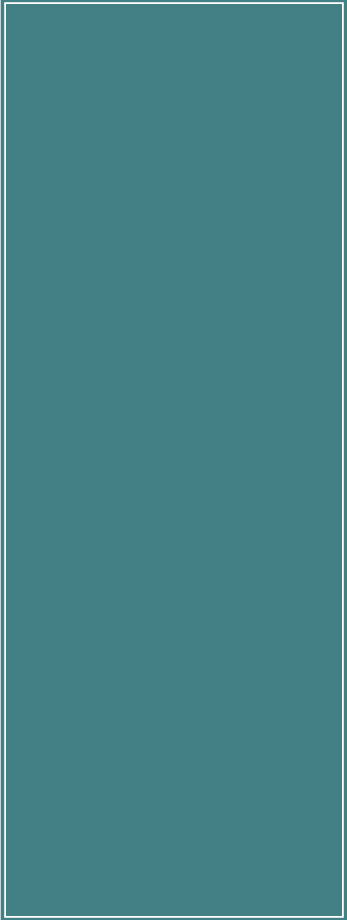


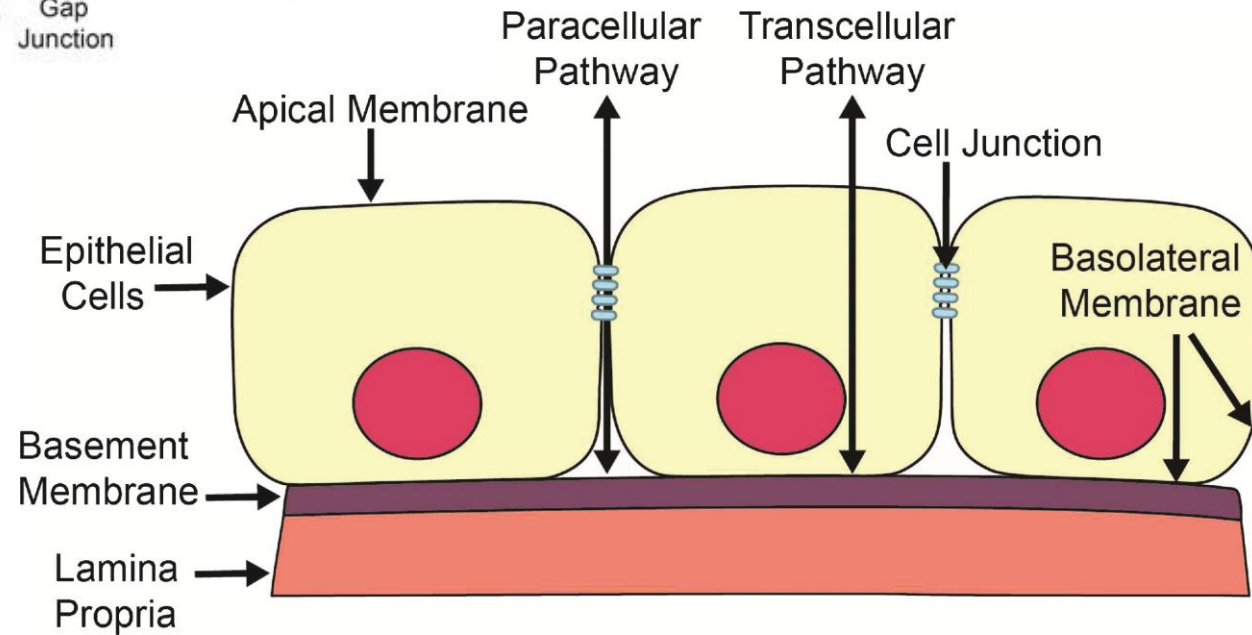
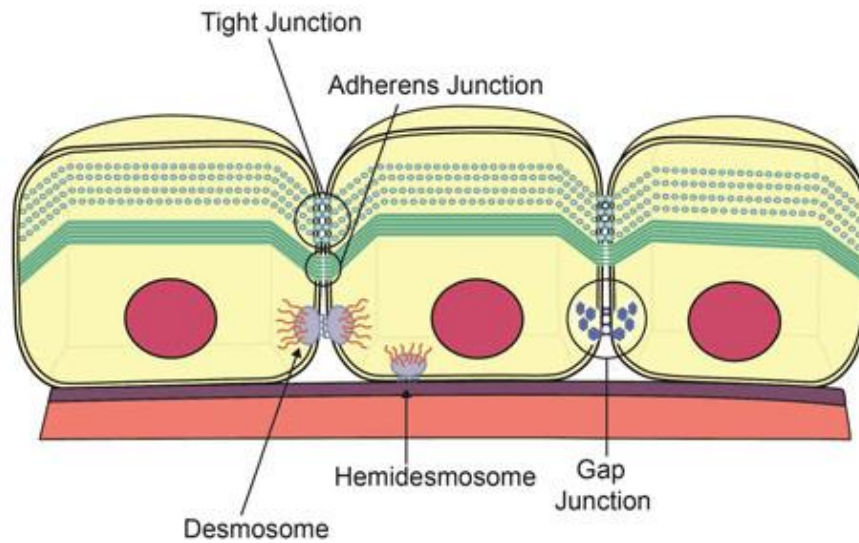
HOẠT ĐỘNG XUẤT TIẾT, HẤP THU NƯỚC – ĐIỆN GIẢI

