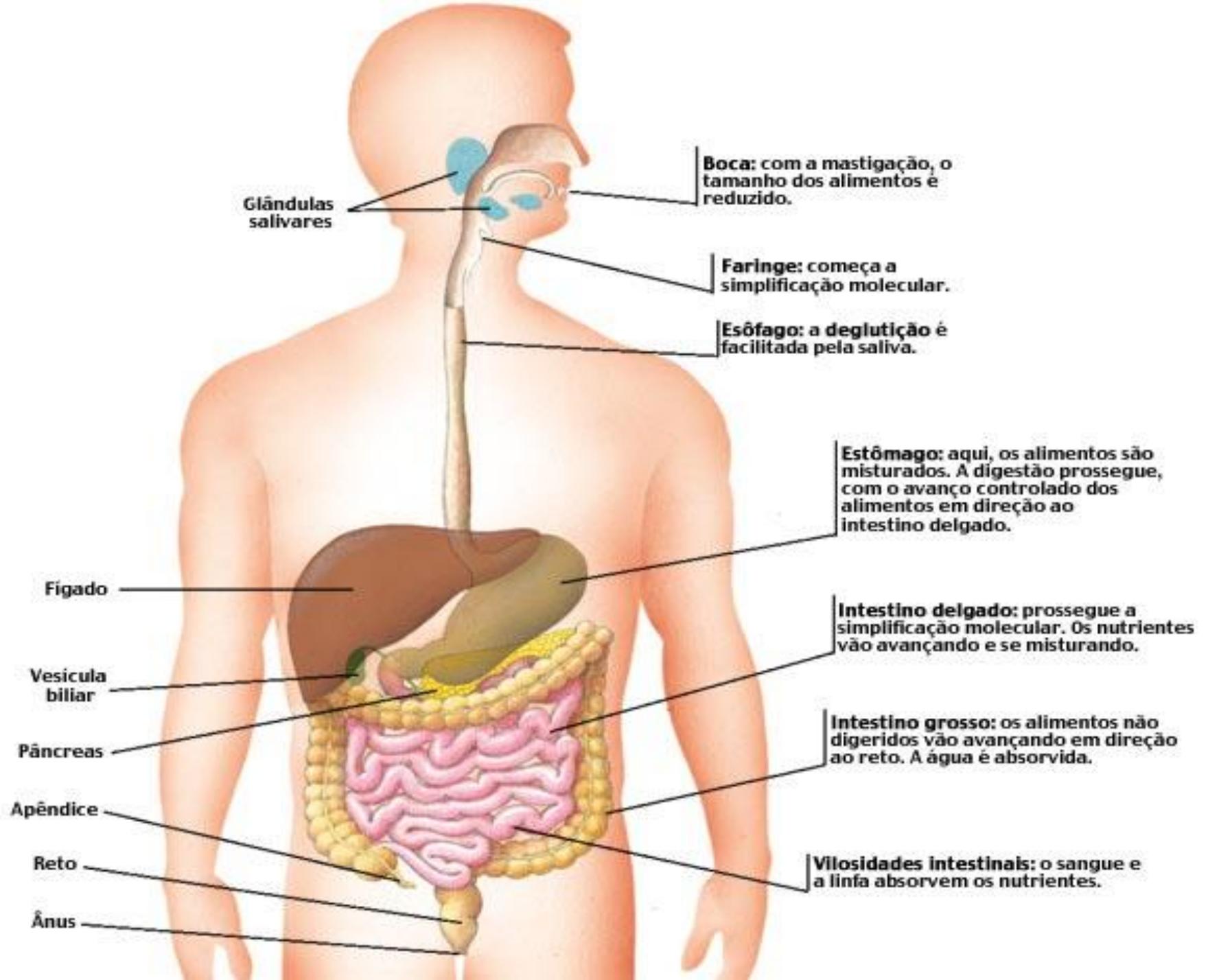
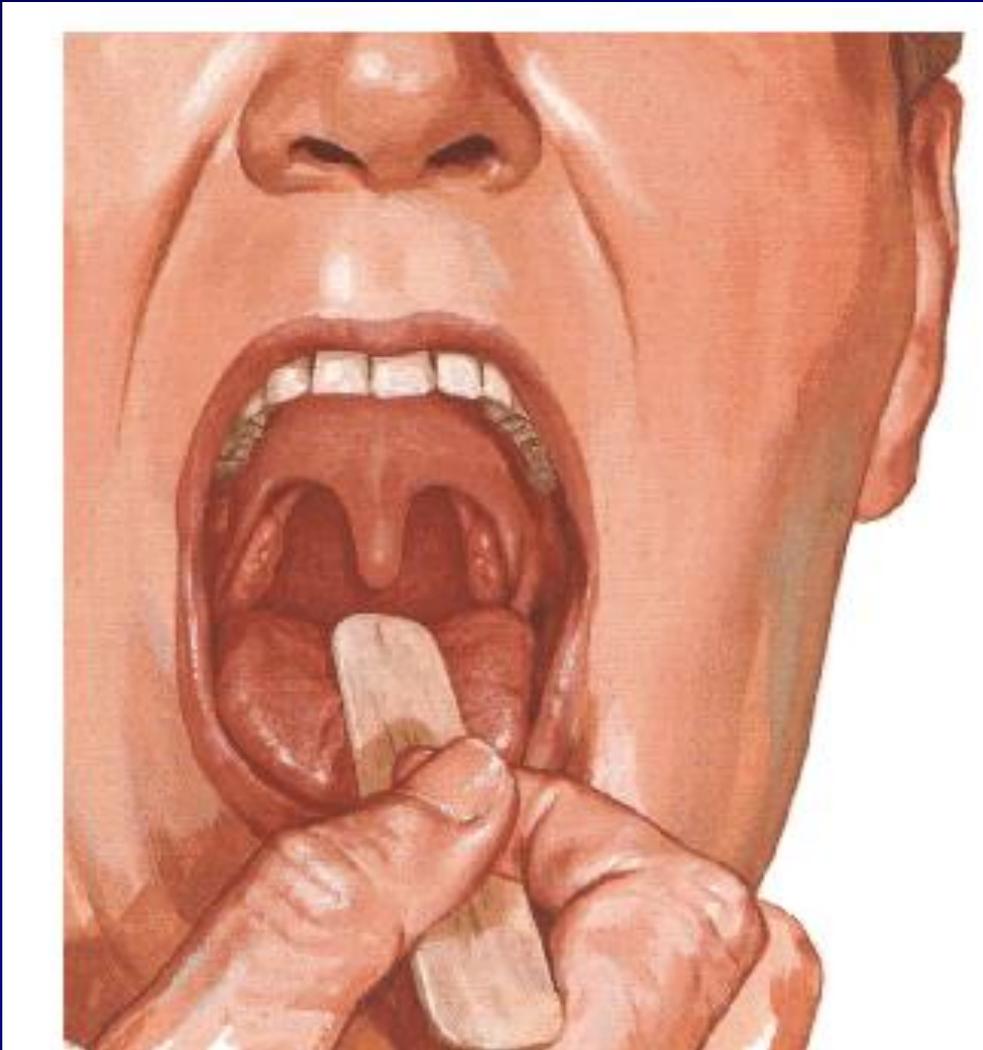


SISTEMA DIGESTÓRIO

Ricardo Santos Simões
Leandro Sabará de Mattos



Cavidade oral (Boca)



A cavidade oral é
revestida por uma
membrana
(mucosa)

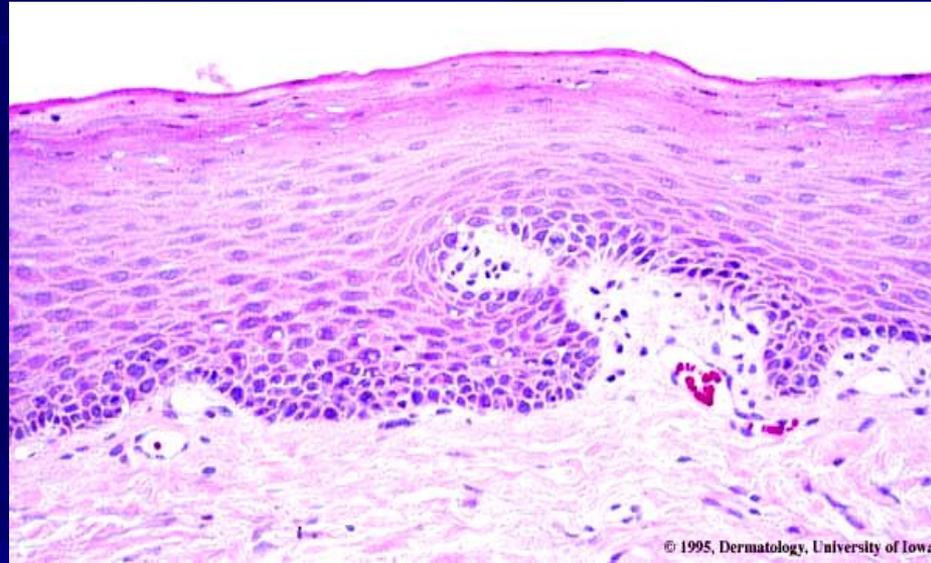
Mucosa oral

Funções



1. **Secreção**: relativa à presença de glândulas;
2. **Sensibilidade/Sensorial**: variável de região para região. Alta nos lábios e na língua. Baixa nas bochechas e no assoalho;
3. **Proteção**: mecânica, bacteriostática (lisosima), imunológica (anel linfático de Waldeyer → aglomerados linfóides na entrada dos tubos digestório e respiratório);
4. **Digestão**: amilase salivar;
5. **Absorção**: transepitelial;
6. **Excreção**: excreção de substâncias pelo fluido gengival.

Mucosa oral

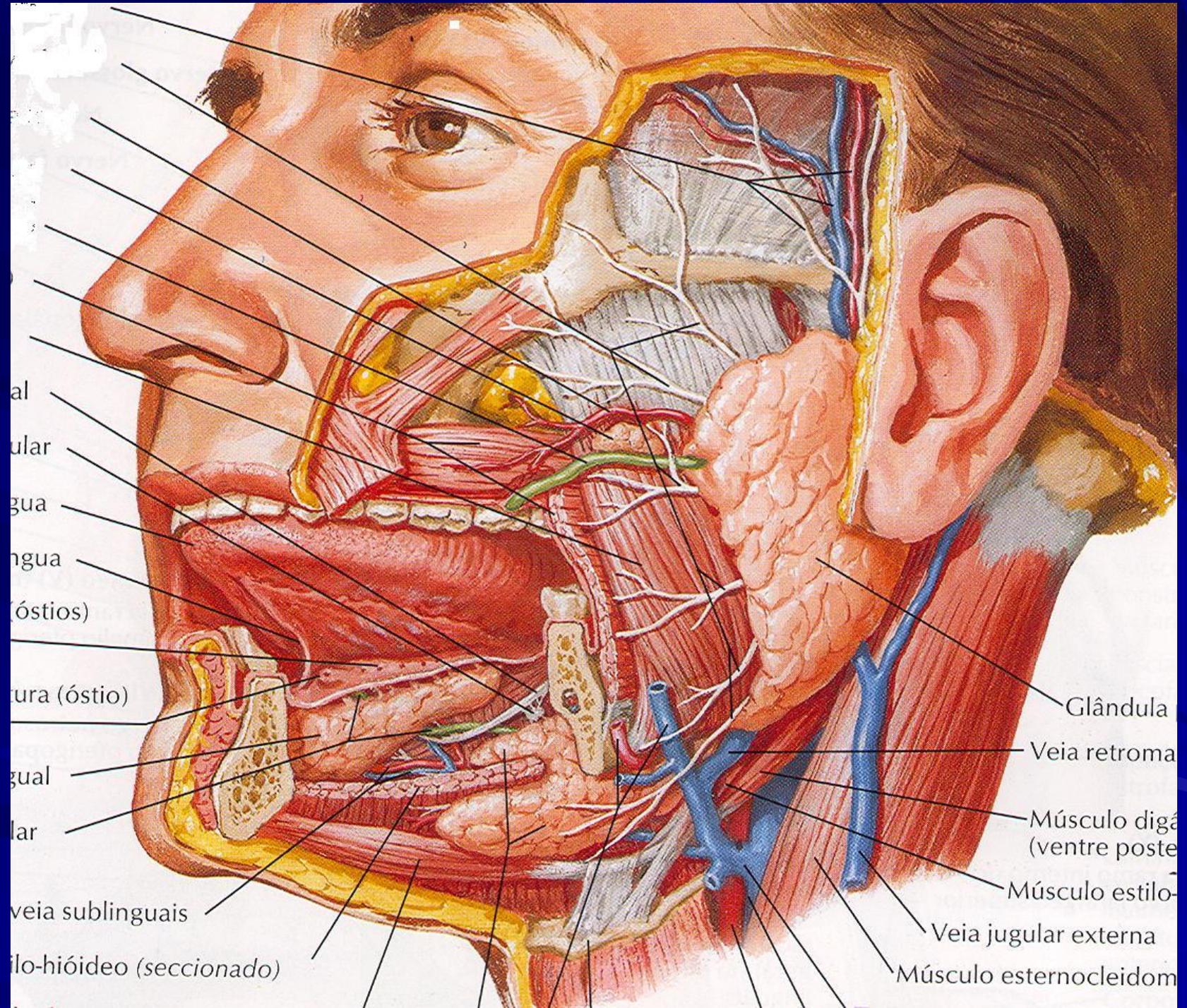


Componentes Histológicos

Epitélio estratificado pavimentoso (escamoso)

Membrana basal que delimita o epitélio do conjuntivo

Lâmina Própria - córion - tecido conjuntivo frouxo (papilar) e denso (reticular) subepitelial



al

ular

gua

ngua

(óstios)

tura (óstio)

gual

lar

veia sublinguais

ilo-hióideo (seccionado)

