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Formulation and Evaluation of Famotidine Floating Tablet

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Abstract: *The aim of this study is to prepare the famotidine gastric retention system. Famotidine Floating tablet were prepared by using Guar gum and Xanthan gum by effervescent Technique. Sodium bicarbonate is added to make fuel. Floating tablets are evaluated for weight uniformity, hardness, friability, drug content, in vitro buoyancy, and dissolution studies. The effect of citric acid on drug release profile and flotation properties was investigated. It has been shown that the prepared tablets have a positive effect on the body. All preparations showed good buoyancy in vitro. In in vitro flotation studies, tablets expandradially and axially. It has been found that the tablet remains floating for 6 hours. Lowering the citric acid level increases floating time, but the tablets float longer the aim of this study is to prepare a floating drug carrier system of famotidine. Famotidine is poorly absorbed in an acidic environment (upper gastrointestinal tract). When taken orally, its bioavailability is close to 50%. To overcome these shortcomings, this study aims to investigate the variable data of famotidine. The aim of this study is to prolong the residence time in the stomach by creating floating tablets of famotidine and to investigate the effects of different polymers on its release. Three famotidine formulations containing various polymers were developed through optimization The prepared tablets were evaluated in terms of physicochemical parameters such as hardness, floating properties (swimming delay time, floating time) and chemical content. Physicochemical parameters of the formulated tablets were found within normal limits.*

Keywords: Famotidine