

# **SNS COLLEGE OF PHARMACY AND HEALTH SCIENCES**



*Affiliated To The Tamil Nadu Dr. MGR Medical University, Chennai*

*Approved by Pharmacy Council of India, New Delhi.*

**Coimbatore -641035**

**COURSE NAME : NOVEL DRUG DELIVERY SYSTEM (BP 706 T)**

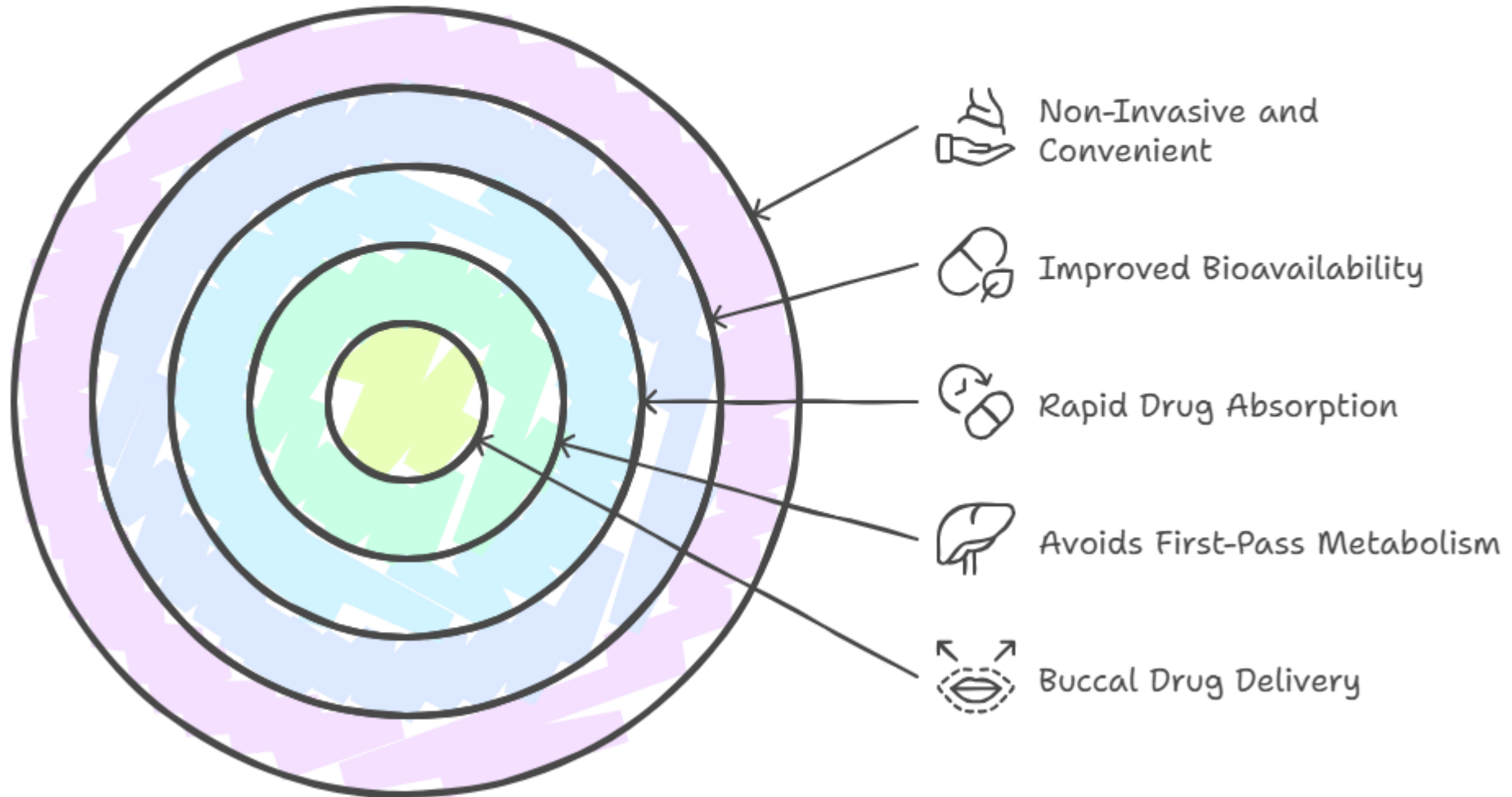
**VII SEM / IV YEAR**

**UNIT -2**

**TOPIC 2 :BUCCAL DRUG DELIVERY SYSTEM**



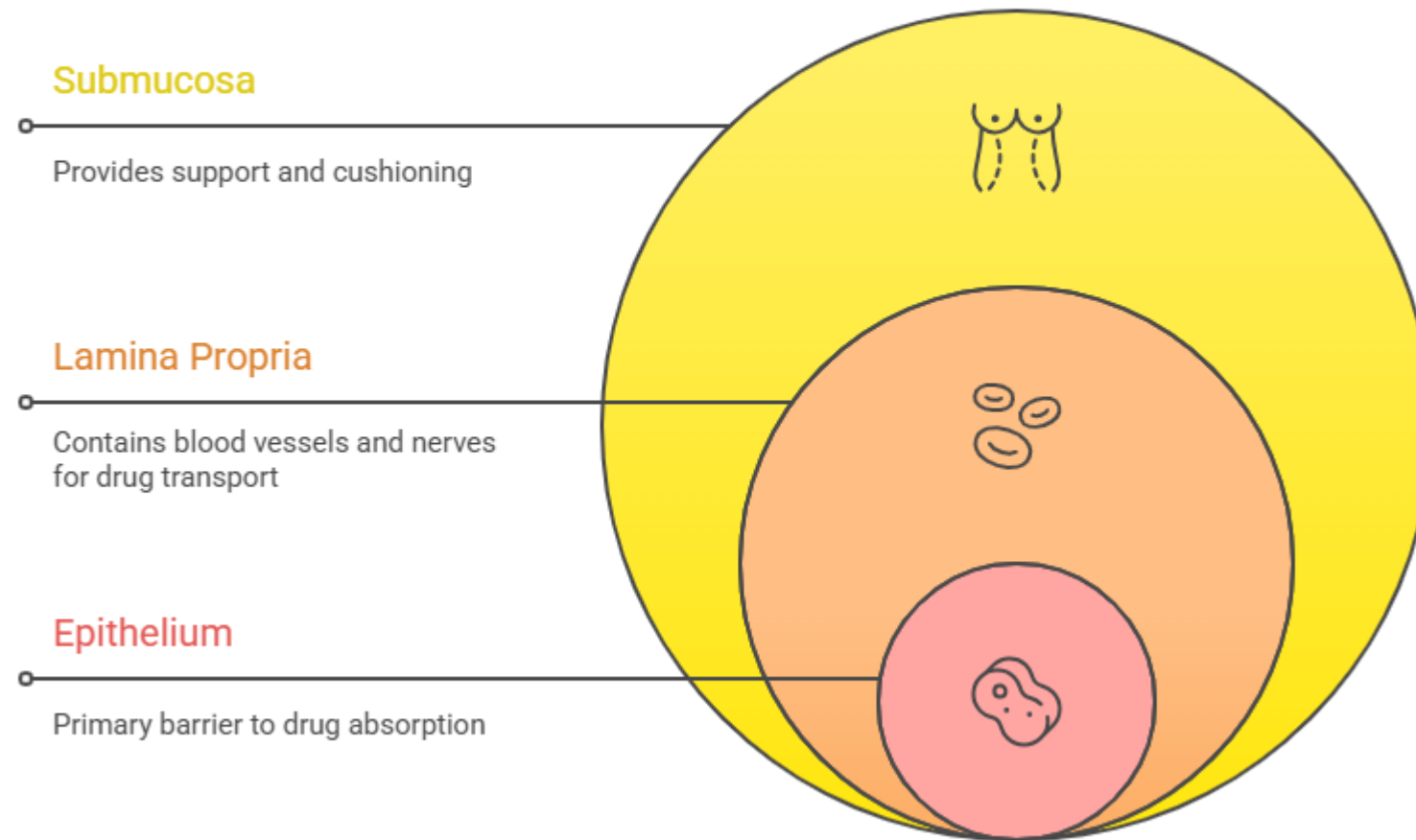
## INTRODUCTION TO BUCCAL DRUG DELIVERY



