

# Chol-Control

by ChiroNutraceutical



CHIRO  
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By combining only high-end natural compounds that have been shown to be beneficial for individuals with elevated cholesterol levels, Chol-Control Cholesterol Support Formula by ChiroNutraceutical is formulated to help reduce LDL and triglyceride levels and increase the HDL level in your patients, as well as provide cholesterol support for those patients whose cholesterol falls within the normal range.

The ingredients (policosinol, niacin, guggulipid, plant sterol complex, cayenne powder, and garlic powder) are synergistically blended to provide the potent and desired benefits.

## Plant Sterols/Stanol

Plant sterols/stanols have been proven to lower LDL levels in multiple studies! In fact, a recent study for the University of California Davis Medical Center looked at the effects of sterol-fortified orange juice. Of 72 adults, half received regular orange juice and the other half fortified orange juice. After just 2 weeks, the group drinking the fortified orange juice had a 12.4% drop in their LDL cholesterol levels. The results were published in the journal *“Arteriosclerosis, Thrombosis, and Vascular Biology”*.

The FDA gave these products the status of “health claim”. This means that experts widely agree on the cholesterol lowering benefits of stanols and sterols. It also allows manufacturers to advertise the heart-healthy benefits on labels. Ruth French, RD, a spokeswoman for the American Dietetic Association said: “Eating sterol and stanol containing foods is an easy way to lower your LDL cholesterol, which helps reduce the risk of heart disease.”

## Gugulipid

Gugulipid, which comes from the resin of the Commiphora Mukul tree, has been used in Ayurvedic medicine for over 2000 years! Animal research and clinical trials over the past three decades has confirmed that Gugulipid can: reduce elevated serum cholesterol with significant reductions in LDL and VLDL<sup>1,2</sup>, increase HDL cholesterol<sup>1-3</sup>, reduce serum triglycerides<sup>1,2,3,7</sup>, protect against cholesterol-induced atherosclerosis<sup>1,2</sup>, decrease platelet adhesiveness and increase fibrinolytic activity<sup>1,2,5</sup>, reduce body weight in obese patients with elevated cholesterol levels<sup>1,2,4,5</sup>, and stimulate thyroid function<sup>2,8</sup>.

## Policosinol

Policosinol acts on cholesterol metabolism in the liver, but at a different part of the metabolic pathway than statins. Multiple animal studies have shown that policosinol has a cholesterol lowering effect. Recently, human studies have revealed that policosinol has a LDL lowering effect that is on par with statin drugs. Also, in some cases, policosinol has been demonstrating HDL elevation by 10-25%.<sup>9</sup>

## Niacin

Niacin, also known as “nicotinic acid,” is found in red meat, chicken, turkey, beans, and grains. It is a required nutrient and a member of the B vitamin family. Have you ever taken a B-complex vitamin pill that triggered a strange burning sensation of the skin? If so, that was the niacin you experienced. Niacin plays a crucial role in energy production, gene expression, and hormone synthesis. Humans cannot exist without it.

When taken at doses greater than the RDA, niacin confers an array of health benefits. Niacin:

- Increases high-density lipoprotein (HDL) by 20-35%. No other available over-the-counter treatments, and very few drugs, are as effective.
- Decreases small low-density lipoprotein (small LDL) particles. Small LDL is an important yet underappreciated cause of heart disease. Niacin is the most effective agent known for correcting this abnormal pattern.
- Decreases triglycerides by 30%. Niacin is especially effective when taken with fish oil (at doses of 4000 mg a day, providing 1200 mg of EPA/DHA).
- Decreases very low-density lipoprotein (VLDL) particles.
- Decreases lipoprotein(a), or Lp(a). No other treatment approaches the power of niacin to reduce the genetically determined pattern of high Lp(a), which is among the most serious risk factors for heart disease.
- Decreases low-density lipoprotein (LDL), usually by 20-40 mg/dL, or 5-25%.

Niacin blocks the release of fatty acids from fat cells. Fewer fatty acids are passed through to the liver, resulting in fewer VLDL particles. Less VLDL leads to less small LDL and higher HDL.<sup>1</sup> Niacin also improves endothelial function and nitric oxide synthase activity.

## Cayenne & Garlic

Cayenne Pepper and Garlic Powder round out the ingredients. These two powders are added because they help lower the level of LDL oxidation, which is one of the key factors in preventing atherosclerotic plaque buildup. Healthy men and women were randomly assigned cayenne chili or no chili for four weeks. At the end of the study, which was published in the August 2006 issue of the *“British Journal of Clinical Nutrition”*, “the scientist found that the cayenne chili group had a lowered rate of LDL cholesterol oxidation compared to the non-chili group.

## References

1. Satyavati, G.V., “Gum guggul (Commiphora mukul - The success story of an ancient insight leading to a modern discovery”, Indian J. Med. Res., April, 1998, 327-335
2. Satyavati, G.V., Effect of an indigenous drug on disorders of lipid metabolism with special reference to atherosclerosis and obesity (Medoroga), MD thesis (Doctor of Ayurvedic Medicine), Banaras Hindu University, Varanasi, India 1966
3. Verma, S.K. and Bordia, A., “Effect of Commiphora mukul (gum guggulu) in patients of hyperlipidemia with special reference to HDL-cholesterol.” Indian J. Med. Res. April 1988, 336-360.
4. Sidhu, L. S., Keertisharma, Puri, A.S. and Prakash, S., “Effects of gum guggul on body weight and subcutaneous tissue folds”, J. Indian Res. Med. Yoga Homoeo, II (1976) 16.
5. Sastry, V.V.S., Experimental and clinical studies on the effect of oleogum resin of Commiphora mukul Engl. On thrombotic phenomena associated with hyperlipaemia (Snehavyapat), M.D. thesis (Docotr of Ayurvedic Medicine), Banaras Hindu University, Varranasi, 1967
6. Werbach, M.R. and Murray, M.T., Concise Meteria MEDica, Guglipid (commiphora mukul), Botanical Influences on Illness, Third Line Press, Tarzana, CA, 1994:24
7. Nityanand, S., et al., “Clinical Trials with Gugulipid: A new hypolipidemic agent”, J. Assoc. Phys. India, 37(5):323-328
8. Tripathi, Y.B., et al, “Thyroid Stimulatory Action of (Z)-Guggulsterone: Mechanism of Action”, Planta Medica, 1988;4:271-277
9. Castano G., “Comparrison of the efficacy and tolerability of policosinol with atorvastatin in elderly patients with type II hypercholesterolemia” Drugs Aging. 2003;20(2): 153-63