

CHEMISTRY IN EVERYDAY LIFE

BASED ON PHARMACOLOGICAL EFFECT

This classification provides range of drugs available for a particular type of problem.

CLASSIFICATION OF DRUGS

BASED ON CHEMICAL STRUCTURE

Drugs having common structural features are grouped together in one class.



BASED ON MOLECULAR TARGET

Based on the interaction with biomolecules such as lipids, proteins, carbohydrates & nucleic acids.

FOOD ENHANCING

- **ARTIFICIAL SWEETENING AGENTS:** Natural Sweeteners (Sucrose) artificial Sweeteners (Aspartame)
- **FOOD PRESERVATIVES:** Prevent Spoilage of food due to microbial growth. (Table Salt, Sugar)

CLEANING SOAPS

SOAPS

Sodium or Potassium Salts of long chain of fatty acids like Stearic acid, olic acid

TYPES OF SOAPS

- (a) Toilet Soaps
- (b) Floating Soaps
- (c) Medicated Soaps
- (d) Shaving Soaps
- (e) Transparent Soaps
- (f) Laundry Soaps

SYNTHETIC DETERGENTS

Sodium Salts of alkyl benzene. Sulphonic Acids

Three types of detergents:

- Anionic detergents
- Cationic detergents
- Non ionic detergents

CLEANING ACTION OF DETERGENTS

The cleaning action of detergents are same as that of soaps.

BASED ON DRUG ACTION

Which act on a particular biochemical process are kept under one class.

ANTACIDS

Substances that neutralize the excess H⁺ & raise pH in stomach.
Ex: Ranitidine

ANTIHISTAMINES

Drugs which diminish the main action of histamine. (Prevent the allergic reactions) Also known as anti-allergic drugs.
Ex: Diphenhydramine hydrochloride

THERAPEUTIC ACTION OF DRUGS

NEUROLOGICALLY ACTIVE DRUGS

Tranquilizers: Chemicals used for treatment of stress & in mild or even severe mental diseases.
Ex: Iproniazid

Analgesics: Reduce pain without causing impairment of consciousness, mental confusion or paralysis of nervous system.

CLASSIFIED IN TWO TYPES:

- (a) Non-narcotic (Non-addictive)—Aspirin
- (b) Narcotic—Morphine

ANTIFERTILITY DRUGS

Birth control pills (Norethindrone)

ANTIMICROBIALS

(a) Antibiotics: It is used to treat infection because of their low toxicity for humans & animals.
Ex: Penicillin

(b) Antiseptics & Disinfectants: Chemicals which either or prevent the growth of micro-organism. Antiseptics are applied to living tissues whereas disinfectants are applied to inanimate objects.

PURPOSE

- For their preservation
- Enhancing their appeal
- Adding nutritive value

CHEMICALS IN FOOD

The chemicals, synthetic or natural substances added to food preparation for different purposes are known as food additives.

