

TYPES OF DOSAGE FORMS AND THEIR DEFINITIONS

Presented by

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TYPES OF DOSAGE FORMS AND THEIR DEFINITIONS

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Definition: The manner in which drug substance are presented in the market (e.g- solids, liquids or semi solids)

Need for convert drug to dosage forms:

- 1-Accurate dose.
- 2-Protection e.g. coated tablets, sealed ampoules.
- 3-Protection from gastric juice.
- 4-Masking taste and odor (to make palatable).
- 5-Placement of drugs within body tissues.
- 6-Sustained release medication.
- 7-Controlled release medication.
- 8-Optimal drug action.
- 9-Insertion of drugs into body cavities (rectal, vaginal)
- 10-Use of desired vehicle for insoluble drugs.



Need for different dosage form of same drug

To minimize discomfort and instant relief and improve patient compliance

Desirable properties of dosage form:

Should:

- Convenient to handle, use and store
- Stable during storage and use
- Withstand mechanical shock during transport
- Flexibility in different drug strength
- Provide expected therapeutic effect
- Extent, drug release, onset, intensity, duration of action predictable
- Economical and elegant



Classification



Based on

Physical state

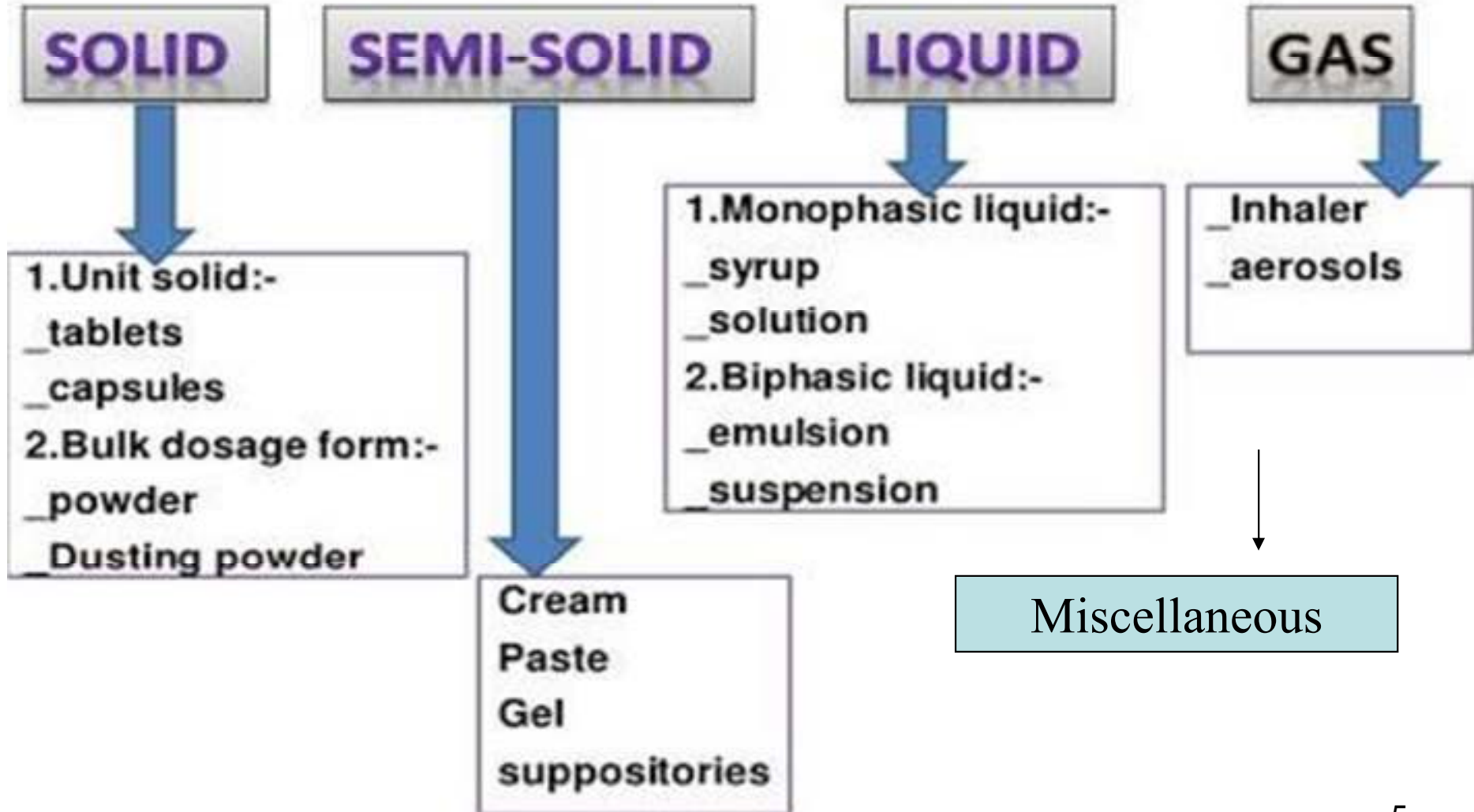
Route of Administration

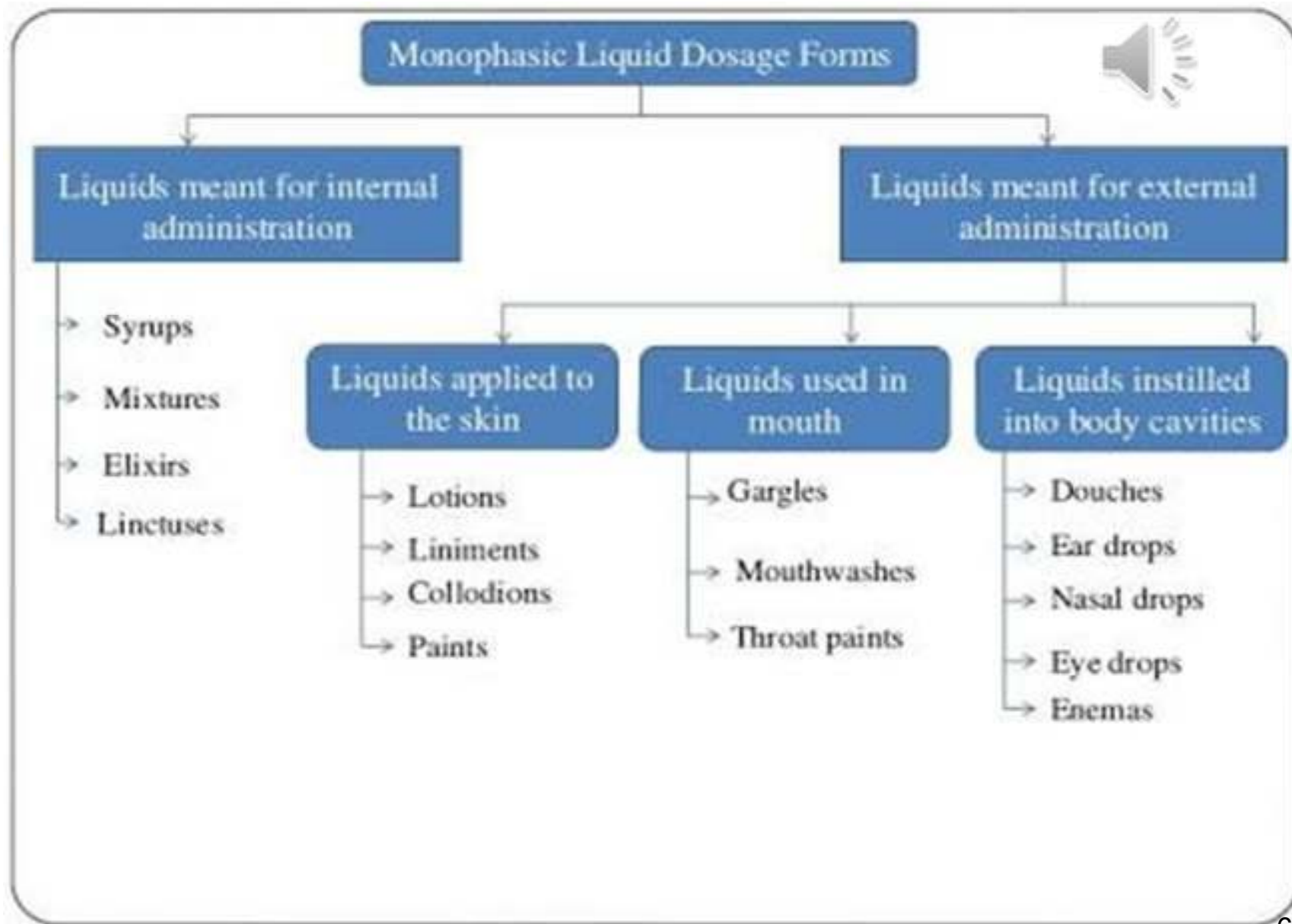
Site of Application

Uses

CLASSIFICATION

Based on Physical state





Based on Route of administration



Oral	Parenteral	Rectal	Urethral
1. Powders	1. Solutions	1. Suppositories	1. Suppositories
2. Tablets	2. Suspensions	2. Enemas	
3. Capsules	3. Emulsions	3. Ointments	Sublingual
4. Solutions	Intra respiratory - Aerosols		1. Tablets
5. Suspensions	Trans dermal	Vaginal	2. Lozenges
6. Emulsions	1. Ointments	1. Suppositories	
7. Syrups	2. Creams	2. Tablets	Intranasal
8. Elixirs	3. Powders	3. Ointments	1. Solutions
9. Magmas	4. Pastes	4. Creams	2. Sprays
10. Gels	5. Lotions	5. Douches	3. Inhalations
11. Cachets	6. Plasters	Conjunctival - Ointments	
12. Pills	Intra ocular – Solutions, Suspensions, Ointments		

Site of Application