BS Nguyễn Bình Thư

MỤC TIÊU

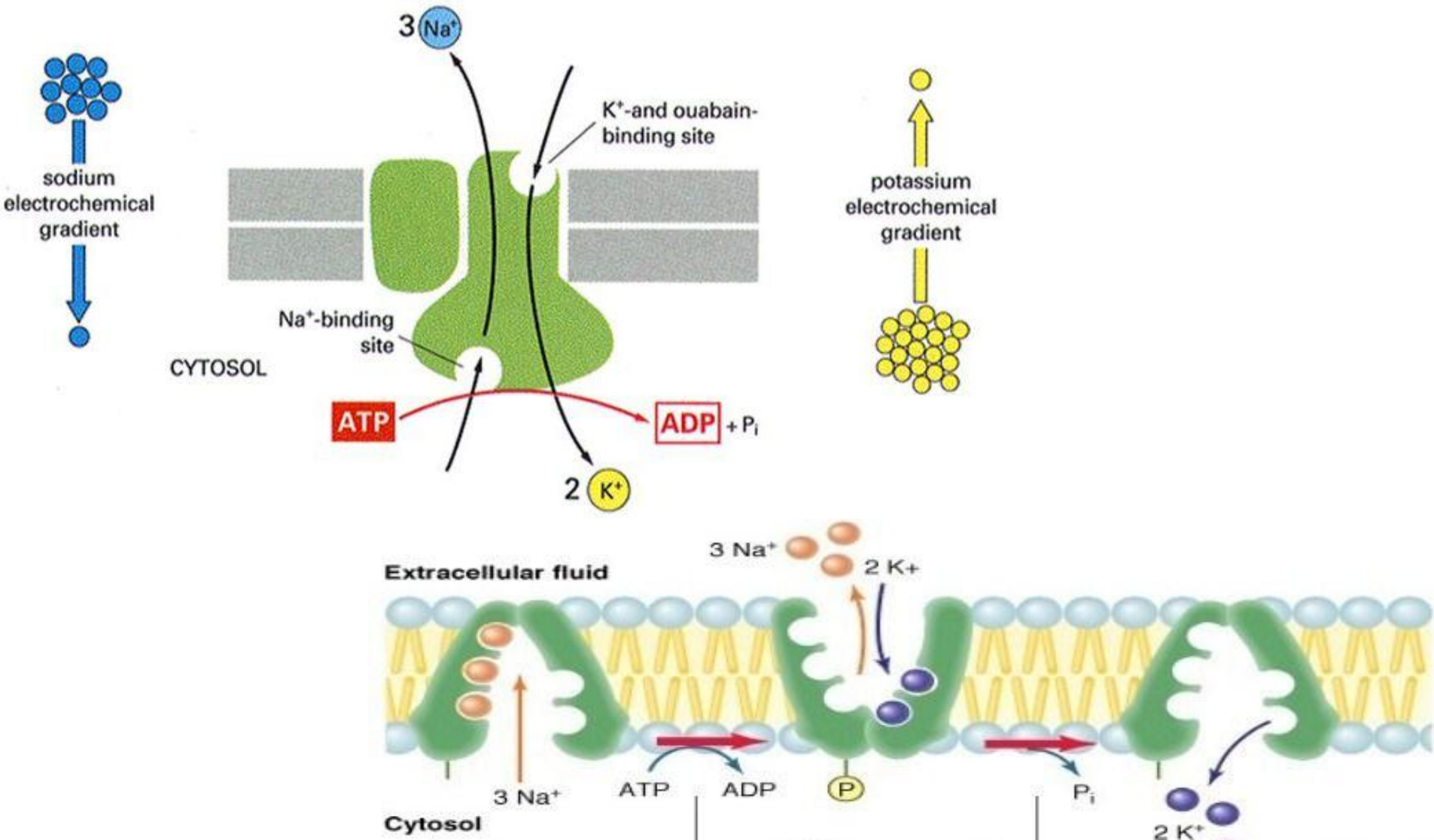
- 
- 1) Trình bày quá trình xuất tiết và hấp thu nước, điện giải, khoáng chất trong ống tiêu hóa.
 - 2) Ứng dụng giải thích một số triệu chứng bệnh lý.

MÔ HỌC



ĐIỆN GIẢI

KÊNH $\text{Na}^+ - \text{K}^+$ ATPase



Na⁺

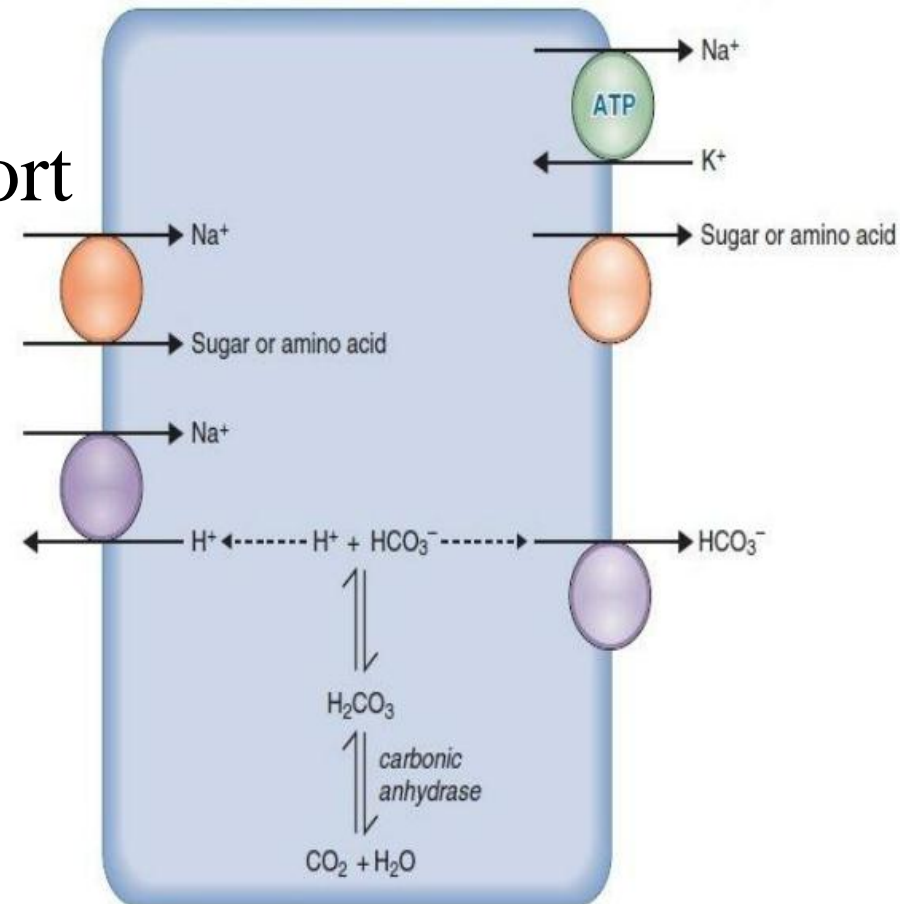
- ❖ Khuếch tán thụ động
- ❖ Na⁺– glucose, aa cotransport
- ❖ Na⁺– Cl⁻ cotransport
- ❖ Na⁺– H⁺ exchange