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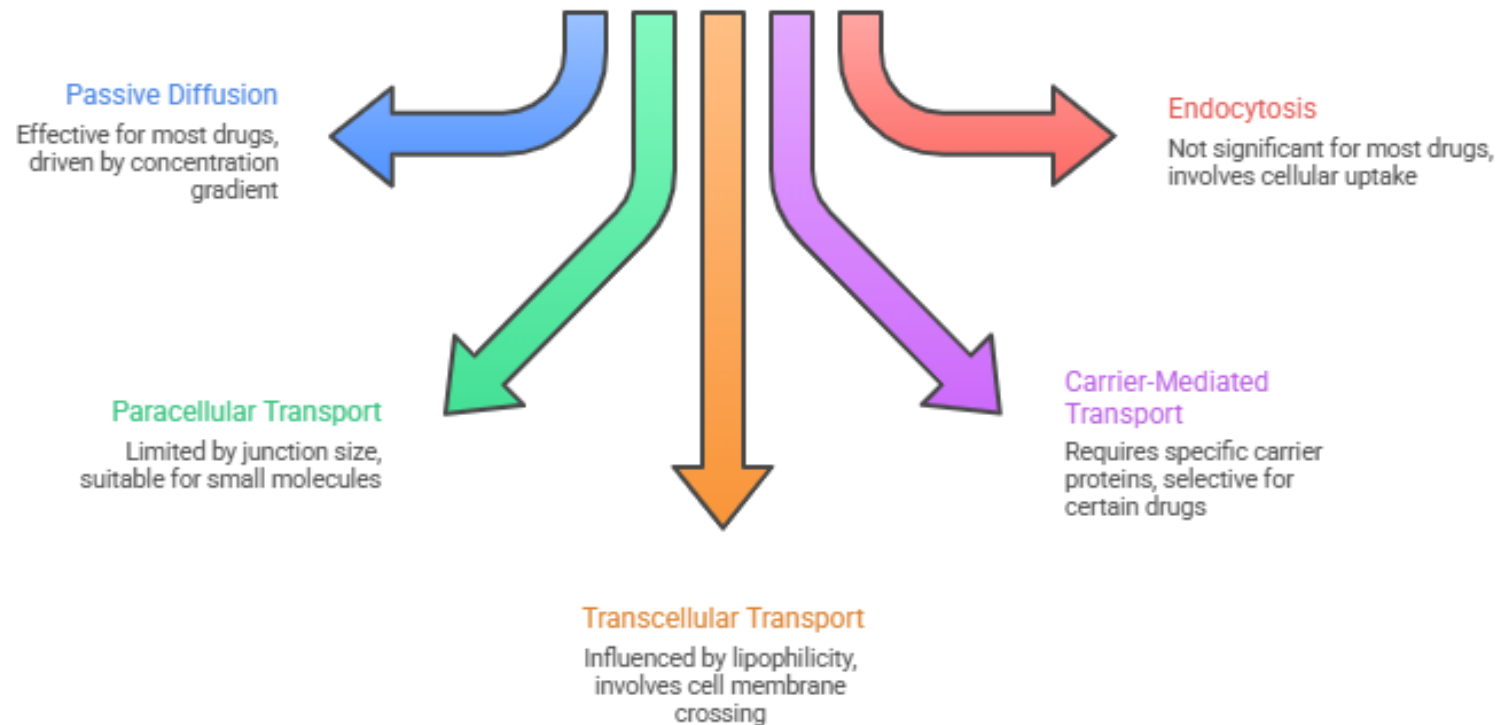
## Anatomy of buccal mucosa



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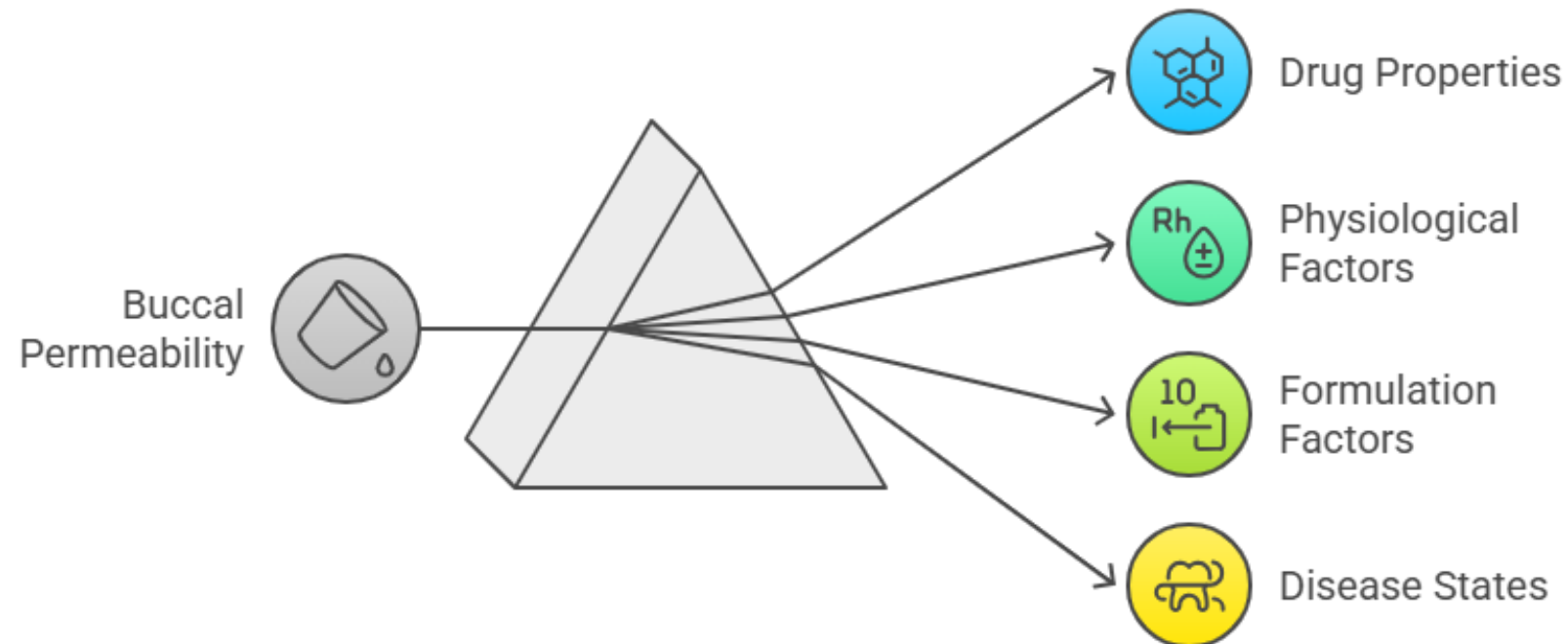
## Mechanisms of Drug Transport Across the Buccal Mucosa



