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*Shaping Lives...
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Lymphatic System

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Introduction

Components

Lymph is the fluid

Vessels – **lymphatics**

Structures & organs

Functions

Return tissue fluid to the bloodstream

Transport fats from the digestive tract to the
bloodstream

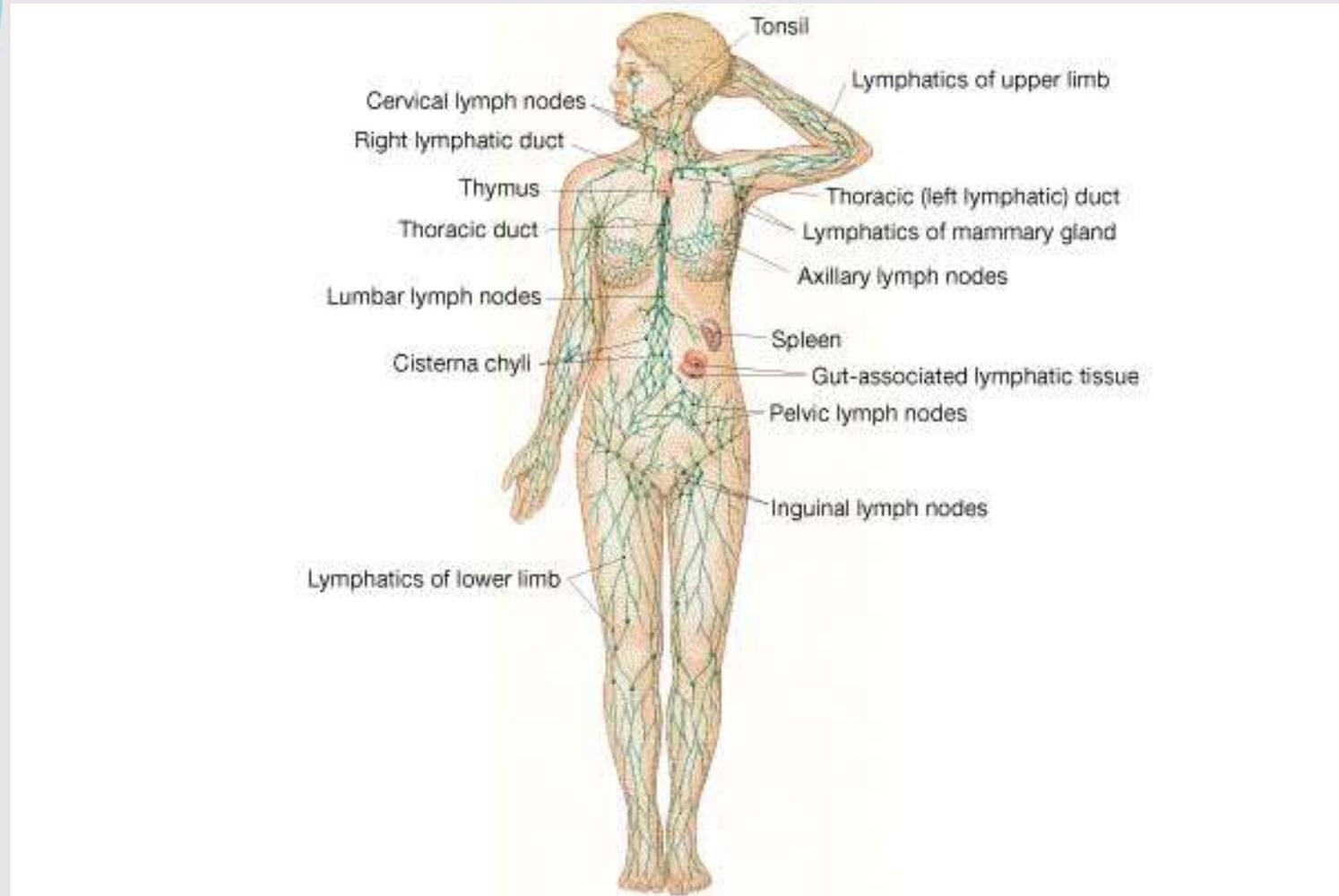
Surveillance & defense



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The Lymphatic System





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Lymphatics

Originate as lymph capillaries

Capillaries unite to form larger vessels

Resemble veins in structure

Connect to lymph nodes at various intervals

Lymphatics ultimately deliver lymph into 2 main channels

Right lymphatic duct

