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## Formulation and Evaluation of Fast Dissolving Tablet of Diclofenac Sodium

Kalpana Singh<sup>1</sup>, Urmita Nishad<sup>2</sup>, Vivek Kumar<sup>3</sup>,  
Anupama Maurya<sup>1</sup>, Meraj Ali<sup>2</sup>

<sup>1,2</sup>*Institute of Pharmaceutical Sciences & Research  
Sahaswan, Unnao*

<sup>3</sup>*Faculty of Gaya Prasad Institute of Human Excellence  
for Pharmacy*

<sup>4</sup>*Faculty of J.P. Parna College of Pharmacy, Taran,  
Gauguh, Haridwar*

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### ABSTRACT

The present study was aimed to formulate, evaluate, and optimize a tablet that disintegrates and dissolved rapidly to show a rapid onset action. Diclofenac sodium, non-steroidal-inflammatory, analgesic, and pyretic properties were selected as a model drug. Diclofenac sodium is among the most extensively used Non-steroidal anti-inflammatory drugs, employed in musculoskeletal complaints, especially arthritis. In the present study, an attempt has been made to prepare fast dissolving tablets of diclofenac sodium using super disintegrants like sodium starch Glycolate, Croscarmellose sodium, Croscopolone and starch by direct compression technique using 3 different concentrations of super disintegrants. The pre-compression parameters of the tablet-like hardness, friability, weight variation, disintegration time, in-vitro dissolution release rate, and drug content. It was concluded that the batch which was prepared by using a combination of croscopolone and sodium starch Glycolate as a superdisintegrants shows excellent disintegration time, enhance dissolution rate, taste-masking and hence lead to improve efficacy and bioavailability of a drug.