



**FACULTY OF ENGINEERING & TECHNOLOGY**  
**DEPARTMENT OF BIOTECHNOLOGY**

# Digestion in Small Intestine

## Note:

- ◆ Main digestion takes place in the small intestine by pancreatic amylase
- ◆ Digestion is completed by pancreatic amylase because food stays for a longer time in the intestine.



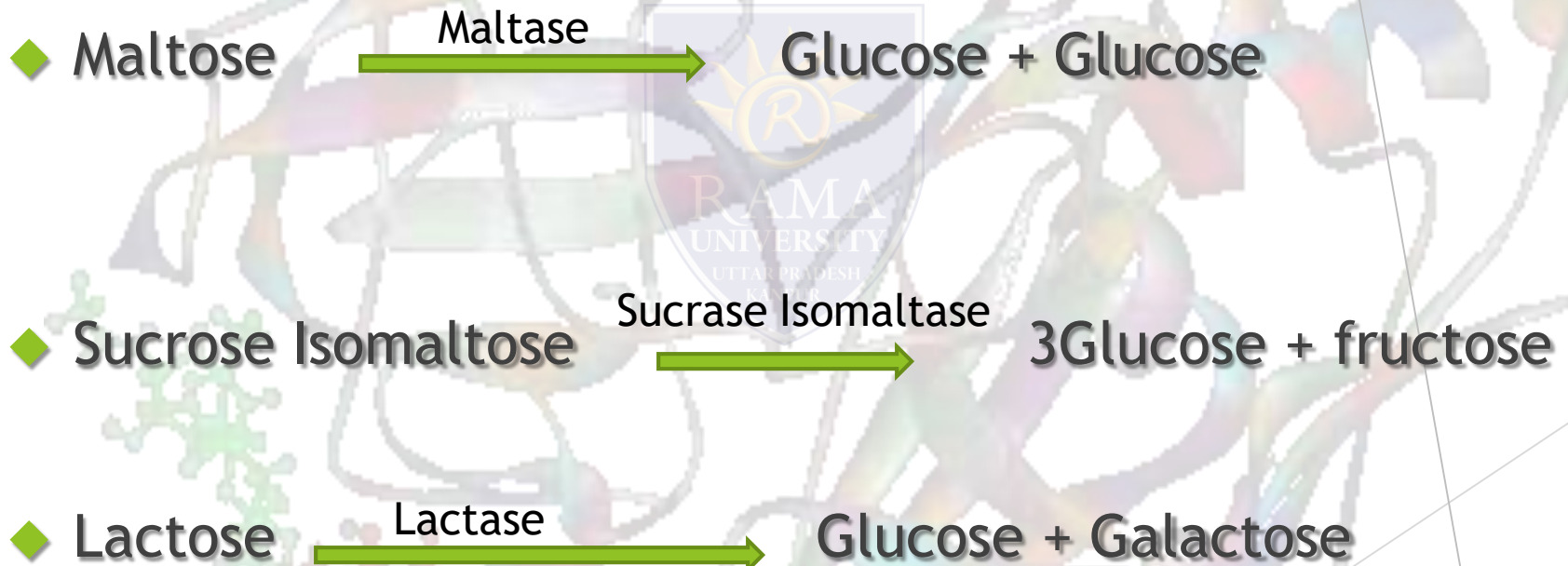
# What are Disaccharidases?



- ◆ They are present in the brush border epithelium of intestinal mucosal cells where the resultant monosaccharides and others arising from the diet are absorbed.
- ◆ The different disaccharidases are :
  - 1) **Maltase**,
  - 2) **Sucrase-Isomaltase** (a bifunctional enzyme catalyzing hydrolysis of sucrose and isomaltose)
  - 3) **Lactase**



# Reactions catalyzed by Disaccharidases

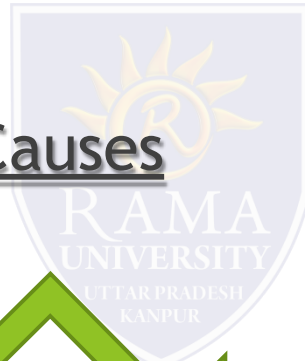


# Clinical significance of Digestion

- ◆ Lactose intolerance is the inability to digest lactose due to the deficiency of Lactase enzyme.



## Causes



Congenital

Acquired during lifetime

Primary

Secondary