1. Skin- Ointments, creams, lotions, liniments
2. Eye- Solutions, ointments, creams
3. Tooth- Tooth powder, tooth paste
4. Hand- Hand creams, lotions, hand washings
5. Foot- Creams, ointments, dusting powders
6. Hair- Hair cream, hair lotions, shampoos, hair fixing
7. Nasal- Solutions, sprays, inhalations



Uses

1. Internal – all preparations except external
2. External – Ointments, lotions, creams, powders, solutions, liniments, paste, hair dyes, hair colorants

Definitions : Solid dosage forms


- **Powders:** Solid dosage forms containing finely divided particles in micron size
- **Tablets:** Solid dosage form containing medicaments with or without excipients
- **Granules:** Aggregate of particles
- **Capsules:** Drug enclosed with gelatin capsule
- **Cachets:** Drugs enclosed with wafer sheet of rice
- **Pills:** Small tablet containing excipients
- **Lozenges:** Solid preparations containing sugar and gum used to medicate mouth and throat
- **Suppositories:** Solid dosage containing medicaments with suitable suppository base that inserted in to the body cavities other than mouth, like rectum, nose, ear
- **Poultices:** Solid dosage form converted to paste like preparation used externally in the skin to reduce inflammation



Definitions: Liquid dosage forms

1. **Collodions:** Liquid preparations for external use having nitro cellulose used to protect the skin
2. **Droughts:** Liquid preparations for oral containing medicaments available in single dose or multiple dose
3. **Elixirs:** Liquid preparation for oral containing medicaments with suitable excipients
4. **Emulsions:** Biphasic liquid dosage form for oral containing medicaments in which fine oil globules dispersed in continuous phase
5. **Suspensions:** Biphasic liquid dosage form for oral containing medicaments in which fine solid particles suspended in continuous phase
6. **Enemas:** Liquid preparation for rectal containing medicaments



7. **Gargles:** Concentrated aqueous solutions for external use used to treat throat infections
8. **Gels:** Aqueous colloidal suspensions containing medicaments used as antacids
