

Introduction to disease and microbiology

Health – maintaining homeostasis (remaining healthy)

- Appropriate level of physical activity
- Adequate nutrition (energy and components)
- Good quality sleep
- Strong Immune System
 - Natural Defenses
 - Quick response
- Stress management
 - Environmental
 - Social
 - Biological
- Mental stimulation
 - Socialization
 - Active brain
 - Emotional

Disturbances in Homeostasis/ becoming ill

Exogenous – external factors – Pathogens, environment, diet

Endogenous – internal factors – Lifestyle choices, organ + system failure, genetics

Potential outcomes; Chronic or acute (Long lasting or severe)

Define disease

some definitions include:

- A disorder of structure or function in a human, animal, or plant, especially one that produces specific symptoms or that affects a specific location and is not simply a direct result of physical injury
- (an) illness of people, animals, plants, etc. caused by infection or a failure of health rather than by an accident.
- A disease is a particular abnormal condition, a disorder of a structure or function, that affects part or all of an organism
- The type of disease that we are going to concentrate on over the next five weeks are the diseases caused by microorganisms (pathogen)
- Pathogen: a microorganism that has the potential to cause disease.