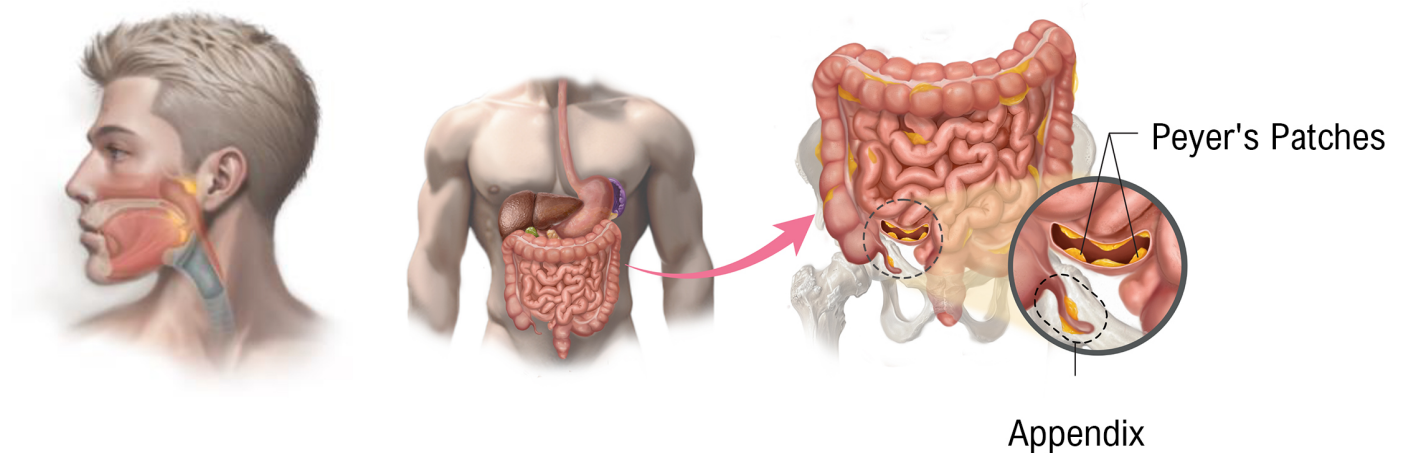


TOPIC: SECONDARY LYMPHOID ORGANS: MALT

Introduction to MALT

- ◆ **Mucosa-Associated Lymphoid Tissues (MALT):** collection of lymphoid tissues that line _____ membranes.
 - Frontline defense against pathogens trying to enter body through mucosal surfaces.
 - Located throughout mucosal _____ of respiratory, digestive, urinary, & reproductive systems.
 - Most MALT _____ an exterior capsule but some may be partially encapsulated.
- ◆ The largest collections of MALT are the tonsils, Peyer's patches, & the appendix.



EXAMPLE

Which of the following body areas does not typically contain MALT?

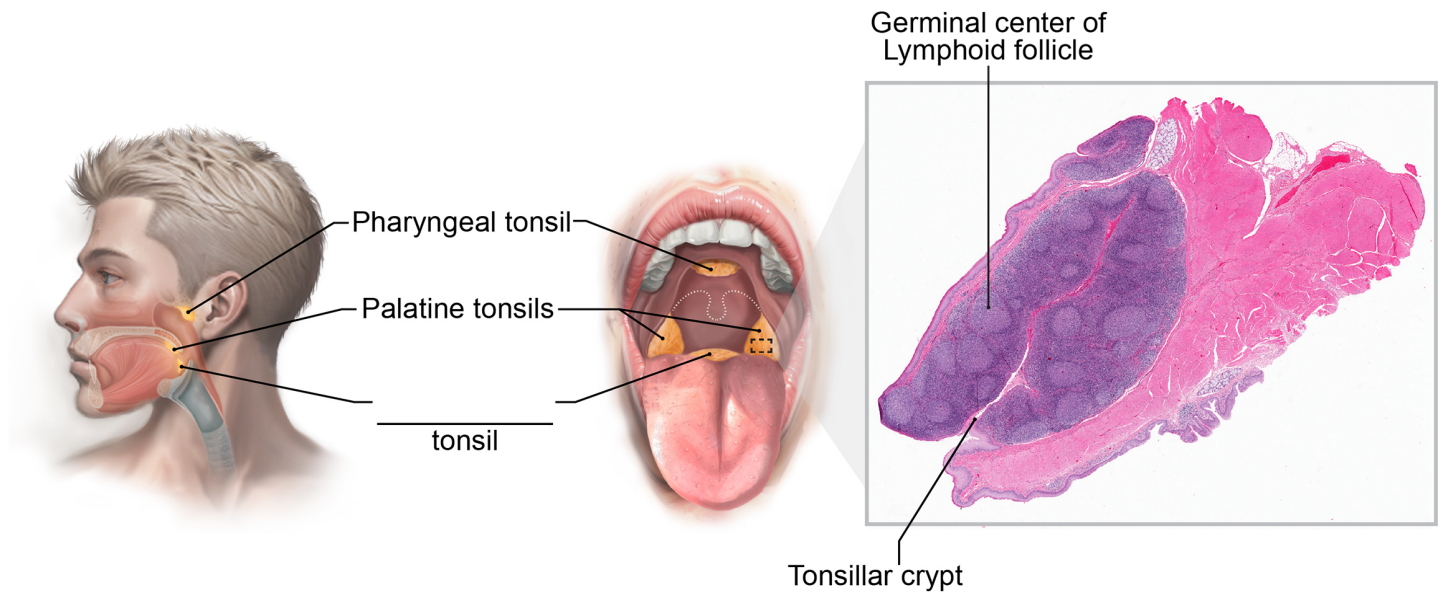
- a) Respiratory tract.
- b) Digestive tract.
- c) Central nervous system.
- d) Urogenital tract.

