

Shuddha Guggulu

(*Commiphora wightii*)



According to Sanskrit definition, the word 'Guggulu' means 'one that protects against diseases'. *Guggulu* has been used for over 3000 years and is described all of the classical Ayurvedic texts, including Sushruta Samhita. In this book it is recommended for the treatment of rheumatic pain and obesity. *Guggulu* produces a resinous sap known as gum guggul. The extract of this gum, called guggulipid, guggulipid or guggulipid, has been used in Ayurvedic medicine for nearly 3,000 years in India.¹

Some of the uses in the traditional medicine have been for reducing obesity, as well as in the treatment of rheumatoid arthritis, osteoarthritis and sciatica.² It does, however, exert an anti-cholesterolemic effect (lowers blood cholesterol levels) and is also an anti-inflammatory and anti-oxidant compound.

The hypolipidemic effects of *Guggulu* are the effects of guggul most supported by the literature; most clinical human trials show on average a 20% decrease in serum triglycerides and cholesterol, with positive benefits being seen in 70-80% of patients. The herb is found across the world. In India, it is found in the states Rajasthan and Gujarat.

Active contents:

Shuddha Guggulu contains resin, volatile oils and gum. The extract has ketonic steroid compounds known as guggulsterones. Guggulsterones E and Z, the active components³ as well as other guggulsterones including Guggulsterone 1-4 and 6; X, Y, Z, M and dehydroguggulsterone M⁴. E- and Z-guggulsterones are responsible for lowering cholesterol and triglyceride levels. As antioxidants, guggulsterones keep LDL cholesterol under control, an action which protects against atherosclerosis.

Herb actions:

Anti-Inflammatory: Guggulsterones appear to reduce circulating levels of pro-inflammatory cytokines and markers such as IL-1b, IL-2, and TNF-a & also able to reduce Cyclo-oxygenase-2 (COX2) mRNA levels and suppress its TNF α mediated activation. This finding supports its traditional use in the treatment of rheumatoid arthritis and other inflammatory conditions.

Thyroid and Metabolic Rate: Its administration (1 mg/100 g body weight) brought about an increase in iodine-uptake by thyroid and enhanced activities of thyroid peroxidase and protease as well as oxygen consumption by increasing serum T3 and T4 levels⁵. Thus, the thyroid gland is stimulated by guggulsterone. This effect plays a role both in the ability of the substance to decrease cholesterol levels and to promote weight loss by increasing the body's rate of metabolism.

High cholesterol & Atherosclerosis: Guggulsterones also lower serum cholesterol by enhancing hepatic reuptake of cholesterol by stimulating hepatic LDL receptors, while at the same time boosting levels of HDL the 'good' cholesterol. It may decrease the production of cholesterol in the liver. Excretion of cholesterol and bile acids are increased, so that less fat and cholesterol are absorbed. The lowering of serum lipids is what consequently decreases the risk of atherosclerosis.

Weight loss: *Shuddha Guggulu* enhances the thyroid function, which in turn regulates metabolism and can help with weight loss.

Indications: Hyperlipidemia, Arthritis, Atherosclerosis, Obesity.

Contraindications: None

Dose: 1 capsule, two times a day or as advised by the Physician

Composition: Each capsule contains 250mg standardized extract of Shuddha Guggulu (*Commiphora wightii*).

References :

1. Indian herb can reduce cholesterol, BBC NEWS, 2 May 2002.
2. Wang L, Waltenberger B, Pferschy-Wenzig EM, Blunder M, Liu X, Malainer C, Blazevic T, Schwaiger S, Rollinger JM, Heiss EH, Schuster D, Kopp B, Bauer R, Stuppner H, Dirsch VM, Atanasov AG. Natural product agonists of peroxisome proliferator-activated receptor gamma (PPAR γ): a review. *Biochem Pharmacol.* 2014 Jul 29. pii: S0006-2952(14)00424-9. doi: 10.1016/j.bcp.2014.07.018. PubMed PMID 25083916.
3. Zhu N, et al Bioactive constituents from gum guggul (*Commiphora wightii*). *Phytochemistry.* (2001).
4. Shishodia S, et al The guggul for chronic diseases: ancient medicine, modern targets. *Anticancer Res.* (2008).
5. Tripathi YB, Malhotra OP, Tripathi SN Thyroid Stimulating Action of Z-Guggulsterone Obtained from *Commiphora mukul*. *Planta Med.* (1984)