



## ADDITIONAL DOSAGE ROUTES: **ORAL CAVITY**

The Oral Cavity Compartmental Absorption & Transit (OCCAT™) model represents the oral cavity (mouth) as a collection of the following compartments: buccal, gingival, palate, top of the tongue, bottom of the tongue, and mouth floor.

### The model can simulate a variety of dosage forms including:

- ✓ Sublingual solutions & tablets
- ✓ Lingual sprays and supralingual tablets
- ✓ Controlled release buccal patches

### Some of the processes considered in the oral cavity models include:

- ✓ Dissolution & precipitation in the saliva
- ✓ Diffusion through the oral mucosa
- ✓ Uptake into systemic circulation
- ✓ Swallowing of unabsorbed drug
- ✓ Physiological saliva flow and simulation of variety of study designs (normal swallowing, subjects asked to not swallow for certain period of time, etc...)



### Utilize validated PBBM models

Mechanistic, physiologically-based models are provided for each tissue, for different species.



### Customize in GastroPlus®

As with other GastroPlus modules, there is no equation or code writing required.



### Optimize your models

Load measured *in vivo* PK data, for local tissues, to optimize and validate your models.



### Leverage PBPK delivery models

PBPK delivery models, including the Population Simulator and Parameter Sensitivity Analysis, can be utilized.

