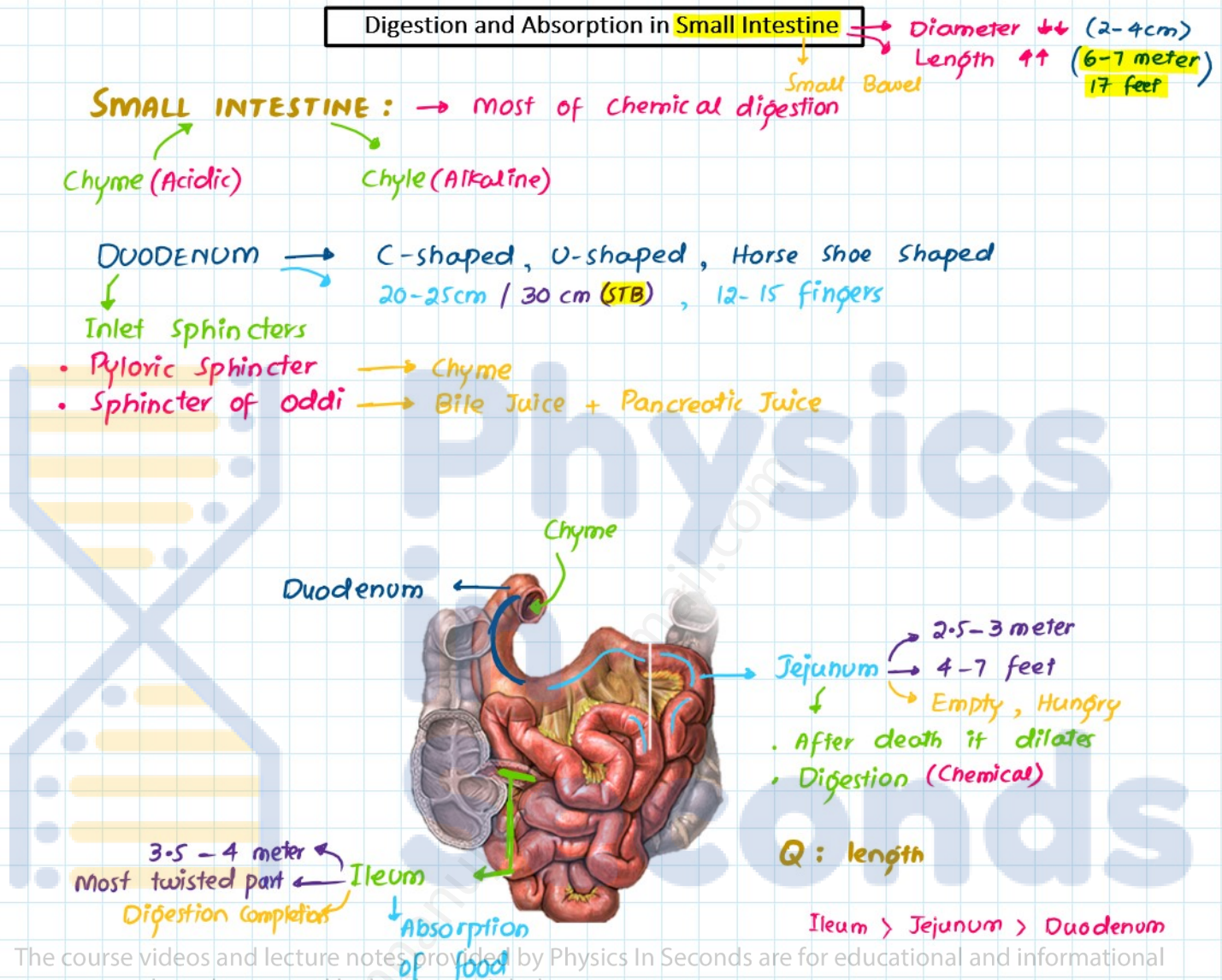


## 7.6 Digestion and Absorption in Small Intestine



The course videos and lecture notes provided by Physics In Seconds are for educational and informational purposes only and protected by local copyright laws.

Unauthorised reproduction or distribution is strictly prohibited. By accessing and using these materials, you agree to use them solely for personal, non-commercial use and will not hold the copyright holder liable for any damages.

• **BILE JUICE**  
• **PANCREATIC JUICE**  
• **INTESTINAL JUICE**

By accessing and using the materials, you also agree to abide by all local copyright laws.

**Sucrase** (Sucrose → Glucose + Fructose)  
**Maltase** (Maltose → Glucose + Glucose)  
**Erypsin** (Dipeptides → Amino Acids)  
**Lactase** (Lactose → Galactose + Glucose)  
**Lipase** (Lipids → Fatty Acids + Glycerol)

