OBJECTIVES

Drugs can be administered by various routes depending upon need, but oral route is the oldest and common mode of drug administration in many diseases. The solid dosage form include powder, tablets, capsule, moulds, etc. but the tablet is the most widely used dosage form because of its convenience in term of self administration, accurate dose, compactness, low cost and ease of manufacturing. However pediatric and geriatric patient experience difficulties in swallowing conventional tablets, which lead to poor patient compliance. Traditional tablets and capsule administered with an 8-oz glass of water may be inconvenient for some patient to swallow, because of this the intended therapeutic drug response cannot be observed.

In some cases such as motion sickness, sudden episode of allergic attack or coughing and unavailability of water during traveling, swallowing conventional tablets may be difficult. Such a problem can be resolved by means of fast dissolving tablet. When put on tongue, this tablet disintegrates instantaneously, releasing the drug, which dissolve or disperse in the saliva. Some of the drugs are absorbed from the mouth, pharynx and esophagus as the saliva passes down the stomach. 

In such cases, bioavailability of drug is significantly greater than those observed from conventional tablet dosage form. A wide range of drugs can be considered as a candidate for this dosage form [e.g., Analgesics and anti-inflammatory agents, Anti-epileptics, Anti-fungal agents, Antimalarial, Anti-gout agents, Anti-hypertensive agents, Antibacterial-agents, Anti-neoplastic agents, Anti-thyroid agents, Diuretics, Anti-parkinsonian agents, Anxiolytic, Sedatives, Hypnotics, and Neuroleptics, Lipid-regulating agents, Opioid analgesics].

Analgesic and Anti-inflammatory drugs are usually indicated for the treatment of acute or chronic conditions where pain and inflammation are present. In the present work, this class of drug is proposed to be used as a model drug for the study. The low aqueous solubility problem of Analgesic and Anti-inflammatory drug can be overcome by formulating it into a solid dispersion or by complexation.

Further mouth dissolving tablets offers following advantages
- Improved taste of the tablets has patient acceptability.
- More rapid drug absorption through pre-gastrum area like mouth, pharynx and oesophagus.
- Free from the risk of suffocation due to physical obstruction when swallowed and thus offer improved safety.
- Ease of administration for patients who are mentally ill, disabled, amulatory and non-cooperative.
- Requires no water intake. It can be designed to leave minimal or no residue in the mouth after administration.