Drains right side of head & neck, right arm, right thorax

Empties into the right subclavian vein

Thoracic duct

Drains the rest of the body

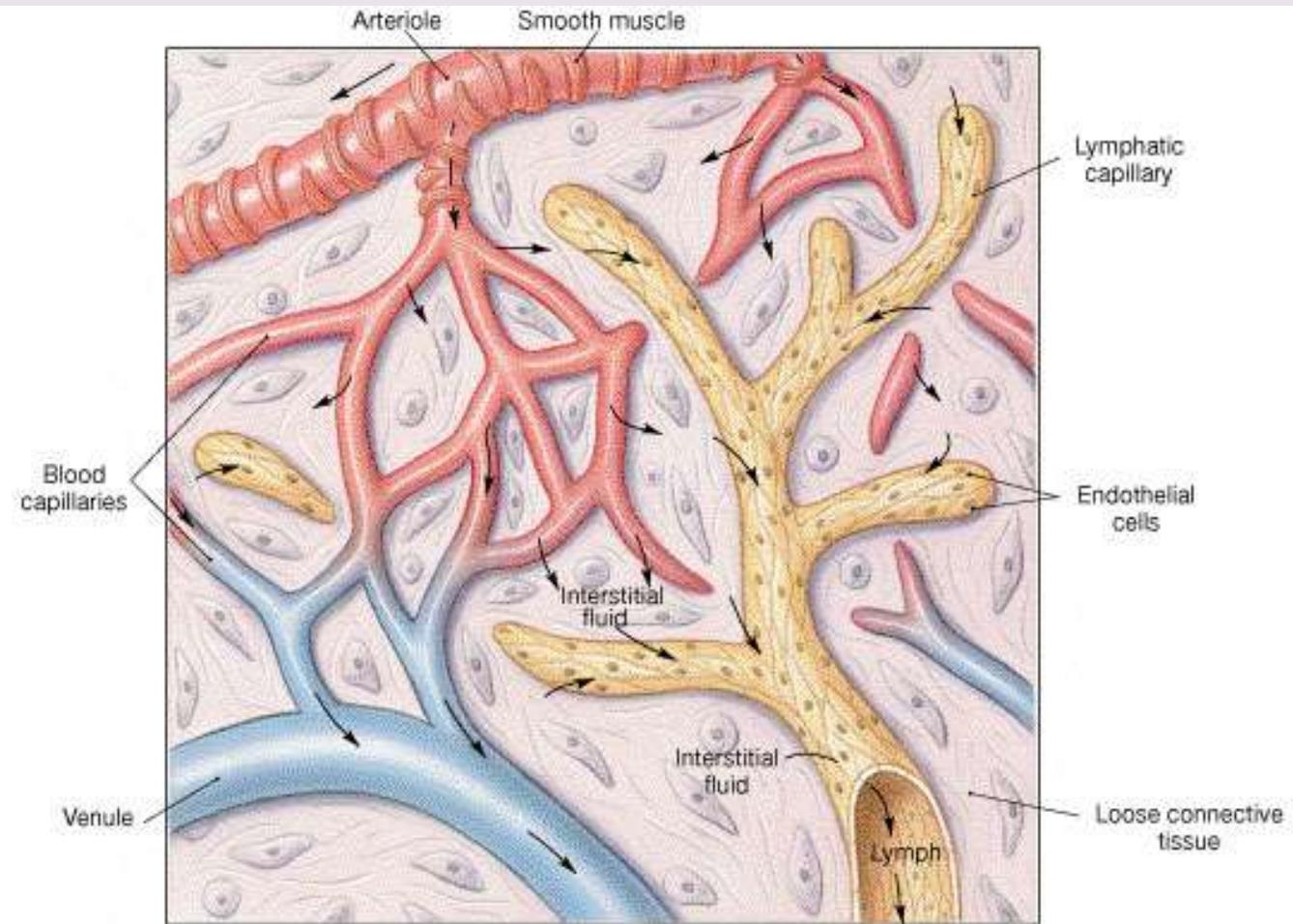
Empties into the left subclavian vein



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Lymph Capillaries



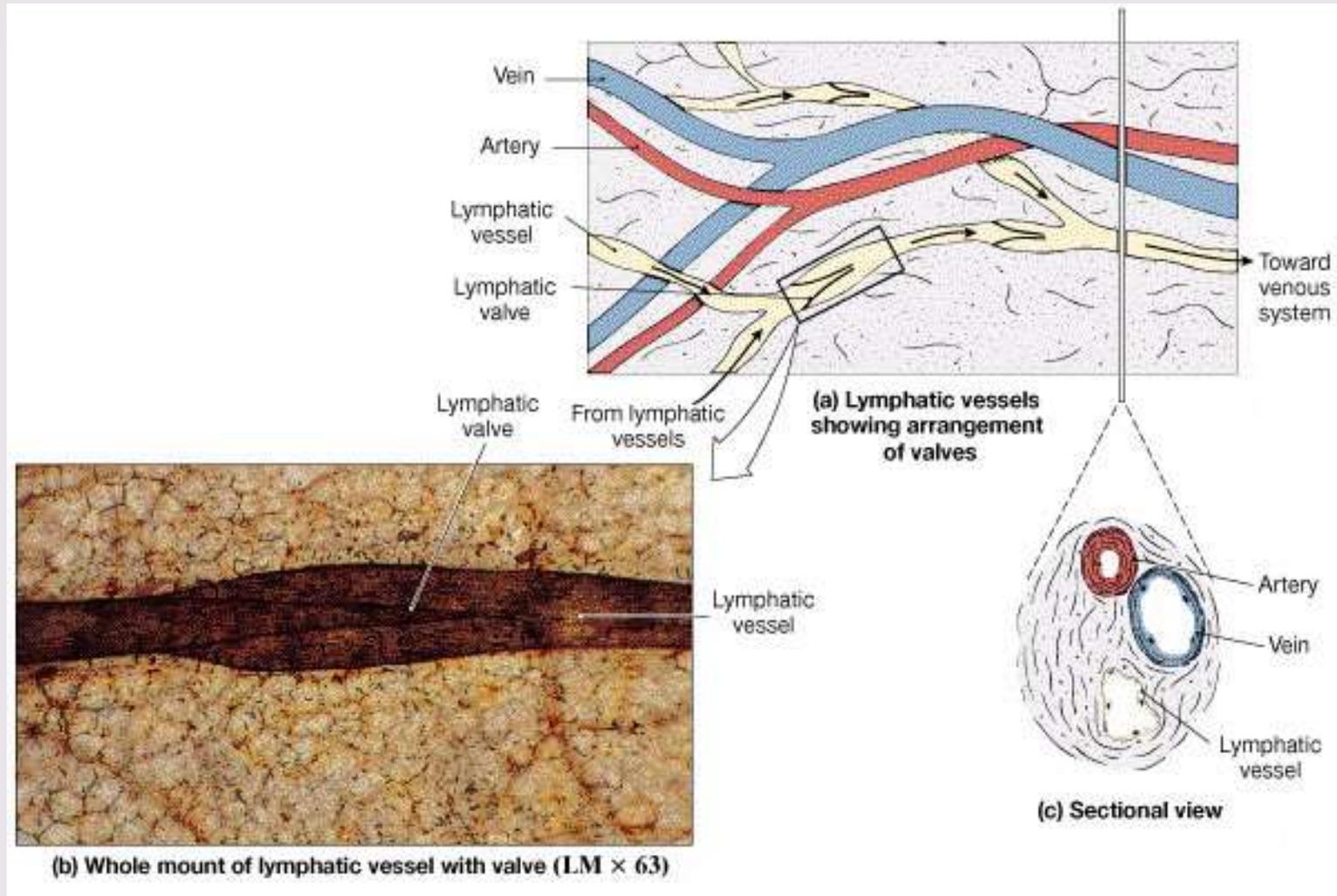
(a) Association of blood capillaries, tissue, and lymphatic capillaries