Jejunum

Lumen

Epithelial cell of the jejunum

Blood



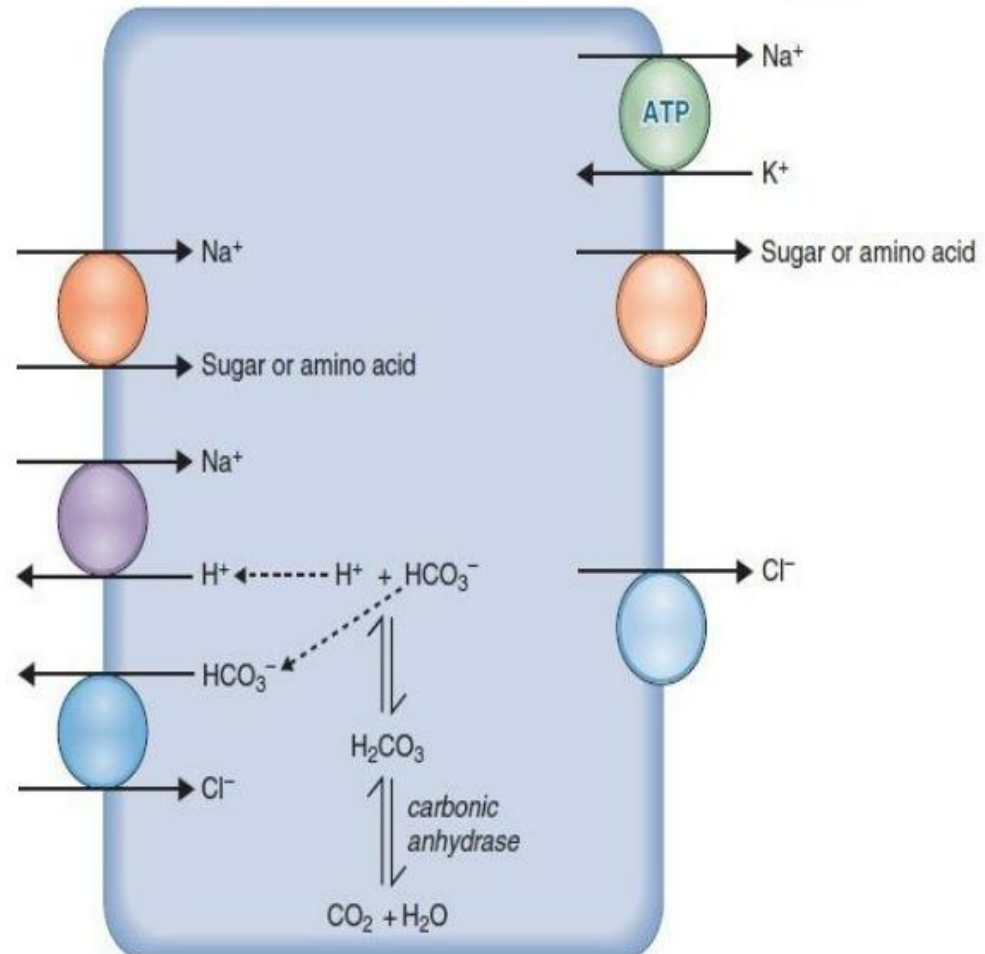
Na⁺

Ileum

Lumen

Epithelial cell of the ileum