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## Factors Influencing Buccal Permeability



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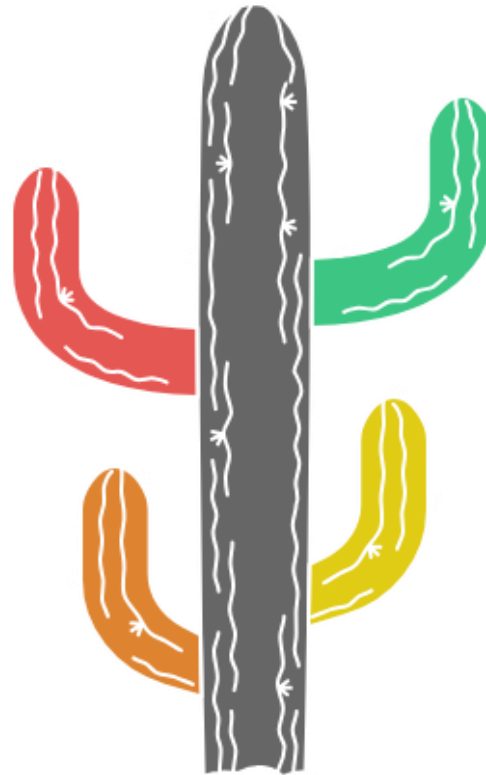
## Buccal Drug Absorption Barriers

