



**SNS COLLEGE OF PHARMACY AND HEALTH SCIENCES**

Sathy Main Road, SNS Kalvi Nagar,  
Saravanampatti Post, Coimbatore - 641 035,  
Tamil Nadu.



**DOSAGE FORMS**

# Terms:-

**Drug**:-(active pharmaceutical ingredient - API)  
chemical compound intended for used in  
diagnosis, treatment or prevention of  
diseases.

## **Excipients**:-

(inactive pharmaceutical ingredients)  
Technological, biopharmaceutical and/or  
stability reasons.  
Diluents/fillers, binders, lubricants,  
desintegrants, coatings, preservants and  
stabilizers, colorants and flavourings

## **dosage form**:-

Drug+excipients

# CLASSIFICATION

**SOLID**

**SEMI-SOLID**

**LIQUID**

**GAS**

**1. Unit solid:-**

**\_tablets**

**\_capsules**

**2. Bulk dosage form:-**

**\_powder**

**\_Dusting powder**

**1. Monophasic liquid:-**

**\_syrup**

**\_solution**

**2. Biphasic liquid:-**

**\_emulsion**

**\_suspension**

**\_Inhaler**

**\_aerosols**

**Cream**

**Paste**

**Gel**

**suppositories**

**SOLID**

---

- **Tablets:-**

- They are unit solid dosage forms consisting of active ingredient and suitable pharmaceutical excipients.
- They may vary in size, shape, weight, hardness, thickness, disintegration and dissolution characteristics, and in other aspects.



## Capsules:-

- They are unit solid dosage forms consisting gelatin shell that breaks open after the capsule has been swallowed and releasing the drug.
- Types-
  - hard-shell gelatin capsule
  - soft-shell gelatin capsule



1. soft gelatin shell manufactured in one piece with drug usually in liquid form inside the shell, e.g. fat-soluble vitamins and E, Procardia (nifedipine), etc.



2. hard shell manufactured in two pieces that fit together and hold the drug, either in powdered or granular form.



## lozenges :-

tablets formed from hardened base or sugar and water containing drug and other flavors.

They are designed to dissolve slowly in the mouth and release the drug topically to the tissues of mouth and throat; they are not to be swallowed.





## Powder:-

- They are bulk solid dosage forms consisting two or more medicament meant for internal use.
- The size of particle range from 10,000 microns to 0.1microns.
- Size of the powder determine the effectiveness of physiological properties.



# SEMI-SOLID

# SEMI-SOLID

---

- Semisolids contain both liquids and solids semi-solid.
- dosage forms that are too soft in structure to qualify for solids but too thick to be considered liquid.
- They are meant for topical application.

## Creams: -

Creams are semi-solid emulsions, that is mixtures of oil and water.

They are divided into two types-

1.O/W TYPE

2.W/O TYPE

## A.O/W creams:-

- which are composed of small droplets of oil dispersed in a continuous aqueous phase.
- cosmetically acceptable as they are less greasy and more easily washed off using water.

## B.W/O creams:

- which are composed of small droplets of water dispersed in a continuous oily phase.
- Water-in-oil creams are more difficult to handle.
- Water-in-oil creams are also more moisturising as they provide an oily barrier which reduces water loss from the stratum corneum, the outermost layer of the skin.



## *Ointment/Pastes*

- Pastes are semisolid dosage forms that contain one or more drug substances intended for topical application.
- Generally, pastes contain a higher proportion of solid materials than ointments.
- They are more stiff, less greasy, and more absorptive of serous secretions when used on the skin.
- Medicated dental pastes are also prepared for adhesion to the mucous membranes for local effect.



LIQUID

## **Elixirs:-**

solutions that contain an alcohol and water base, added sugar and flavorings, e.g. Tylenol; commonly used for pediatric and elderly patients who have difficulty swallowing tablets or capsules.

## **Syrups:-**

do not contain alcohol and are concentrated solutions of sugar, water, and flavorings. They are sweeter and more viscous than elixirs. Most OTC cough medications are syrup based and don't only carry the drug but also act to soothe the inflamed mucous membranes of the throat.

## **Solutions:-**

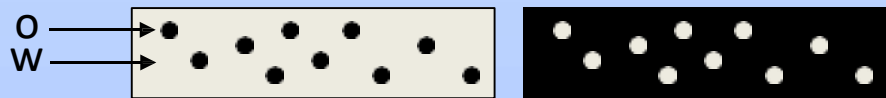
one homogenous phase, prepared by dissolving one or more solutes in a solvent.

## **Emulsions:-**

-a dispersion system consisting of two immiscible liquids

-o/w or w/o

-cloudy appearance.



## **Suspensions:-**

A dispersion system where solid particles are dispersed in liquid phase

- Solid particles called dispersed phases and liquid called continuous phases.

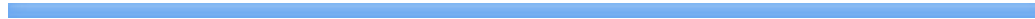
## *Liniments*

- Liniments are alcoholic or oleaginous solutions, suspensions, or emulsions of medicinal agents intended for external application to the skin, generally by rubbing.





**GAS**



## *Inhalations*

- Inhalations are finely powdered drug substances, solutions, or suspensions of drug substances administered by the nasal or oral respiratory route for local or systemic effects.
- Special devices are used to facilitate administration.



Thanks to a new insulin inhaler, researchers say, the daily injections many diabetics take may become relics of the past.

## aerosol sprays

- Several different types of pharmaceutical product may be packaged in pressurized dispensers, known as aerosols.
- used as surface disinfectants, wound or burn dressing, relieve irritation of bites.