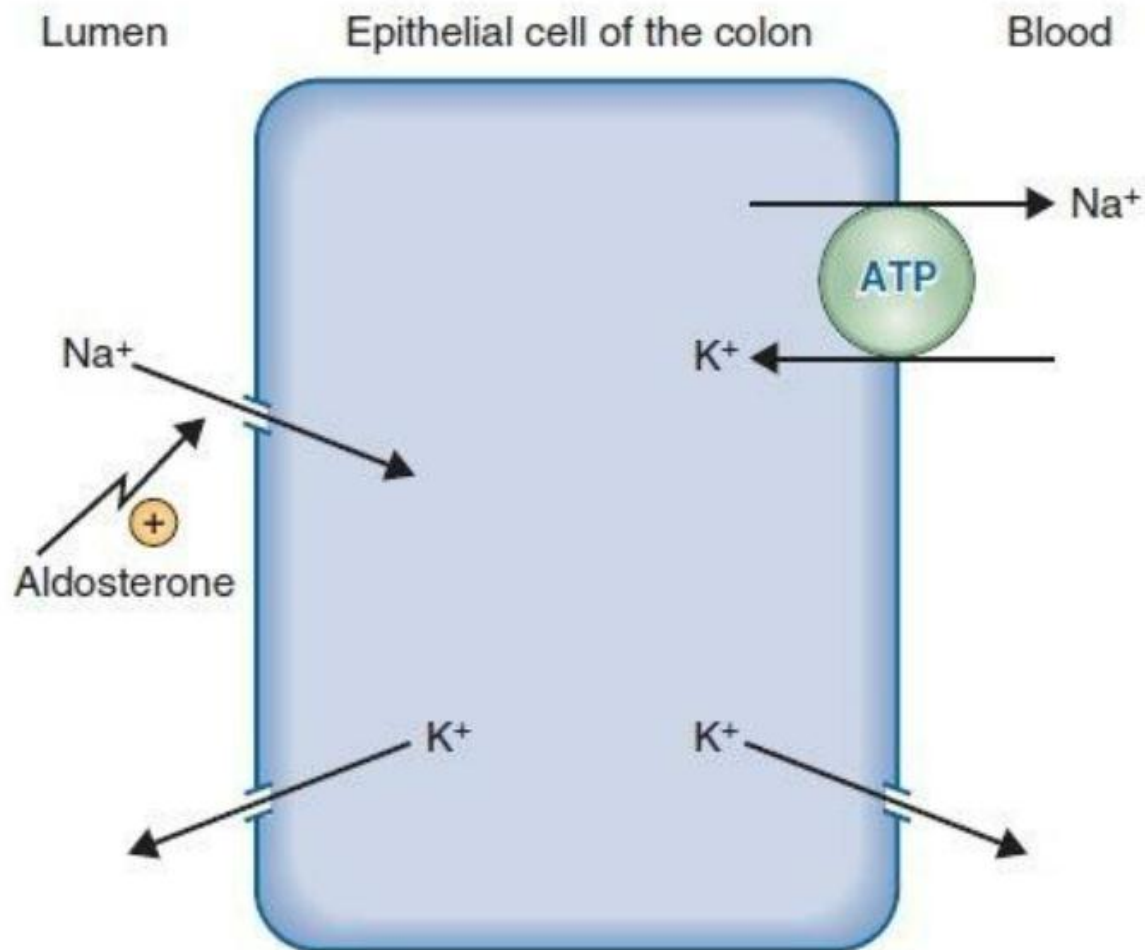
Blood



B

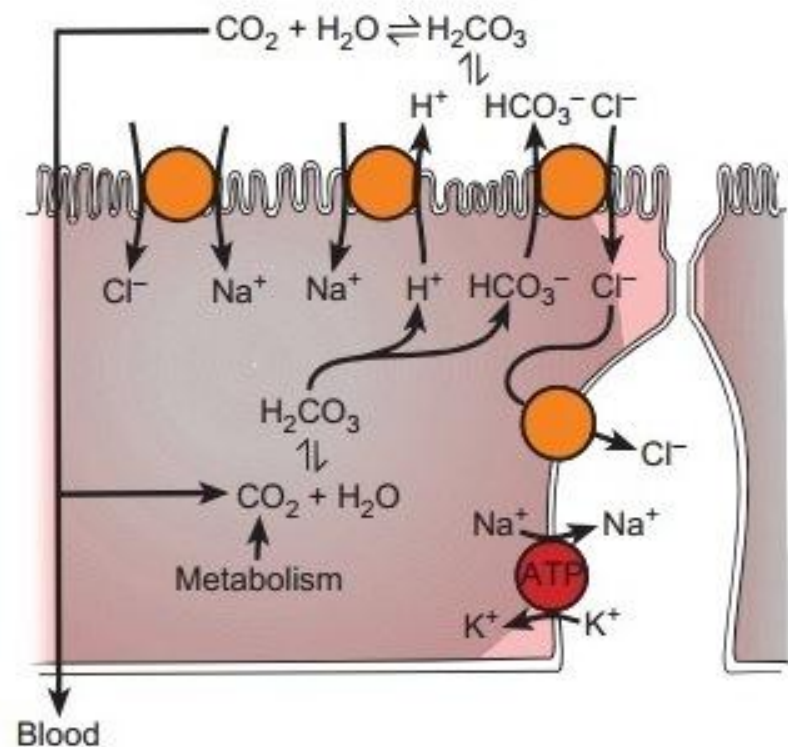
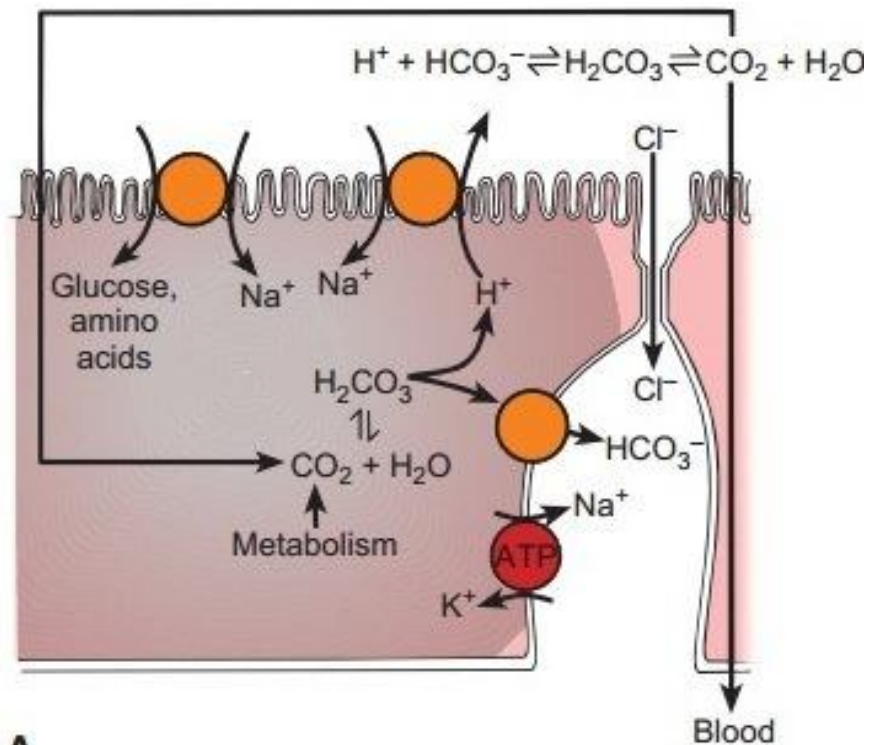
Na⁺