Glândula

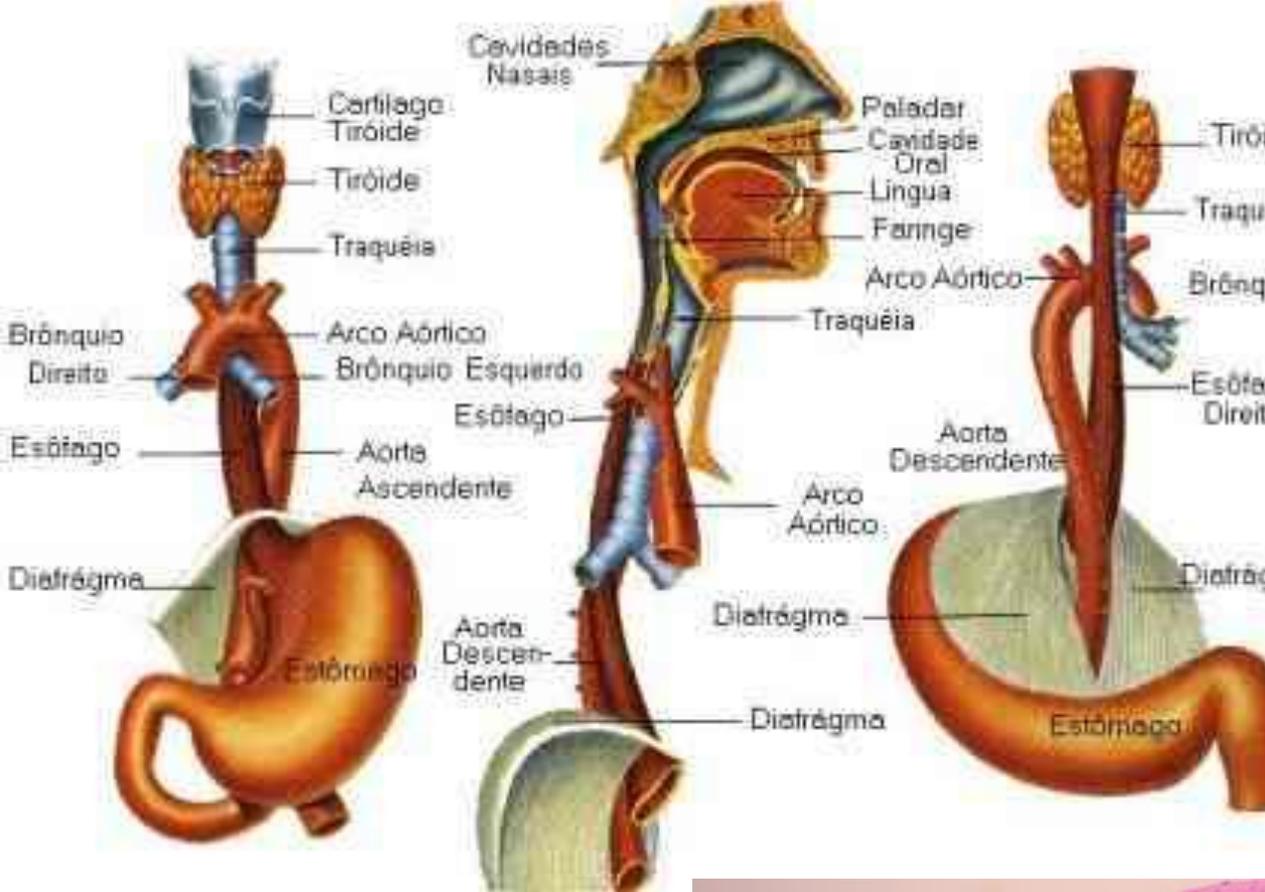
Veia retroma

Músculo digá
(ventre poste

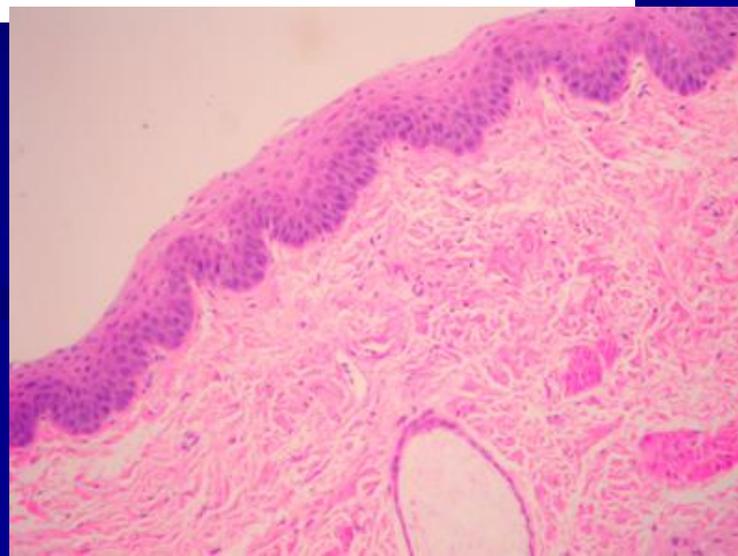
Músculo estilo-

Veia jugular externa

Músculo esternocleidom



Esôfago

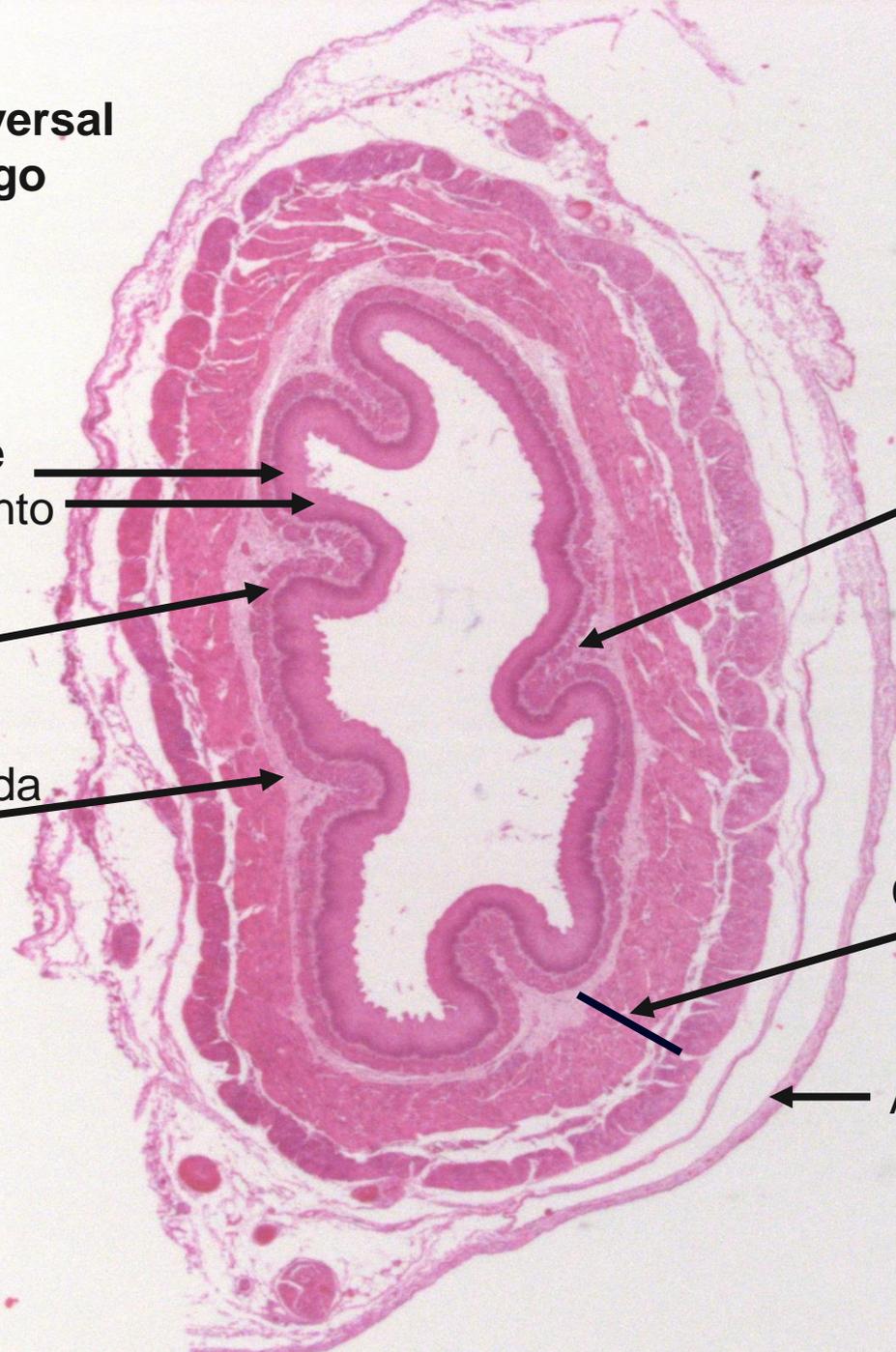


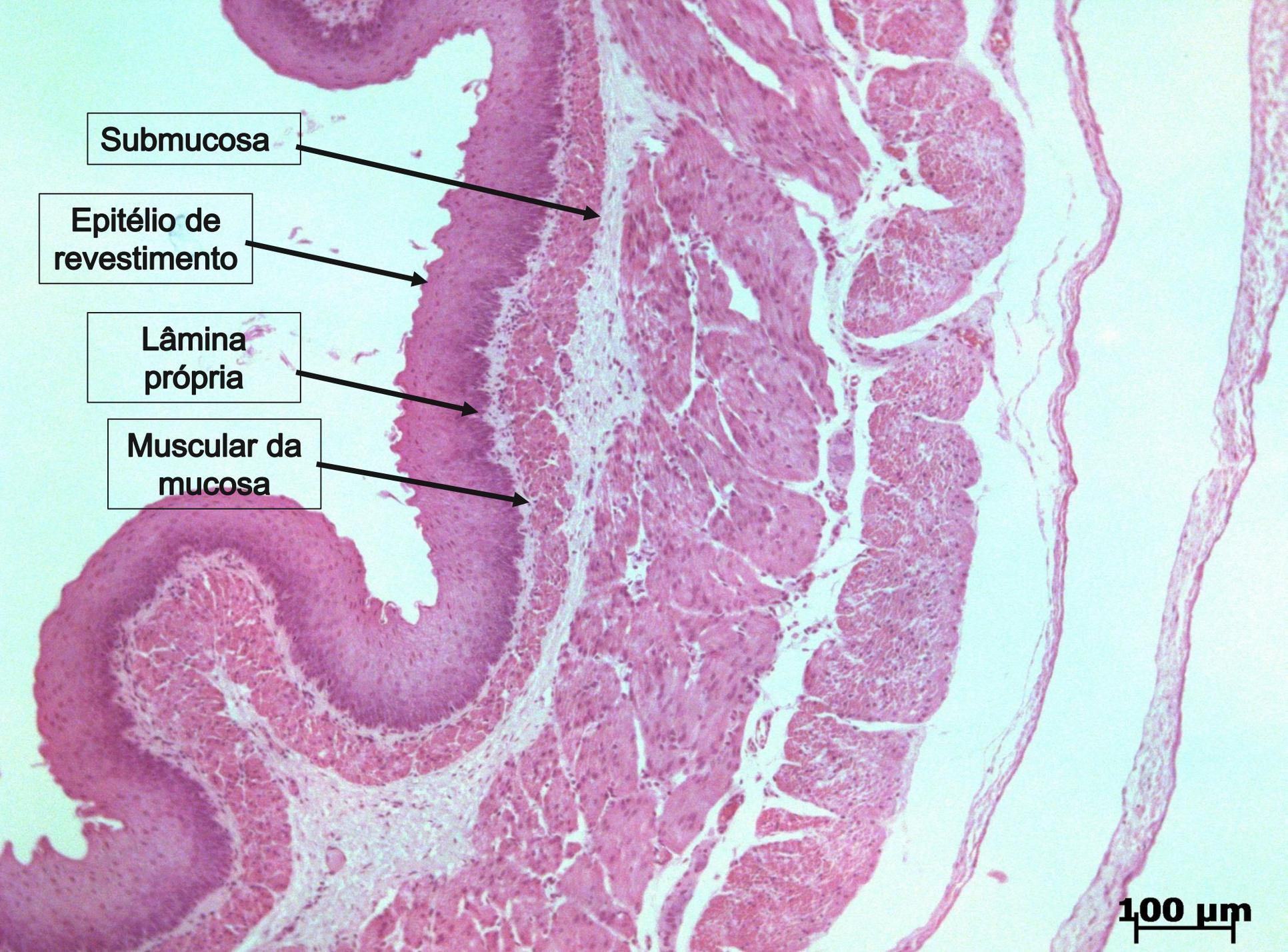
Corte transversal de esôfago

Plano de construção

- Mucosa
 - Epitélio de revestimento
 - Lâmina própria
 - Muscular da Mucosa
- Submucosa
- Camada muscular
- Adventícia

500 μ m





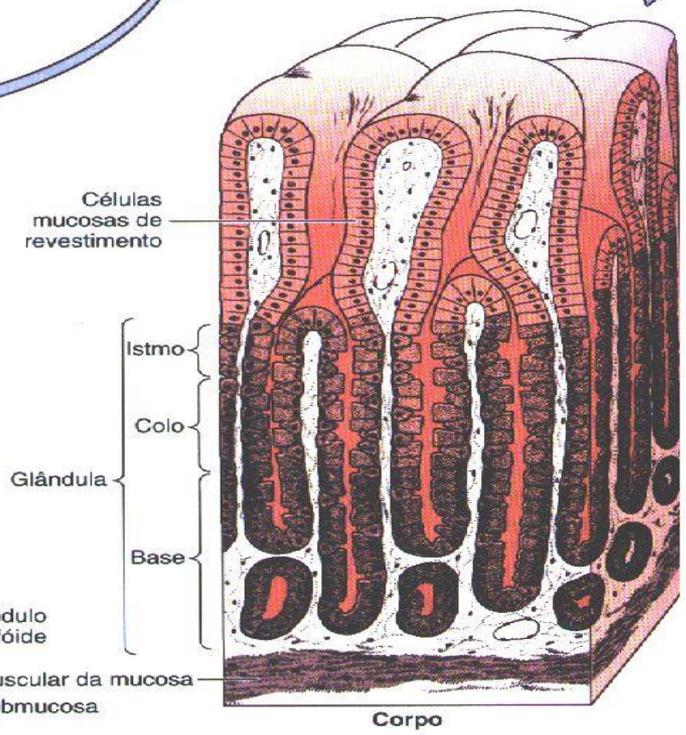
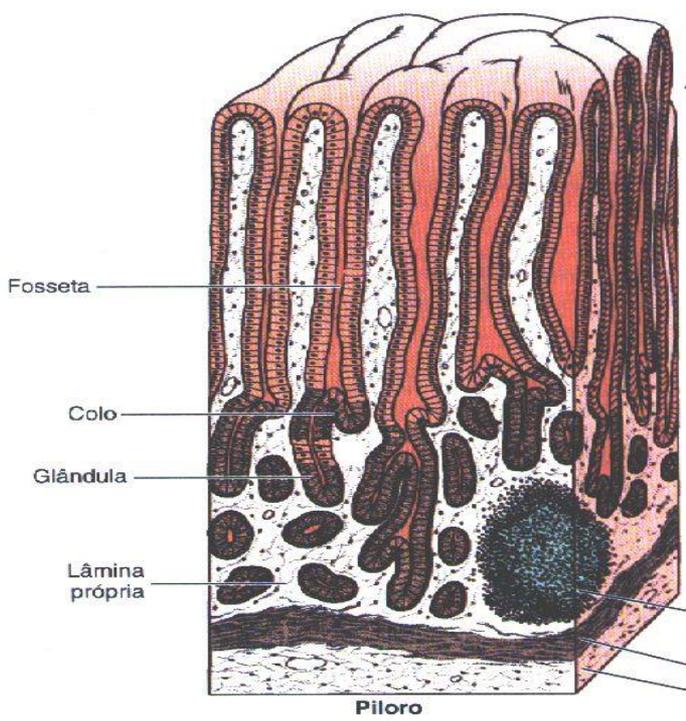
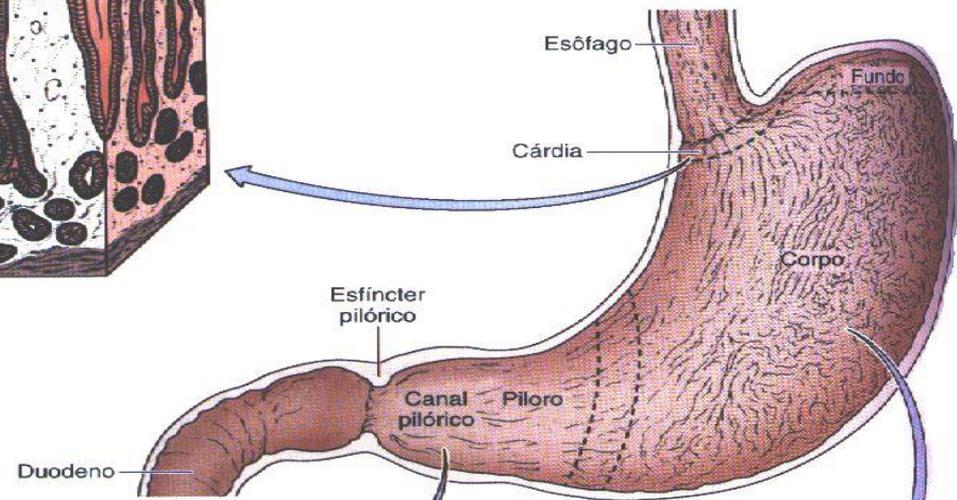
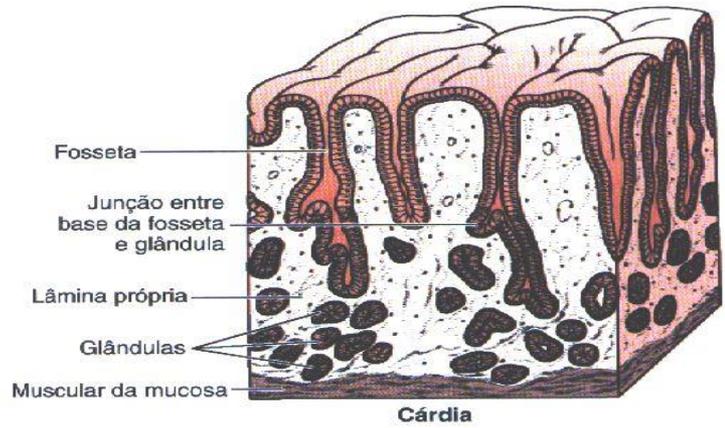
Submucosa

Epit lio de revestimento

L mina pr pria

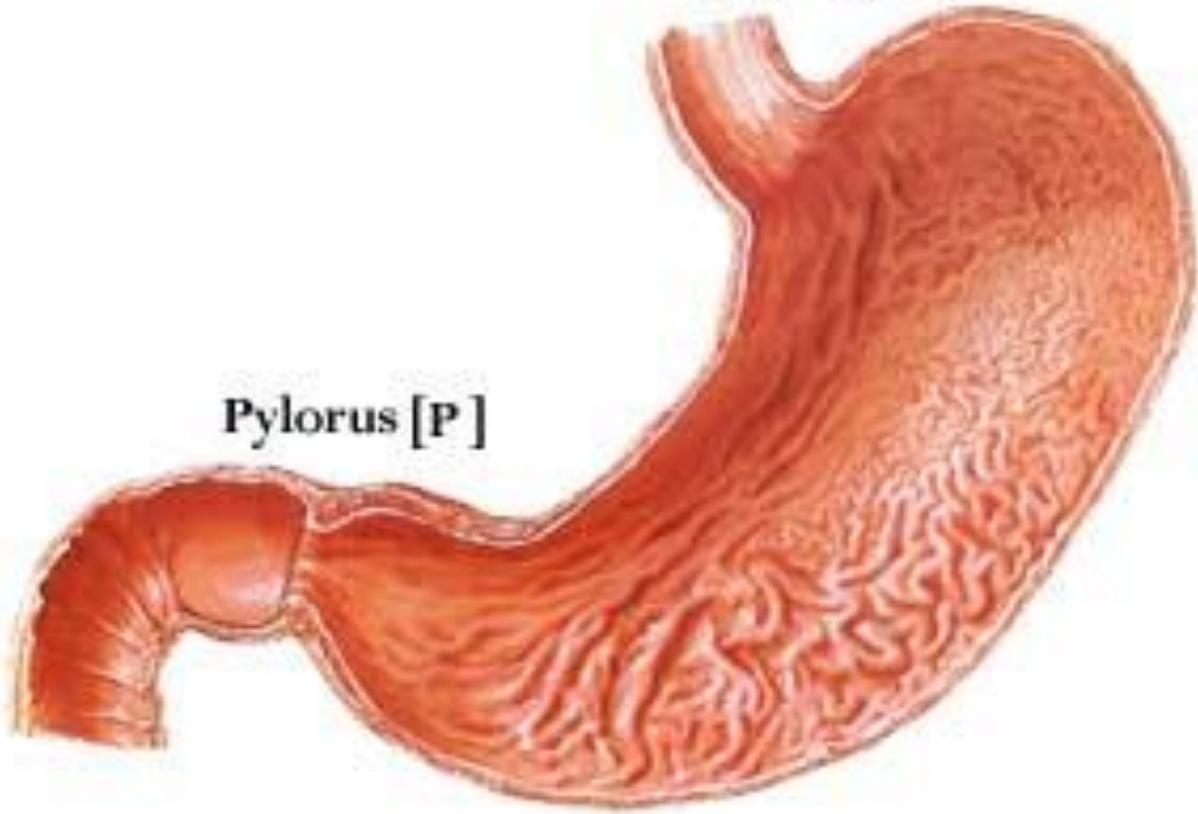
Muscular da mucosa

100  m



Cardia [C]

Pylorus [P]



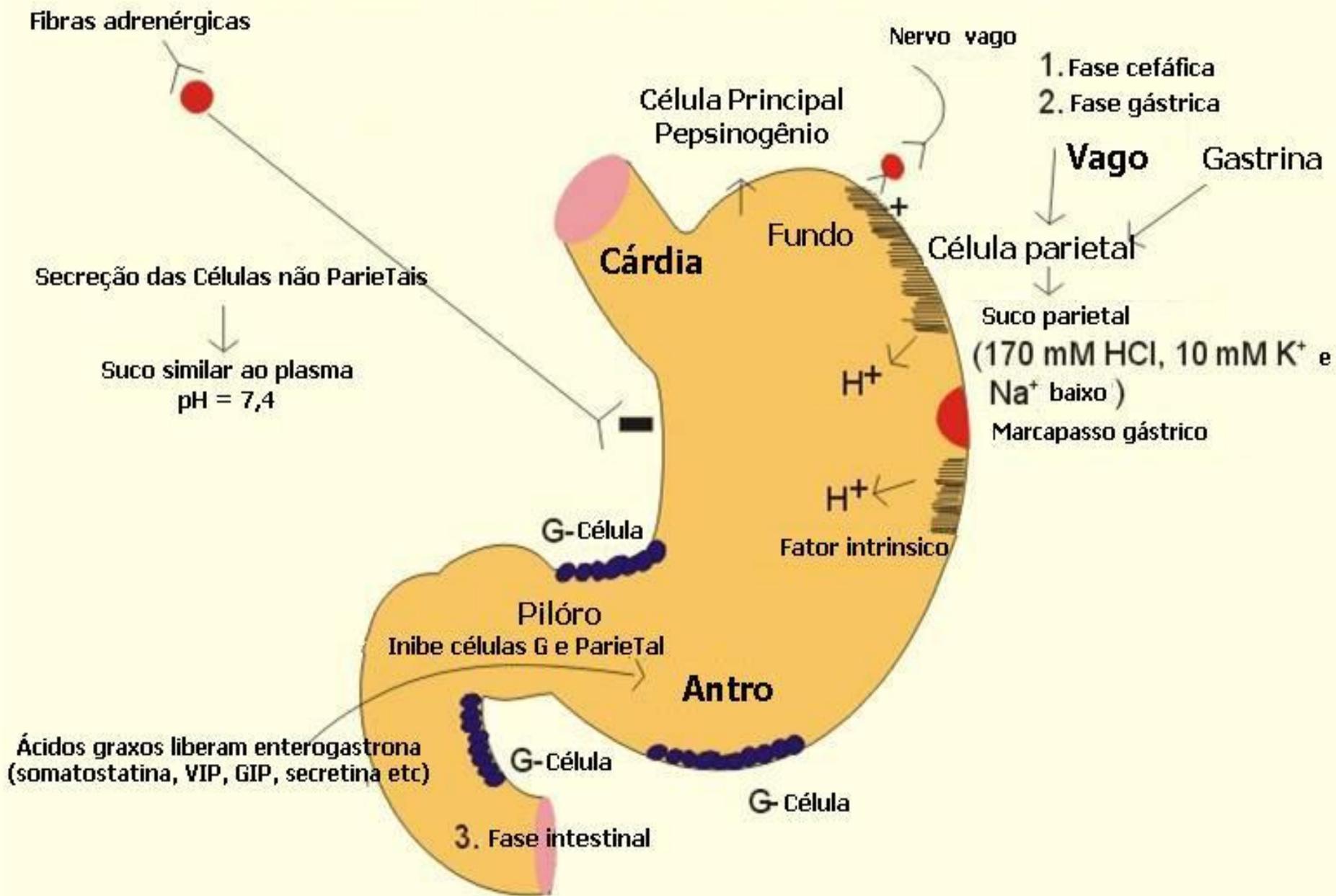
Sensores Nutricionais

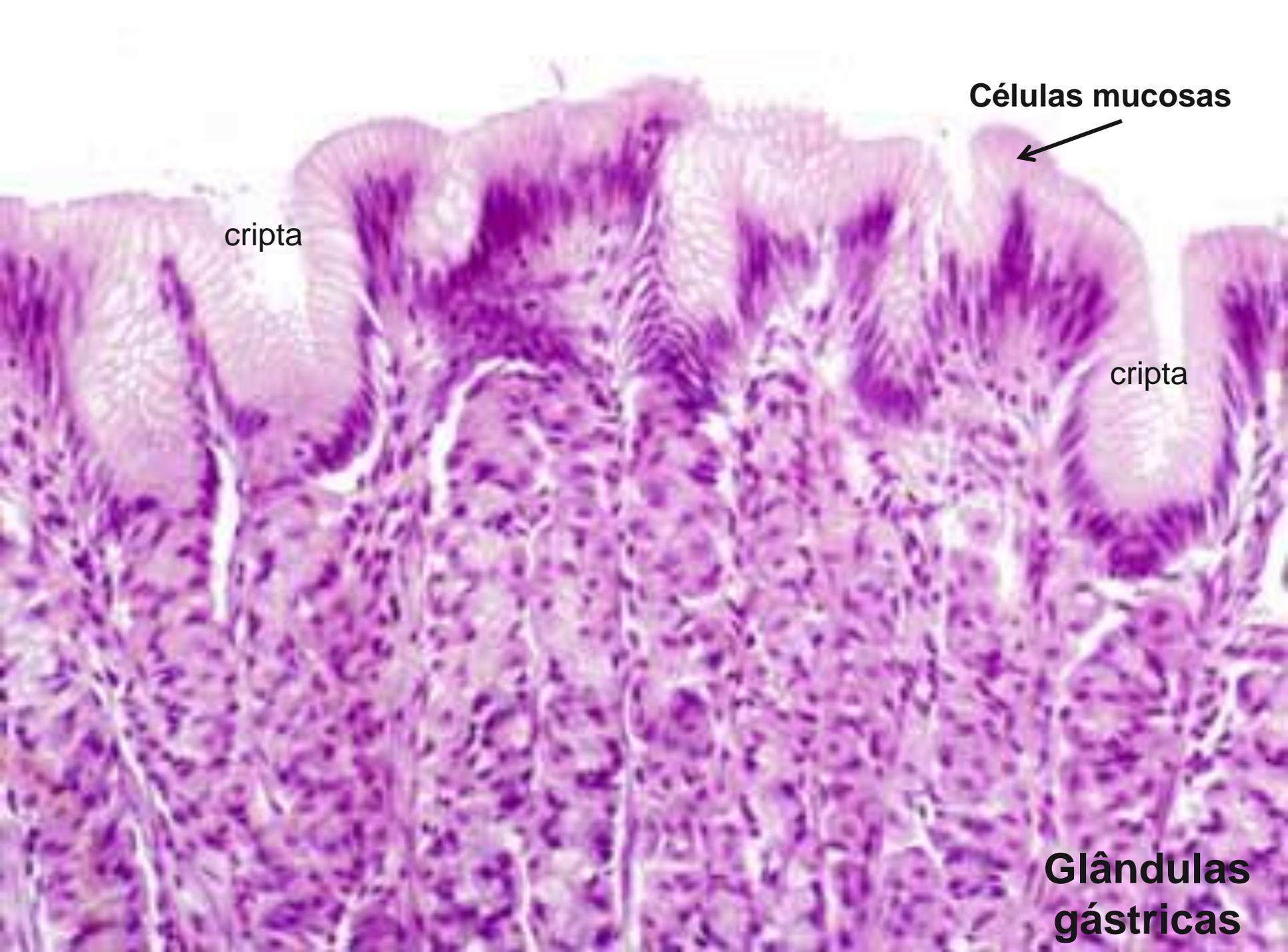
- ◆ Estômago: ...longe de ser apenas um reservatório...
 - ◆ Presença do alimento estimula terminações aferentes vagais.
 - ◆ Detectam a secreção local de hormônios: grelina e leptina.
- ◆ Leptina: produzida pela mucosa gástrica = ANOREXÍGENA.
- ◆ Grelina: secretada pelas glândulas oxínticas = OREXÍGENA.
 - ◆ Estimula o apetite pela inibição vagal.
 - ◆ Secretada na ausência de alimento no interior do estômago.

