

Heart health

- REDUCES CHOLESTEROL



For centuries, guggul has been used extensively by Ayurvedic physicians to treat a variety of afflictions, including arthritis, inflammation, bone fractures, obesity, and disorders of lipid metabolism.

The classic Ayurvedic medical text, the Sushrutasamhita, describes in detail the usefulness of guggul in the treatment of obesity and other disorders of fat metabolism including “coating and obstruction of channels”. Inspired by this description, researchers began studying, in well-designed scientific studies, the clinical effectiveness of gum guggul and its extracts in disorders of lipid metabolism, specifically its ability to lower cholesterol and triglyceride levels, and promote weight loss. In addition to its therapeutic applications, the gum resin of *C. mukul* is used as a binding agent in tablets, an emulsifying agent, a fixative in perfumery, and as incense.

Chemical composition

C. mukul, also known as the Indian myrrh tree, the gum resin is pale yellow, brown or dull green in color with a bitter, aromatic taste and balsamic odor. Tapping of the tree begins in November and continues through January, with collection continuing until June. One tree yields up to 1 kg of gum resin. The gum resin extract from the bark of *C. mukul* contains a combination of steroids, diterpenoids, aliphatic esters and carbohydrates.

The aerial parts of *C. mukul* contain beta-sitosterol, myricyl alcohol, and many amino acids (cysteine, histidine, lysine, arginine, aspartic acid, serine, glutamic acid, threonine, alanine, proline, tryosine, tryptophan, valine, leucine, and isoleucine). The flowers are rich in flavonoids, most notably quercetin.

Both guggul and its purified extracts have shown to be effective hypolipidemic agents in patients with ischemic heart disease, hypercholesterolemia, obesity, and hyperlipidemia. Fifty patients with symptoms of ischemic heart disease treated with an oral daily dose of 10–15 grams of guggul for three months experienced a 25% decrease in total cholesterol and a 30% reduction in triglycerides, representing a significant change compared to controls. Twenty-two patients with primary hyperlipidemia were given a 1,500 mg daily dose of gugulipid for six weeks. Serum cholesterol levels were significantly reduced in 59% of the patients, evident at two weeks after initiation of treatment. Among responders, serum cholesterol and triglyceride

levels were lowered 24.5% and 27.3%, respectively. A multicentered clinical trial involving 205 patients resulted in a significant lowering of serum cholesterol (23.6%) and serum triglycerides (22.6%) in 70% of patients treated with 1500 mg of gugulipid daily for 3 months. Another study involving 125 patients compared the effect of gugulipid with clofibrate, a popular hypolipidemic pharmaceutical. The average reduction in serum cholesterol and triglycerides in response to treatment with the standardized extract was 11% and 16.8%, respectively. HDL-cholesterol was increased in 60% of the patients who responded to treatment with the *C. mukul* extract. With clofibrate, cholesterol and triglycerides were reduced 10% and 21.6% respectively. Guggul has been shown to be a useful adjunct to dietary modification in hypercholesterolemic patients.

Treatment was with gugulipid at a level supplying 100 mg of guggulsterones daily for six months. In addition to a fruit and vegetable enriched diet resulted in an 11.7% reduction in total cholesterol, 12.5% reduction in LDL cholesterol, 12.0% reduction in triglycerides, and 11.1% reduction in the total cholesterol/high density lipoprotein cholesterol ratio in 61 patients.

Recommended dosage

The dosage of guggul in any form is based on its guggulsterone content. Clinical studies have demonstrated that 20 mg of guggulsterones four times per day is an effective treatment for elevated cholesterol levels, elevated triglyceride levels, or both. For a 2.5% guggulsterones content ethyl-acetate extract like gugulipid, this translates to an effective dose of 800 mg four times per day.

Each vegetable capsule contains:

Guggul (standardized to 2.5% guggulsterones) 800 mg

Non-medicinal ingredients: Vegetable magnesium stearate and silicon dioxide, in a NON-GMO vegetable capsule composed of vegetable cellulose and purified water.

Contains no: Artificial preservatives, flavour, colour, sugar, milk, starch, wheat, corn, soy or yeast.

Suggested use:

Take 1 capsule four times daily with meals or as directed by your health care practitioner.

Keep out of reach of children.

*Manufactured under strict GMP (Good Manufacturing Practices)
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