

The Control of Microbial Growth

Chapter 9

I. Terminology

- A.Sterilization
- B.Disinfection
 - a. disinfectant
- C.Sanitization / Decontamination
- D.Antisepsis / Degerming
 - a. antiseptic
- E.-cide
- F.-static or -stasis
- G.Sepsis
- H.Asepsis

II.Rate of Death

- A.Factors

III.Methods of Physical Control

A.Heat

- 1. moist heat
 - a. boiling
 - b. autoclave
 - c. pasteurization
 - a)Classic = LT
 - b)HTST
 - c)UHT
- 2. dry heat

B.Filtration

C.Low Temp

D.Dessication

- 1. lyophilization

E.Osmotic Pressure

F.Radiation

- 1)thymine dimers

G.Types of Disinfectants

- 1. phenol
 - a. phenolics
 - b. bisphenols
- 2. halogens
 - a. iodine
 - 1)tincture
 - 2)iodophor
 - b. chlorine
- 3. alcohols
- 4. heavy metals
- 5. surfactants
 - a. soaps and detergents
 - b. anionic detergents
 - c. cationic detergents - Quats
- 6. organic acids
- 7. antibiotics
- 8. aldehydes
- 9. gaseous sterilants
- 10.plasmas
- 11.oxidizing agents
 - a. peroxygens
- 12.commercial sterilization