

Antidiabetic Compound in Juice of *Momordica Charantia*

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Abstract: *The present article provides an overview of Diabetic mellitus and its treatment with insulin, oral hypoglycemic drugs, and herbal drugs. Despite significant progress in the treatment of diabetes with oral hypoglycemic agents, the search for newer drugs continues because current synthetic drugs have several limitations. Herbal drugs with antidiabetic activity have yet to be commercially formulated as modern medicines, despite being recognized for their therapeutic properties in traditional medical systems. This study investigated the beneficial effects and mechanism of action of the juice of *Momordica charantia* on streptozotocin (STZ)-induced diabetes in rats. Diabetes mellitus was linked to significant ($p < 0.01$) reductions in body weight, plasma insulin, and insulin-positive cells per islet, as well as significant ($p < 0.01$) increases in blood glucose, osmolarity, and systolic blood pressure over time compared to age-matched healthy controls. Oral administration of *M. charantia* juice to STZ-induced diabetic rats partially reversed all of the diabetes-induced effects observed.*

Keywords: Diabetic mellitus, oral hypoglycemic, *M. charantia*, antidiabetic, Herbal drugs, Juice