ELECTROLYTE TRANSPORT IN THE COLON

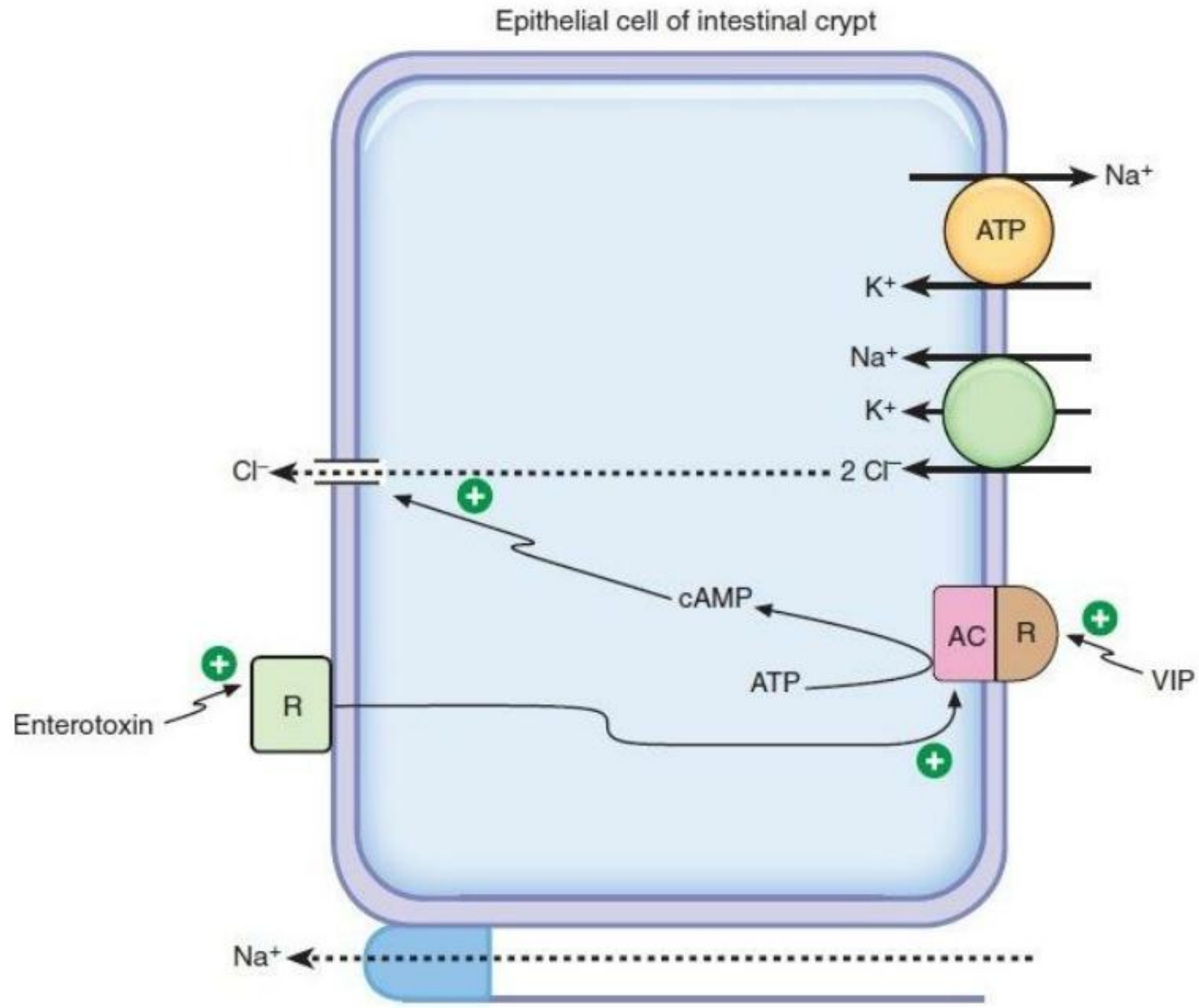


Cl⁻

- ❖ Di chuyển qua khe gian bào
- ❖ Na⁺– Cl⁻ cotransport
- ❖ Cl⁻ – HCO₃⁻ exchange



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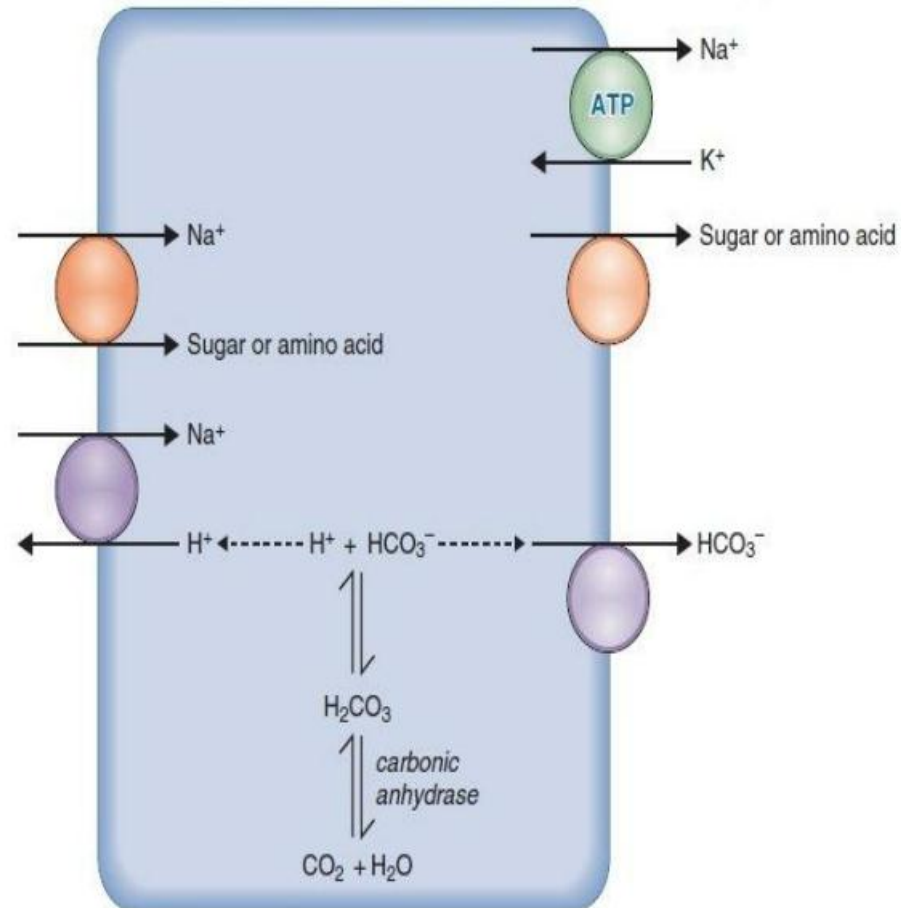
HCO_3^-