Camundongos sem o gene da leptina



Secreção das Células





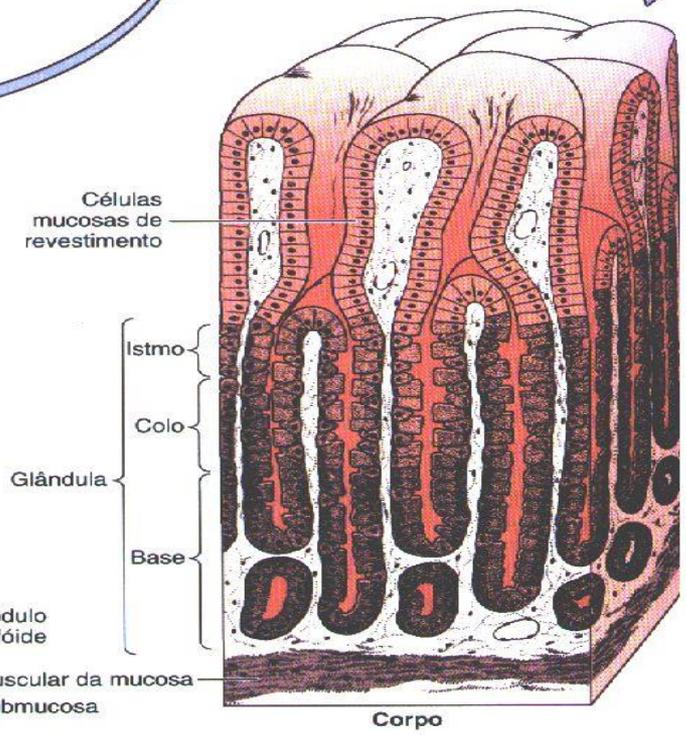
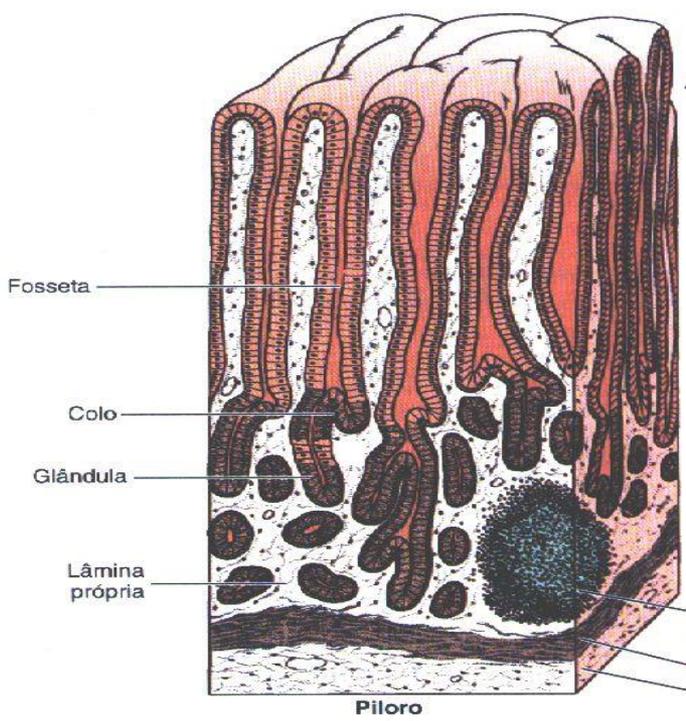
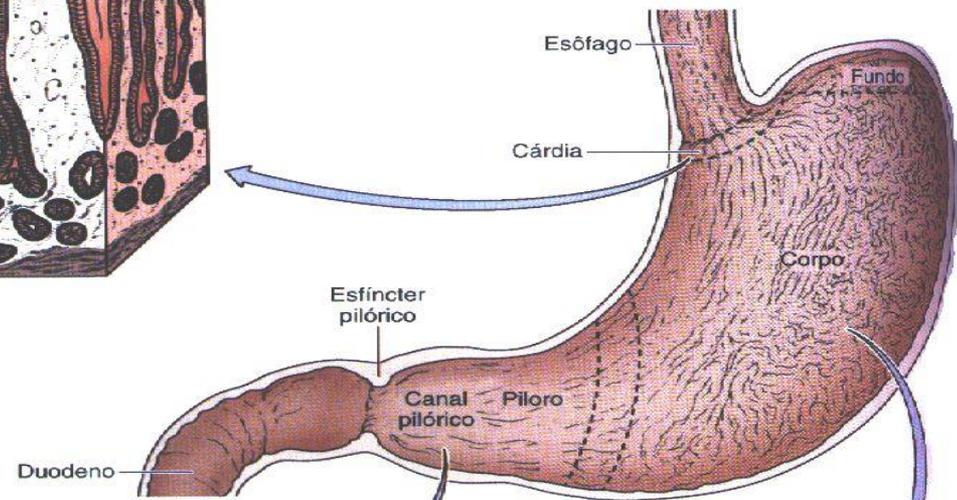
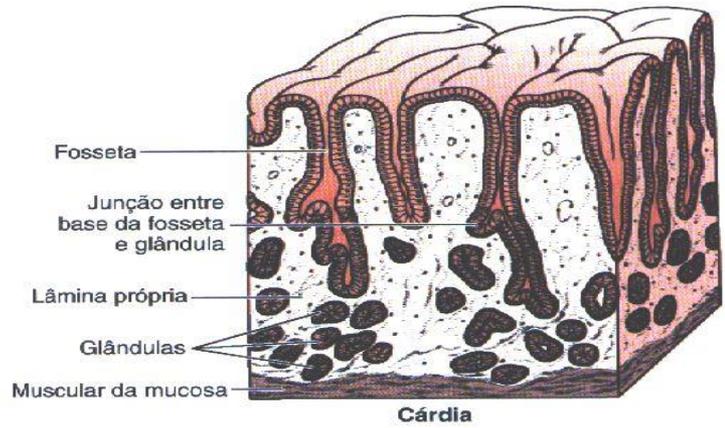
Células mucosas



cripta

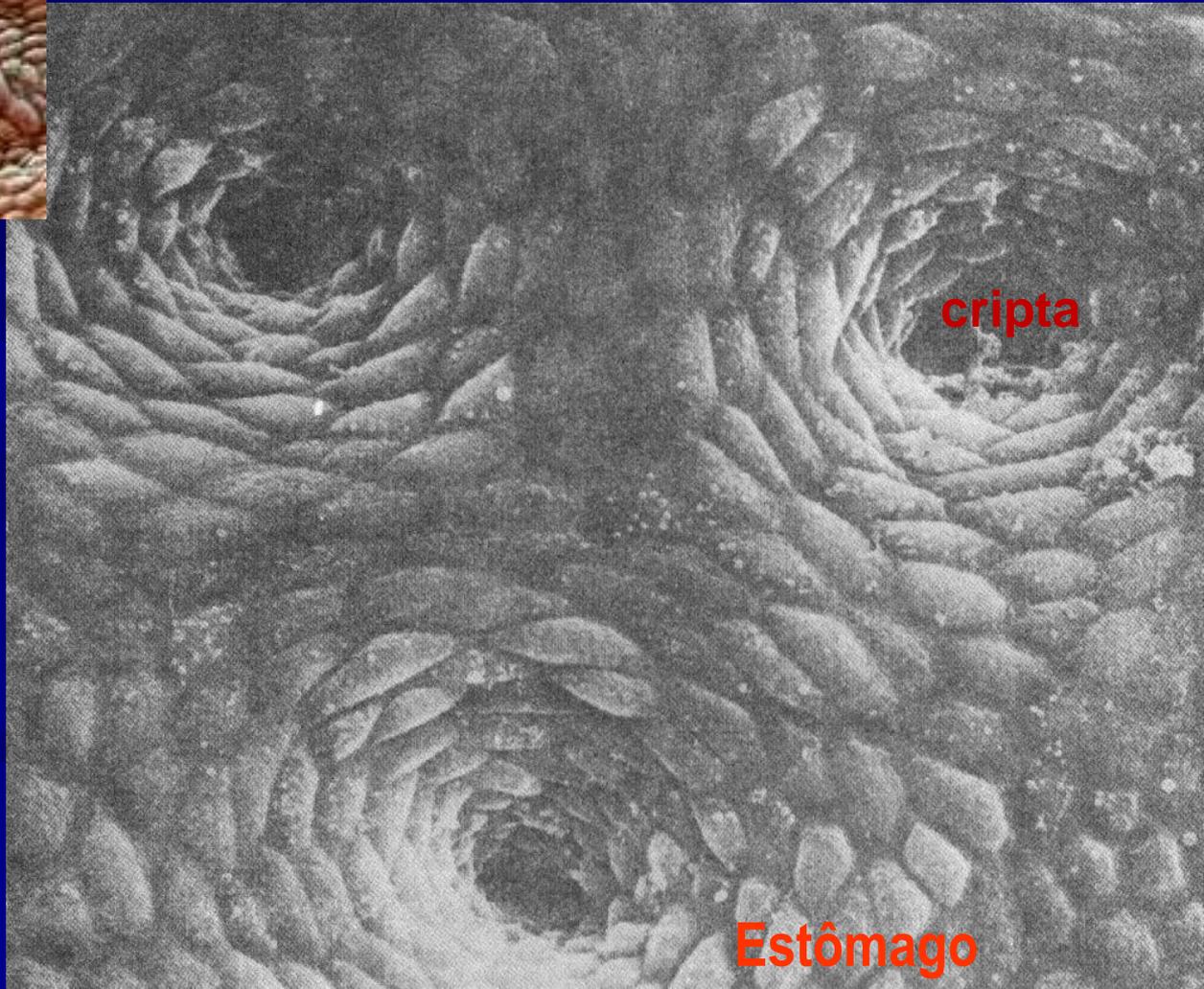
cripta

**Glândulas
gástricas**



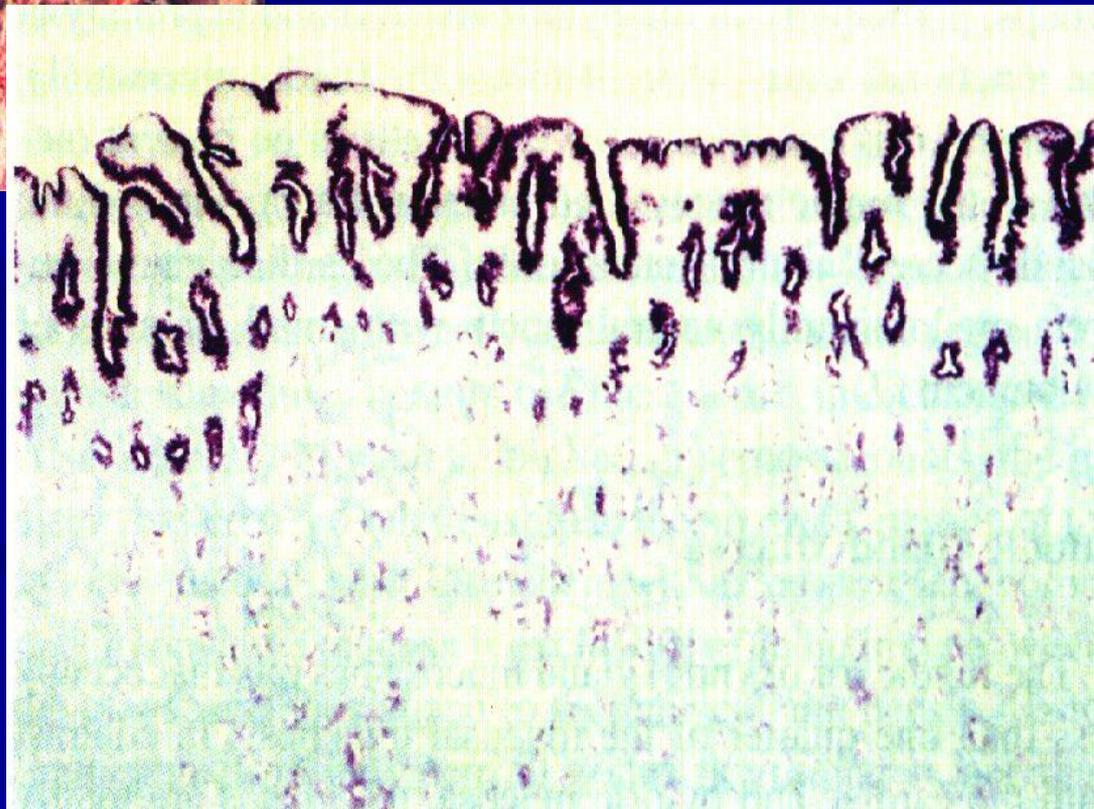
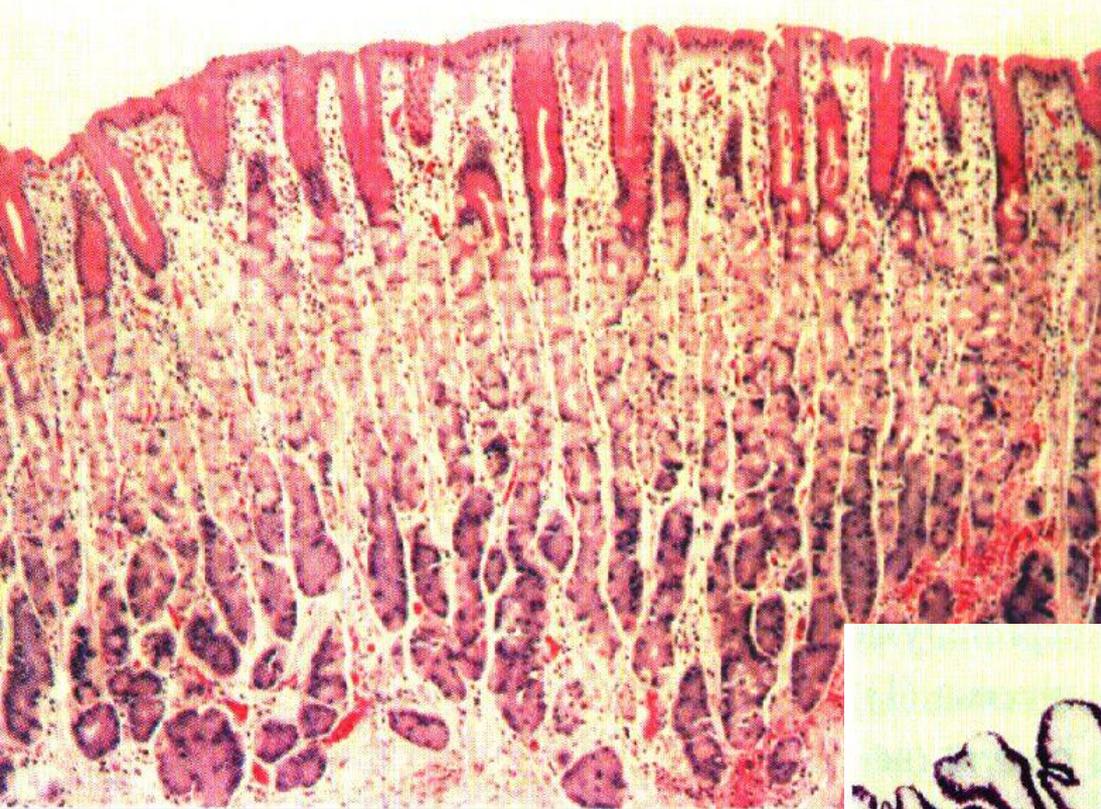


