

Ancient Ayurvedic Medicine Improves Lipid Balance: HDL/LDL/Triglycerides

Three Decades of Research Prove The Therapeutic Value of Gugulipid

The oleoresin of *Commiphora mukul* (gum guggul) is known in the ancient Ayurvedic system of medicine for its therapeutic value in various ailments including all types of arthritis, obesity and associated lipid disorders and their complications.

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.^(1,2)
- Increase HDL cholesterol.^(12,3)
- Reduce serum triglycerides.^(1,2,3,7)
- Protect against cholesterol-induced atherosclerosis.^(1,2)
- Decrease platelet adhesiveness and increase fibrinolytic activity.^(1,2,5)

Effects of Gugulipid on Serum Lipids and Atherosclerosis

Most of the research done with gugulipid has dealt with its effect on lipid metabolism and atherosclerosis. The first studies were completed in 1966 by G.V. Satyavati and reported in her doctoral thesis. Her interest was inspired when she found a strong analogy between modern knowledge of atherosclerosis and the ancient concept of *medoroga* in the original sanskrit text of Sushruta (600 B.C.).⁽¹⁾

Carefully planned studies were carried out over a period of two years on rabbits in which hyperlipidemia was induced by feeding hydrogenated vegetable oil. The studies demonstrated for the first time that gum guggul could not only lower significantly serum cholesterol and phospholipids, but also protected the animals against cholesterol-induced atherosclerosis, at the fatty streak stage. The oleo-resin also reduced the body weight of the animals.⁽¹⁻²⁾

A similar trend to significantly reduce serum cholesterol levels in patients with obesity and hypercholesterolemia was found in clinical studies using crude gum guggul.⁽¹⁻²⁾

Other clinical studies soon followed using crude gum guggul and different components of the plant. The compound gugulipid, an extract of the oleoresin of gum guggul, has now been standardized. In earlier studies, crude guggul had pro-

GUGULIPID®

(*Commiphora mukul*) Standardized Extract

Product No. 462 Fill Size: 90 vegetable capsules

Each all-vegetable capsule contains:

Gugulipid (*Commiphora mukul*) 340 mg.

Other ingredients: rice flour, magnesium stearate.

Hypoallergenic. This product is free of artificial colors, flavors, preservatives and sodium. Contains no animal products.

®Gugulipid is a registered trademark of Sabinsa Corp.

RECOMMENDED USE: Two capsules 2-3 times daily.

- Reduce body weight in obese patients with elevated cholesterol levels.^(1,2,4,5)
- Stimulate thyroid function.^(2,8)
- Remove excess uric acid in the system.⁽⁹⁾

duced mild side effects (skin rashes, diarrhea, restlessness, hiccoughs, etc.). No adverse reactions have been reported when the standardized extract was used.^(1,6)

The efficacy and safety of gugulipid are reported to be better than the synthetic drug clofibrate.⁽¹⁾ In an experimental double-blind crossover study, its lipid-lowering effect was comparable to the drug clofibrate; however, HDL cholesterol increased in 60% of the patients who responded to gugulipid while clofibrate had no effect on HDL.⁽⁷⁾

Subsequent studies on patients with elevated serum cholesterol showed a significant lowering of not only serum cholesterol, triglycerides and total lipids, but also the non-esterified fatty acids.⁽¹⁾ Typically cholesterol levels will drop 14%-27% in a 4 to 12 week period while triglyceride levels will drop 22%-30%.⁽⁶⁾ The only clinical study which reported no significant lowering of serum cholesterol was carried out on healthy individuals and coronary artery disease patients who did not have high serum lipid levels.⁽¹⁾

In a 16-week study, forty patients given 4.5 grams daily of purified gugulipid in 2 divided doses showed a decrease in serum cholesterol of 21.75% and serum triglycerides decreased by 27.1%. There were similar decreases in VLDL and LDL cholesterol and HDL cholesterol showed a grad-

(over)

ual increase to over 35% by the end of the study. Another study reported decreased platelet adhesiveness and increased fibrinolytic activity in patients with heart disease.⁽³⁾

Several ketonic steroid compounds have been isolated from gum guggul. Two of the compounds, Z-guggulsterone and E-guggulsterone are primarily responsible for the hypolipidemic activity. The standardized extract is preferred

Effects of Gugulipid on Obesity, Thyroid and Arthritis

Due to the preoccupation with the hypolipidemic action of gugulipid because of the well known association of hyperlipidemia with ischemic heart disease, research dealing with effects of gugulipid on other body systems has been largely neglected. However, there have been some reports of beneficial effects on obesity, thyroid function and arthritis.

• OBESITY

All Ayurvedic texts describe gum guggul as the drug of choice for reducing body weight. The original Ayurvedic treatise, *Sushrutasamita*, that inspired Satyavati's work deals in an extraordinarily lucid and scientific manner with the etiology, pathogenesis and treatment of obesity and associated lipid disorders and their complications.⁽¹⁾ Since Satyavati first reported reduction of body weight in both rabbits and humans, two of the subsequent studies have reported a significant reduction in the body weight of obese subjects using gugulipid.^(1,4,5)

• THYROID FUNCTION

Some studies have attributed the hypolipidemic effect of gugulipid to its stimulatory action on the thyroid gland. In animal experiments, Z-Guggulsterone was shown to increase iodine uptake as well as thyroid peroxidase and protease activity. It was determined that the thyroid stimulatory action of gugulipid was not mediated by thyroid stimulatory hormone (TSH) of pituitary origin.⁽⁸⁾

• ARTHRITIS

Before Satyavati's work in 1966, guggul was well known as an Ayurvedic treatment for various types of arthritis.⁽¹⁾ Both the crude oleoresin (gum

over the isolated sterones primarily for commercial reasons; however, the other components of the extract show a synergistic (hypolipidemic) effect.⁽¹⁾

The mechanism for gugulipid's cholesterol lowering action appears to be its ability to increase the liver's metabolism of LDL cholesterol. Guggulsterone increases the uptake of LDL cholesterol from the blood by the liver.⁽⁶⁾

guggul) and the standardized extract (gugulipid) have exhibited anti-inflammatory action⁽⁶⁾ and one research study in France reported a significant reduction of uric acid in animals given gugulipid.⁽⁹⁾ Gout is a common type of arthritis caused by an increased concentration of uric acid in biological fluids. In gout, uric acid crystals are deposited in joints, tendons, kidneys and other tissues where they cause considerable inflammation and damage.

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