Jejunum

Lumen

Epithelial cell of the jejunum

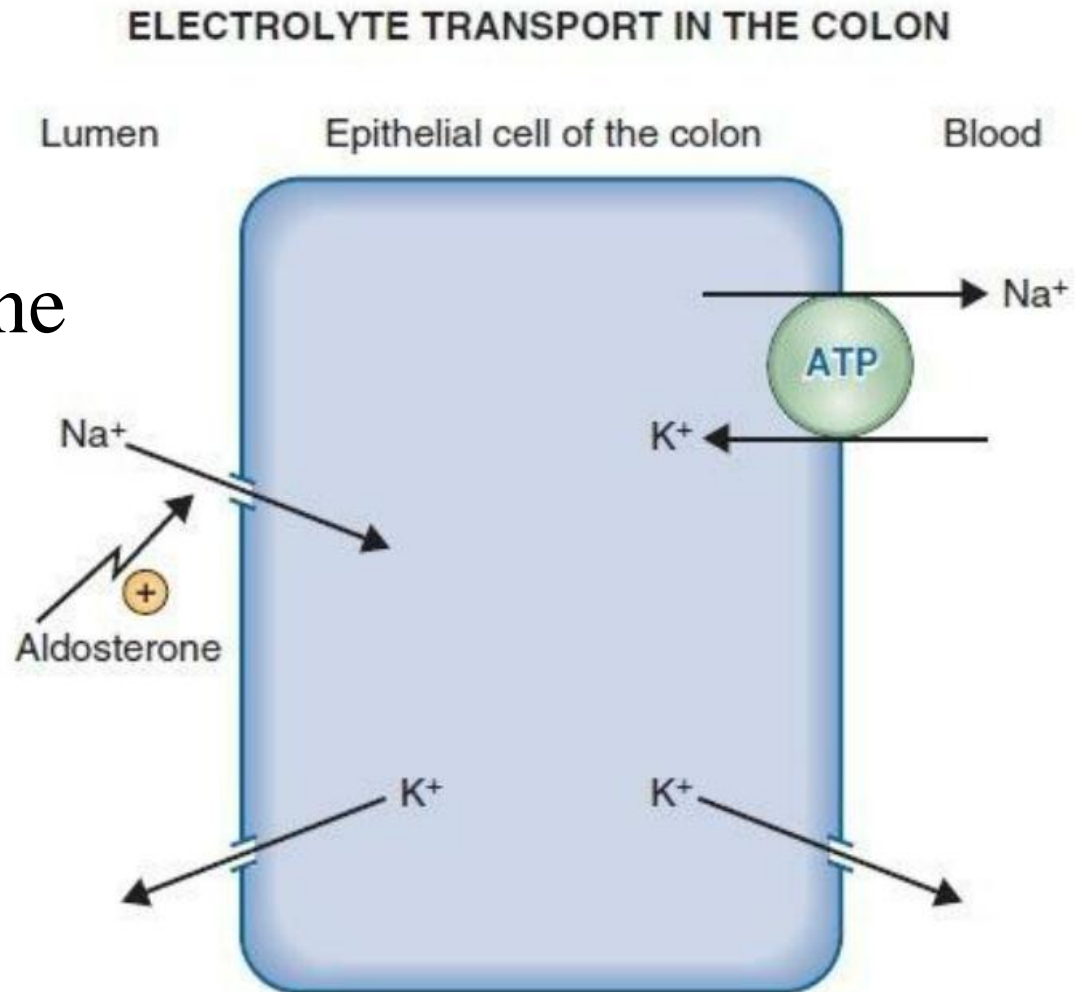
Blood



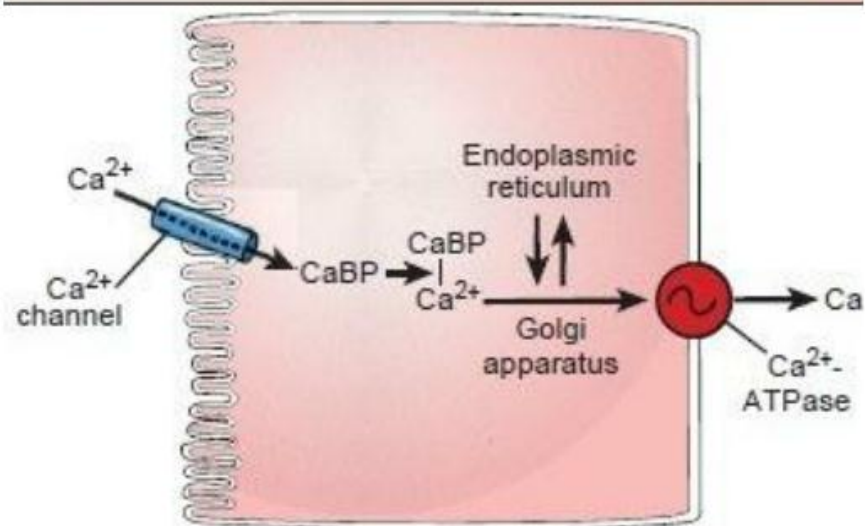
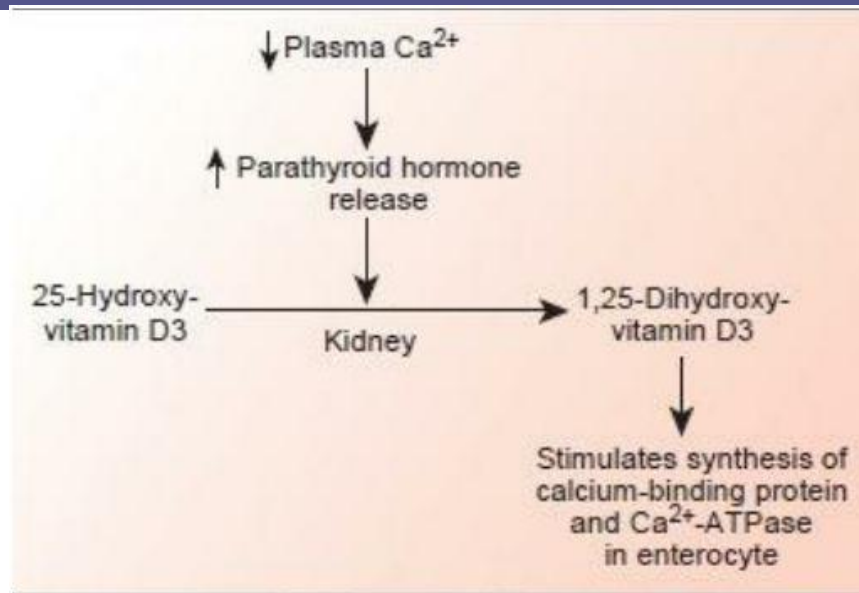
A

K^+

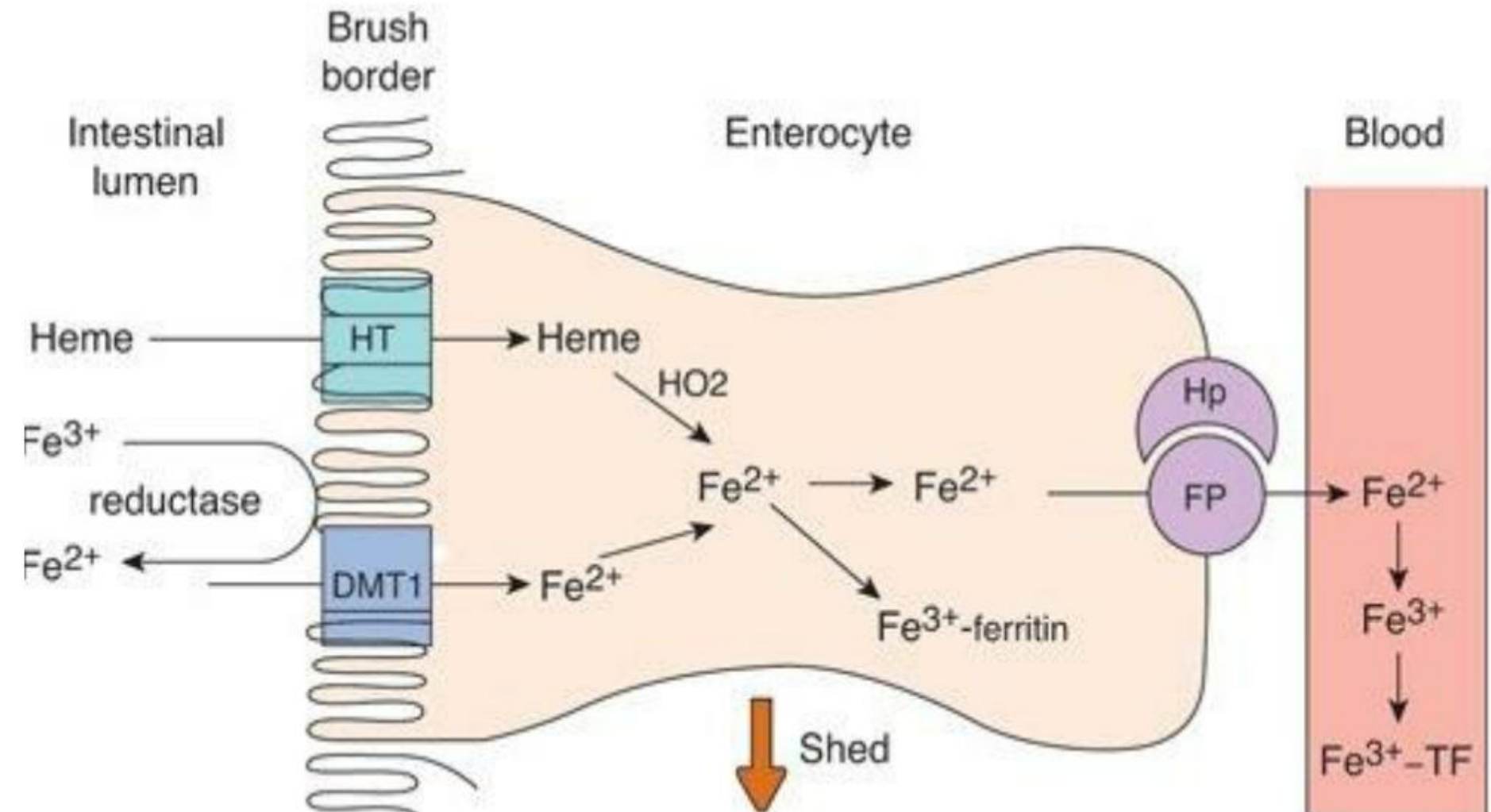
- ❖ Hấp thu tại ruột non
- ❖ Bài tiết tại ruột già phụ thuộc aldosterone



