

THE DEVELOPMENT OF DENTAL DRUG IN THE FORM OF MEDICATED CHEWING GUM

OLEKSII YAKOVENKO, JULIA MASLIY

National University of Pharmacy, Kharkiv, Ukraine; realmanutd.ua@gmail.com

Every year the number of people with diseases of the mouth cavity is growing rapidly. Therefore, the necessity for dosage forms, which would effectively contribute to the treatment of these diseases, is an urgent problem today. Medicated chewing gum (MCG), which carry out a role of oral drug delivery, is the optimal formulation for the prevention and treatment of dental diseases, due to their advantages – fast local effect, no need to swallow, the possibility of applying in any convenient place for the patient, as it does not need water, reduced the first-pass metabolism, as well as a better perception of the patient and a more pleasant mode of administration. Besides that, MCGs increase of secretion of saliva, which helps digestion, cleaning and remineralization of teeth, effective in the prevention and treatment of xerostomia, the process of mastication has massaging effect on the gingiva, which leads to greater blood flow and microcirculation of periodontal tissues. Moreover, properly selected active pharmaceutical ingredients (APIs) in the composition of the dosage form provide the appropriate comprehensive treatment and preventive effect on hard tissues of teeth, periodontal tissues and mucous. That is why the aim of our work was to develop a dental drug of comprehensive action in the form of medicated chewing gum.