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Lymphatic Vessels

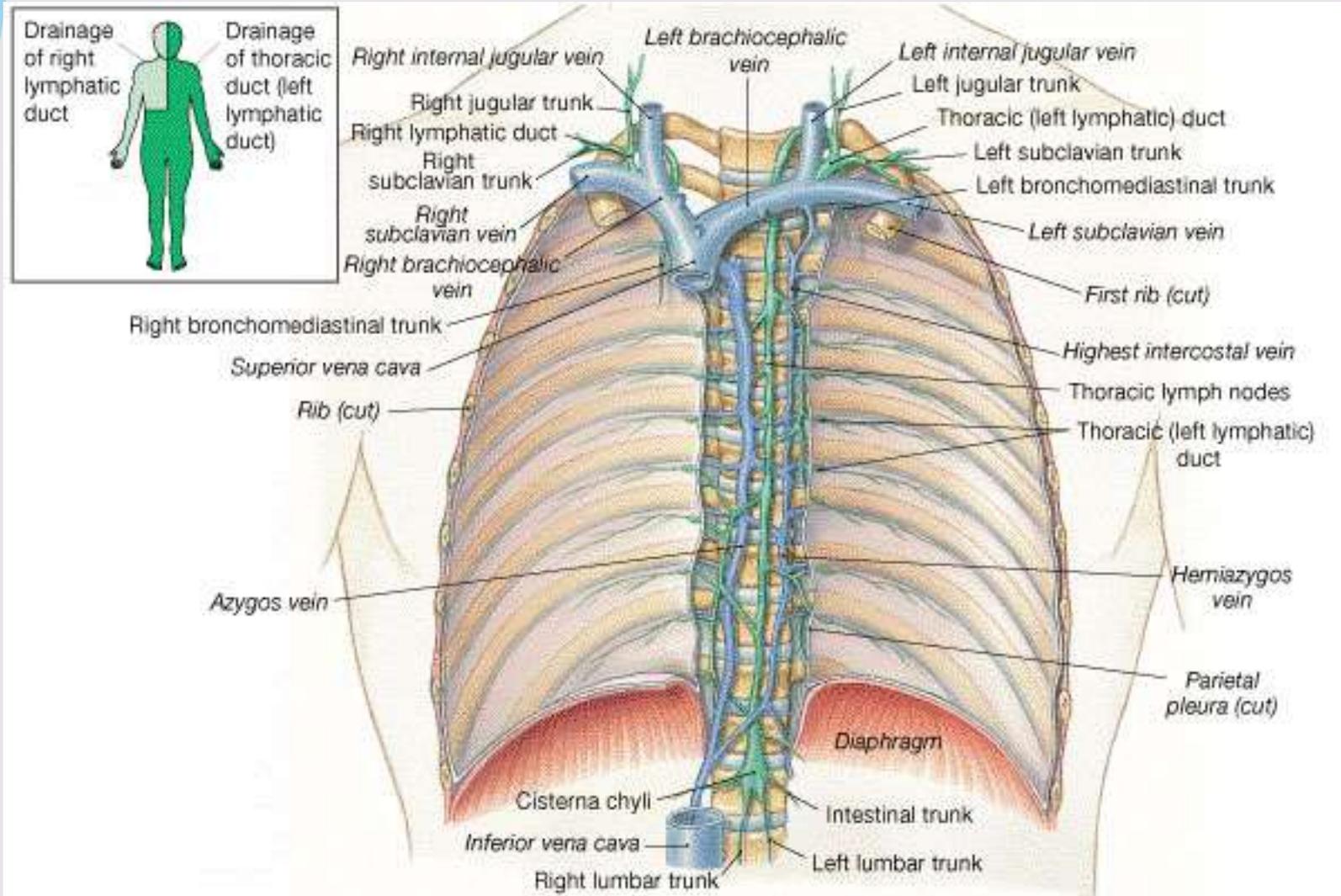




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Main