Ca⁺⁺



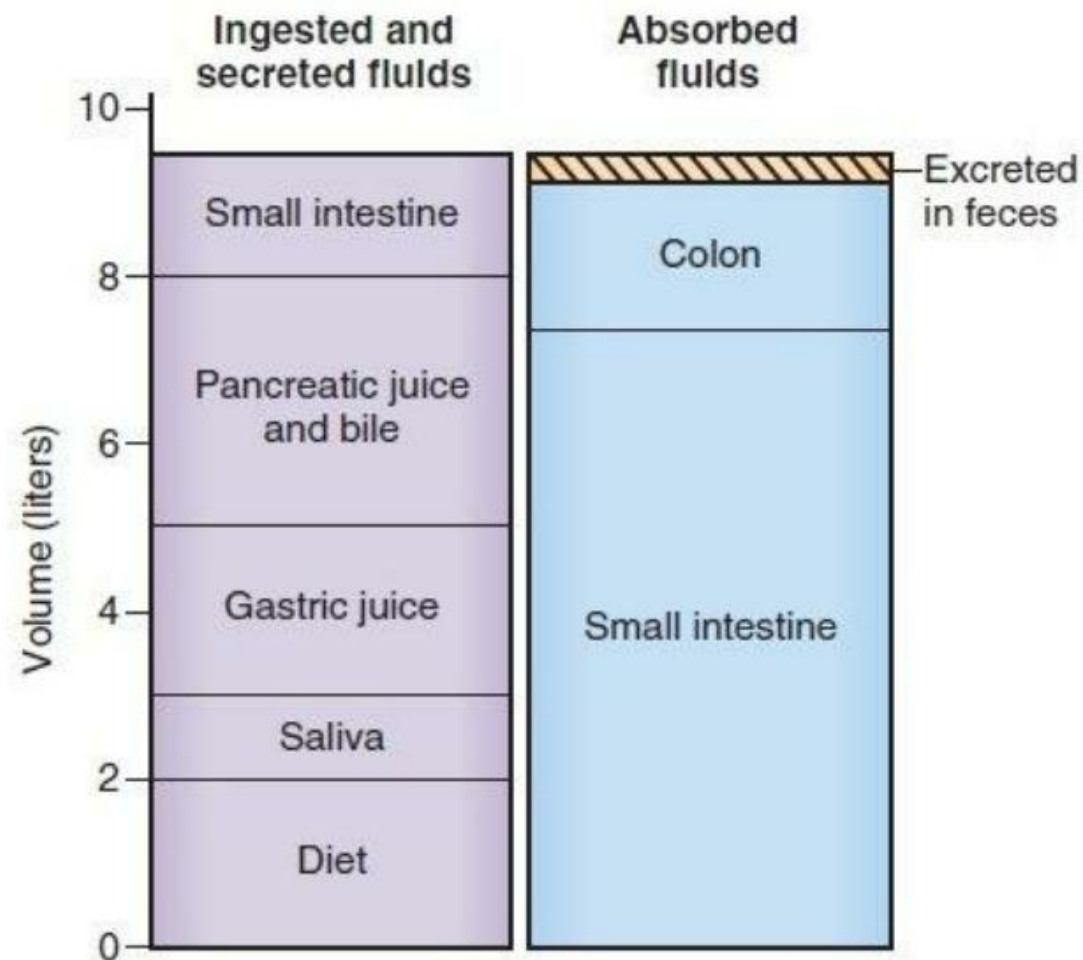
Fe

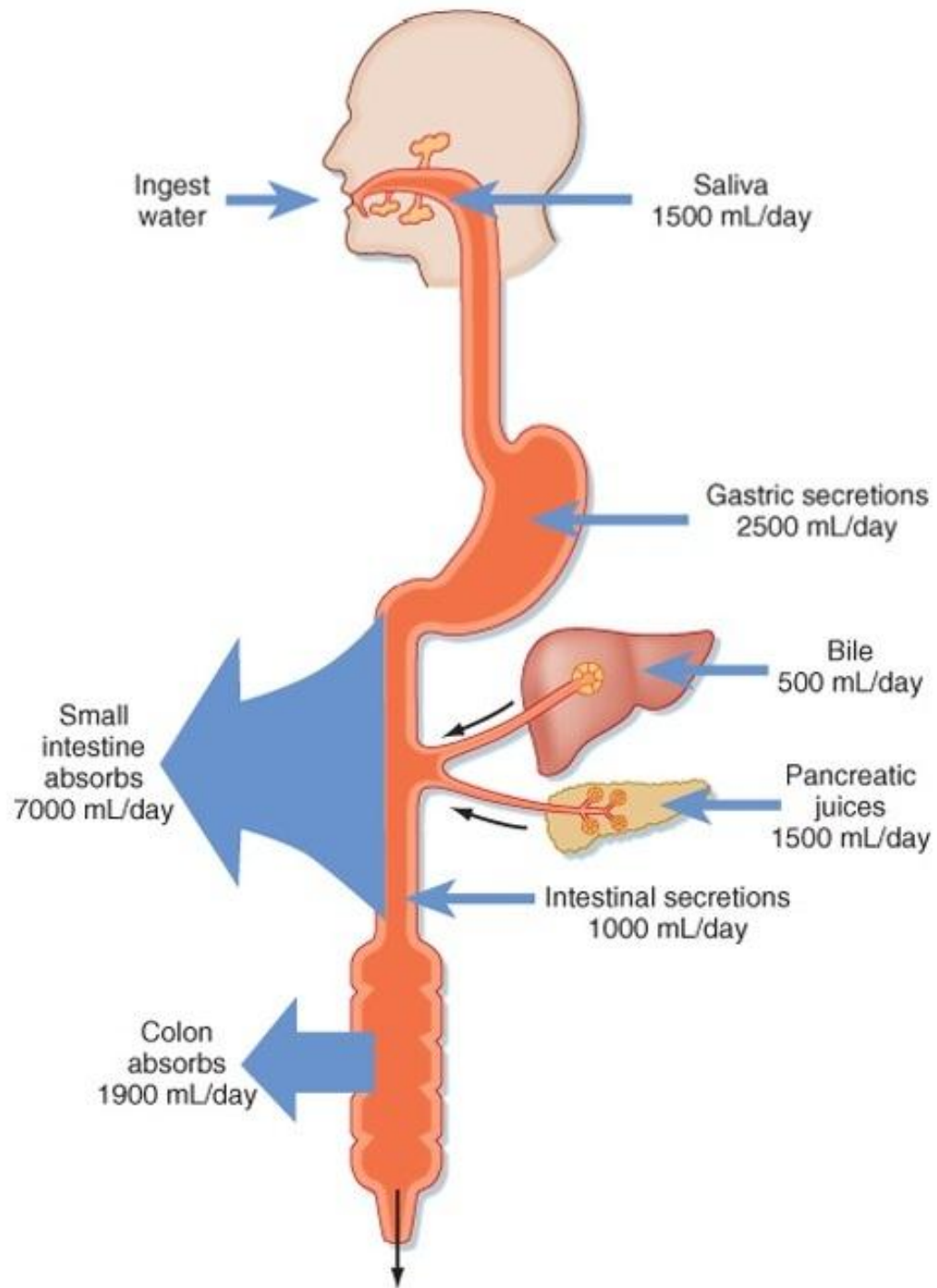




NƯỚC

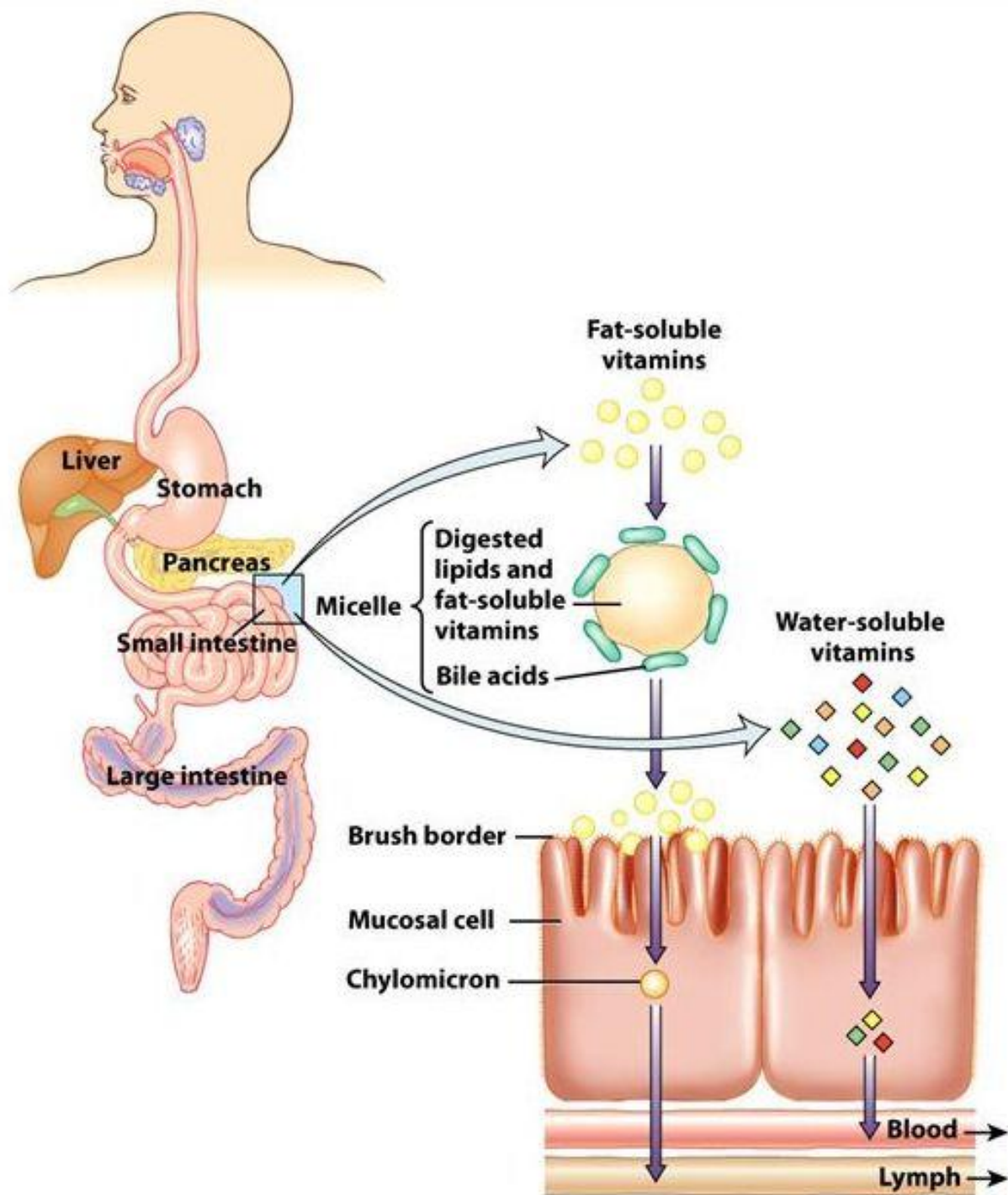
Source	Amount (mL)
Water added to GI tract	
Food and beverages	2,000
Salivary secretion	1,000
Biliary secretion	1,000
