Mastery Series: Innate Immunity

- 1. List the 2 main types of physical barriers to disease.
- 2. How can skin be compromised?
- 3. How can the different mucous membranes be compromised?
- 4. Which bodily secretions:
 - a. are salty?
 - b. contain lysozyme?
 - c. are acidic?
 - d. contain microbial fatty acids?
- 5. Describe:
 - a. what complement is
 - b. how it is activated
 - c. how it damages cells
- 6. Why is inflammation considered a key link between innate and adaptive immunity?

Mastery Series ANSWERS: Innate Immunity

1. List the 2 main types of physical barriers to disease.

Skin/hair and mucous membranes

- 2. How can skin be compromised? Cut/wound; dry; lacking normal flora
- 3. How can the different mucous membranes be compromised? **Cut/wound**; **dry**; **allergen/inflammation**
- 4. Which bodily secretions:
 - a. are salty? Tears, sweat
 - b. contain lysozyme? Most all, especially saliva
 - c. are acidic? Vaginal, stomach
 - d. contain microbial fatty acids? oil
- 5. Describe:
 - a. what complement is: **combination of about 30 different chemicals that, when activated, punch holes in cell walls**
 - b. how it is activated: by encountering a pathogen (innate) or an antibody on a cell (after adaptive immunity has begun)
 - c. how it damages cells: punches holes in cell walls
- 6. Why is inflammation considered a key link between innate and adaptive immunity?

Because by keeping the innate immune system activated, adaptive immunity has time to become effective at neutralizing the target.

