

Gastro Retentive Drug Delivery Systems A Capstone Project Report Submitted In Partial Fulfillment Of The Requirement For The Degree Of Bachelor Of Pharmacy

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LIST OF ABBREVIATIONS

Abbreviations	Full Form of Abbreviations
GRDDs	Gastro retentive drug delivery system
GIT	Gastro intestinal tract

INTRODUCTION:

Principal route of drug administration has always been an oral pathway but in the last few years there has been tremendous advancement in oral drug delivery system including those systems which work as reservoir of drug from which active pharmaceutical ingredient is released over a defined period time in a controlled manner. However, this route has certain physiological issues such as unforeseeable gastric emptying rate and absorption window's presence in the upper region of intestine. [1] To eliminate these issues, researchers have constructed a new form of drug delivery system which can lie in the gastric region for a good quality of time and its retention period

can be predicted, such system has been named as gastro retentive drug delivery system (GRDDs).

GRDDs is known to improve controlled delivery of drugs having an absorption window. This is done by maintaining continuous release of drug for a long time before it reaches the site of absorption.[3] There can be various reasons for increasing the gastric retention of drugs, one such reason is that it improves therapeutic benefits of drugs which are either absorbed from the proximal region of gastro intestinal tract (GIT) or are poorly soluble. The advantage of using GRDDs is that it

- ❖ It enhances solubility of drugs
- ❖ Therapeutic efficiency is improved
- ❖ dose of drug is reduced



- ❖ unnecessary drug throw away is reduced

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Statement by the Candidate

This is to submit that this written submission in my project report entitled "**Gastro retentive drug delivery systems**" represents original ideas in my own words and where others' ideas or words have been included. I have adequately cited and referenced the original sources. I also declare that I have stuck all principles of academic honesty and integrity and have not misrepresented or fabricated

or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will be cause for disciplinary action by the school and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when required.

I assure and hold full responsibility for its genuineness.

Rajnish Gupta
Forwarded Through
Ms. Deep Shikha Sharma
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Certificate by Supervisor

The work described in this project report entitled "**Gastro retentive drug delivery systems**" been carried out by Rajnish Gupta under my supervision. I certify that this is his bonafide work. The work described is original and has not been submitted for any degree to this or any other university.

Date: Ms. Deep Shikha Sharma
Place: Phagwara
(Assistant Professor)

Certificate by School

This is certified that the work described in this project report entitled "**Gastro retentive drug delivery systems**" has been carried out by Rajnish Gupta at the School of Pharmaceutical Sciences, Lovely Professional University, Phagwara.

Signature of HOD/HOS