (3) **LDL cholesterol** and (4) **triglycerides**.^{9,10,11}
- **Block the production of lipids (fats) and cholesterol** by liver cells (in animal studies).¹²

(continued on page 2)

The Most Reliable Indicator of Heart Disease Risk

Compelling evidence suggests that plasma LDL is a major risk factor in the development of cardiovascular disease. However, simply measuring LDL cholesterol and/or total cholesterol may not be adequate. In fact, at least **half** of all heart attacks and strokes in the United States occur in people with **normal cholesterol levels**.³

True, LDL carries most of the cholesterol in the blood. But LDL particles come in various sizes. Research has shown that small, dense LDL particles are more often associated with atherosclerosis than large, “fluffy” LDL particles.⁴

A component of cholesterol called **apolipoprotein B (apo B)** may be more strongly linked to several heart disease risk factors than the LDL cholesterol for which millions of Americans are screened each year.

LDL cholesterol remains an important marker, but **apo B appears to be a better marker** because it more accurately reflects the total number of plaque-causing particles in the blood.

Even when LDL cholesterol is in the normal or low range, high apo B levels may indicate an increased number of the most damaging

plaque-causing particles. Since apo B proteins are easily oxidized and promote an inflammatory response, **the growth of arterial plaque occurs despite normal cholesterol levels**.⁵

In contrast to apo B, **apolipoprotein A-I (apo A-I)** reflects heart protective HDL particles in the bloodstream. Consequently, the balance between apo B and apo A-I, or the **apo B/apo A-I ratio**, is a reliable indicator of cardiovascular disease risk. A higher apo B to apo A-I ratio is associated with a greater risk, and vice-versa.

- Prevent atherosclerosis at the vascular wall by **inhibiting macrophage foam cell formation**.¹³

A 2006 study suggests that PMFs may even help **prevent diabetes** in humans, according to researchers at the University of Hawaii.¹⁴

In addition to citrus PMFs, Sytrinol contains *tocotrienols*, a subgroup of vitamin E. Even though studies relating to tocotrienols account for only about 1% of the published research regarding vitamin E,¹⁵ recent developments indicate that **tocotrienols possess powerful cardiovascular-specific properties that are not exhibited by tocopherols** (the most well-known vitamin E subgroup). New research with tocotrienols has verified:

- Micromolar amounts of tocotrienol **suppress the activity of HMG-CoA reductase**, the liver enzyme responsible for cholesterol synthesis.¹⁵
- Tocotrienols have a **“profound inhibitory effect” on the adherence of monocytes to human endothelial cells in arterial walls**, with delta-tocotrienol exerting the most profound protective effect.¹⁶

The fact that tocotrienols have the ability to lower the production of monocytes (soluble adhesion molecules) is very significant for heart disease patients, because high levels of these monocytes have been associated with increased plaque formation.¹⁷

Coenzyme Q10 Energizes the Heart

Coenzyme Q10 has been extensively studied for its role in helping provide energy for normal heart function. It plays a key role in all energy-dependent processes, especially **heart muscle contraction**. This important role was established in 1972 when researchers documented a link between CoQ10 deficiency and human heart disease.¹⁹

Not surprisingly, consuming supplemental [CoQ10](#) resulted in **significant improvement in patients suffering from cardiomyopathy**, a weakening of the heart muscle that increases the risk for abrupt cardiac death.²⁰

CoQ10 is also a potent antioxidant that **protects LDL cholesterol from oxidation**. This is highly relevant, because oxidation of LDL cholesterol is believed to be a causative factor in the development of atherosclerosis and clogged arteries.²¹

Even **heart transplant candidates, heart attack patients**, and sufferers of **congestive heart failure** have experienced major improvements after receiving supplemental CoQ10. The following results of recent CoQ10 studies are especially noteworthy:

- In a recent randomized, placebo-controlled study, CoQ10 was given to patients with **end-stage heart**

failure awaiting cardiac transplantation. Those receiving CoQ10 improved in the 6-minute walk test, and showed a **decrease in dyspnea** (labored breathing), **nocturia** (excessive nighttime urination), and **fatigue**.²¹ The most significant result was the 6-minute walk test where patients treated with CoQ10 **improved their walking performance** from 269 to 382 meters. By comparison, walking performance **decreased** from 254 to 177 meters in the placebo group.²²

- A double-blind trial involving 144 **heart attack patients** (after acute myocardial infarction or “AMI”) confirmed that receiving 120 mg of CoQ10/day for one year **significantly lowered total cardiac events**, measures of **oxidative stress**, and the **prevalence of fatigue** as compared to placebo. The CoQ10 group also exhibited notably higher mean plasma levels of **vitamin E** and **HDL** (“good”) cholesterol at the end of the one-year period.²³
- When oral CoQ10 was given to stable **congestive heart failure patients**, researchers noted **improvement in functional capacity, endothelial function, and left ventricle contractility** (efficiency), without any side effects.^{24,25}

Hawthorn Strengthens Heart Muscle

Used around the world for centuries as both food and medicine, **hawthorn** (*Crataegus oxyacantha*), a fruit-bearing shrub, contains a variety of bioflavonoid-like complexes that appear to be primarily responsible for its heart protective actions.²⁶ Clinical evidence supports hawthorn’s safety and its cardiovascular benefits, especially its cardiogenic activity.²⁷ Hawthorn’s beneficial effects on the heart and cardiovascular system are reported to include:

- 1) **improved heart muscle strength;**
- 2) **increased integrity of blood vessel walls;**
- 3) **improved coronary blood flow;**
- 4) **positive effects on oxygen utilization.**²⁶

A recent meta-analysis examined the available research pertaining to the use of hawthorn extract in the treatment of **chronic heart failure**.²⁸ The randomized, double-blind, placebo-controlled trials included in the meta-analysis used extracts of hawthorn either alone or in conjunction with conventional drug therapies. Twenty-six studies and eight trials (a total of 632 people) provided data used in this statistical analysis.

