

# GUGGUL CHOLESTEROL COMPOUND™

*Supports Normal Cholesterol Levels*



Throughout history, traditional cultures have used herbs to support a healthy cardiovascular system. One of the most valued Ayurvedic heart botanicals is guggul, the resin of a shrub related to myrrh. New scientific research supports this traditional use and offers evidence to explain guggul's mechanism of action.

Planetary Formulas GUGGUL CHOLESTEROL COMPOUND features a guggul extract, rich in guggulsterones, the constituent believed by scientists to be responsible for many of the plant's benefits. GUGGUL CHOLESTEROL COMPOUND utilizes a guggul extract that delivers 75 mg of guggulsterones daily—the clinically substantiated dosage. In keeping with Ayurvedic principles, this guggul extract is blended with additional botanicals traditionally used with guggul. These include the legendary Triphala compound, India's most important detoxifying formula, as well as selected spices.

GUGGUL CHOLESTEROL COMPOUND is part of the Planetary Formulas line of products that draws on the wisdom of traditional cultures *and* the new knowledge gleaned from scientific research—providing the best of what modern herbalism and science have to offer.



## PLANETARY

FORMULAS

More Than Herbs – *Herbalism!*

### Traditional Ayurvedic Herb

Guggul is a gum resin from the mukul tree (*Commiphora mukul*), a small, thorny bush similar to myrrh, which grows naturally throughout India and Arabia. Guggul has been used in Ayurvedic herbalism since at least 600 B.C. Guggul resin contains a number of constituents including the plant sterols, guggulsterones, which appear to work together to exert the beneficial effects of this botanical.

### New Clinical Research

Numerous clinical studies in India support the use of guggul for maintaining cholesterol levels in the normal range. Recent research at the Baylor School of Medicine in Houston, reported in the journal *Science*, found that guggul may block a receptor in liver cells involved in cholesterol metabolism: the farnesoid X receptor (FXR).

To determine its mechanism of action, researchers studied the effects of guggul extract on mice. In normal mice, guggul extract prevented elevation of hepatic cholesterol, while in mice who lacked FXR guggul had no effect, leading researchers to theorize that guggul blocks FXR activity. FXR is known to play a key role in cholesterol metabolism, by mediating the rate of bile acid production by the liver. Cholesterol is eliminated from the body through bile release.

Guggul has also been found to support normal thyroid function by stimulating the release of thyroid hormone, according to animal studies.

According to several clinical studies, the amount of guggulsterones used to maintain normal cholesterol levels is 75 mg per day, when taken with a diet low in saturated fats. This is the daily dose delivered by Planetary Formulas GUGGUL CHOLESTEROL COMPOUND™.



Developed exclusively for Planetary Formulas by world renowned herbalist, acupuncturist, and author Michael Tierra, L.Ac., O.M.D., who has more than 30 years of clinical experience.

### Detoxification with Triphala

GUGGUL CHOLESTEROL COMPOUND is unique among guggul formulas because it also contains Triphala—one of the oldest and, beyond doubt, the most highly revered compound in the 5,000-year Ayurvedic tradition. This cleansing formula combines three sour and astringent fruits that are legendary for their health-promoting effects: amla, behada, and harada.

### Clinically Derived Formula from Michael Tierra

GUGGUL CHOLESTEROL COMPOUND was developed by licensed acupuncturist and clinical herbalist Michael Tierra, L.Ac., O.M.D. Michael has been using Planetary Formulas products on a daily basis in his more than 30 years of clinical practice. This means you can be assured of obtaining the benefits you are seeking from a herbal product.

### References

Singh, R.B. Aug 1994. Hypolipidemic and antioxidant effects of *Commiphora mukul* as an adjunct to dietary therapy in patients with hypercholesterolemia. *Cardiovasc Drugs Ther.* (4): 659-64.

Tripathi Y.B. et al. February 1984. Thyroid stimulating action of Z-guggulsterone obtained from *Commiphora mukul*. *Planta Med.* (1): 78-80.

Urizar, Nancy L. et al. February 2002. A natural product that lowers cholesterol as an antagonist ligand for FXR. *Science.* 296:5573, 1703-1706.

*Adhering to the quality control requirements and codes of ethics of:*

*American Herbal Products Association  
National Nutritional Foods Association*



\*The above information has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.