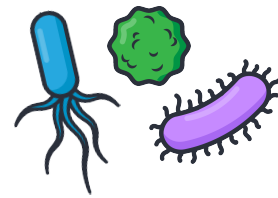


TOPIC: STRUCTURE & FUNCTION OF THE DIGESTIVE TRACT

Normal Microbiota of the Digestive Tract

- ◆ Digestive tract contains _____ microbes (gut micro_____).
 - **Microbial** _____: bacteria protect the body by _____ pathogens.
 - Synthesis of nutrients: vitamins ___ (including folate) & ___ are produced by intestinal bacteria.
 - May influence diverse aspects of physiology: e.g., _____ function and body weight.
 - 25-40% of dry _____ mass.
- ◆ Gut microbiome comprised of _____ of species.

Bacteria	Mouth	▸ _____
	Small Intestine & Large Intestine	▸ <i>Escherichia.</i> ▸ <i>Bacteroides.</i> ▸ <i>Lactobacillus.</i>
Fungi	Large Intestine	▸ _____
Protozoa	Large Intestine	▸ Entamoeba



PRACTICE

A patient is taking tetracycline, a broad-spectrum antibiotic, to help manage acne. The patient has been on the medication for five months. Which of the following may be lower in this patient while on this medication?

- Production of antigens.
- Formation of platelets.
- Metabolism of sugars.
- Production of vitamin K.

PRACTICE

Which of the following statements is most directly related to the concept of microbial antagonism?

- Eating more fiber can increase the number of healthy bacteria in the colon.
- Vitamin K is produced by several bacterial species in the intestine.
- A healthy gut microbiome consists mainly of bacteria but also includes some archaea, fungi, and protists.
- Infection of the intestine with pathogenic *C. difficile* usually follows antibiotic use.