

Microbe-Human interaction

Health

Is the clinical status in which all the body's systems work in its optimum efficiency

↓ Any disturbance in such function

Disease

↓ If caused by a microorganism or its products (e.g toxin)

Infectious Disease

This condition determined by

Roles played by the host (Host resistance)

Roles played by the microorganism

- . Invasiveness
- . Extracellular enzyme
- . Toxin production

Natural (non-specific)

Specific (acquired)

- Skin
 - Normal flora
 - Mucous membrane (barrier, mucous, secretory IgA)
 - Low pH in:
 - . Stomach
 - . Vaginal secretion
 - Flushing action of:
 - . Tears
 - . Urine
 - Phagocytosis
 - Acute phase protein (e.g. Lactoferrin, lysozyme and lactoperoxidase)
- . Antibody response
 - . Cell-mediated response