### Submucosal Blood Flow

Removes drug too quickly

### Epithelial Barrier

Impedes drug permeation



### Enzymatic Degradation

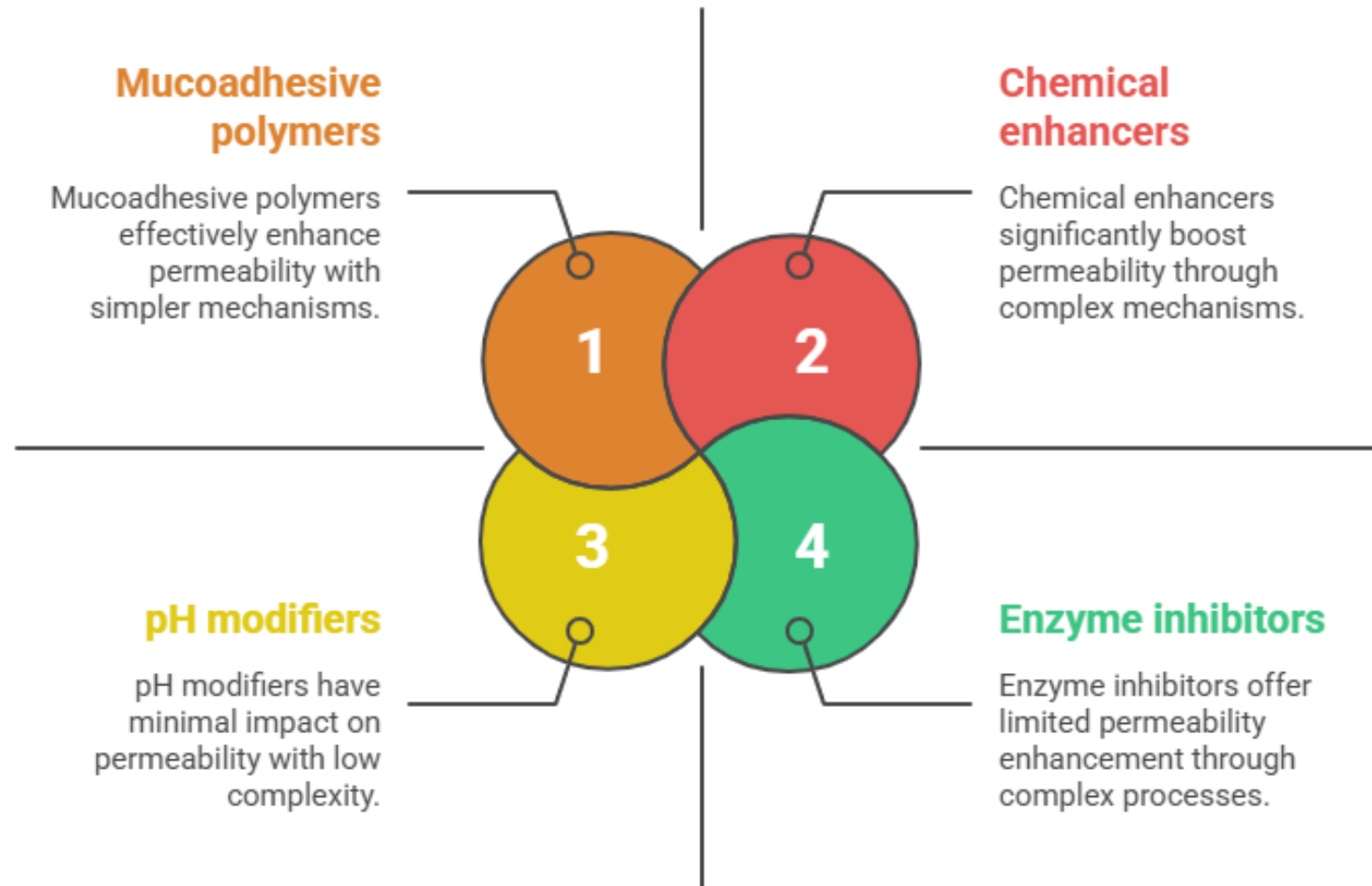
Enzymes degrade some drugs

### Saliva

Dilutes and washes away drug



# Permeation Enhancement Strategies for Buccal Drug Delivery



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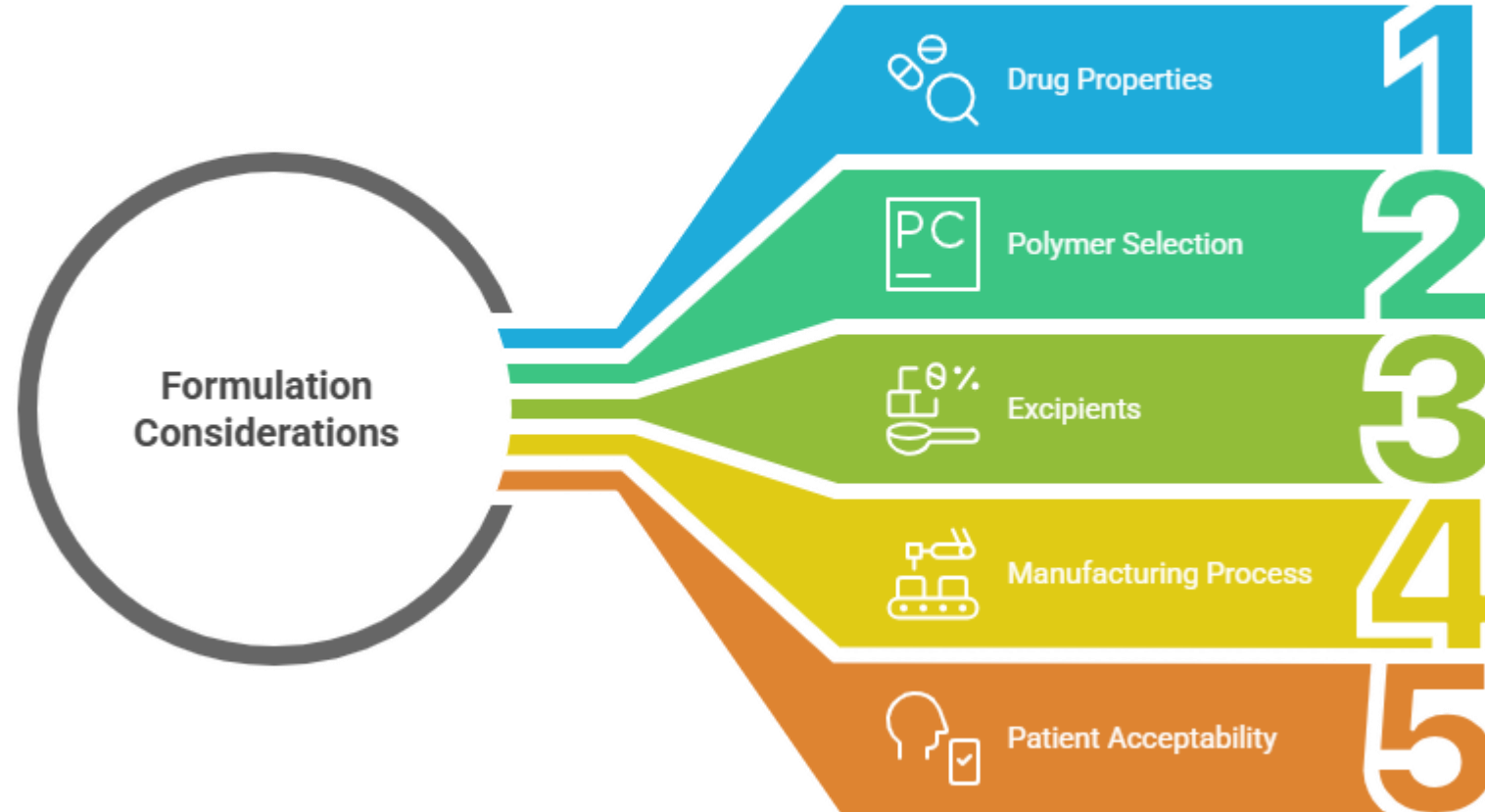
## Buccal dosage forms



