**Research Paper**

# FORMULATION DEVELOPMENT AND EVALUATION OF GASTRO-RETENTIVE ANTI DIABETIC DRUG

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Gastro retentive tablet of an Anti diabetic drug was developed to prolong the gastric residence time, leading to an increase in drug bioavailability and reduced dose frequency. Rosiglitazone Maleate is an anti-diabetic agent is used in the management of Type-II diabetes mellitus. The formulated Gastro retentive tablets containing 8 mg Rosiglitazone Maleate were developed using Hydroxyl propyl methyl cellulose (Benecil) and different additives. The formulated tablets obtained by the direct compression method, followed by optimization of the evaluated parameters were employed to get the final optimized formulation. The resulting formulations indicated optimum hardness, uniform thickness, consistent weight uniformity and low friability. The formulated tablets were able to continuously float over the stimulated gastric fluid for 24hrs. The results of *in vitro* drug release studies showed that optimized formulation (PF5) could release the drug (98%) for more than 24 hrs and remain buoyant for more than 24 hrs.

**Key words:** Rosiglitazone Maleate, Gastro-retentive Drug Delivery System, Hydroxyl propyl methyl cellulose, Floating Tablet.

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