

# Cholestol Gold



## INTRODUCTION:

Heart attacks and stroke cause more than 930,000 deaths per year in the United States alone. Cardiovascular disease is the number one cause of death in the U.S., accounting for 40% of all deaths.

Reducing serum cholesterol levels is an effective strategy for preventing cardiovascular disease. According to the National Health and Nutrition Examination Survey III, only 6.6% of Americans with elevated cholesterol levels are using drug therapy and only 4% are using nutritional therapy to reduce cholesterol.

Statin drugs are the most widely used drugs to reduce cholesterol, however they produce serious side effects. Statins can cause rhabdomyolysis, a deadly condition where dying muscle cells overwhelm the kidneys causing failure. Long term exposure to statins also substantially increases the risks of polyneuropathy. Statin drugs lower cholesterol levels by inhibiting the biosynthesis of the enzyme HMG-CoA reductase in the liver. This enzyme is responsible for the production of cholesterol in the liver. This mechanism of action not only is potentially harmful to the liver but CoQ10 also shares the same biosynthetic pathway. Therefore one unfortunate consequence of consuming a statin drug is the unintentional inhibition of CoQ10 synthesis, an indispensable nutrient for cardiac function.

The long-term consequences of taking statin drugs are not known, however the side effects of muscle pain, liver problems, cancer, nerve damage and depletion of CoQ10 are. For these reasons statins should be reserved for individuals with chronically high cholesterol levels who are at serious risk.

Cholestol Gold is a much better and safer option for individuals with moderately elevated total cholesterol, LDL, and triglyceride levels. When combined with a diet low in saturated fat and cholesterol and exercise, Cholestol Gold is proven to be extremely effective at maintaining healthy blood lipid levels.

**Cholesterol comes from two sources. About 20-30% comes from food and about 70-80% is made in the liver. Cholestol Gold's dual mechanism of action lowers total cholesterol, LDL and triglycerides at both sources. Cholestol Gold blocks the absorption of cholesterol in the diet and safely reduces the amount of cholesterol synthesized by the liver.**

## ACTIVES:

### **Sytrinol™ - Lowers cholesterol produced in the liver**

Sytrinol is a patented proprietary formula derived from natural citrus polymethoxylated flavones and palm tocotrienols. This combination results in a synergistic effect shown by several clinical studies to produce the following results:

	Average Results
Total cholesterol reduction	25%
LDL cholesterol reduction	23%
Triglyceride reduction	28%
HDL increase	3%
LDL/HDL reduction	24%

Sytrinol works by a natural breakdown of HMG CoA reductase by increasing the rate at which the enzyme molecules degrade. This natural process reduces total cholesterol without any of the side effects associated with statins. Since this process in no way interferes with the biosynthetic pathway that synthesizes CoQ10, the effectiveness of Sytrinol does not lower CoQ10 levels like statins.

Research shows that Sytrinol is more effective among individuals with a genetic predisposition to hypercholesterolemia, because it alters the level of cholesterol produced.

120 capsules per bottle

Three capsules provide:

Sytrinol™	150 mg
(Proprietary extract of polymethoxylated flavones and tocotrienols from citrus and palm fruits)	
Phytosterols (from soy)	400 mg
Guggulipid® Extract (std. extract, resin)	225 mg
Inositol Hexaniacinate	112.5 mg
Vitamin B6	12.5 mg
Folic Acid	250 mcg
Vitamin B12	250 mcg

Other ingredients: Gelatin (capsule), calcium carbonate, cellulose, silica and vegetable stearate.

\*Guggulipid® is a registered trademark of the Sabinsa Corporation.

### *Sytrinol's Cardio-Protective Benefits:*

*Lowers total cholesterol-* the tocotrienols in Sytrinol inhibits HMG CoA reductase, the liver enzyme responsible for endogenous synthesis of cholesterol.

*Lowers LDL (bad) cholesterol-* the polymethoxylated flavones in Sytrinol decrease apolipoprotein B, the structural protein needed for endogenous synthesis of LDL cholesterol.

*Lowers triglycerides-* the polymethoxylated flavones in Sytrinol (tangeritin and nobiletin) decrease diacylglycerol acetyl transferase, a liver enzyme needed for endogenous synthesis of triglycerides.

*Reduces inflammation-* Inflammation is a known risk factor in cardiovascular disease. The polymethoxylated flavones in Sytrinol have been shown through numerous studies to be effective at reducing inflammation and more than likely reduces C-reactive protein, a reliable marker and predictor of sudden heart attack.

*Powerful anti-oxidant-* the tocotrienols in Sytrinol have 40-60 times greater anti-oxidant properties than vitamin E. Plus the polymethoxylated flavones are also powerful anti-oxidants.

# Cholestol Gold continued...

## **Phytosterols- block the absorption of cholesterol in the diet**

Phytosterols come from plants such as rice bran, wheat germ, corn oils and soybeans. Their molecular structure is so similar to that of cholesterol that phytosterols compete with cholesterol for absorption in the small intestine. However phytosterols are poorly absorbed at a rate of 1/10<sup>th</sup> to that of cholesterol. This ties up the absorption pathways in the small intestine for an extended period of time, which makes the blocking process very effective.

