

Effects of *Moringa Oleifera* Aqueous Leaf Extract on Submandibular Salivary Glands of Diabetic Albino Rats

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Abstract

Moringa Oleifera (MO), also known as the "drumstick tree," is recognized as a nutritious and cheap source of phytochemicals, that have a prominent anti-oxidative effect. Salivary gland dysfunction has been frequently reported in diabetic patients. Diabetes is a chronic metabolic disease that has complications mainly resulting from persistent hyperglycemia. Aim of the study: To Assess the effect of MO aqueous leaf extract on blood glucose levels in diabetic albino rats and its effect on submandibular salivary glands of diabetic albino rats. Materials and methods: the study comprised three groups; control, diabetic and MO treated groups. The experiment was terminated after fourteen days. The evaluation was performed by measuring the blood glucose levels and weight. Histological evaluation was done by H&E, PAS and IHC for COX-2. Results: the blood glucose levels and histological signs of diabetic complications were significantly lowered in the MO treated group. Conclusion: MO is a promising anti-diabetic treatment and may even reverse some of the diabetic complications.

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