Channels of Lymphatics

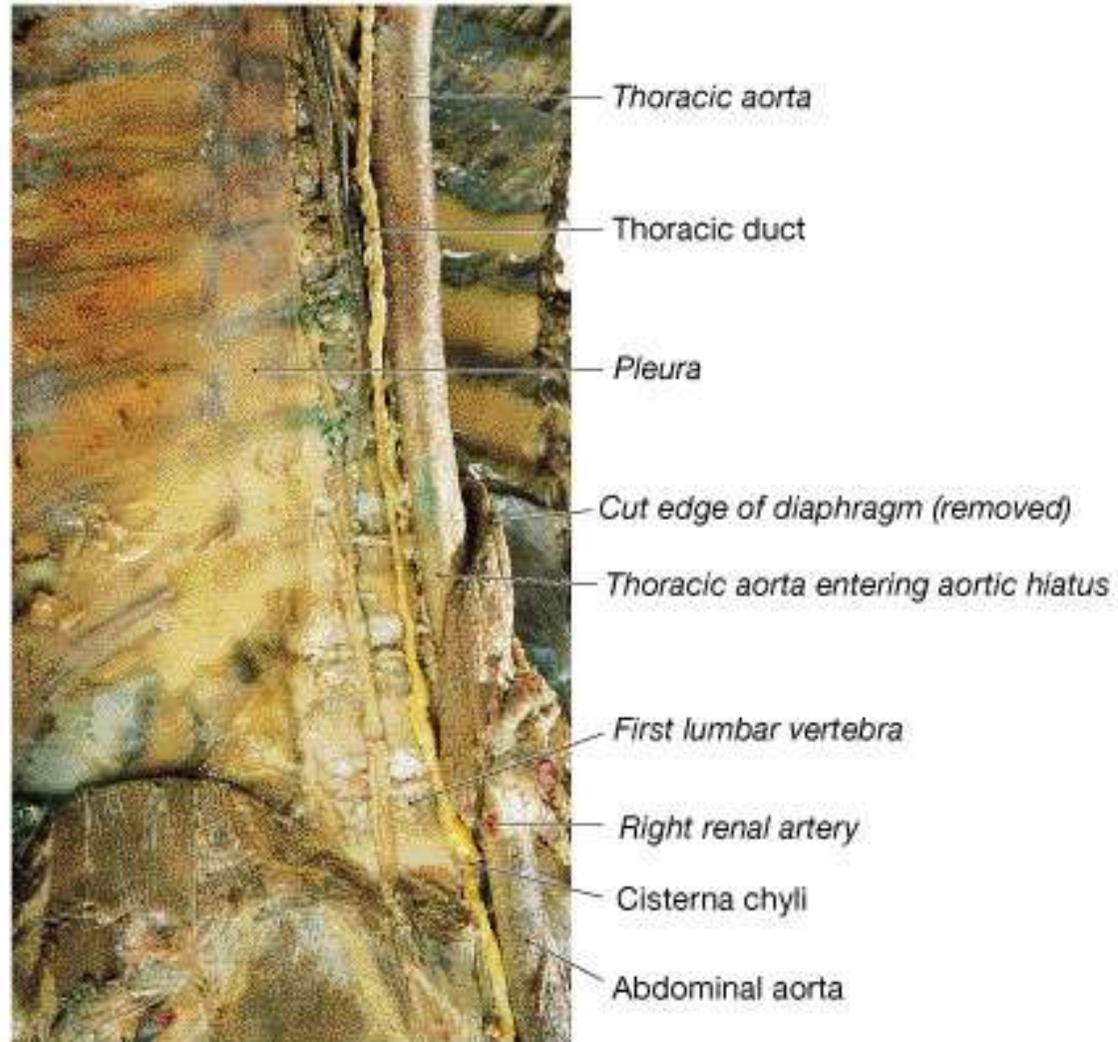




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Major Lymphatic Vessels of the Trunk





