

Liquorice (*Glycyrrhiza glabra*)

Glycyrrhiza glabra Linn. (Family: Fabaceae) is a well-known medicinal plant used in traditional medicine across the globe for its ethanopharmacological value to cure varieties of ailments. The

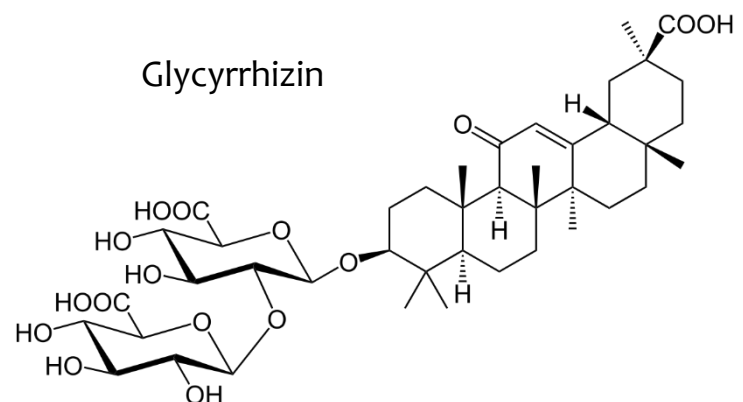


roots and rhizomes are the main medicinal parts of Liquorice. *Glycyrrhiza glabra* Linn. is also called as Liquorice, Mulaithi or Yashtimadu. Glycyrrhiza is a word derived from the ancient Greek term 'glykos', meaning sweet, and 'rhiza', meaning root [1]. This plant is generally used as a flavoring agent

due to its sweetness. *Glycyrrhiza glabra* plays an important part in Ayurveda and Siddha (Indian Traditional Medicine Systems) arrangement of drug acting as ulcer protective, demulcent, expectorant, anti-tussive and purgative [1]

Active Constituents: A number of components have been isolated from Liquorice, includes triterpene saponins, flavonoids, polysaccharides, pectins, simple sugars, amino acids, mineral salts, and various other substances. Glycyrrhizin, a triterpenoid compound, accounts for the sweet taste of Liquorice root. The yellow color of Liquorice is due to the flavonoid content of the plant, which includes liquiritin, isoliquiritin (a chalcone), and other

compounds [3]. The isoflavones glabridin and hispag labridins A and B have significant antioxidant activity and both glabridin and glabrene possess estrogen-like activity [4].



Medicinal Uses:

Tonic, demulcent, expectorant, diuretic, mild laxative, anti-arthritis, anti-

inflammatory, anti-biotic, anti-viral, anti-ulcer, memory stimulant (being MAO inhibitor), anti-tussive, aphrodisiac, anti-mytotic, estrogenic, anti-oxidant, anti-caries agent, anti-neoplastic, anti-cholinergic, anti-diuretic, hypolipidemic activity, etc [5].

Clinical Studies:

In a double-blind, placebo-controlled study, 70 patients with endoscopically-confirmed gastric or duodenal ulcers were given carbenoxolone sodium 300 mg or placebo daily during the first seven days, followed by 150 mg daily over the next 3-5 weeks. The authors concluded the carbenoxolone group had an increase in pH at the stomach antrum from 1.1 to 6.0, and a reduction in basal and histamine-induced gastric

acid secretion at pH 3 and 5. Overall, 70 percent of ulcers in the glycyrrhizin group healed within 3-5 weeks of beginning therapy, compared to 36 percent employing placebo [6].

In a trial of 15 normal-weight subjects (seven males, eight females, ages 22-26), 3.5 mg of a commercial Liquorice preparation daily for two months resulted in a decrease in body fat mass. Plasma renin activity and aldosterone were also suppressed. No changes in body mass index were noted. These results indicate Liquorice and its constituents can reduce body fat by inhibiting 11- β -hydroxysteroid dehydrogenase in fat cells [7].

Grades Available: 18% Glycyrrhizinic acid

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