

Evaluation of the effect of a water extract of *Alstonia scholaris* leaves on serum glucose levels in rats

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The present study was conducted to evaluate the effect of short term administration of water extract of *Alstonia scholaris* leaves (ALSLWExt) on serum glucose levels, body weight, and food - water consumption of healthy Wistar albino rats. Oral administration of ALSLWExt (1ml = 1.4g) at a dose of 5ml/kg body weight as a single dose for 14 consecutive days showed significant reduction in fasting glucose level in the test group compared to that of the control group, which received same volume of distilled water for 14 days. The percentage increase in serum glucose concentration after external glucose load in the test group was highly significant compared to that of the control group. Increase in body weight of the test group was attenuated while the amount of food consumption was increased. These findings reveal that the short term oral administration of ALSLWExt possesses potential effect in reducing fasting serum glucose level and attenuating weight gaining in healthy rats. Pharmacological and toxicological studies to evaluate the safety and efficacy of orally administered ALSLWExt are suggested.

Key words: *Alstonia scholaris*, Serum Glucose, Body weight, Food -water consumption

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