Effect of Luffa aegyptiaca (seeds) and Carissa edulis (leaves) extracts on blood glucose level of normal and streptozotocin diabetic rats.

El-Fiky FK, Abou-Karam MA, Afify EA.

Department of Pharmacognosy, University of Alexandria, Egypt.

The present study investigates the effect of oral administration of the ethanolic extracts of Luffa aegyptiaca (seeds) and Carissa edulis (leaves) on blood glucose levels both in normal and streptozotocin (STZ) diabetic rats. Treatment with both extracts significantly reduced the blood glucose level in STZ diabetic rats during the first three hours of treatment. L. aegyptiaca extract decreased blood glucose level with a potency similar to that of the biguanide, metformin. The total glycaemic areas were 589.61 +/- 45.62 mg/dl/3 h and 660.38 +/- 64.44 mg/dl/3 h for L. aegyptiaca and metformin, respectively, vs. 816.73 +/- 43.21 mg/dl/3 h for the control (P < 0.05). On the other hand, in normal rats, both treatments produced insignificant changes in blood glucose levels compared to glibenclamide treatment.

PMID: 8778506 [PubMed - indexed for MEDLINE]