**PEPTIDASES**  
Exo → Endo  
• Amino peptidase ( $\text{NH}_2$ )  
• Carboxy peptidase ( $\text{COOH}$ )

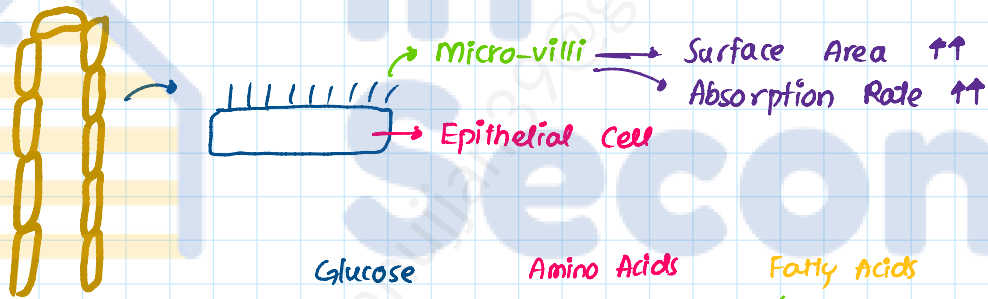
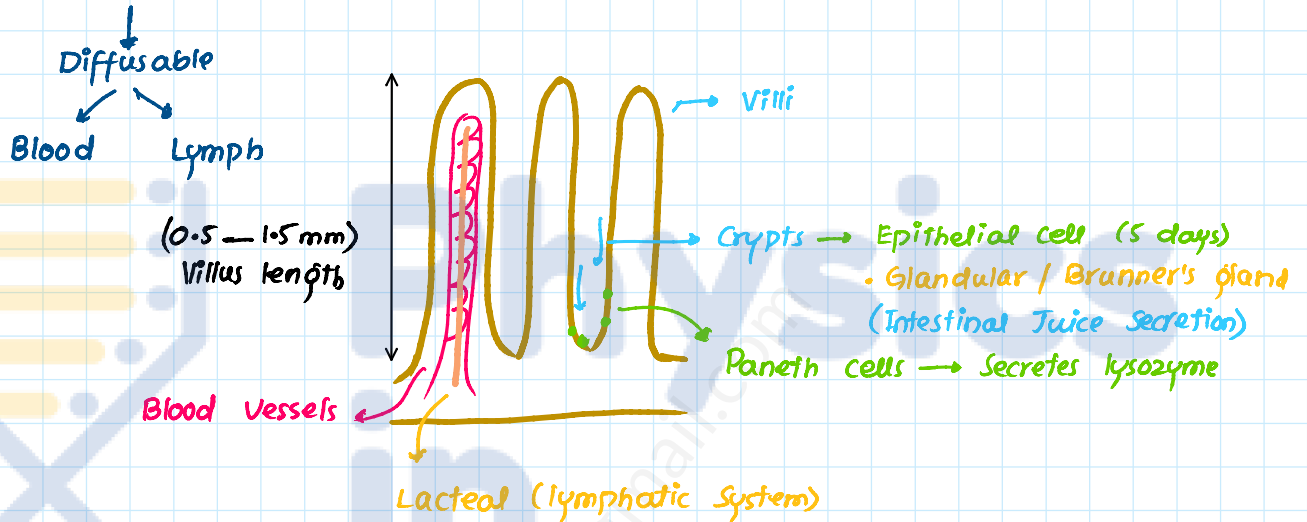
① Carbohydrates → Oligosaccharides → Disaccharide → Monosaccharide  
(Sucrose, lactose, maltose)  
↓ Diffusable

② Proteins → Polypeptides / peptones → Dipeptides → Amino Acid  
Pepsin (Acidic)      Amino-      Erypsin

② Proteins  $\xrightarrow[\text{Trypsin (Alkaline)}]{\text{Pepsin (Acidic)}}$  Polypeptides / peptones  $\xrightarrow{\text{Amino-peptidase}}$  Dipeptides  $\xrightarrow{\text{Erypsin}}$  Amino Acid

③ Lipids  $\xrightarrow[\text{Bile}]{\text{Emulsified Fats}}$   $\xrightarrow{\text{Lipase}}$  Fatty acids + Glycerol

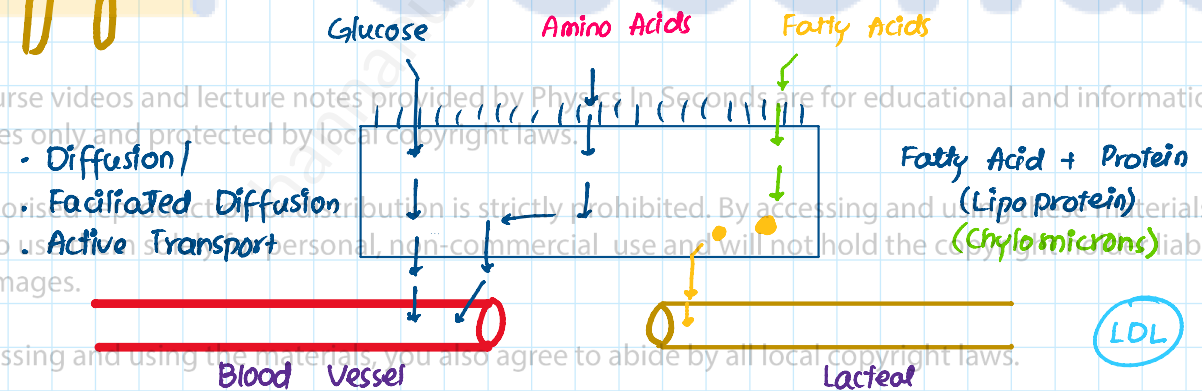
## ABSORPTION OF FOOD $\rightarrow$ Ileum (Surface Area of ileum $\uparrow\uparrow$ )



The course videos and lecture notes provided by Physics In Seconds are for educational and informational purposes only and protected by local copyright laws.

Unauthorized distribution is strictly prohibited. By accessing and using these materials, you agree to use them for personal, non-commercial use and will not hold the copyright holder liable for any damages.

By accessing and using the materials, you also agree to abide by all local copyright laws.



Capillaries of villi  $\rightarrow$  Hepatic Portal vein  $\rightarrow$  Liver.  
(Distribution)

LDL

Lipid  $>$  Protein

HDL

Lipid  $<$  Protein