

Let's start with the history.....

An extract from the resin of the mukul myrrh tree (*Commiphora mukul*), guggul has been used since 600BC in Ayurvedic medicine to treat obesity and lipid disorders.

Original Sanskrit verse from Atharva Veda refers to the medicinal values of guggul.

Studies of guggul resulted in the publication of Satyavati's doctoral thesis entitled 'Effect of an indigenous drug on disorders of lipid metabolism with special reference to atherosclerosis and obesity (medoroga)' that was submitted to Banaras Hindu University (BHU). This pioneering work, published in 1966, provoked much interest among Indian scientists at BHU and institutions elsewhere. A number of preclinical and clinical studies were undertaken on gum guggul with emphasis on its hypolipidaemic and related properties. These were soon followed by phytochemical and pharmacognostic studies. Finally in 1988, guggulipid was available as a hypolipidaemic agent on the Indian market.

What is Guggul?

Guggul is the yellowish resin (or gum) that is produced by *Commiphora mukul*, a small, thorny plant that grows throughout northern India. Guggul is also referred to as guggul gum, guggal, gugglesterone, gugulu and gum gugal. Its active components, Z-guggulsterone and E-guggulsterone, have an ability to lower both cholesterol and triglyceride levels. Specifically, guggulipid lowers VLDL and LDL cholesterol and triglycerides while simultaneously raising HDL cholesterol. This indicates guggul's primary use for providing protection against atherosclerosis. These effects are due to guggul's action on the liver which is stimulated to metabolise LDL cholesterol, effectively lowering the amount in the bloodstream.

How effective is Guggul?

Firstly on high cholesterol Studies show that 14-27% of LDL cholesterol and 22-30% of triglycerides levels were reduced when guggul was given to men and women with high cholesterol for 12 weeks with no change in diet or exercise. Several clinical studies were published in the Indian Journal of Medicine (volume 84) in 1986, Indian Pharmacopoeia and in the Journal of the Association of Physicians in India (vols 34 & 37) all stating the efficacy of guggul in lowering LDL cholesterol and triglycerides. Dr David Moore and his team at the Baylor College of Medicine in Houston found that the guggulsterone, the active ingredient in the guggul extract, blocks the activity of a receptor in the liver's cells called Farnesoid X Receptor (FXR). Later, Dr David Mangelsdorf at the University of Texas Southwestern Medical Center in Dallas confirmed that guggul blocks the receptor and affects how cholesterol is metabolised. Secondly on atherosclerosis Guggul also appears to boost levels of 'good' cholesterol in the bloodstream, although the exact mechanism is unknown. In addition it decreases hepatic cholesterol levels and both of these actions help prevent atherosclerosis. Guggul is also an antioxidant, which helps stop the oxidization of cholesterol and the subsequent hardening of the arteries.

The following is one of many double blind randomised clinical trials conducted by scientists and healthcare professionals around the world.

Hypolipidaemic and antioxidant effects of *Commiphora mukul* as an adjunct to dietary therapy in patients with hypercholesterolaemia.

Singh RB, Niaz MA, Ghosh S.1994 Aug, 8(4):659-64

Heart Research Laboratory, Medical Hospital and Research Centre, Moradabad, India

The effects of the administration of 50 mg of guggulipid or placebo capsules twice daily for 24 weeks were compared as adjuncts to a fruit- and vegetable-enriched prudent diet in the management of 61 patients with hypercholesterolaemia (31 in the guggulipid group and 30 in the placebo group) in a randomised, double-blind fashion. Guggulipid decreased the total cholesterol level by 11.7%, the low density lipoprotein cholesterol (LDL) by 12.5%, triglycerides by 12.0%, and the total cholesterol/high density lipoprotein (HDL) cholesterol ratio by 11.1% from the pre diet levels, whereas the levels were unchanged in the placebo group. The HDL cholesterol level showed no changes in the two groups. The lipid peroxides, indicating oxidative stress, declined 33.3% in the guggulipid group without any decrease in the placebo group. The compliance of patients was greater than 96%. The combined effect of diet and guggulipid at 36 weeks was as great as the reported lipid lowering effect of modern drugs. After a washout period of another 12 weeks, changes in blood lipoproteins were reversed in the guggulipid group without such changes in the placebo group. Side effects of guggulipid were headache, mild nausea, eructation, and hiccup in a few patients.

Anyone looking for an alternative to Statins for treatment of High Cholesterol would probably find the ancient Indian Guggul worth investigating as it can be found in a variety of supplement formulas from a growing number of manufacturers around the world.

<http://www.beatingcholesterol.com>

About the Author

Stephen Guy-Clarke has been a passionate practitioner of natural medicine for thirteen years. He graduated in Acupuncture at the Shanghai Research Institute of Acupuncture and Meridian in 1994 and has a special interest in nutrition. Stephen has lectured and written on a number of health related topics including Asthma, 'Light, the future of Medicine' and 'You are what you absorb – The case for proper nutrition'.

Stephen also has a background in both corporate management and business ownership.

He spends his time between living in rural Suffolk, England, and beautiful Goa, India, with his wife Christine.