

Microorganisms: Advantages & Disadvantages

Disadvantages of Microbes

Can cause diseases

Can lead to food spoilage

Advantages of Microbes

Dairy products

Bread making

Alcoholic drinks

Insecticides

Fertility of soil

Vitamin production

Enzymes

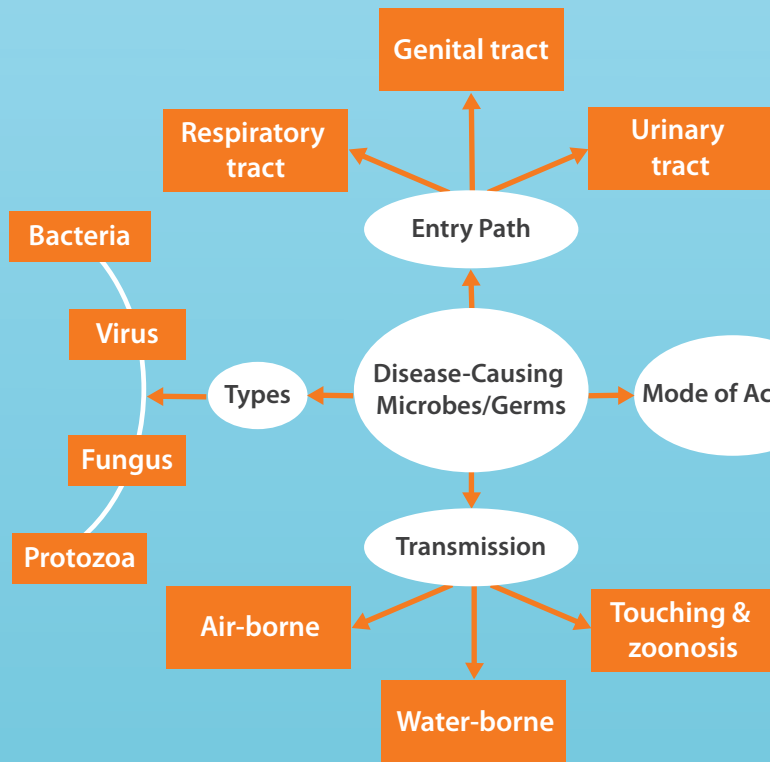
Steroids

Sewage treatment

Antibiotic and Antiviral Production

Biotechnology and research

Disease Causing Microorganisms



Inoculation

- Transfer of microbes to environment where they grow & reproduce. E.g.: Vaccine
- Media used: Agar plate, broth culture, slant culture, plate culture, stab culture
- Done using inoculation needle – Disposable or re-usable

Attach to target site & release toxin making host weak

- Body's immune system is triggered
- T & B-lymphocytes get activated

- Antibiotics
- Antivirals
- Antifungals
- Anti-helminthic



Food preservation: Process to prevent edible items from getting spoilt

Principles of food preservation

Preventing microbes in preserved foods

Removal of microorganisms

Inhibiting microbial growth

Killing microbes

Microbial enzyme deactivation

Food Preservation Methods

Biological

Physical

Chemical

Filtration

Heat treatment

Drying

Radiation

Using chemicals/ preservatives

Acids