

# DESIGN, DEVELOPMENT AND EVALUATION OF HERBAL LOZENGES FOR LAXATIVE ACTIVITY

Ravali K. Battula<sup>a</sup>, Aswani Borrigorla<sup>a</sup>, Sivani Macha<sup>a</sup>, Maddhu L. Palisetty<sup>a</sup>, Sri M. Motupalli<sup>a</sup>,  
Ravi Ketipally<sup>a\*</sup> and Ramarao Nadendla<sup>a</sup>

(Received 23 May 2024) (Accepted 03 December 2024)

## ABSTRACT

India is one of the countries where a large section of the population uses traditional systems of medicine. Herbal medicines are yet the base of about 75 to 80% of worldwide population due to their acceptability, compatibility with human body, availability and minimal side effects. Lozenges are solid unit dosage forms that dissolve in the oral cavity and enter systemic circulation to show pharmacological effect with increased retention time in oral cavity. Thereby, it bypasses the first pass metabolism, reduces gastric irritation, and boosts bioavailability. Constipation is epitomized by irregular and infrequent bowel movements that lasts for over a week. The primary intent of this research study is to design a herbal laxative lozenge to ameliorate constipation by taking advantage of dill, fennel, ajwain and perform respective evaluation studies. Present research includes *in vitro* studies where rats are evaluated with volume of faeces and moisture content analysis. DoE was employed for optimization of formulation studies.