Phytosterols also inhibit the reabsorption of cholesterol from bile acids in the digestive process, reducing the amount of cholesterol entering the bloodstream. The result is that both phytosterols and dietary cholesterol end up excreted in waste matter.

Phytosterols may reduce the risk of heart disease by lowering total and LDL cholesterol. Phytosterols do not affect HDL or triglyceride levels. Much scientific research is available that documents phytosterols ability to block the absorption of cholesterol and consequently reduce both total and LDL cholesterol levels. These studies date back to the 1950's.

**More than 20 clinical studies have been recently reviewed by the FDA. These studies show that phytosterols lower total and LDL cholesterol by 10-15%.** In addition, these studies demonstrated phytosterols effectiveness on individuals with normolipidemic and dyslipidemic levels including those on statin or other lipid lowering agents.

A recent study confirmed that patients already taking statin drugs could reduce their LDL cholesterol levels by an additional 10% by including phytosterols in their diets.

### ***FDA Allowed Health Claim:***

**Dietary supplements containing at least 400 mg. per serving of plant sterols, taken twice a day with meals for a daily total intake of at least 800 mg. as part of a diet low in saturated fat and cholesterol, may reduce the risk of heart disease. A serving of Cholestol Gold supplies 400 mg. of plant sterols.**

### **Enlarged prostate**

The phytosterol beta sitosterol has been used successfully for over 20 years in the treatment of benign prostatic hyperplasia (BPH). The BPH symptoms of reduced urinary flow and painful, burning urination were relieved in various studies using the phytosterol beta sitosterol.

**Guggulipid** – Four published clinical trials (two were placebo controlled double blind) using standardized gum guggul on hundreds of patients with hyperlipidemia had the following average results:

Total cholesterol	Ave. reduction 15%
LDL cholesterol	Ave. reduction 17%
Triglycerides	Ave. reduction 24%
HDL cholesterol	Ave. increase 14%

Experiments indicate that guggulipid lowers cholesterol by inhibiting the enzyme HMG-CoA reductase in the liver from producing cholesterol. It aids in weight loss by raising the body temperature a few degrees, resulting in thermogenesis (fat burning for energy). Studies show that the sterols in the guggulipid inhibit platelet aggregation preventing thrombosis.

**Niacin** – is the only supplement that's been proven in tests as rigorous as those for a prescription drug to lower cholesterol. A study published in the Annals of Internal Medicine comparing niacin with the cholesterol lowering drug lovastatin on 136 patients with high LDL cholesterol over a 26 week period showed the following results:

	Niacin	Lovastatin
LDL cholesterol reduction	23%	32%
HDL cholesterol increase	33%	7%
Lp(a) Lipoprotein reduction	35%	0%

Inositol Hexaniacinate is a special form of niacin composed of six nicotinic acid molecules bound to and surrounding one molecule of inositol. It has been used in Europe for over 30 years to lower cholesterol and improve blood flow. Inositol hexaniacinate exerts the benefits of niacin without flushing or other side effects.

## **CLINICAL INDICATIONS:**

*High Cholesterol, LDL and Triglyceride Levels*

## **SUGGESTED USAGE:**

As a dietary supplement, adults take 3 capsules twice daily with meals, or as directed by physician.

## **CONTRAINDICATIONS:** Pregnancy

## **DRUG INTERACTIONS:** None known

## **REFERENCES:**

1. Tripathi YB, et al. "Thyroid stimulating action of Z-guggulsterone obtained from Commiphora mukul." *Planta Med.* 1984; 1:78-80.
2. Singh RB, et al. "Hypolipidemic and antioxidant effects of Commiphora mukul as an adjunct to dietary therapy."
3. English, Jim. "Novel Dietary Supplement Shows Dramatic Effects in Lowering Cholesterol, LDL, and Triglycerides." *Life Extension Magazine.* Nov. 2004.
4. "Treatment of dyslipidemia in high-risk patients: too little, too late." *Int J Clin Pract Suppl.* 2002 Jul; (130):15-9.
5. "Serum total cholesterol concentrations and awareness, treatment, and control of hypercholesterolemia among US adults: findings from the National Health and Nutrition Examination Survey, 1999 to 2000." *Circulation.* 2003 May 6; 107(17):2185-9.
6. "Contemporary awareness and understanding of cholesterol as a risk factor: results of an American Heart Association national survey." *Arch Intern Med.* 2003 Jul 14; 163(13):1597-600.
7. "Use of nutritional supplements for the prevention and treatment of hypercholesterolemia." *Nutrition.* 2003 May; 19(5):415-8.
8. Staack, Richard F. PhD. MBA. "Sytrinol: A Natural Solution for Lowering Cholesterol"
9. Hicks, Kevin and Robert Moreau. "Phytosterols and Phytostanols: Functional Food Cholesterol Busters." *Food Technology.* Vol. 55, No.1. January 2001. 63-67.
10. "What are Phytosterols?" [www.forbesmedi.com/s/Phytosterols.asp](http://www.forbesmedi.com/s/Phytosterols.asp)
11. [www.wholehealthmd.com/refshelf/substances\\_view/1,1525,10131,00.html](http://www.wholehealthmd.com/refshelf/substances_view/1,1525,10131,00.html)
12. Lichtenstein et al. "Stanol/Sterol Ester- Containing Foods and Blood Cholesterol Levels" *Circulation.* 2001; 103:1177.

These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent disease.