

# 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<sup>+</sup> & 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: Meprobamate

**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. Antiseptic are applied to living tissues whereas disinfectants are applied to inanimate objects.

## CHEMICALS IN FOOD

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

## PURPOSE

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