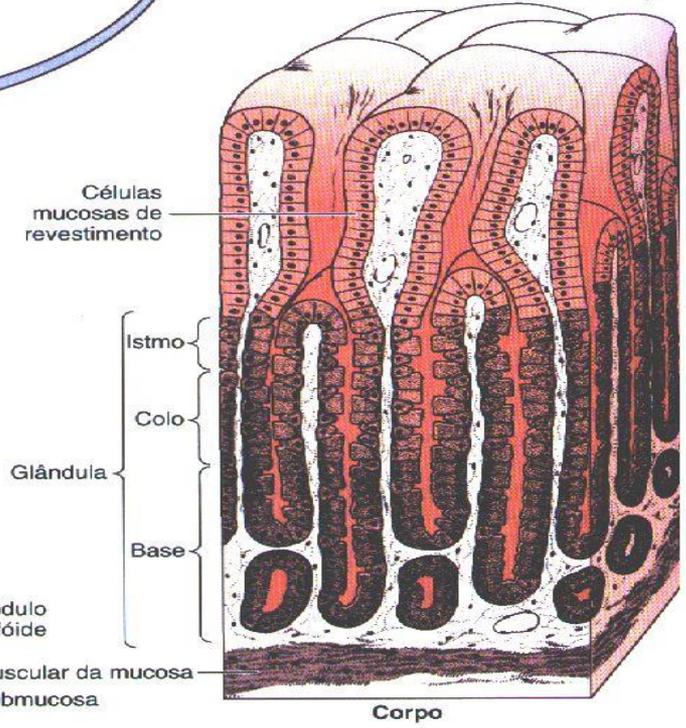
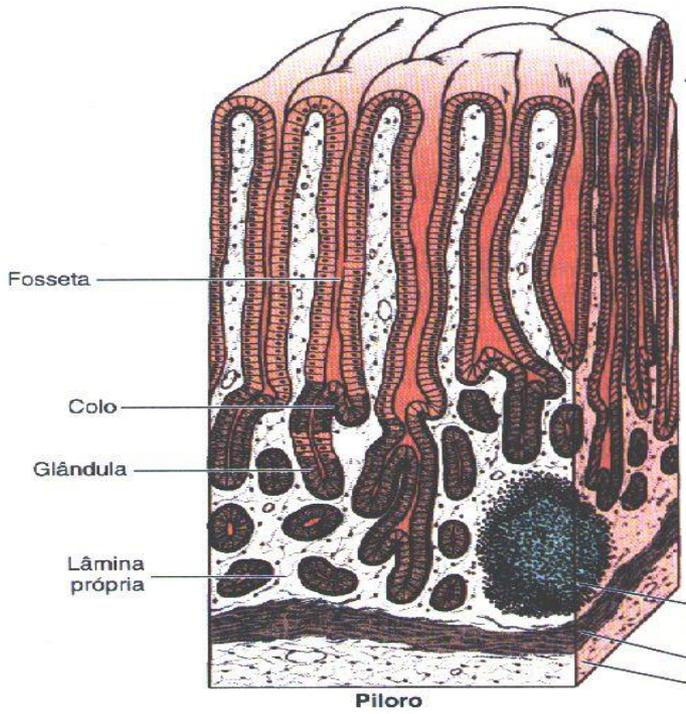
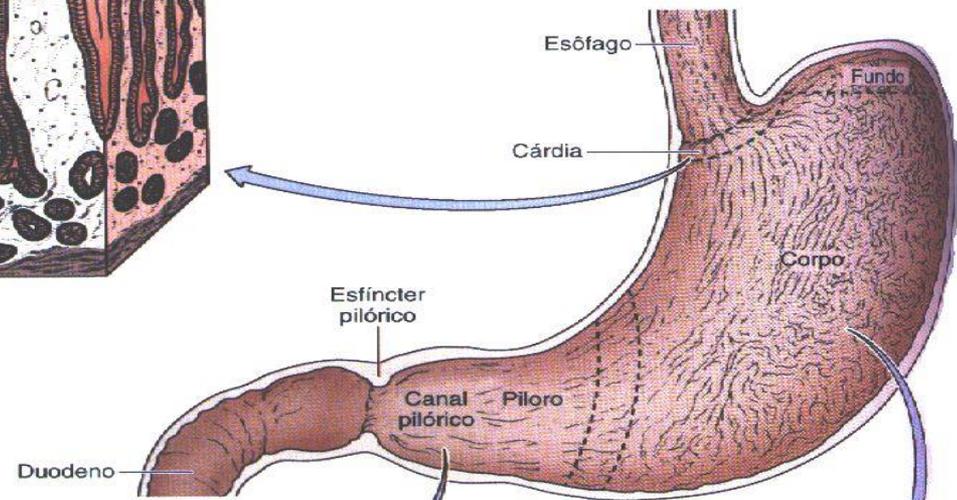
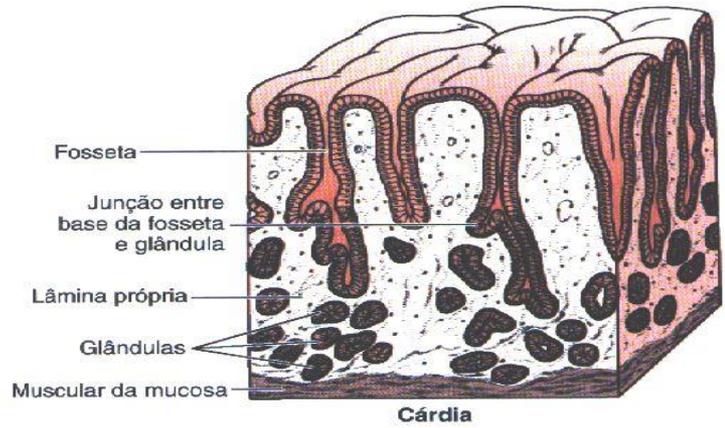
criptas



cripta

Estômago





Fosseta gástrica

Epitélio superficial

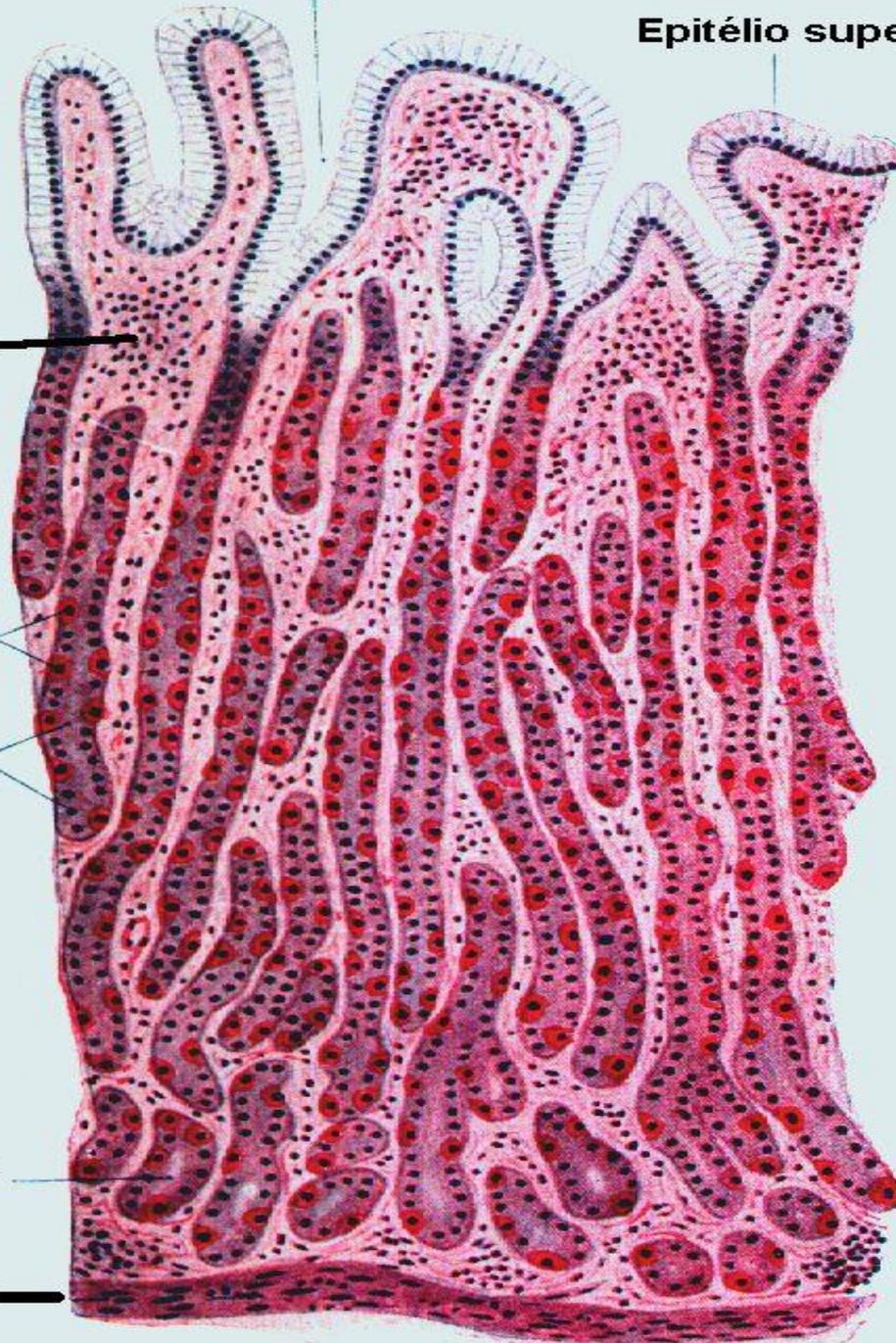
Lâmina própria

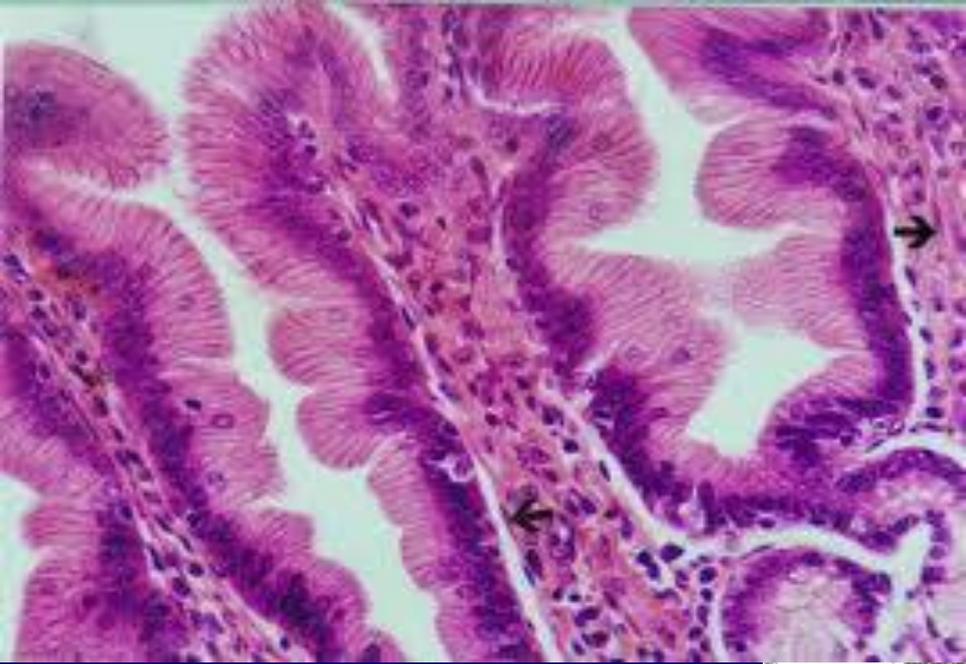
Células parietal
(PT)