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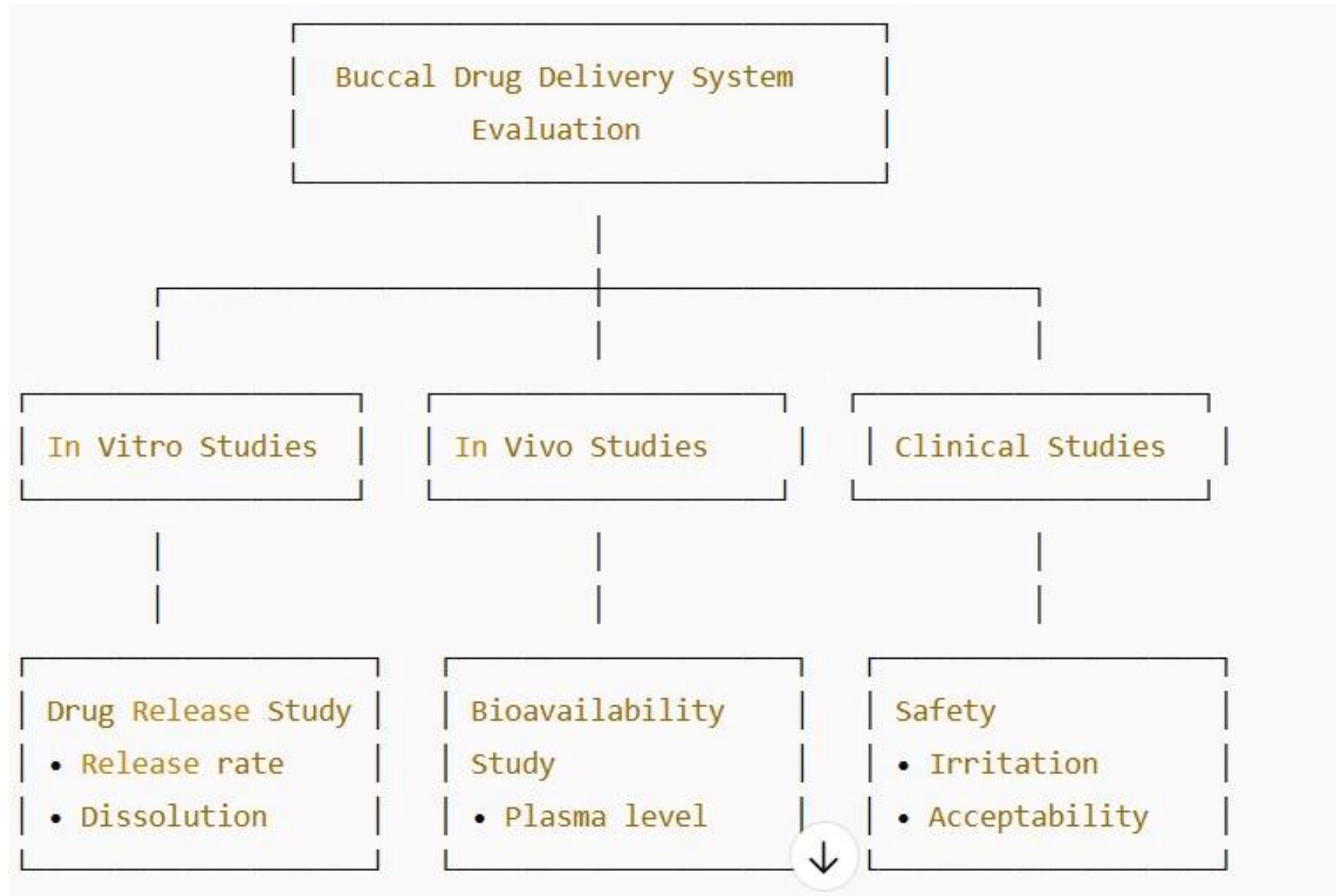
## Unveiling Formulation Considerations for Buccal Delivery



