



Simple Solutions for Cardiovascular Health

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Why is my doctor concerned about my cholesterol?

Elevated blood cholesterol is a major risk factor for developing heart disease, and heart disease is the leading cause of death in the United States. Nearly 100 million Americans have elevated cholesterol (a reading greater than 200mg/dl) and many times they're not even aware of it.

To a degree, blood cholesterol can be managed by changes in lifestyle. In particular, exercising, maintaining an ideal weight, and eating a diet high in whole grains, fresh fruits and vegetables that is also low in saturated fat and cholesterol. Adding daily natural plant phytosterol esters to a diet low in saturated fat and cholesterol is another natural option for maintaining cardiovascular health.

What are natural plant Phytosterol Esters?

Phytosterol esters are naturally found in small amounts in fruits, vegetables, and whole grains. Studies show that these phytosterol esters compete with cholesterol decreasing its absorption. Unfortunately, it's very difficult to obtain enough of the phytosterol esters regularly from the diet to effectively lower cholesterol. Scores of studies involving thousands of people, show that adding a phytosterol ester supplement with meals, safely and effectively helps lower total cholesterol. It also rapidly lowers very dangerous unstable LDL-cholesterol, often within just 2 to 4 weeks.

How do Phytosterol Esters lower my cholesterol?

When you eat, the fats from the meal are collected into small balls called micelles. The more soluble fats exit these balls first and are absorbed into the blood stream. Both

cholesterol and phytosterol esters are poorly soluble and they stay in the micelle ball until the end, after desirable fats have been absorbed. The phytosterol esters block the absorption of cholesterol at this crucial point. To a certain extent, the more phytosterol ester present during a meal, the less cholesterol you will absorb.

Based on evidence collected from scores of studies involving thousands of individuals, supplementing with at least 1.3 grams of plant phytosterol esters daily as part of a diet low in saturated fat and cholesterol, is suggested to significantly lower cholesterol levels.

For the past fifty years, phytosterol esters have been studied in many different population groups under many circumstances and they have consistently lowered cholesterol in these individuals. Because of this, many public health authorities are beginning to include phytosterol esters as part of their recommendations.

The National Cholesterol Education Program of the National Institutes of Health recommends adding plant sterols (phytosterol esters) to the diet to improve cholesterol reduction.

Phytosterol esters may improve the ratio of LDL-cholesterol, the bad cholesterol, to HDL. Having a good LDL to HDL ratio is a sign of decreased mortality in the elderly. Phytosterol esters may also improve levels of C-reactive protein, an inflammatory factor in the blood that increases the risk for stroke and heart attack.

How do I take Phytosterol Esters?

A significant number of studies show that a serving of plant phytosterol esters at a minimum potency of 650mg, taken twice a day with meals, may significantly lower cholesterol levels. They may also reduce the risk of cardiovascular disease if the diet is low in cholesterol and saturated fat.

According to 32 experts analyzing the safety and effectiveness of phytosterols based on 41 human trials, the combination of diet and phytosterol ester supplementation may reduce dangerous LDL-cholesterol by 20% or more - and achieve this rapidly. The beauty of the phytosterol esters is, based on many dozens of studies, that they are totally nontoxic and can effectively block the absorption of cholesterol. They accomplish this without blocking the absorption of fatty soluble nutrients such as vitamin E, lycopene or lutein; an insignificant reduction of beta-carotene is possible.

Can I take Phytosterol Esters with my cholesterol medication?

If you are taking a statin drug such as Zocor or Lipitor to lower your cholesterol, you can safely add phytosterol esters to your daily regimen. Phytosterols work differently than statin drugs and research shows that when taken in combination the results can be startling. According to the analysis of 32 experts, who based their opinions on a meta-analysis of 41 trials, adding sterols to your statin medication may be more effective than doubling the dose of the statin.

Is there any supplement complementary to plant Phytosterol Esters?

Policosanol is rapidly gaining fame for its activity in aiding the management of cholesterol according to published human studies. Policosanol inhibits the production of cholesterol in the liver, but in a different way than statin drugs. Because of its different mechanism, Policosanol lacks a toxic effect on the liver.

What are the benefits of Plant Phytosterol Esters?

Plant Phytosterol Esters:

- May significantly and quickly lower cholesterol
- May significantly and quickly lower LDL-Cholesterol
- Improves the ratio of LDL-cholesterol to beneficial HDL.
- May help reduce the risk of heart disease
- May safely be added to other cholesterol lowering medication for improved benefit

What is Policosanol?

Policosanol is a specific mixture of plant substances called cosanols, that when derived from the wax of the sugar cane (they are not derived from the sugar) may have the ability to help improve blood cholesterol levels. Numerous controlled human studies show the benefits of Policosanol. In a recently published controlled study, a daily total of 20mg of Policosanol taken for 6 months decreased LDL-cholesterol (bad cholesterol) by 27%, decreased total cholesterol by 15%, decreased triglycerides by 12%, and increased HDL (good cholesterol) by 17%. A second six-month study showed that a single daily serving of 10mg of Policosanol reduced total cholesterol by 16%, reduced dangerous LDL-cholesterol by 24%, and improved HDL levels by 29%.

How much Policosanol should I try?

In the majority of the studies, a 10mg serving of policosanol twice a day was beneficial for helping to manage blood fats. Some experts believe that two daily servings of 20mg each should be used by individuals who have increased cholesterol levels due to a genetic trait (a condition found in particular families).

Is Policosanol safe for Diabetics?

Yes, Policosanol is very safe for diabetics. Policosanol is derived from sugar cane wax, not from sugar, and a number of studies on diabetics demonstrated lower cholesterol levels with no effect on blood sugar nor any toxicity.

What are the possible benefits of Policosanol according to published research?

Policosanol:

- May help lower dangerous LDL-cholesterol
- May decrease the oxidation of LDL, decreasing the risk of it turning rancid and damaging blood vessel walls
- May decrease the release of oxidizing, inflammatory chemicals in the blood vessel walls
- May modestly thin the blood
- May decrease total cholesterol
- May, over time, improve levels of beneficial and protective HDL-cholesterol
- Policosanol may improve intermittent claudication

Citations for this article can be found on page 35.