Células principais

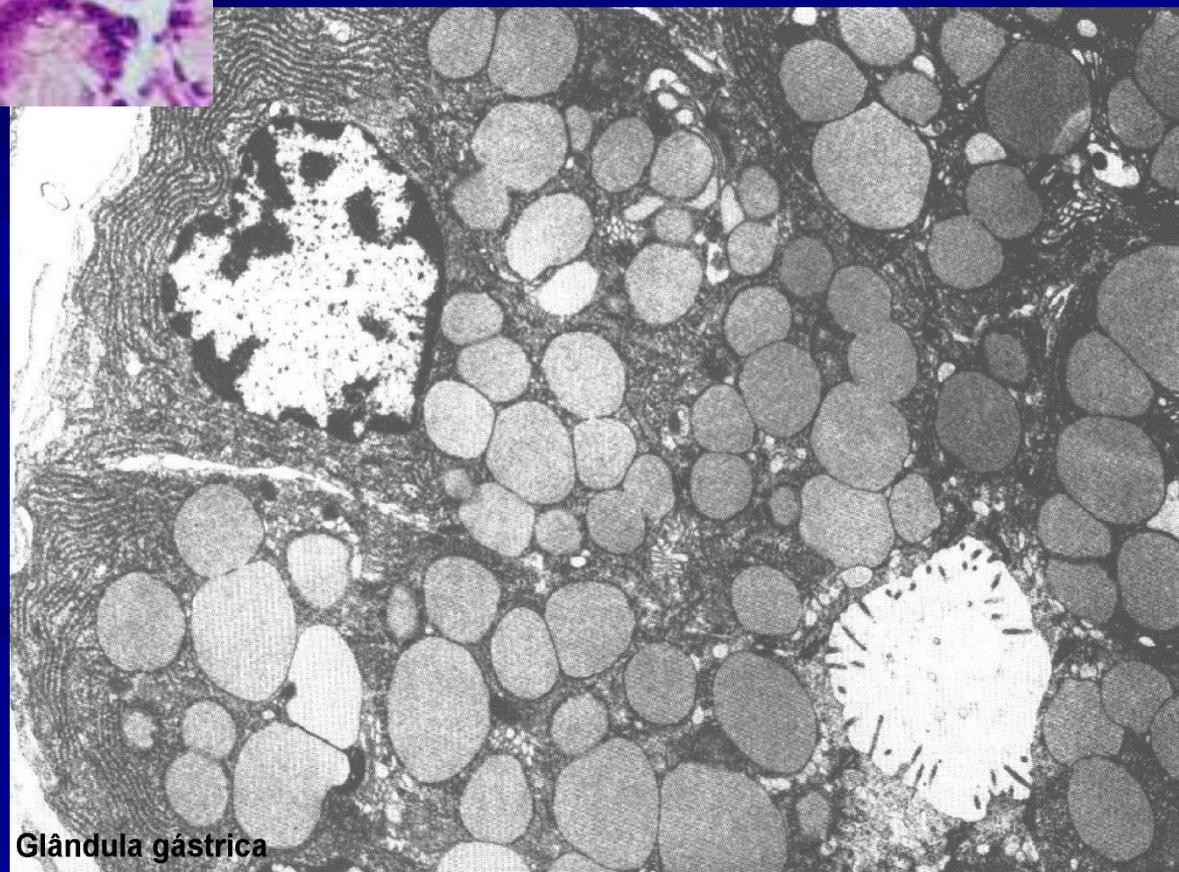
Fundo de uma glândula
gástrica

Muscular da mucosa

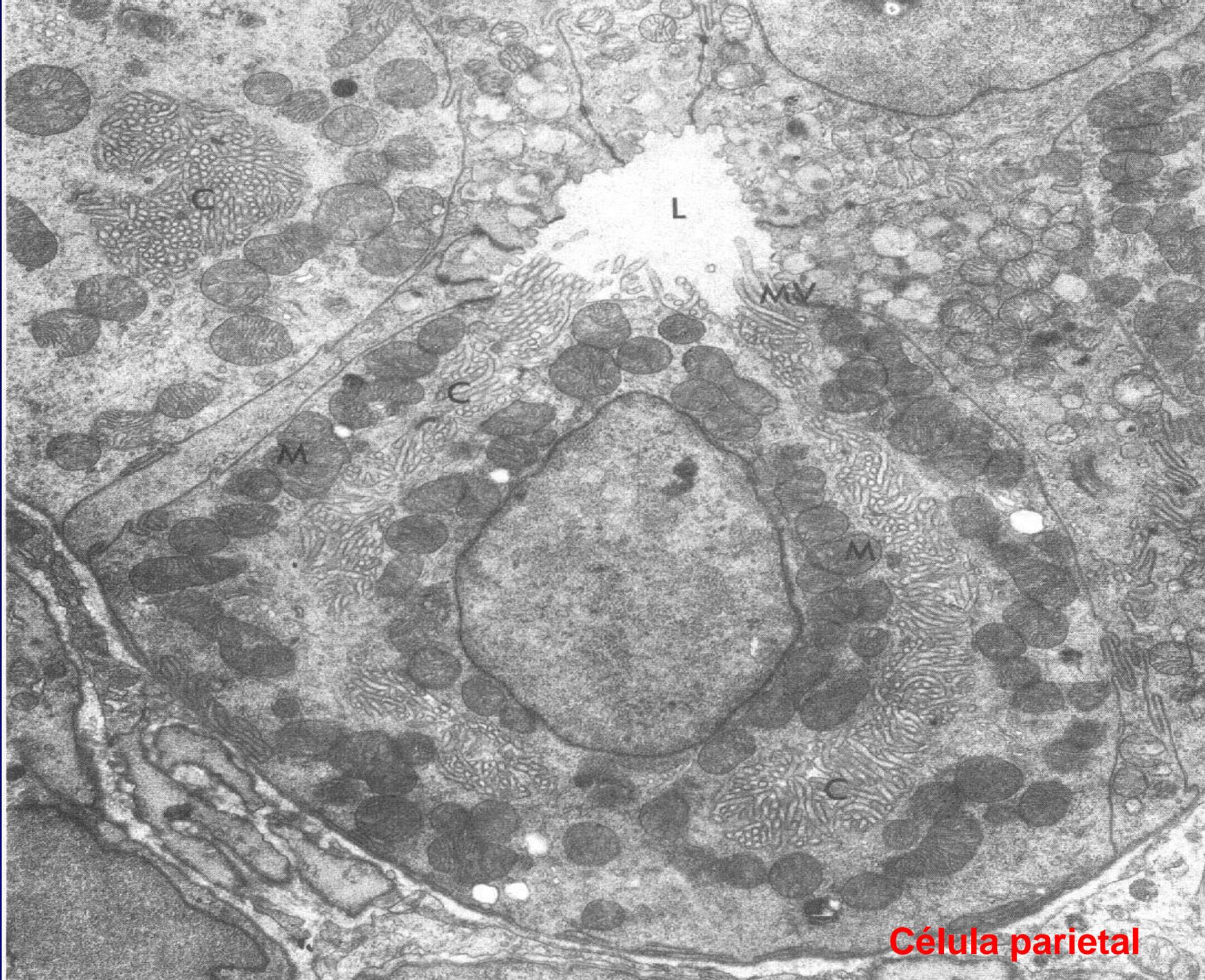




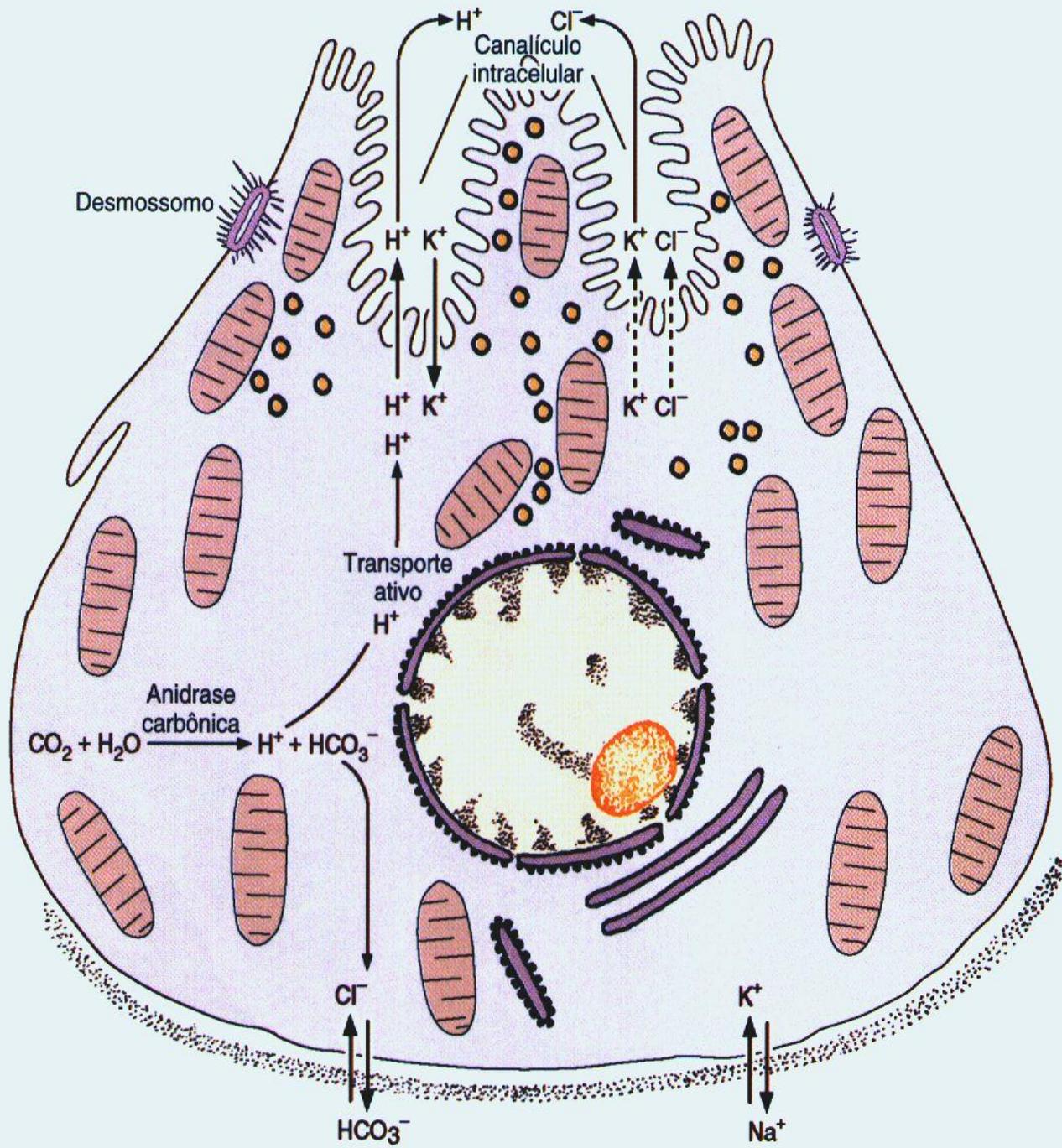
Cripta da glândula gástrica



Glândula gástrica



Célula parietal

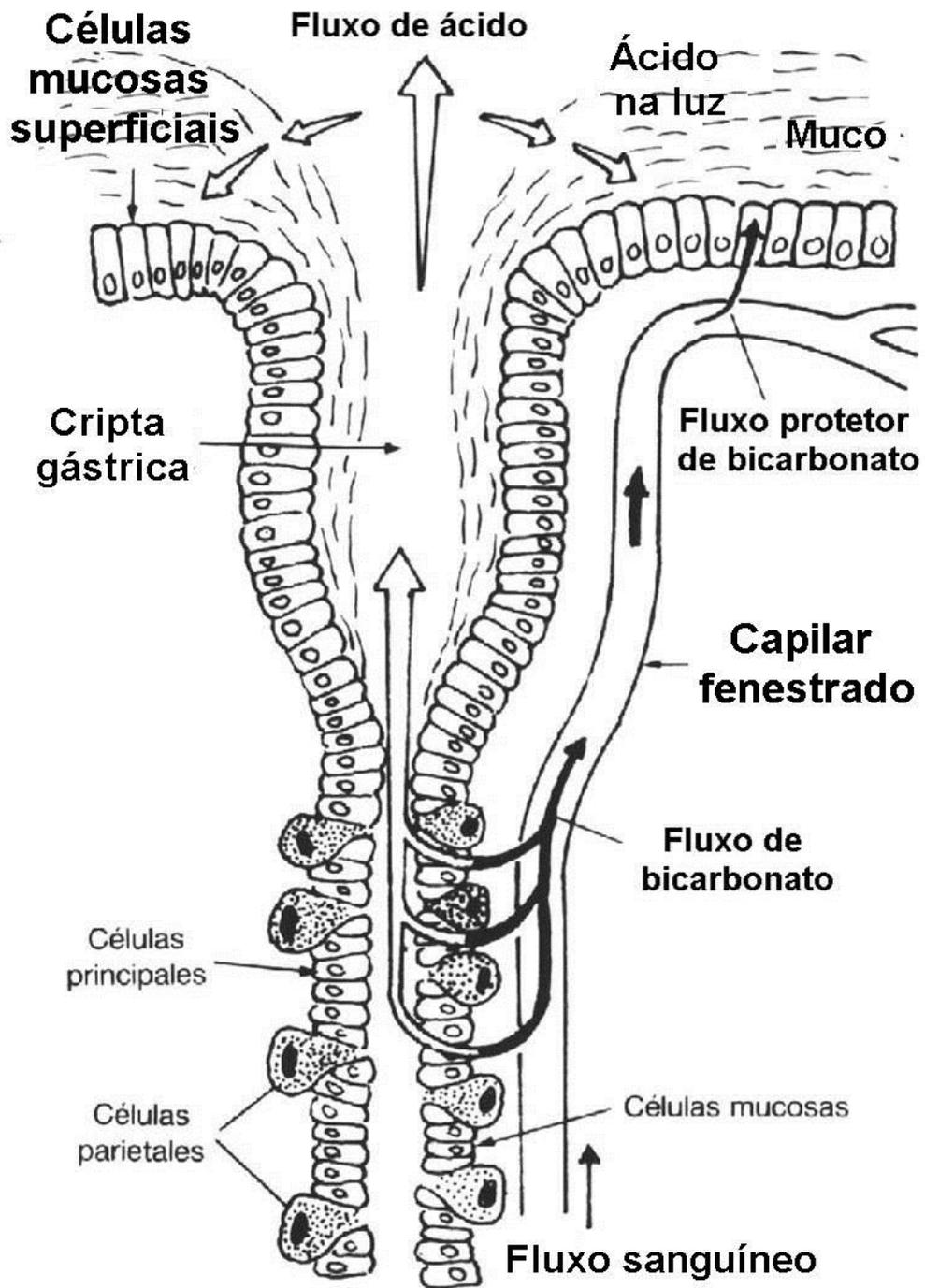


**Forma ácido
clorídrico
(PT)**

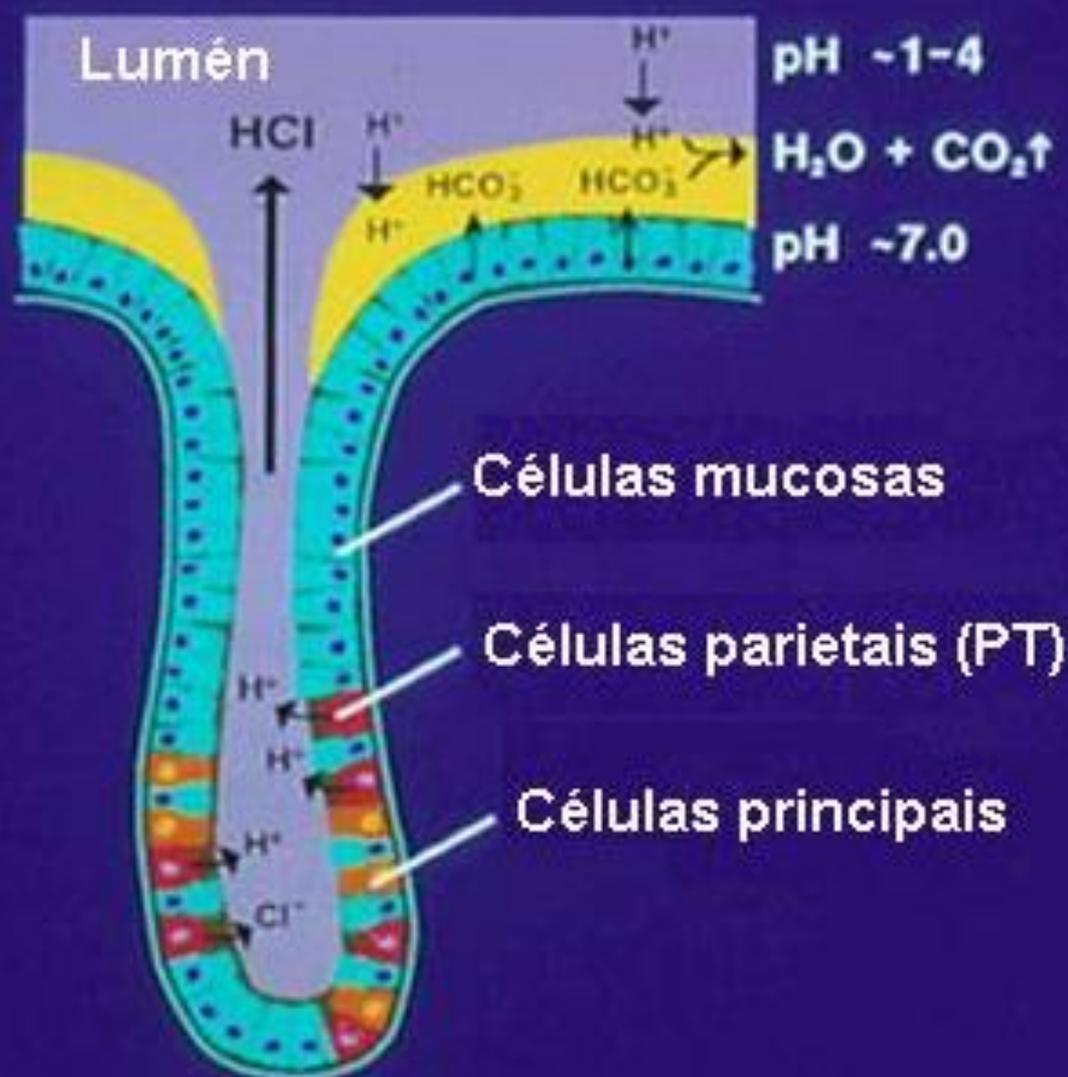
**Fator
antianemico
(Vitamina B12)**

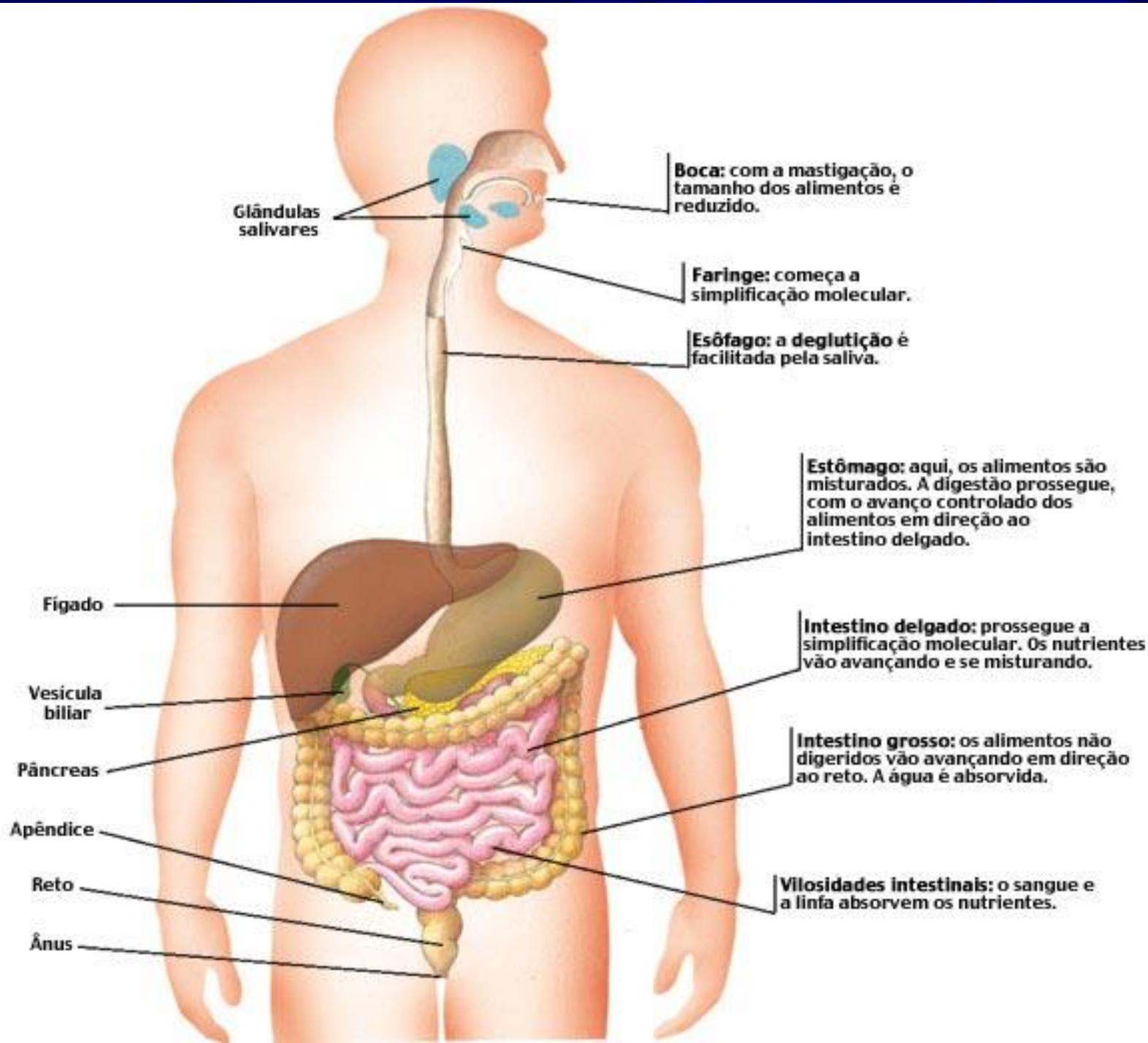
**Leptina
(anorexígeno)**

**Maior concentração
no Fundo e Corpo**



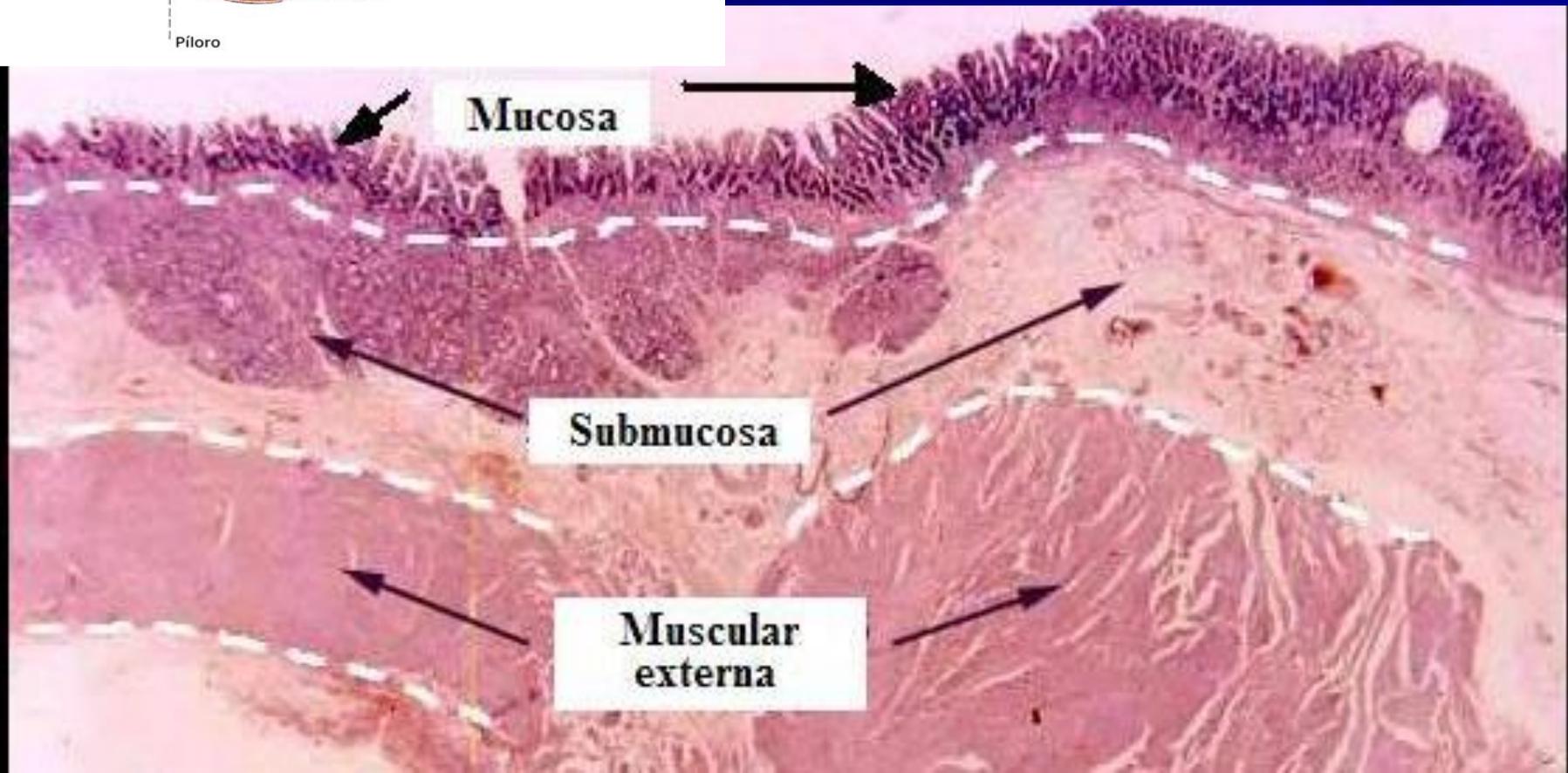
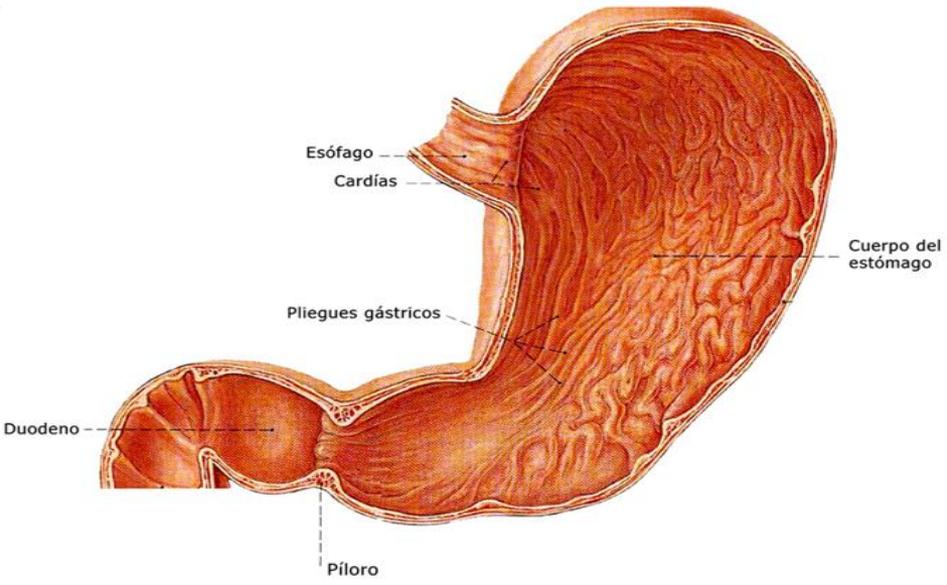
O muco e o HCO_3^- neutralizam o ácido na superfície da mucosa gástrica

