

Microbiology – MSS system – Lecture 1 activity answers

Answer the following statements with True or False and correct the False one:

1. To prevent skin infections, sweat glands produce sweat containing lysozyme that breaks down bacterial cell membranes. (TRUE) (FALSE)

Lysozyme breaks down bacterial cell walls

2. The skin of the back region has a higher colonization by normal skin microbiota compared to the perineum. (TRUE) (FALSE)
3. Skin infections/infestations can occur as a result of infection by bacteria, viruses, fungi, protozoa, helminths, or ectoparasites. (TRUE) (FALSE)
4. Viruses represent the highest fraction of the skin microbiome regardless of the skin region sampled. (TRUE) (FALSE)

Bacteria rather than viruses

5. The skin-resident immune cells include Langerhans cells, dermal dendritic cells, macrophages, mast cells, and eosinophils. (TRUE) (FALSE)
6. Sebaceous glands secrete sebum rich in fatty acids and lactic acid creating an acidic habitat that completely prevent colonization by all bacterial species on the skin. (TRUE) (FALSE)
7. The detection of *Propionibacterium acnes* on the skin is indicative of an underlying disease condition. (TRUE) (FALSE)
8. *Leishmania* species are transmitted by lice, causing cutaneous leishmaniasis. (TRUE) (FALSE)
Transmitted by flies (sandfly)
9. *Staphylococcus epidermidis* is the most prevalent skin microorganism in the fungal fraction of the skin microbiome. (TRUE) (FALSE)
Bacterial
10. Skin normal flora help to prevent pathogen colonization by blocking attachment to the skin surface and by producing substances that inhibit the growth of other microbes. (TRUE) (FALSE)