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Beyond the Surface Unveiling the Intricacies of Floating Drug Delivery Systems

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Abstract: Writing an overview on the FDDS served the goal of comprehending the fundamentals of drifting as a means of achieving stomach retention. Both the effervescent and inertvarieties of floating tablets are created using various methods based on buoyancy principles in the production of FDDS. API which are unstable at the lower intestine environment, have a restricted absorptionwindow at the upper GIT, are less soluble in higher pH values, and are active locally can be delivered using FDDS. The technique of design in a floating single unit and several units system, the physical & formulation, and variable impacting stomach retain are all included in the development of FDDS. Reviewing numerous in-vitro and in-vivo procedures with an eye on performance and use in FDDS, the review concentrates on and summarizes these methods. When an appropriate component and gas-generating agent are included, it is possible to administer floating dosage forms in formsthat are not intended for oral administration, such as tablets and capsules. The method is helpful in solving a number of issues that came up when developing drug dosages. Along with current and unique advancements, the review paper sheds light on several strategies employed at development of floating Forms of dosage.

Keywords: FDDS, GIT, Gastric retention, Bioavailability, prolong release, in vitro buoyancy

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