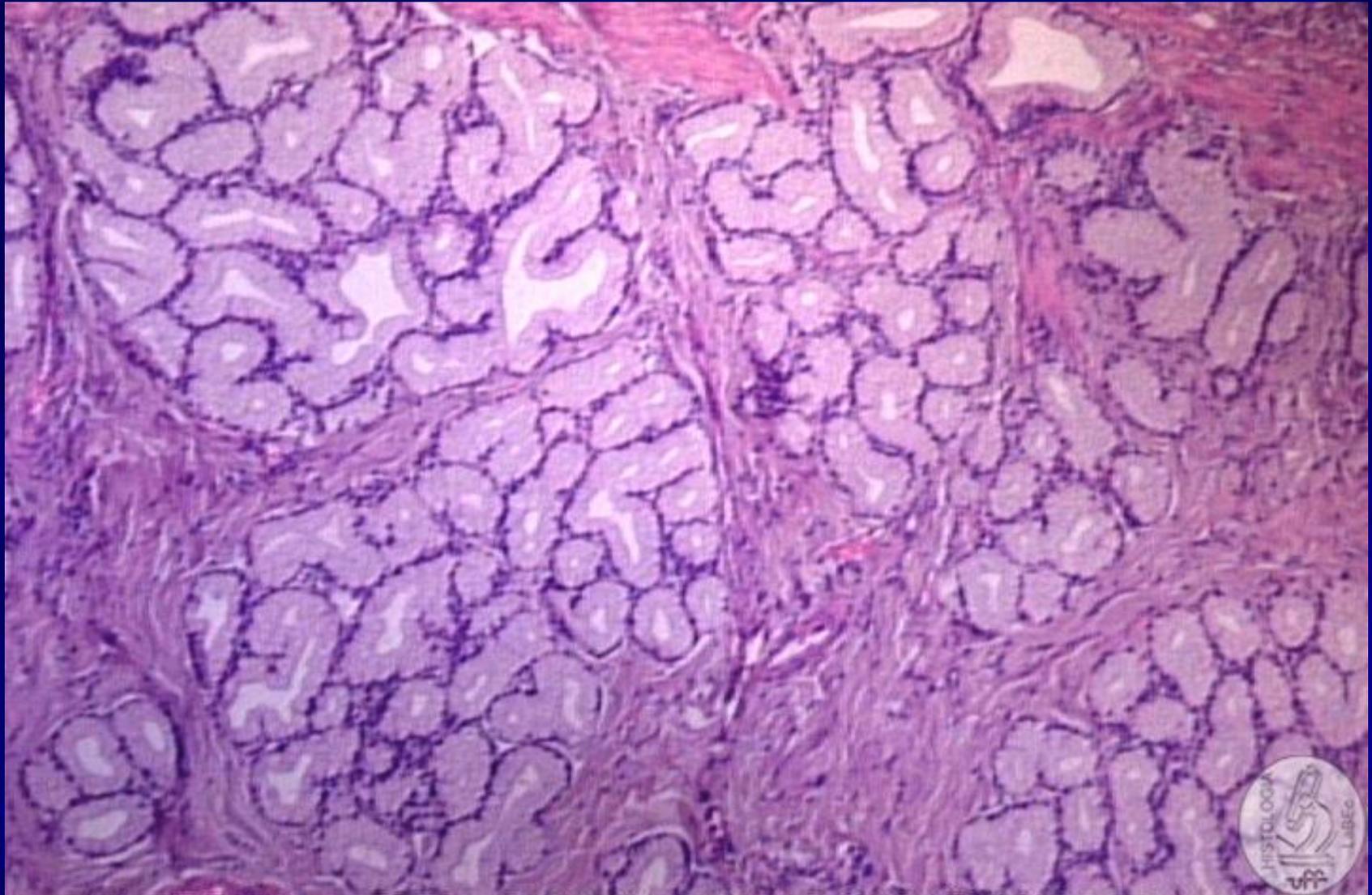




Transição gastro-duodenal

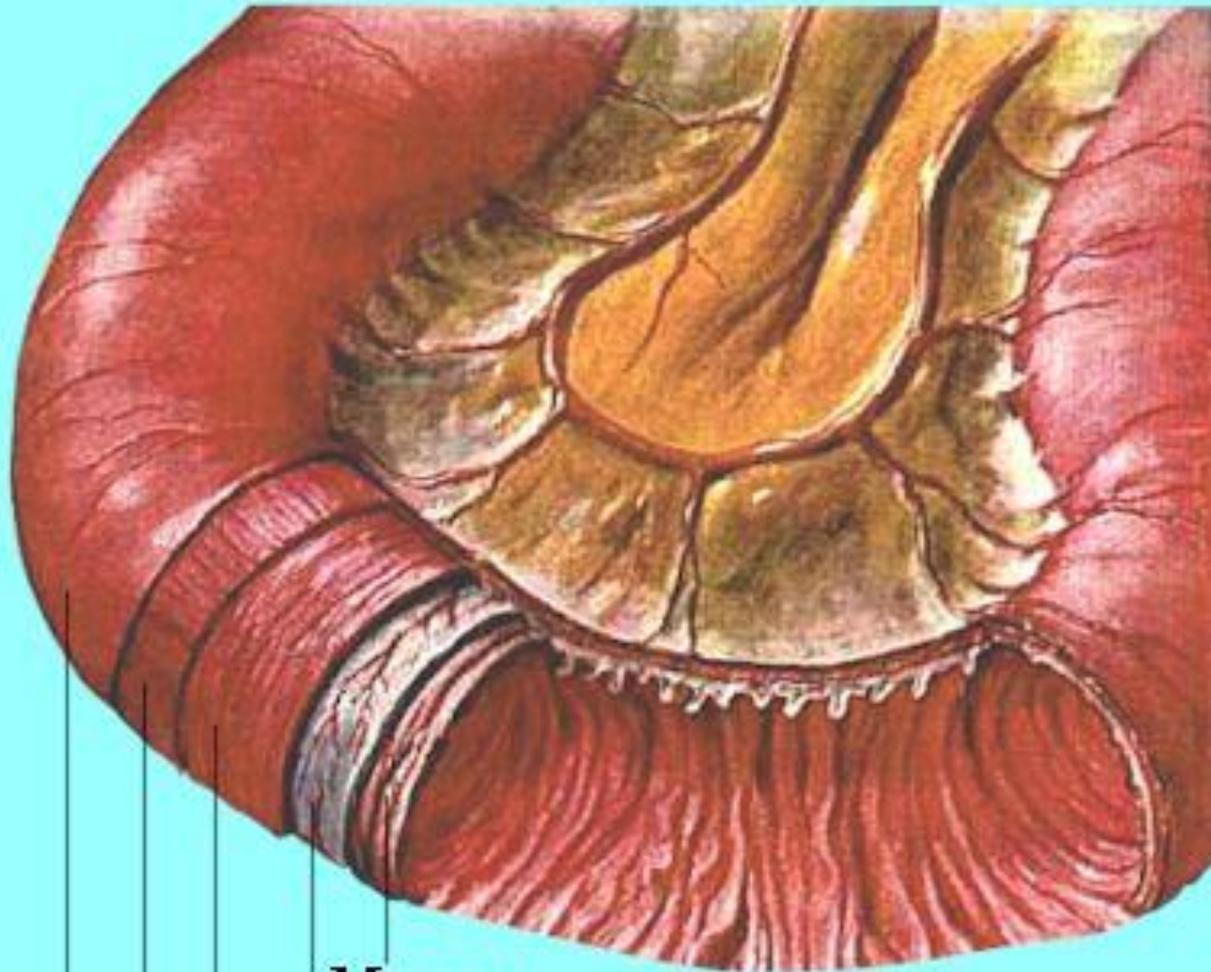
Glândulas duodenais





Glândulas duodenais ou de Brünner secretam muco e bicarbonato

Intestino Delgado estructura



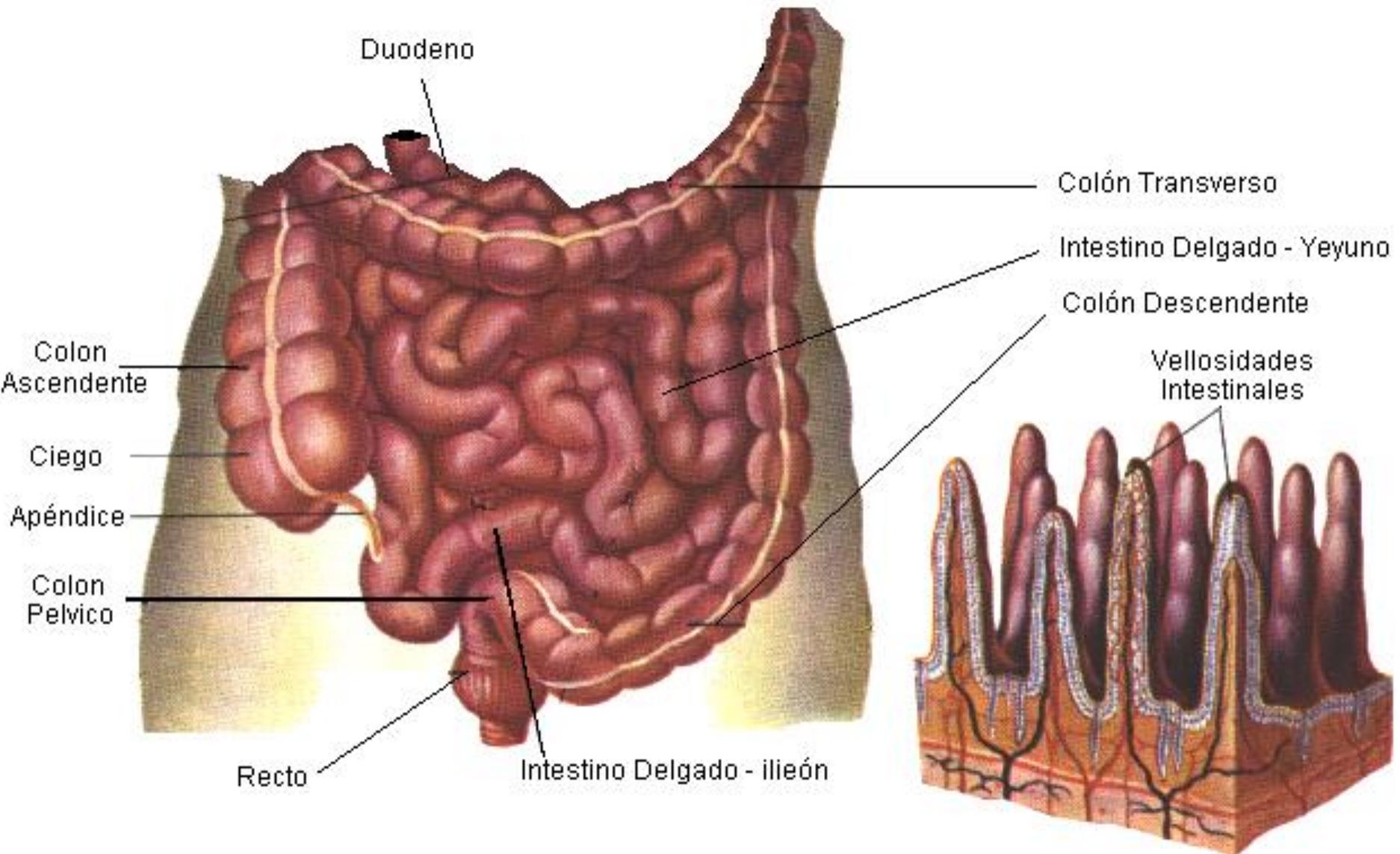
Mucosa

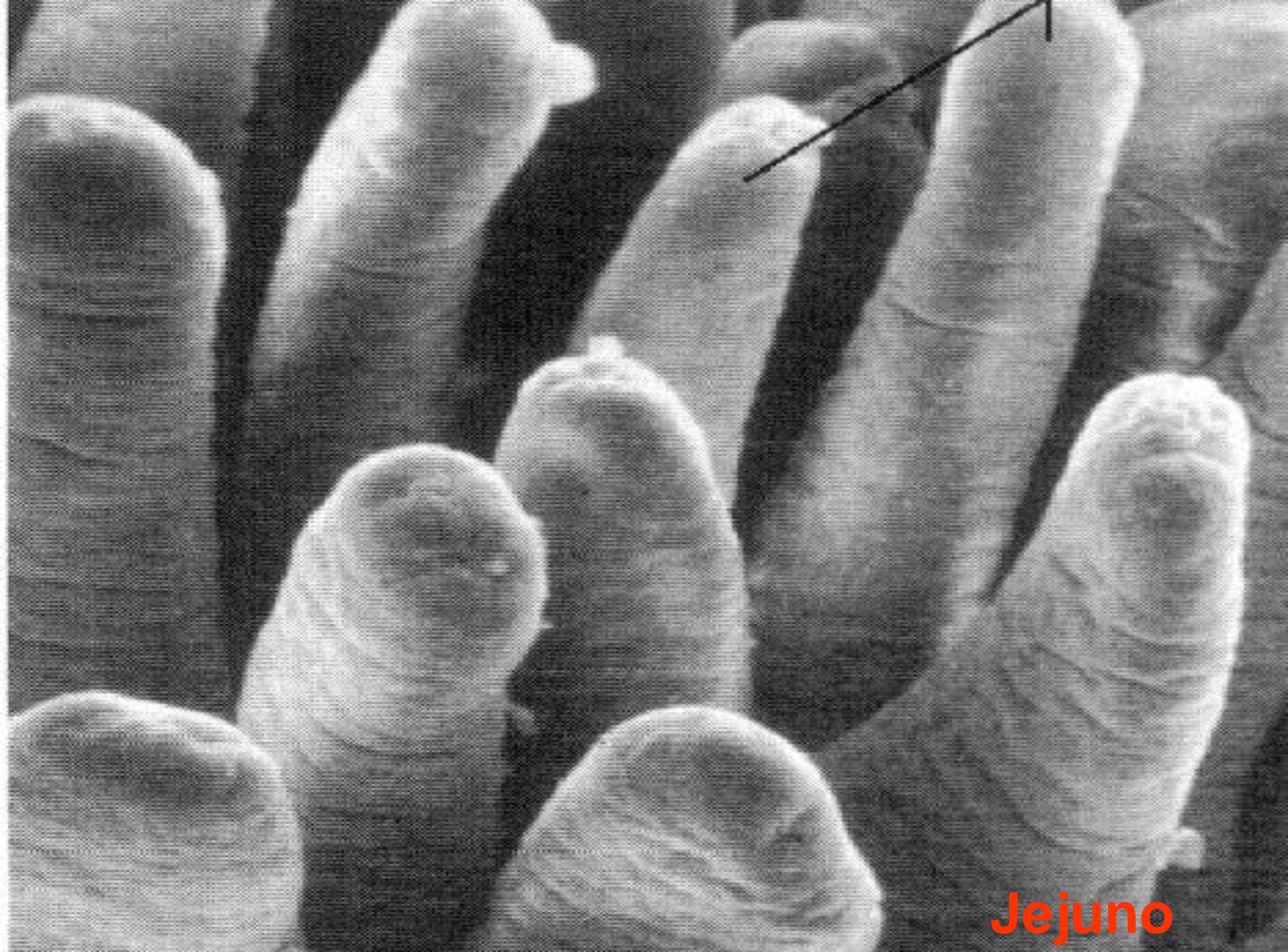
Submucosa

Musc. circular

Musc. longitudinal

Serosa

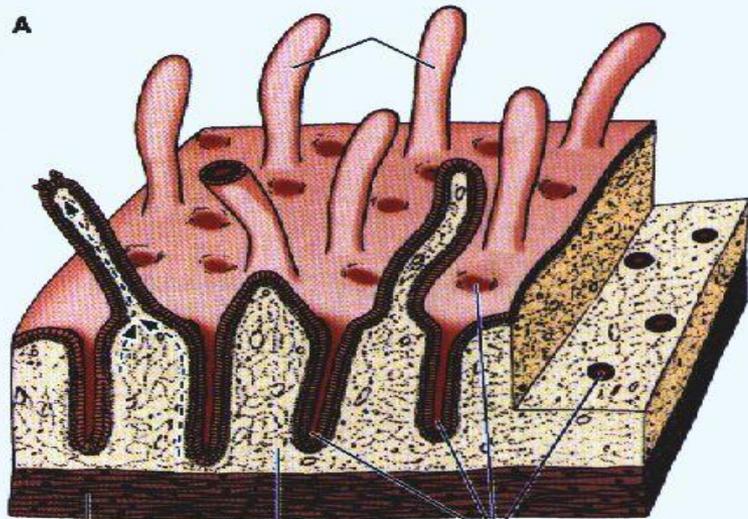




Jejuno

Vilosidades

A

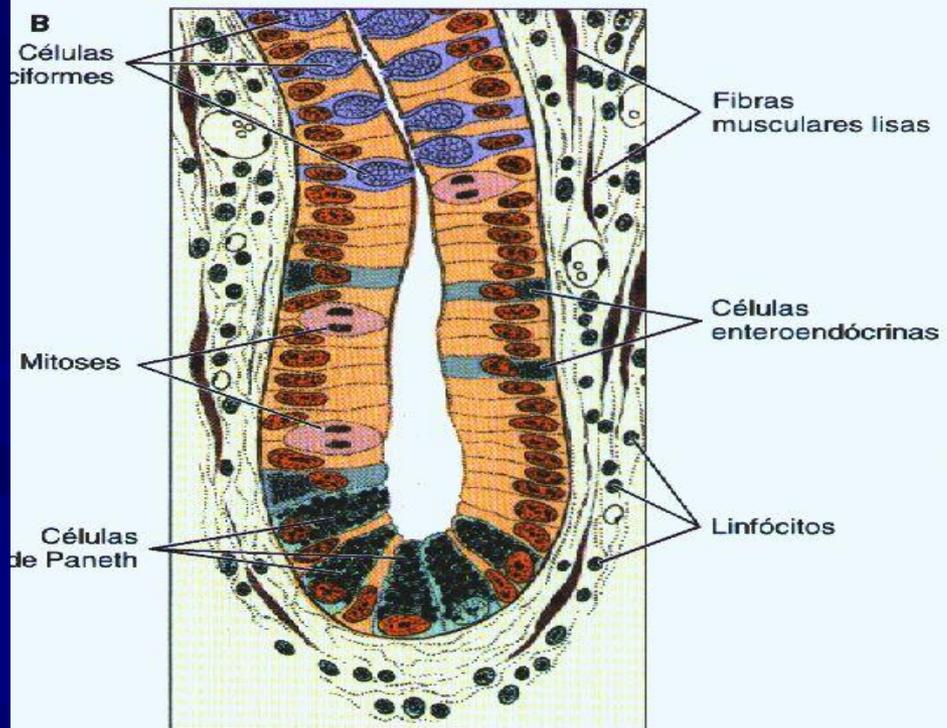


Muscular da mucosa

Lâmina própria

Glândulas intestinais

B



