



## Evaluation of Oral Fast Disintegrating Tablet of Taste Masked Famotidine in Rat

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**SUMMARY.** The purpose of this research was to formulate fast-disintegrating tablets of famotidine by using tasteless complex of famotidine. Famotidine is a commonly used antiulcer drug but major disadvantage is its bitterness and low bioavailability. A fast-disintegrating dosage form has been developed as a user-friendly formulation that disintegrates in the mouth immediately. In this study the bitter taste of famotidine was masked by making complex with ion exchange resin Indion 214. The drug-resin complexes were characterized by infrared spectroscopy and thermal analysis. Famotidine oral fast disintegrating tablets were prepared by direct compression method by using different superdisintegrants. The prepared tablets were found to comply with various official specifications. Tablet containing crospovidone as superdisintegrating agent showed superior organoleptic properties, along with excellent *in vitro* disintegrating time and drug release, as compared to other formulation. The *in vivo* anti ulcer activity in rats shown that there was no bioavailability change due to complexation and tablet had good antiulcer activity.

**KEY WORDS:** Famotidine, Oral fast disintegrating tablets, Superdisintegrating agent, Taste masking.

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