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# SUMMARY

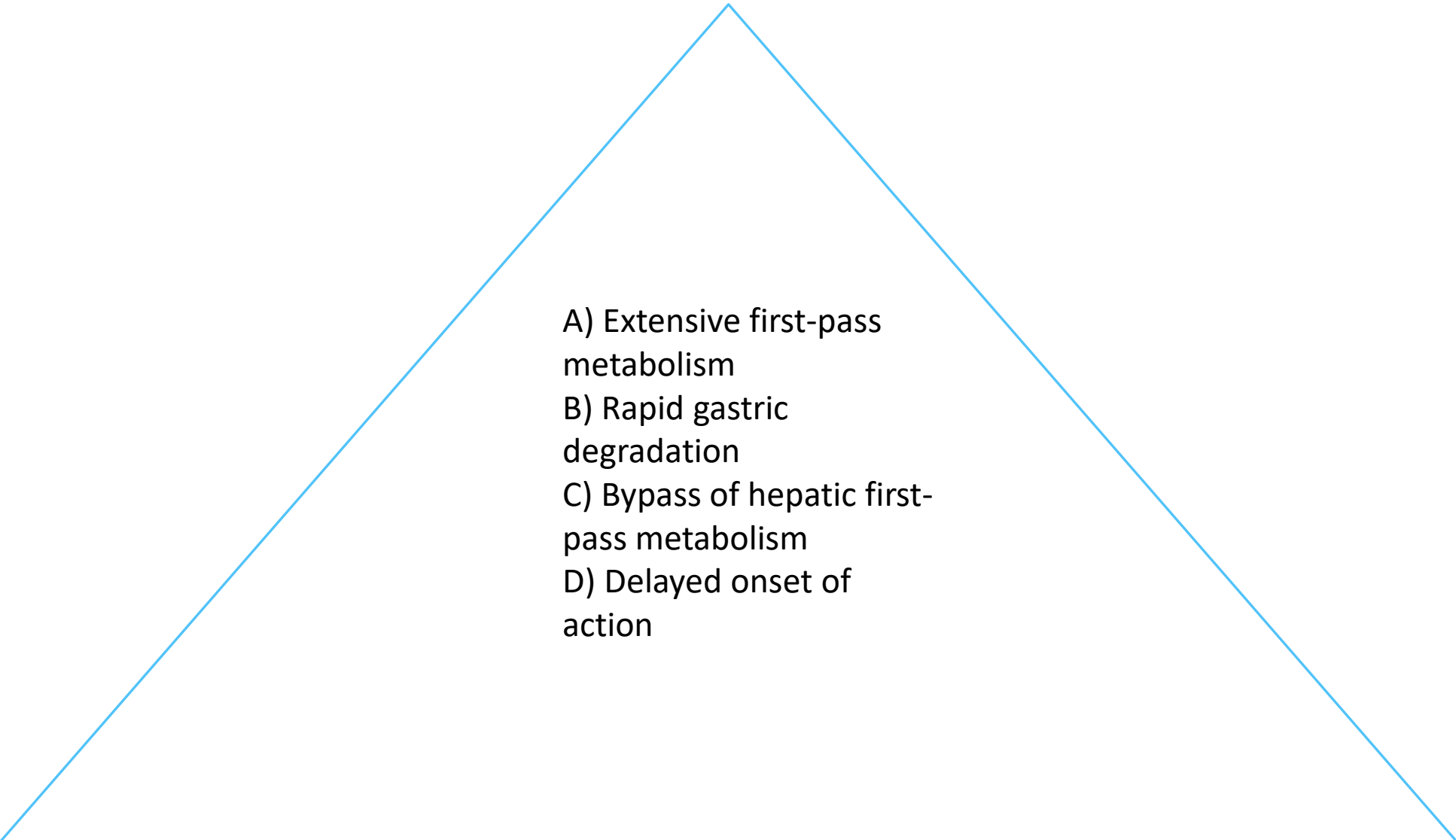




1. Which of the following is a major advantage of buccal drug delivery?





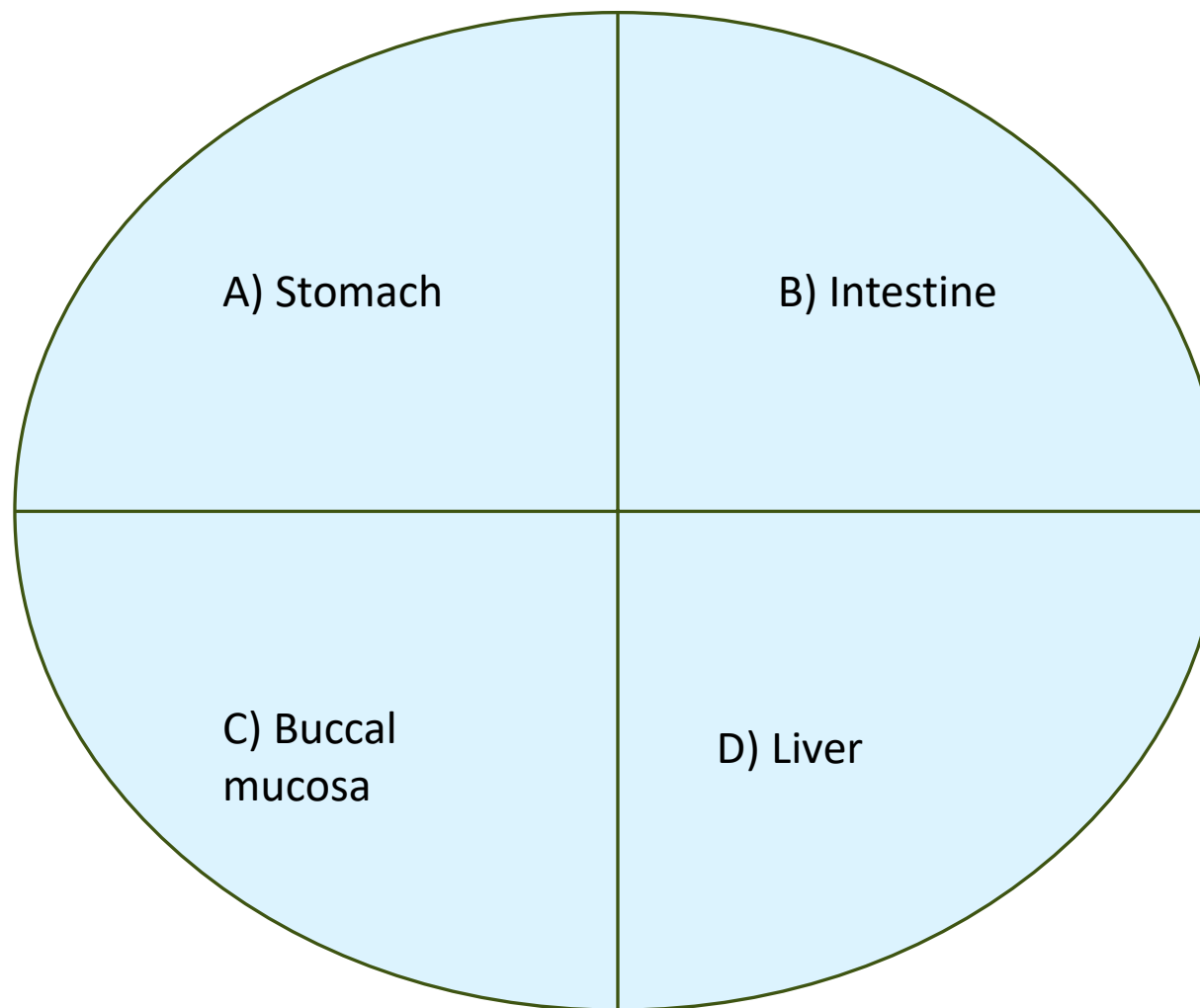
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- A) Extensive first-pass metabolism
  - B) Rapid gastric degradation
  - C) Bypass of hepatic first-pass metabolism
  - D) Delayed onset of action