The combined analysis showed that treatment with hawthorn extract (160-900 mg per day), for periods ranging from 3 to 16 weeks, **relieved heart disease-related symptoms** such as **fatigue** and **shortness of breath**, and improved certain objective measures of heart function. Moreover, hawthorn had few negative

side effects. The authors of the study concluded: “...according to the best available evidence, hawthorn extract has significant benefits, compared with placebo, as an adjuvant treatment for patients with chronic heart failure.”²⁸

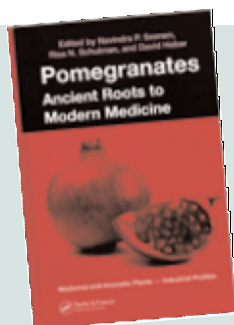
Grape Extract Protects Artery Walls

A **full spectrum extract of grape** (from seed and skin) is a powerful ingredient shown to be especially beneficial to the heart. Although grape **seeds** are noted for their high concentrations of OPCs (*oligomeric proanthocyanidins*), the polyphenolic antioxidants known as **anthocyanidins** are found in the **skins of grapes**.²⁹ Plus, the potent heart-protective nutrient **trans-resveratrol** is stored in the **skin** of grapes (to protect the fruit against fungal infection). A starting therapeutic dosage for grape extracts standardized to OPCs is 150 mg daily.³⁰

Studies strongly support the use of grape extract to maintain a healthy cardiovascular system:

- Polyphenolic grape flavonoids from seed and skin were shown to **protect LDL cholesterol from oxidation** and **reduce the development of atherosclerotic lesions**.³¹
- In animal experiments, a standardized extract from fresh grapes reduced the atherosclerotic lesion area by 41% as compared to control or placebo.³¹
- Consumption of a full spectrum grape seed-skin extract by human subjects was linked to increased serum antioxidant potential and lower protein and LDL oxidation. According to the researchers, these outcomes indicate a **significant reduction in coronary heart disease risk**.²⁹
- In patients with coronary heart disease, intake of red grape polyphenol extract caused a **significant increase in flow-mediated dilation** (the ability of the artery to relax and expand to accommodate increased blood flow).³² Flow-mediated dilation (FMD) is reduced in patients with atherosclerosis and with coronary risk factors.³³

(continued on page 4)



Helpful New Book Details Pomegranate's Impact On Heart Disease, Cancer and More

Pomegranates: Ancient Roots to Modern Medicine

by Navindra P. Seeram, Risa N. Schulman, and David Heber (Eds.)

In this landmark book, a team of the world's leading nutritional experts pool their information for a fascinating and comprehensive look at pomegranate's history, biochemistry, and potent health effects.

Pomegranates: Ancient Roots to Modern Medicine provides the most complete and up-to-date review of literature showing how this polyphenol-rich fruit **may protect against heart disease, stroke, prostate cancer and more**. As co-editor Dr. Risa Schulman explains, “...beyond its potent effects in several diseases, the pomegranate is extraordinary because of its multifunctionality. That the pomegranate can impact illness in many ways makes it a highly valuable tool. Its multifunctionality also makes it an ideal research pathway for understanding the common underlying mechanisms of the major diseases facing us today, and how phytochemicals can intervene. The pomegranate is truly a twenty-first-century natural medicine.”

The health benefits of pomegranates are attributed to the high levels and diversity of the fruit's unique phytochemicals. According to editor Dr. Navindra Seeram, assistant director of the UCLA Center for

Human Nutrition, “...**punicalagins** have been established as the chemical marker compounds that should be used for the authentication, quality control, and standardization of pomegranate products.”

According to the research detailed in this volume, [pomegranate juice constituents](#):

- Have been shown to have a higher antioxidant activity than tea (*Camellia sinensis*), red wine (*Vitis vinifera*), and other fruit juices;
- Have shown remarkable preventive potential against two of the major chronic diseases of aging — heart disease and cancer;
- Demonstrate effectiveness in retarding prostate cancer;
- Demonstrate significant activity in battling several types of cancer cells in cell culture and animals.

For a more detailed review of pomegranate research, receive a free copy of *Natural Wellness* update Vol. 7, Report #7, by calling 1-800-643-9558 and requesting the “Pomegranate Report.”

The book, *Pomegranates: Ancient Roots to Modern Medicine*, is available online at www.amazon.com.

Bioperine Ensures Better Absorption for Greater Effect

Before any heart health formula can be effective, it has to be *absorbed* through the body's digestive processes. That's why Bioperine, a purified, standardized extract of the fruit *Piper nigrum L* or *Piper longum L*, is included in this formula.

Bioperine was shown to enhance absorption and bioavailability of various nutrients when it was co-administered with them. One study of particular importance confirmed that **the bioavailability of powdered Coenzyme Q10 was increased by over 30%** when it was taken with Bioperine.³⁴

In Summary: A Comprehensive, Science-Based Heart Support Formula

For high-powered, wide-ranging heart and cardiovascular protection, look for a formula which includes the following ingredients and dosages *per serving* (taken as 2 servings per day):

<u>Ingredient</u>	<u>Amount per serving</u>
Sytrinol (polymethoxylated flavonoid-tocotrienol complex)	150 mg
Coenzyme Q10	50 mg
Hawthorn Extract	150 mg
Full Spectrum Grape Extract	75 mg
Bioperine	2.5 mg

Because this [heart-wise formula](#) includes potent, targeted nutrients, adding it to your daily supplementation program is a simple, low-cost way to protect against increased risk of cardiovascular disease.

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