

# Gastroretentive (Floating) Drug Delivery System: A Review

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**Abstract:** In the recent years, scientific and technological advancements have been made in the research and development of novel drug delivery systems by overcoming physiological troubles such as short gastric residence times and unpredictable gastric emptying times. Gastric emptying of dosage form is extremely variable process and ability to prolong and control the emptying time. Gastric transit time is valuable asset for dosage forms, which reside in the stomach for a long period of time than conventional dosage form. Several approaches are currently utilized in the prolongation of the gastric residence times, including floating drug delivery systems, swelling and expanding systems, polymeric bioadhesive systems, modified-shape systems, high-density systems and other delayed gastric emptying devices. The purpose of writing this review on floating drug delivery systems (FDDS) was to compile the recent literature with special focus on the principal mechanism of floatation to achieve gastric retention. This review explains briefly about types of floating system, advantages, limitation, floating mechanism, factors affecting floating system, drug candidates suitable for floating, evaluation parameters and application of the system.

**Keywords:** Gastric Residence Times, Gastric Emptying Times, Swelling, Bioadhesive.

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