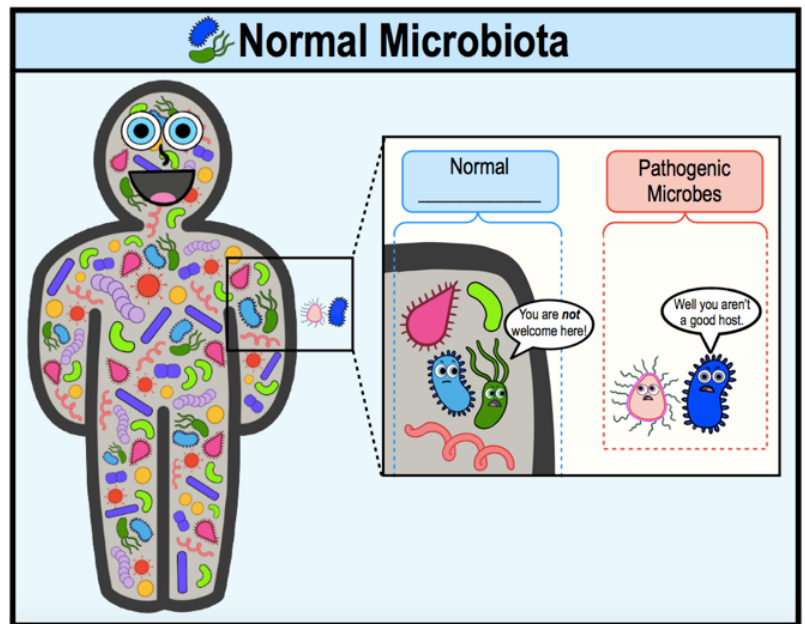
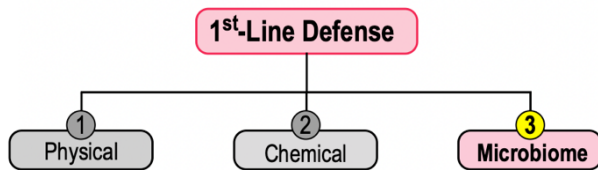


CONCEPT: FIRST-LINE DEFENSES: NORMAL MICROBIOTA

- **Normal Microbiota** (): population of resident microbes that grow in & on the bodies of *healthy* humans.
 - Part of the first-line defenses in innate immunity & is essential to immune development during/after .
 - Some members of microbiota protect us by attachment sites used by pathogenic microbes.
 - Some members of microbiota produce chemicals that are to pathogenic bacteria.
 - Can be disrupted when biotics are used, which can make the person susceptible to various infections.
- **Probiotics**: microbe cultures that are applied or ingested, thereby benefiting the normal microbiota.
 - **biotics**: chemicals that promote the growth of beneficial microbes consumed with *probiotics*.



PRACTICE: Normal microbiota:

- Are the organisms that typically reside on and in your body.
- Protect against infection by pathogens.
- Enhance infection by pathogens.
- Play no role in affecting pathogen growth.
- A and B.
- C and D.

PRACTICE: The human body typically begins to be colonized by its normal microflora:

- Before birth, in utero.
- When a child first goes to school.
- During puberty.
- During and immediately after birth.
- When an infant gets its first infectious disease.