Células cilíndricas

Fibras musculares lisas

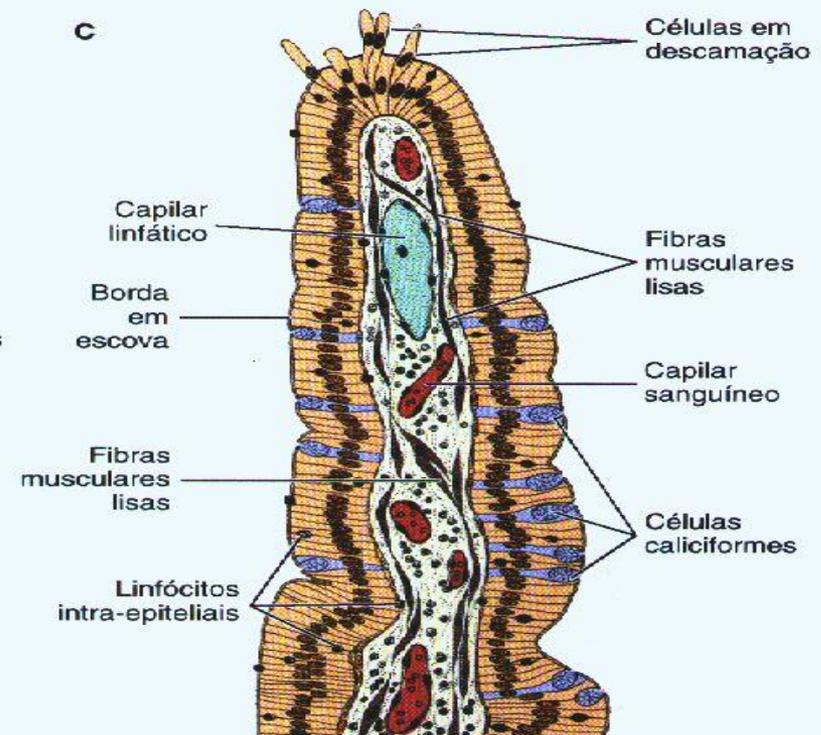
Células enteroendócrinas

Mitoses

Células de Paneth

Linfócitos

C



Células em descamação

Capilar linfático

Fibras musculares lisas

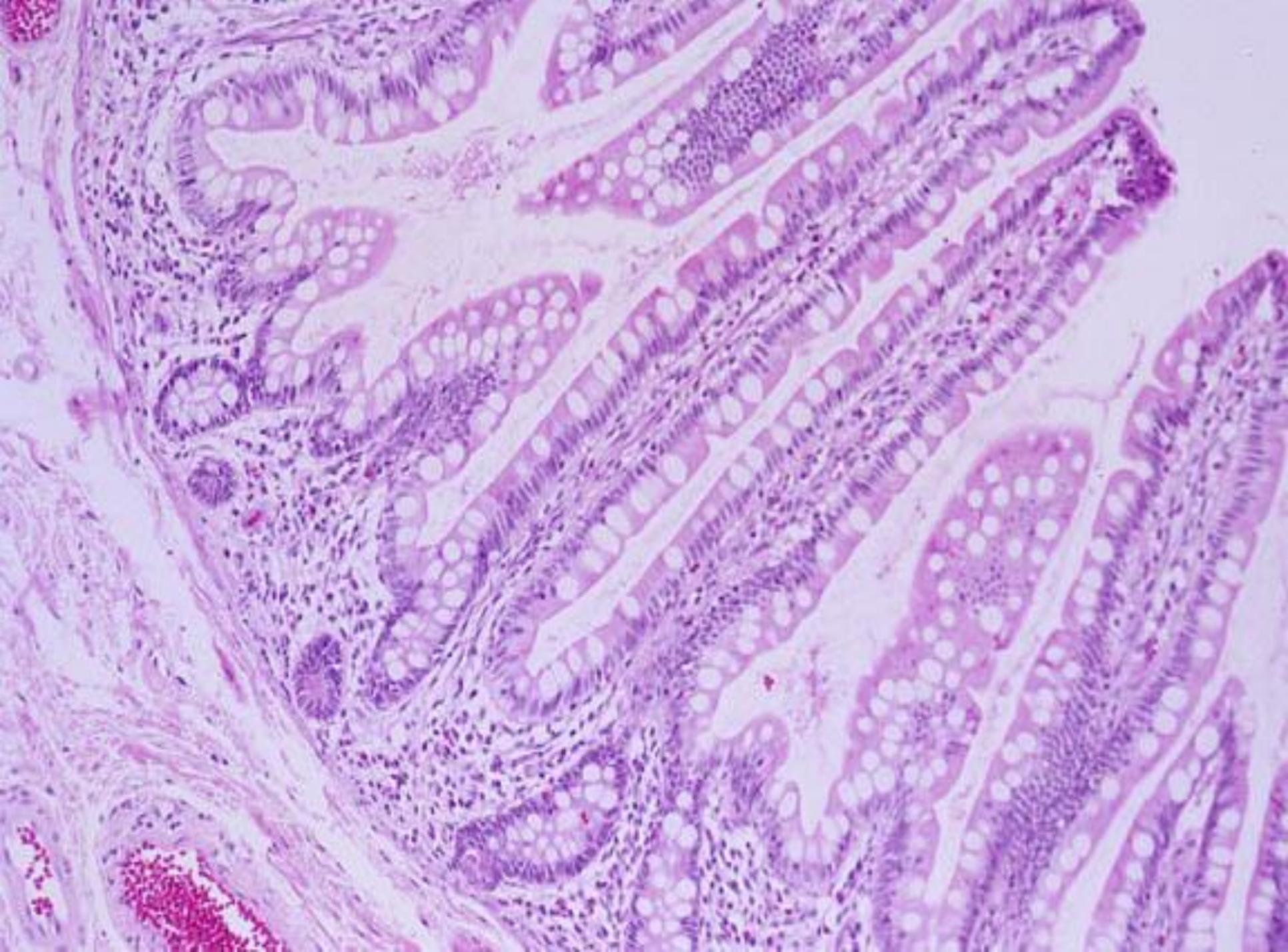
Borda em escova

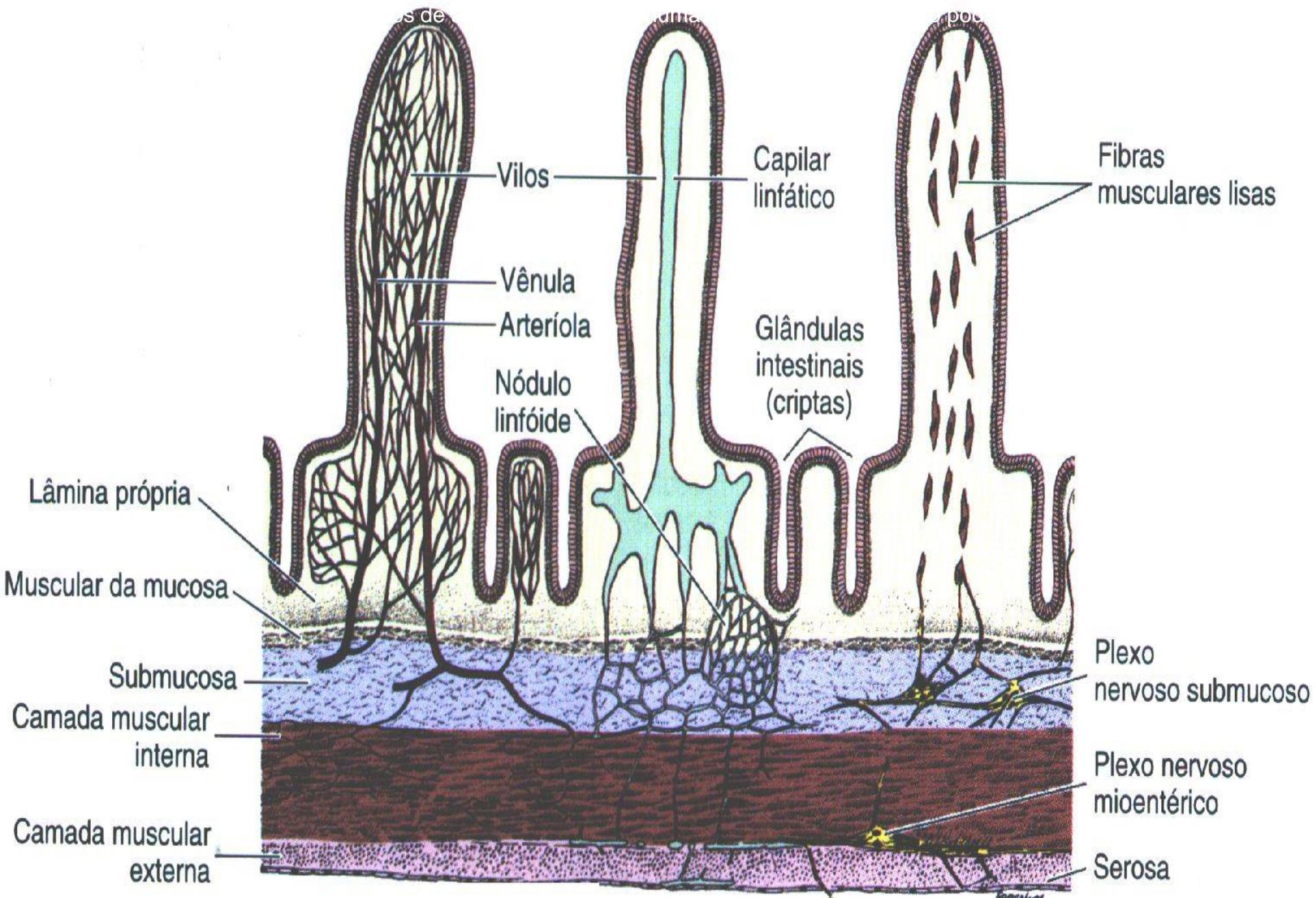
Capilar sanguíneo

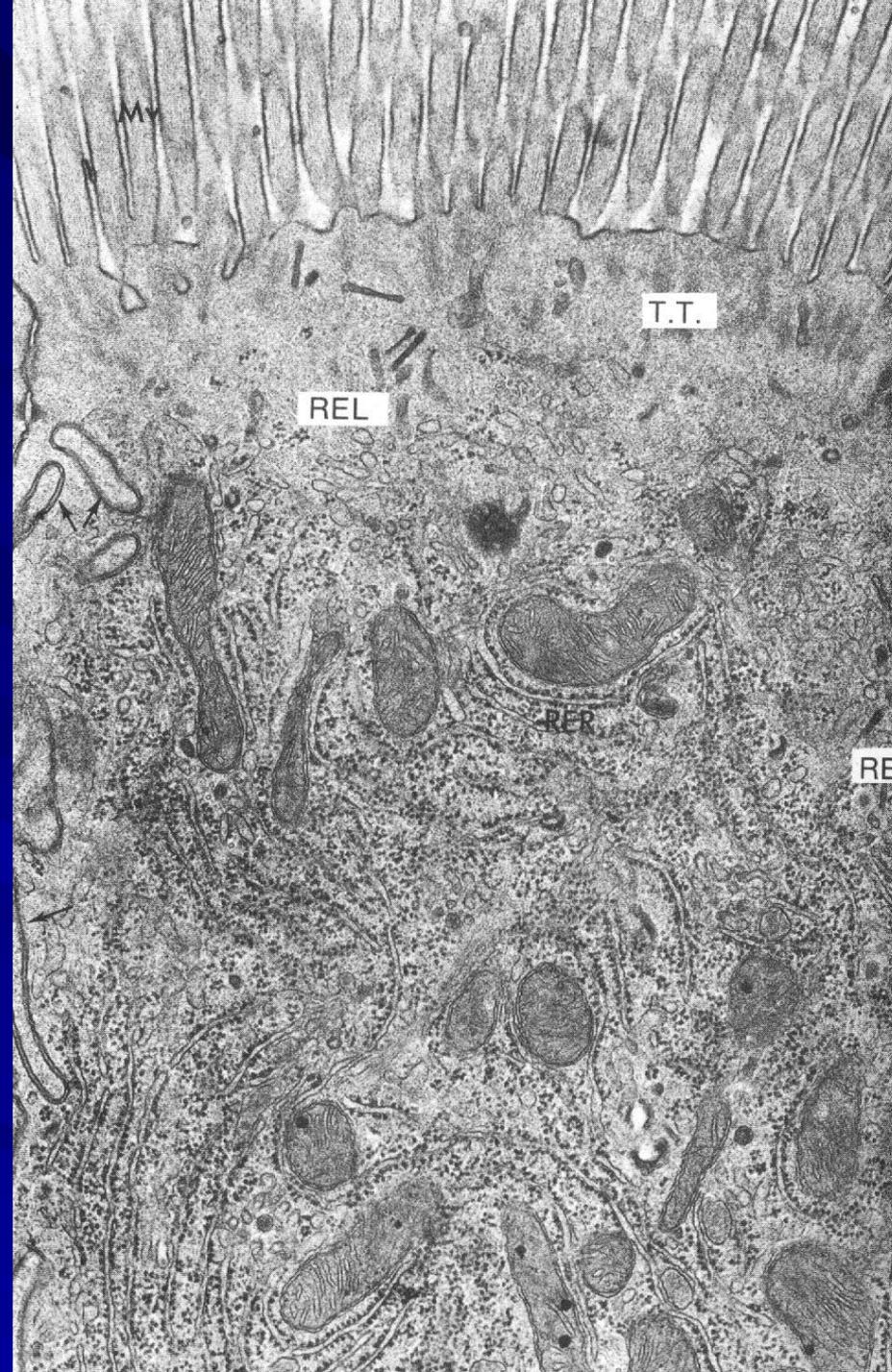
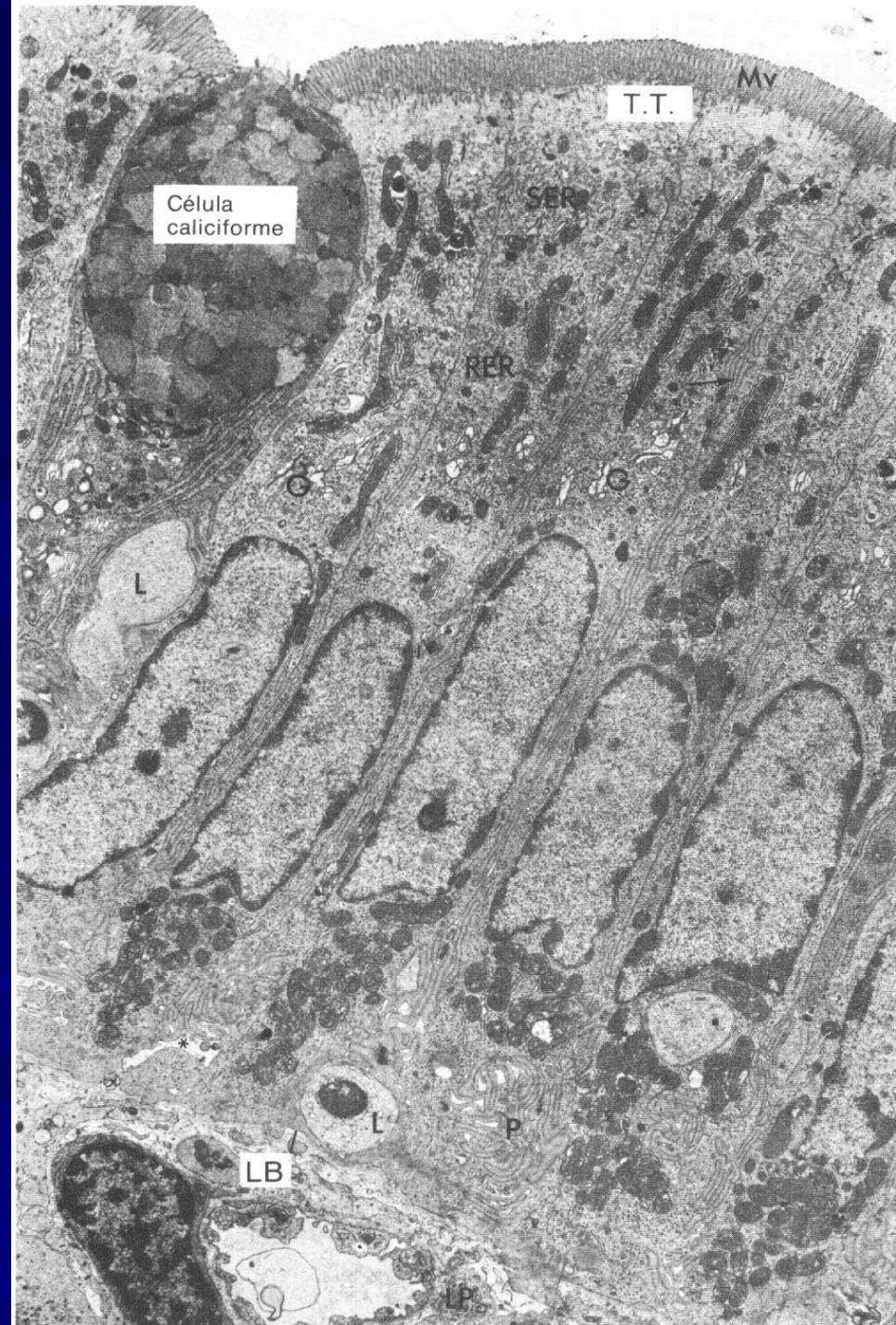
Fibras musculares lisas

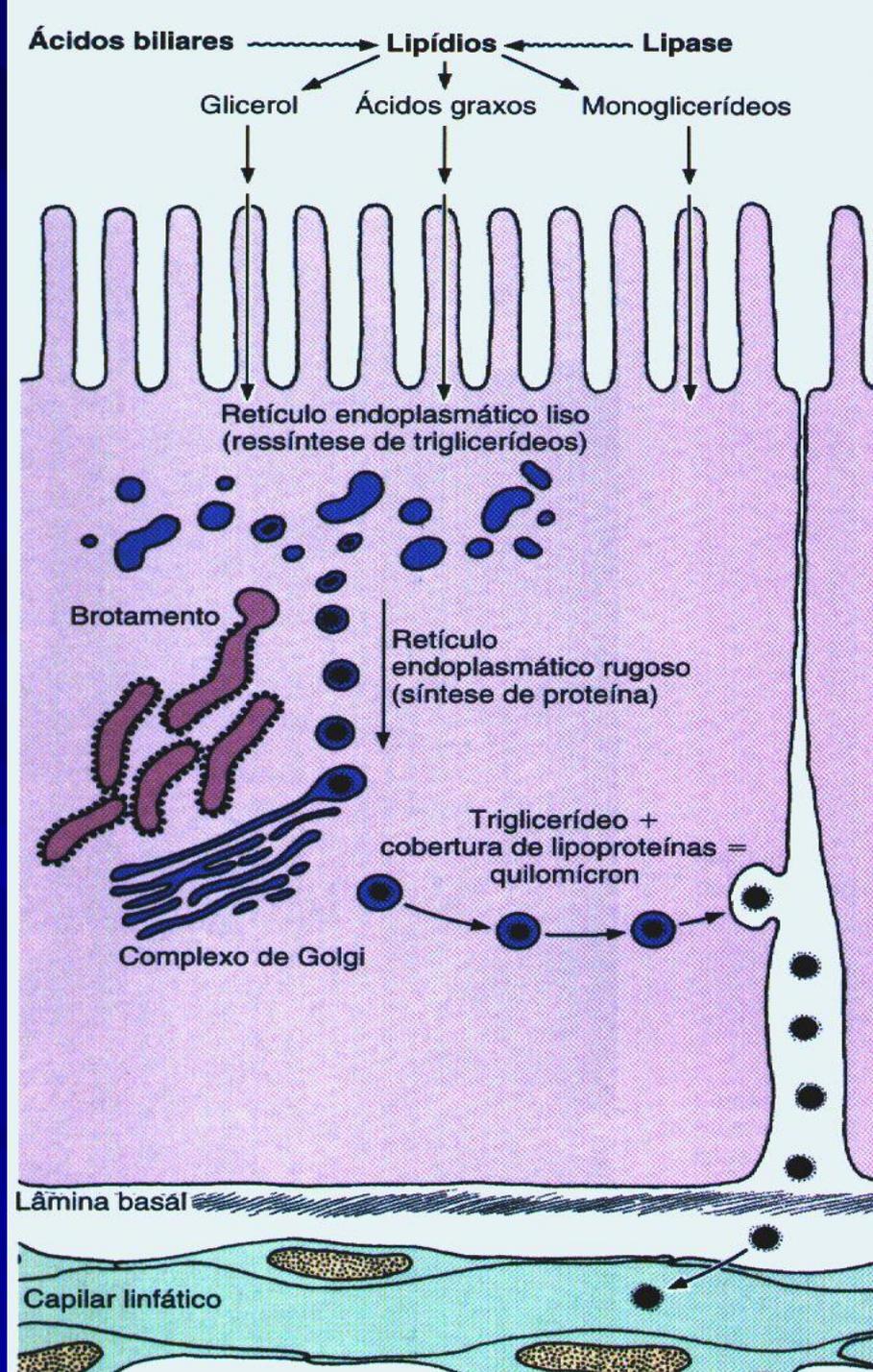
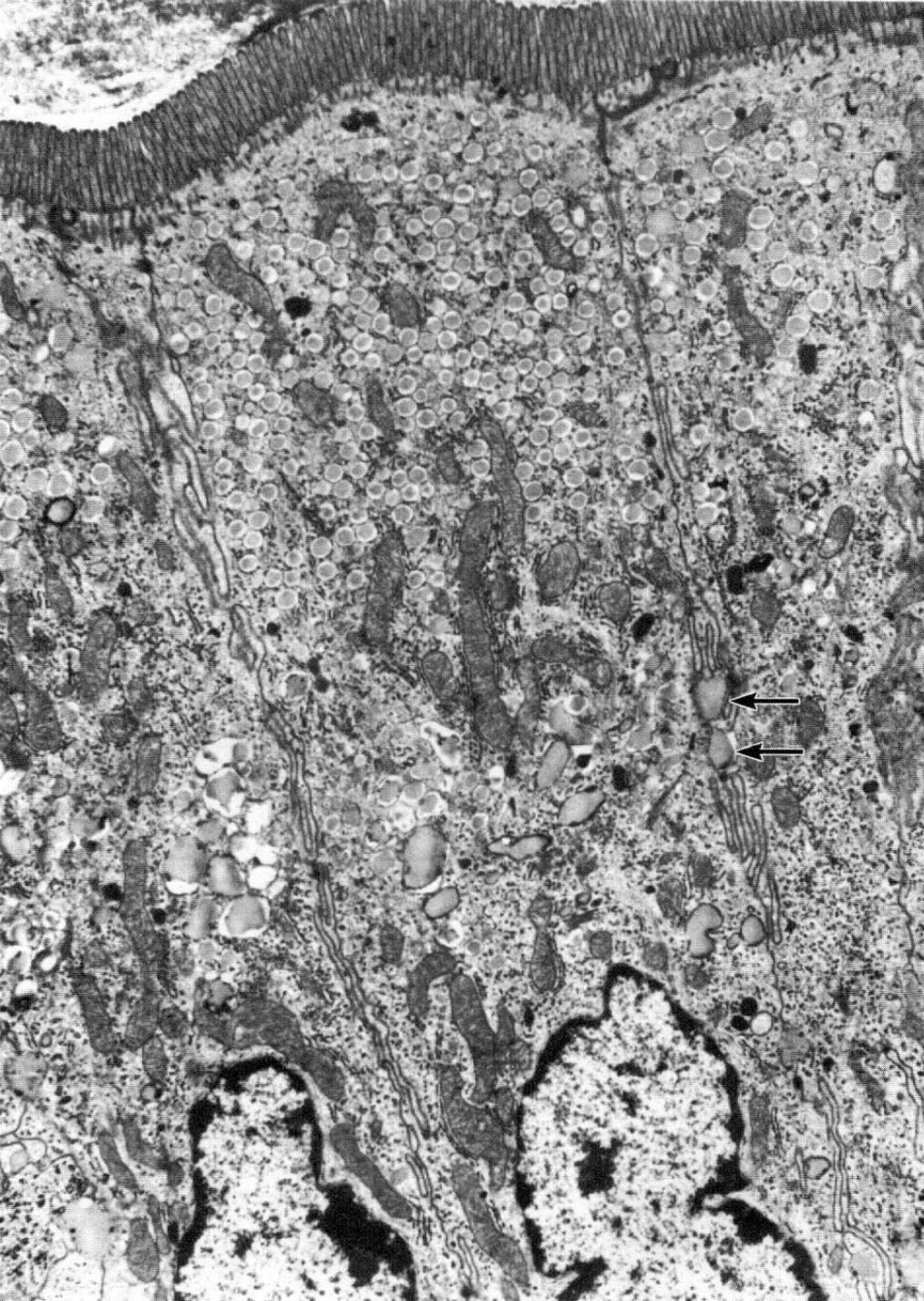
Células caliciformes