Gastric secretion	2,000
Pancreatic secretion	1,000
Intestinal mucosal secretion	2,000
Water absorbed in feces	
Duodenum and jejunum	4,000
Ileum	3,500
Colon	1,400
Water lost in feces	100

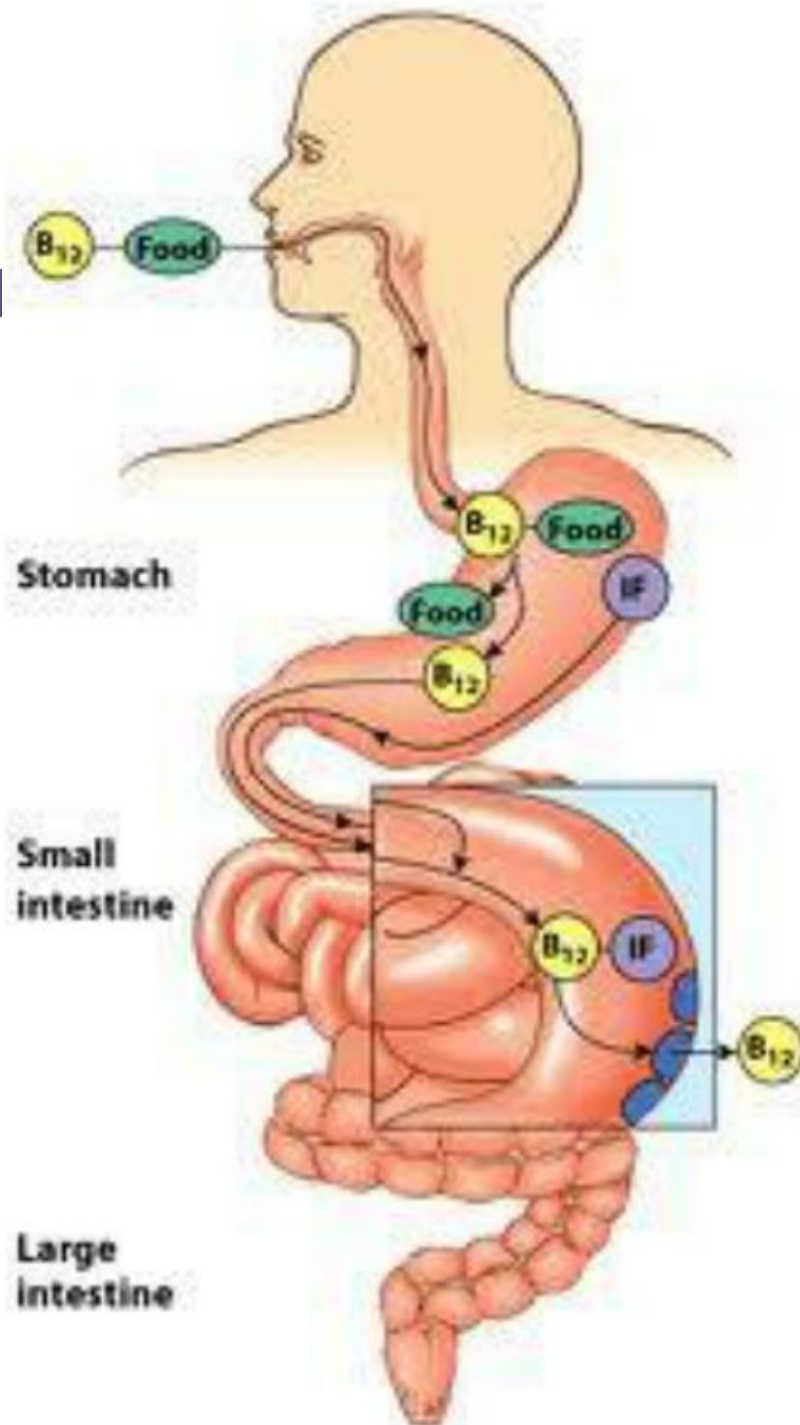






VITAMIN





CẢM ƠN ĐÃ CHÚ Ý LẮNG NGHE