

Mangosteen and Diabetes

As many as **18.2 million Americans** (6.3 percent of the population) have diabetes. Each year about one million more aged 20 or older are diagnosed with the disorder. **National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK).**

Antidiabetic activity of a xanthone compound, mangiferin. Phytomedicine. 2001 Mar;8(2):85-7. Miura T, Ichiki H, Hashimoto I, Iwamoto N, Kato M, Kubo M, Ishihara E, Komatsu Y, Okada M, Ishida T, Tanigawa K. Suzuka University of Medical Science, Mie, Japan.

Mangiferin, a xanthone, lowered the blood glucose (sugar) level in type II diabetic mice. From these findings, it seems likely that mangiferin exerts its antidiabetic activity by decreasing insulin resistance.

Effect of mangiferin on hyperglycemia and atherogenicity in streptozotocin diabetic rats S. Muruganandan^a, , K. Srinivasan^b, S. Gupta^a, P.K. Gupta^a and J. Lal^a

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In the present study, the effect of mangiferin (a xanthone glucoside, isolated from the leaves of *Mangifera indica*) on the atherogenic potential of streptozotocin (STZ)-diabetes was investigated. In addition, the effect of mangiferin on oral glucose tolerance in glucose-loaded normal rats was also determined. The chronic administration of mangiferin (10 and 20 mg/kg, i.p.) for 14 days significantly as well as markedly improved oral glucose tolerance in glucose-loaded normal rats suggesting its potent antihyperglycemic activity. The accumulating evidences suggest that both pancreatic and extrapancreatic mechanisms might be involved in its antidiabetic or antihyperglycemic action. In conclusion, the present study demonstrates that mangiferin possesses significant anti-diabetic, anti-hyperlipidemic and anti-atherogenic properties thus suggesting its beneficial effect in the treatment of diabetes mellitus associated with hyperlipidemia and related cardiovascular complications.