

*Full Length Research Paper*

# **Biological study of the effect of licorice roots extract on serum lipid profile, liver enzymes and kidney function tests in albino mice**

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This study was carried out to elucidate the effects of oral administration of *Glycyrrhiza glabra* root extract on serum lipid profile, liver enzymes, kidney function test, and glucose concentration in albino mice when compared with ten male mice used as control. 40 male mice were treated for one month and equally allocated into four groups: the first group (G1) was used as the control group. The second (G2), third (G3) and fourth groups (G4) were treated with 1 ml of 0.2, 0.7 and 1 mg mL<sup>-1</sup> day<sup>-1</sup>, respectively. There was statistically high significance difference between treated and untreated groups for all biochemical parameters, showing a remarkable effect on serum lipid profile, enzymes and kidney function test. *G. glabra* root extract at low dose act as anti-lipidaemic agent, has hepatoprotective activity for liver cell, prevents renal failure and is an anti-hyperglycemic agent.

**Key words:** *Glycyrrhiza glabra*, liver enzymes, serum lipid profile, kidney function test, glucose concentration.