

**DEVELOPMENT AND IN-VITRO EVALUATE MEDICATED LOLLIPOP  
CONTAINING MECLIZINE HYDROCHLORIDE**

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**ABSTRACT**

**Problem Statement:** Motion sickness is a sensation of wooziness. Motion sickness is a common problem in people travelling by car, train, airplanes, and especially boats. Anyone can get it, but it is more common in children, pregnant women, and people taking certain medicines. Motion sickness can start suddenly, with a queasy feeling and cold sweats. It can then lead to dizziness and nausea and vomiting. Meclizine hydrochloride administration should be 6 to 8 h before travel starts or before the expected onset of motion sickness.

**Purpose:** The purpose of this study was to resolved related problems, Meclizine acts as a central nervous system depressant. It continues being effective for eight to 24 hours. It may also be used to reduce dizziness and loss of balance caused by inner ear problems. Oral route Many drugs can be administered orally as liquids, capsules, tablets, or chewable tablets. Because the oral route is the most convenient and usually the safest and least expensive. Medicated lollipop having potential to drug delivery orally, therefore the purpose of this study was formulating medicated lollipop for the orally drug delivery of meclizine hydrochloride.

**Method:** Medicated lollipop was prepared by using Required quantity of sugar syrup was prepared mixing sugar and water. sucrose was dissolved in small quantity of water and heated it to 110°C till sucrose dissolves completely forming as clear viscous sucrose syrup. Then the sucrose syrup was poured into the corn syrup and heated to 160°C till the colour changes to golden yellow. Flavour was added between 120°C to 135°C then temperature was down to 90°C and drug, polymer and other ingredients were added and mixed it well. The prepared mixture

was poured into the calibrated mould , After 1-2 hrs medicated lollipop was peeled out from the calibrated mould and evaluated.

**Result:** The formulation containing Require quantity of sugar, corn syrup and HPMC K 100M with solvent used water contained was prepared medicated lollipop was the optimized batch with hardness 11.8kg/cm<sup>2</sup> and drug released study 96.69%. Stability study shows developed medicated lollipop was stable at 25° C ± 2° C at 50 ± 5% RH (Room Temperature) and 30° C ± 2° C at 65 ± 5% RH (accelerated condition) after One months.

**Conclusion:** So, This Medicated lollipop formula (F8) is considered to be a potential vehicle for a meclizine hydrochloride for delivering drug orally.

**Keywords:** Meclizine hydrochloride, Sucrose, Corn syrup, HPMC K100 M, Citric acid, Calcium carbonate