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Lymph Tissue

3 types

Diffuse lymphatic tissue

- No capsule present

- Found in connective tissue of almost all organs

Lymphatic nodules

- No capsule present

- Oval-shaped masses

- Found singly or in clusters

Lymphatic organs

- Capsule present

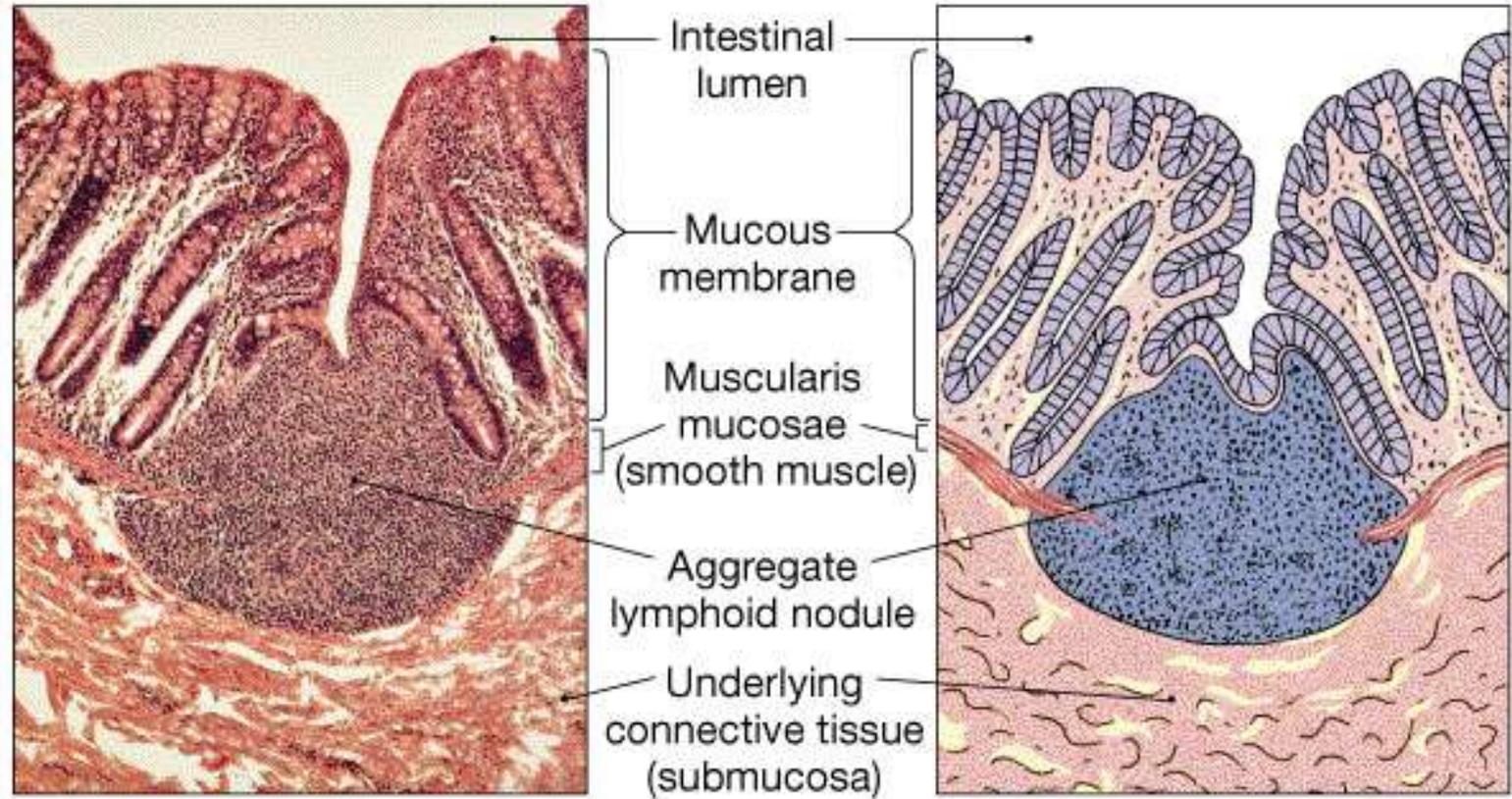
- Lymph nodes, spleen, thymus gland



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Lymph Nodules



(a) Lymphoid nodule



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Lymph Nodes

Oval structures located along lymphatics

Enclosed by a fibrous capsule

Cortex = outer portion

 Germinal centers produce lymphocytes

Medulla = inner portion

 Medullary cords

Lymph enters nodes through afferent lymphatics, flows through sinuses, exits through efferent lymphatic



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Lymph Node

