

Sterilization: *Sterilization* describes a process that destroys or eliminates all forms of microbial life and is carried out in health-care facilities by physical or chemical methods

Disinfection: *Disinfection* describes a process that eliminates many or all pathogenic microorganisms, except bacterial spores, **on inanimate** objects.

There are many methods of sterilization:

But while the selection method requires not alter the sterilization of the physical and chemical properties of a substance which sterilized

1- Heat sterilization: is the best way to sterilization and it's easy of use and cost .But it cannot be applied to heat living tissue or tools that are affected by the high heat like rubber materials.

Heat sterilization are two ways: dry heat and moist heat

Dry heat: dry heat sterilization are concentrated on the oxidation mechanism of cell vehicles, and are exposing materials or items that have to be sterilized up to a temperature ranging from 160-180 ° C for one hour. This method is suitable for the sterilization of glass and metal tools is acute and powders, oils

Moist heat: The best factor for sterilization is water vapor under pressure, as it is in the closed autoclave. Water vapor helps under pressure on the temperature influence in the things that are sterilize like clothes and there is a direct relationship between temperature and vapor pressure, rise in temperature to 121 degrees Celsius for 15 minutes is sufficient to eliminate the spores of *Clostridium botulinum*.

2- Radiation: gamma irradiation after the currently selected method for sterilizing a large number of small-sized tools like, syringes, gloves and other. You can also use this method to sterilize vaccines can also be invoked to save some foods; but the cost of this method is too high

3- Filtration: is the separation of contaminants from the fluid, a method used for a long time, especially for water purification and other liquids. Consisting of filters of modern Alnatrossilowes, and works by static electricity and fine pores.

4- Chemicals: There are still gases used formaldehyde and ethylene oxide, both of which sterilizes by it's effect on protein and nuclear acids of microorganism.

- **Disinfectant** is known as a substance that destroys the microorganisms and inhibit their growth. There are characterized by this special disinfectants are used in living tissue as there are disinfectants antibacterial given by mouth with a topical effect in the digestive tube does not absorbed

-**Hydrogen peroxide 6%**

-**Alberacetic acid 1%**

-**Alformalldehaide 2%**

-The diving tools in the Boiled water for several minutes kills germs active but does not eliminate all the spores. And this

method can be used in cases of having a quick means, In addition, 2% of sodium carbonate to the water increases the possibility of spending the spores