9. **Linctuses:** Viscous, liquid oral preparations used to relief cough 
10. **Lotions:** Liquid preparations for external application usually applied without friction
11. **Liniments:** Liquid preparations for external application usually applied with friction
12. **Mixtures:** Liquid oral preparations containing one or more medicaments
13. **Mouth washes:** Concentrated aqueous solutions for external use used to treat mouth infections and oral hyginic

14. **Nasal drops:** Liquid preparations containing medicaments that are instilled in to the nose with a dropper used to treat nose infections and blockage of nose

15. **Paints:** Liquid preparations for external application to the skin or mucous membrane with soft brush

16. **Solutions :** Clear liquid preparation containing with or without medicaments used to internal or external preparations

17. **Syrups:** Sweet, viscous, concentrated liquid preparations containing with or without sugar and medicaments



Definitions: Semisolid dosage forms



1. **Ointments:** Semisolid dosage forms for external use containing with or without medicaments with suitable ointment base
2. **Creams:** Semisolid dosage forms for external use containing with or without medicaments with suitable fatty base
3. **Paste:** Semisolid dosage forms for external use containing high proportion of finely powdered medicaments with suitable fatty base
4. **Gels:** Transparent semisolid dosage forms for external use containing hydrophilic or hydrophobic base with gelling agents
5. **Poultices:** Semisolid dosage forms for external use containing medicaments applied to the skin to hold the dressing and protective

Definitions: Gaseous dosage forms

1. **Aerosols:** Suspension of fine solid or liquid particles with gas used to apply drug to respiratory tract having atomizer with in device
2. **Inhalations:** Internal liquid preparations containing medicaments dissolved in suitable solvent or if insoluble suspended in the propellant
3. **Sprays:** Gaseous preparations of drugs containing alcohol applied to mucous membrane of nose or throat with atomizer or nebulizer



Thank you