The primary site for buccal drug absorption is





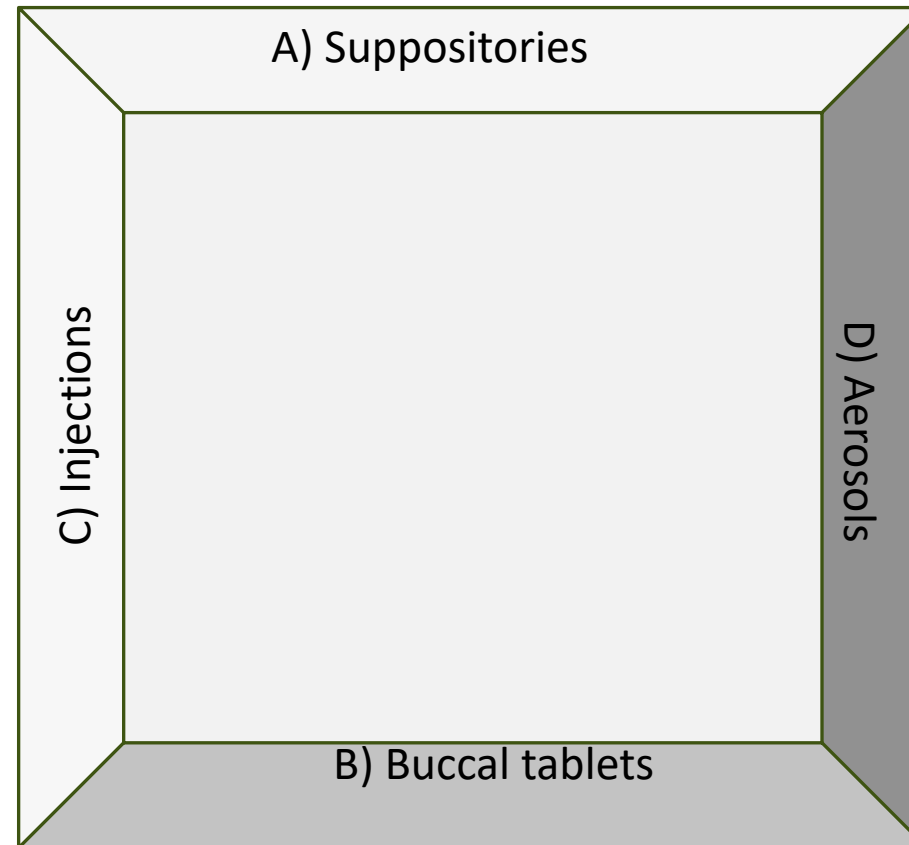




Which type of dosage form is commonly used in buccal drug delivery?









## REFERENCES

1. Yie W. Chien: Novel Drug Delivery Systems, Second Edition, Marcel Dekker, Inc, 1992 Pg no.816.
2. Joseph R. Robinson: Sustained and Controlled Release Drug Delivery Systems, First edition, Volume 6, Marcel Dekker, Inc,1986,pg.618.
3. <https://www.sciencedirect.com/journal/journal-of-controlled-release>
4. <https://www.tandfonline.com/doi/full/10.1080/10837450.2018.1534376>
5. <https://www.scribd.com/document/668313752/Controlled-and-Novel-Drug-Delivery-by-N-K-Jain-1st-Editn-Reprint>





# THANK YOU