Linfócitos intra-epiteliais





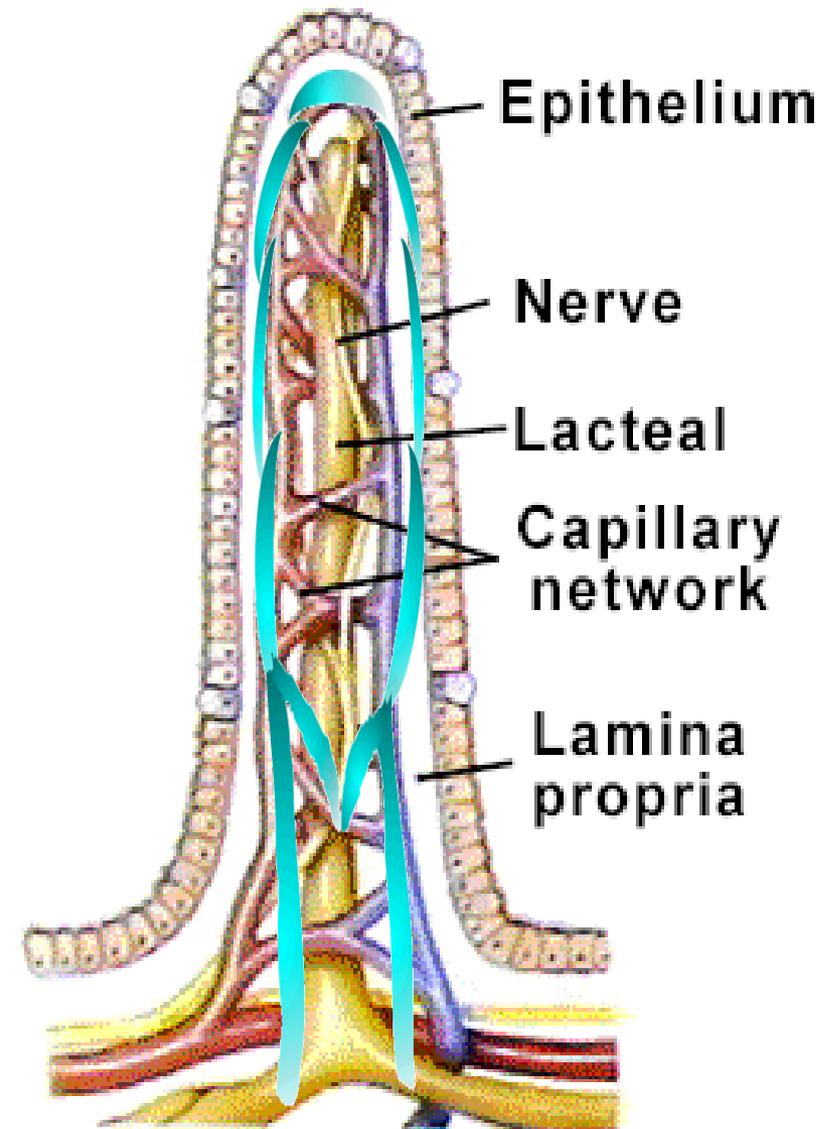


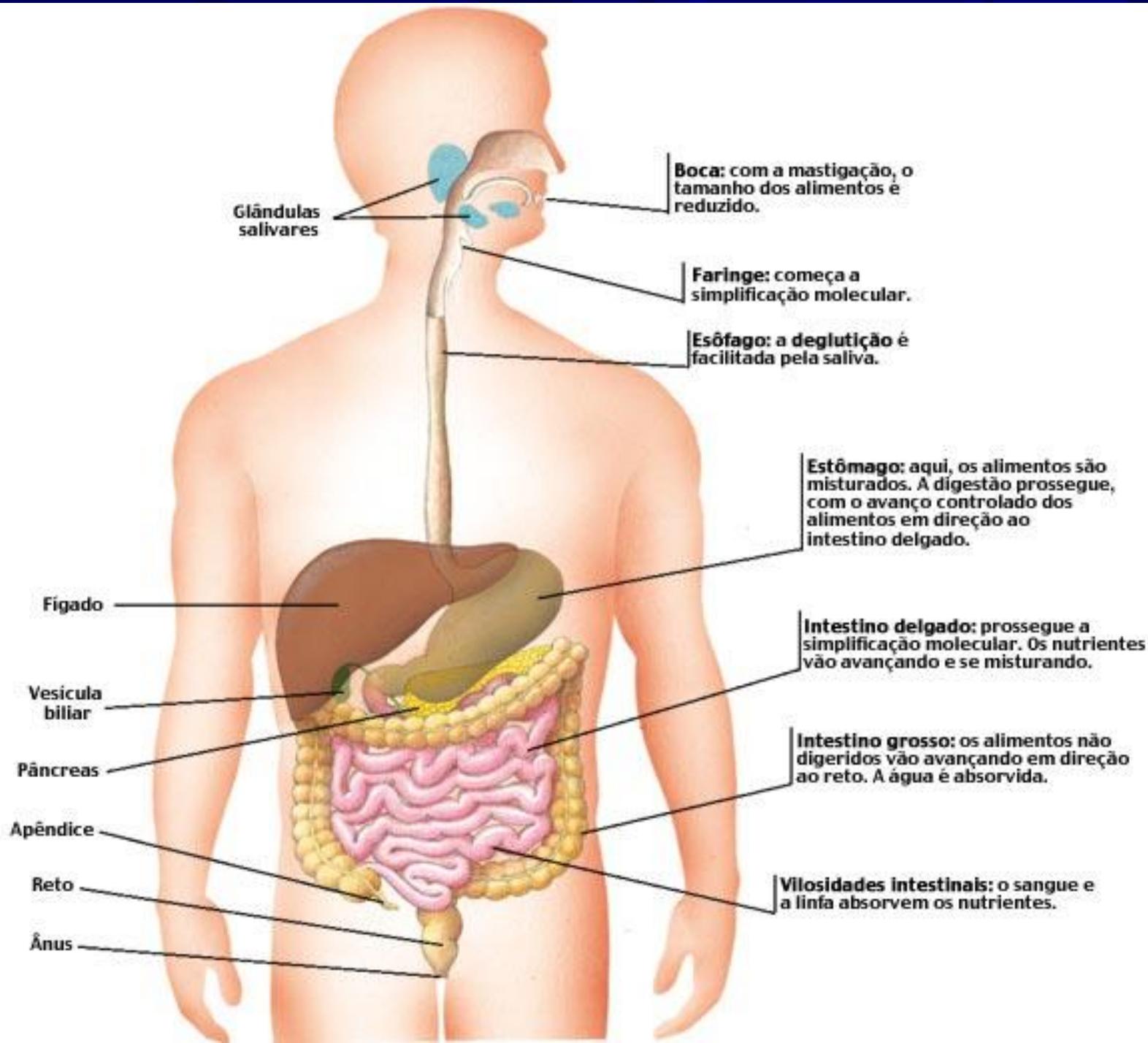


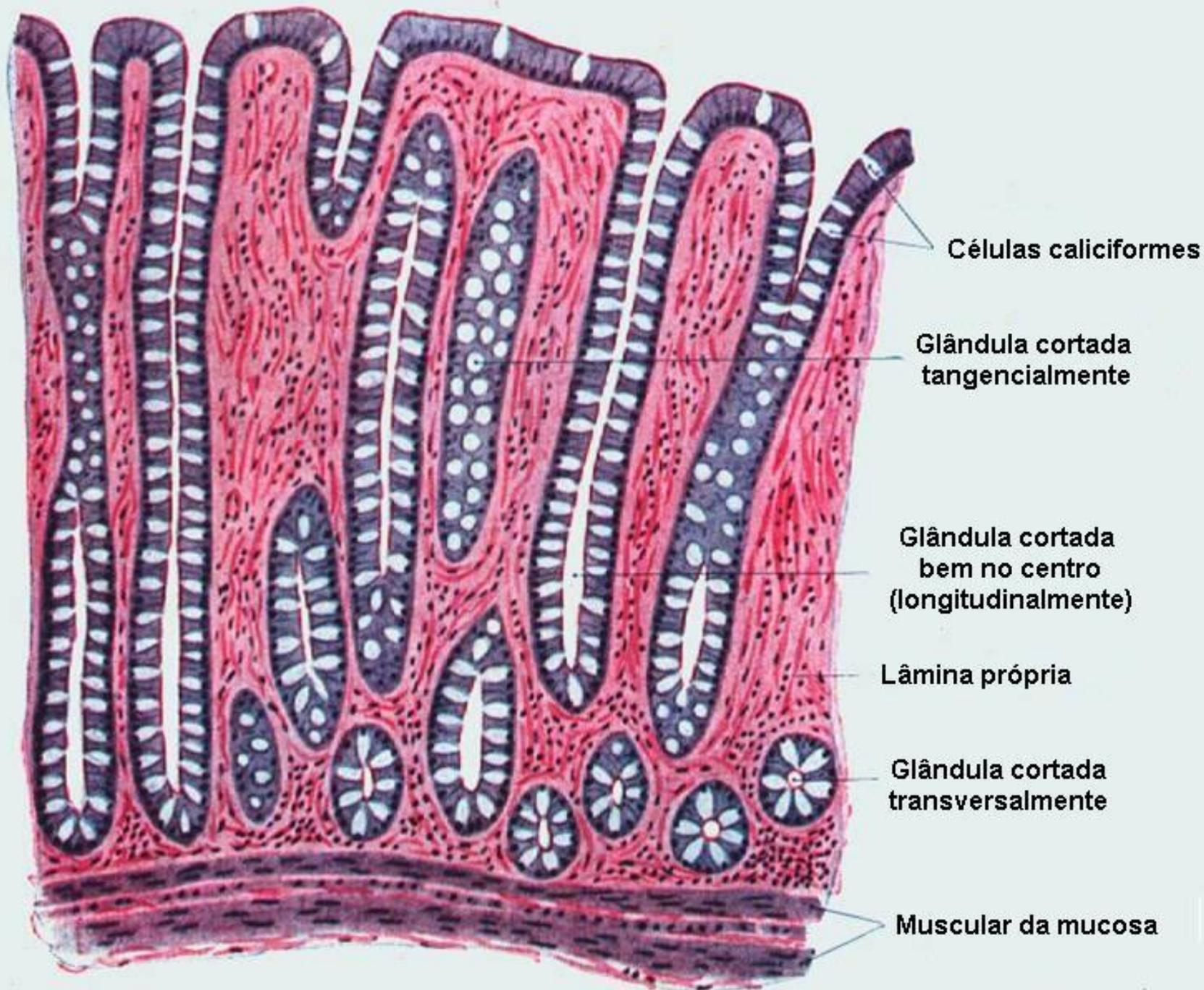
Função dos capilares linfáticos

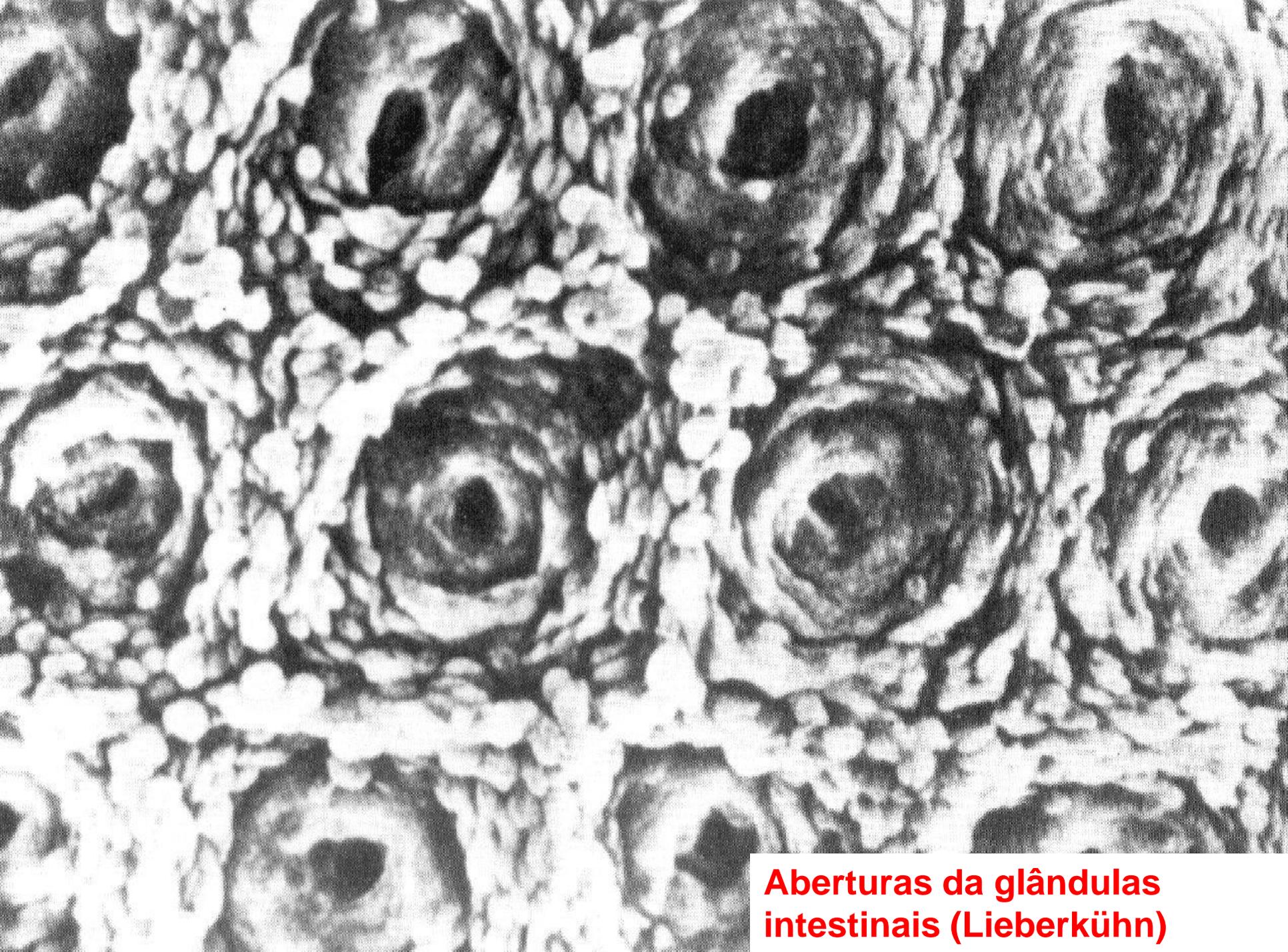
Os capilares das vilosidades intestinais têm por função a captação da gordura

**Vasos quilíferos
(lácteo)**

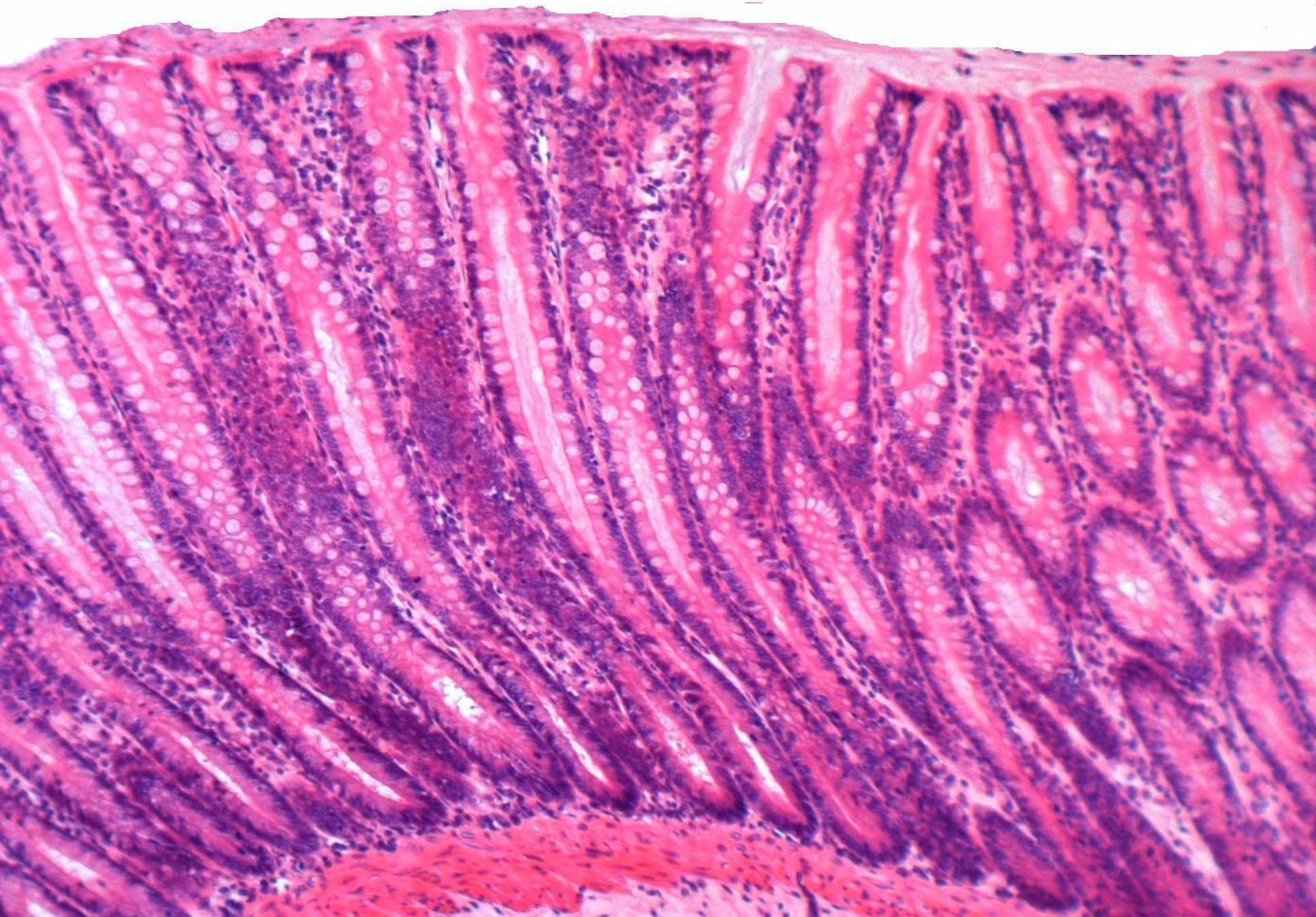


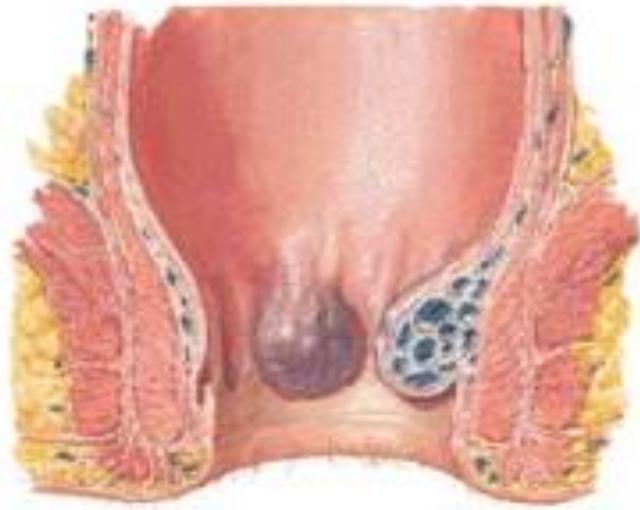






**Aberturas da glândulas
intestinais (Lieberkühn)**

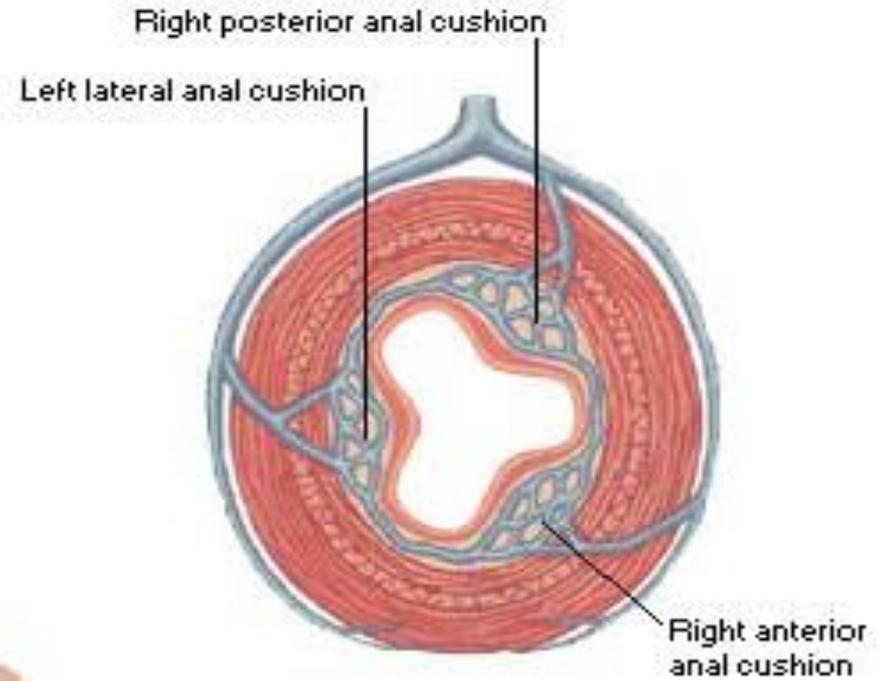




Enlarged anal cushions



Prolapsed "rosette" of internal hemorrhoids



Usual position of anal cushions and sites of prolapse for internal hemorrhoids

