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## Sublingual Route of Administration

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### ABSTRACT

Oral route is the most preferred route to administer the drug to the human body to obtain the desired therapeutic effect. The Sublingual route is one of the most popular alternative routes of administration for systemic drug delivery. These are solid unit dosage form which disintegrate or dissolve rapidly in the mouth without chewing and water. It is most advantageous for paediatric and geriatric patients who have difficulty in swallowing. Sublingual administration of the drug means placement of the drug under the tongue and drug reaches directly into the blood stream through the ventral surface of the tongue and floor of the mouth and enters the sublingual blood vessels, by passing the hepatic first-pass metabolic process. It usually provides a fast onset of action than orally ingested tablets. The epithelial membrane is 100-200  $\mu\text{m}$  thick in the sublingual region and 500-600  $\mu\text{m}$  in the buccal region. The epithelial membrane in both regions is non-keratinized and the abundance of blood supply at the sublingual region provides good drug penetration to achieve the highest plasma drug concentration with a rapid onset of action. It should be noted that smoking, which leads to vasoconstriction, may affect the absorption of the drug. The different formulations are usually prepared with the help of direct compression method because they exhibit good mechanical strength and fast dissolution. Nowadays, the people need effective relief with less dose and short period of time so sublingual tablet is the most suitable form of administration.

**Keywords:** Bioavailability, Sublingual tablet, Quick onset of action