TOPIC: SECONDARY LYMPHOID ORGANS: MALT

Tonsils

◆ **Tonsils:** collection of MALT around entrance of the pharynx (throat), removing pathogens from food & air.

- Tonsils are _____ fully encapsulated & their epithelium invaginates interiorly to form *tonsillar* _____.
- There are _____ main sets of tonsils that are named according to their location.



EXAMPLE

What is the primary function of the tonsils?

- a) Aiding in digestion in the mouth by secreting enzymes that break down fats & carbohydrates.
- b) Secreting mucus to prevent the mouth from drying out.
- c) Producing essential hormones.
- d) Initiating immune responses & “trapping” pathogens.

PRACTICE

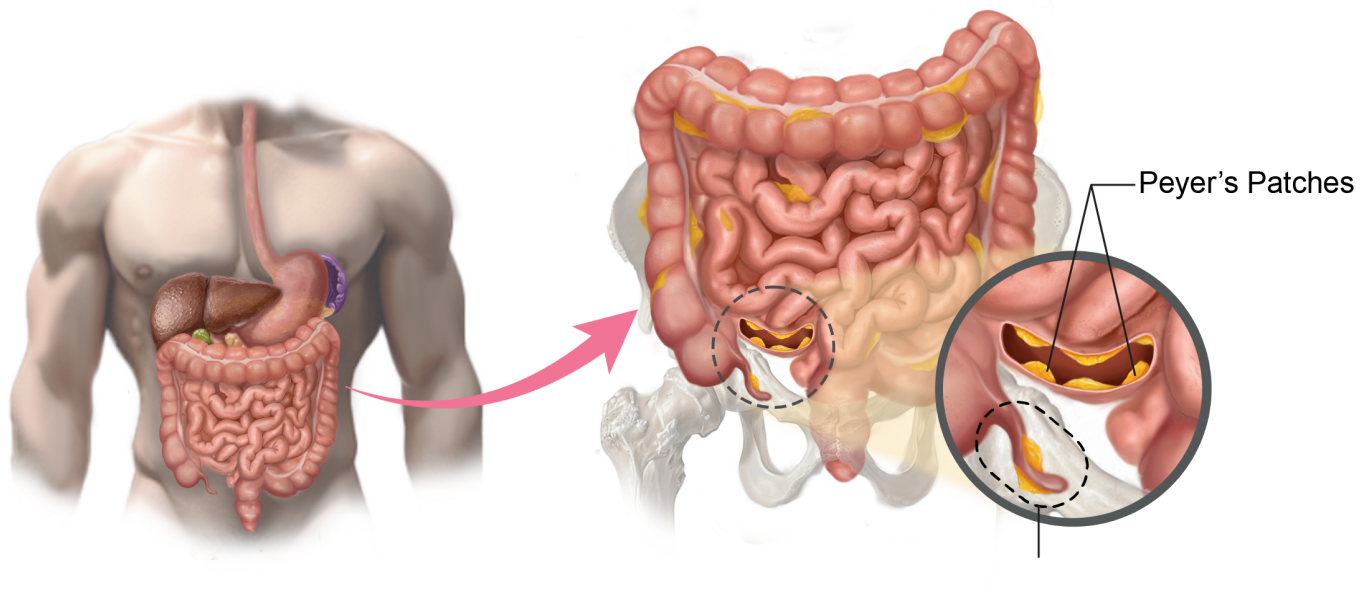
Which pair of tonsils trap pathogens at the posterior end of the oral cavity?

- a) Palatine tonsils.
- b) Pharyngeal tonsils.
- c) Lingual tonsils.
- d) All 3 pairs of tonsils.

TOPIC: SECONDARY LYMPHOID ORGANS: MALT

Digestive System Immunity: Peyer's Patches & Appendix

- ◆ **Peyer's Patches:** lymphoid follicles located on ____terior wall of distal portion of small intestine (ileum).
 - Prevents large intestine bacteria from escaping into small intestine.
- ◆ **Appendix:** a tubular extension of 1st part of large intestine (_____) containing lymphoid follicles.
 - Generates “memory” lymphocytes for _____-term immunity.
 - Serves as a _____ for *beneficial* gut bacteria to repopulate gut microbiome after disturbances.



EXAMPLE

Clusters of lymphoid nodules in the wall of the ileum of the small intestine are _____.

- a) Tonsils.
- b) Appendix.
- c) Peyer's Patches.
- d) Lymph Nodes.

PRACTICE

Which of the following is not considered to be MALT?

- a) Thymus.
- b) Tonsils.
- c) Peyer's Patches.
- d) Appendix.

TOPIC: SECONDARY LYMPHOID ORGANS: MALT

PRACTICE

Which of the following is a function of the appendix?

- a) Production of digestive enzymes.
- b) Storage of bile.
- c) Regulation of blood sugar levels.
- d) Immune response in the gut.