



आईएफटीएम विश्वविद्यालय, मुरादाबाद, उत्तर प्रदेश

IFTM University, Moradabad, Uttar Pradesh

NAAC ACCREDITED

E-Content

IFTM University, Moradabad

SOLID DOSAGE FORMS: TABLETS

Dr. Prevesh Kumar
M. Pharm, Ph. D
Pharmacy Academy, IFTM University Moradabad
2023

SOLID DOSAGE FORMS

Tablets



Capsules



Powders



Granules



Suppositories



ADVANTAGES OF SOLID DOSAGE FORMS

1. More stable than liquids, with longer expiration dates.
 2. Easy shipping and handling.
 3. Less needed shelf space.
 4. No preservation requirements.
 5. Accurate dosage (single dose).
 6. Suitable for sustained release preparation.
-

DISADVANTAGES OF SOLID DOSAGE FORMS

Their preparation needs complicated and expensive machines.

TABLETS AS A SOLID DOSAGE FORM

DEFINITION:



-
- TABLETS ARE INTENDED FOR ORAL ADMINISTRATION TO PRODUCE CERTAIN THERAPEUTIC EFFECT.
 - TABLETS ARE SOLID PREPARATIONS EACH CONTAINING A SINGLE DOSE OF ONE OR MORE ACTIVE INGREDIENTS AND USUALLY OBTAINED BY COMPRESSING UNIFORM VOLUME OF PARTICLES OR SOME ARE PREPARED BY MOULDING.

Tablets are Usually Prepared by the Aid of Some Pharmaceutical Excipients (Additives):

To Help in Tableting Procedure.

Ensure that The Drug will be Released as Intended.

The term "Tablets" (from the Latin *Tabuleta*) is Associated with The Appearance of The Dosage Form I.E Tablets are Small Disc-like or Cylindrical Specimens.

Tablets are Solid, Flat or Biconvex Discs.

Most Tablets Are Used For Oral Administration Of Drugs, Others Are Administered Sublingually Buccaly Or Vaginally.



- Tablets may be Swallowed Whole or Being Chewed.
- Some are Dissolved in Water Before Administration.
- Some are Put in Oral Cavity, Where The Active Ingredient is ----
- Liberated at A Predetermined Rate.

-Implants Or Passeries may also be Presented in Form of Tablet.

-Tablet May Vary in Shape and Differ Greatly in Size and Weight
-Depending on The Amount of Medicinal Substance and The
Intended Mode of Administration.

-The Compressed Tablet is the Most Popular Dosage Form in Use
Today.

-About Two-thirds of All Prescriptions are Dispensed as Solid
Dosage Forms, and Half of These are Compressed Tablets.

ADVANTAGES OF TABLETS (TABLETS ARE POPULAR WHY?):

In U.K. Tablets Represents About 46% of All Other Dosage Forms.

1- Compared to Liquid Dosage Forms Tablets Possess More Chemical and Physical Stability.

2- Packaging in Blister Packs can Also Enhance The Stability of Tablets.

3- They Provide an Accurately Measured Dose and Low Content Variability of The Unit Dose.

4- Low Manufacturing Cost.

5- Easy to Package (Blister Or Strip) and Ship.

6- Easy Handling Over Liquid Dosage Form.



ADVANTAGES OF TABLETS CONT.

6- Simple to Identify. Coatings can be Colored or Stamped to Aid Tablet Recognition.

7- Manufacturing Processes and Techniques can Provide Tablets Special Properties
For Example: Enteric Coatings Or Sustained Release Formulations.

8- Lightest and Most Compact.

9- Coating can Mask Unpleasant Taste And Improve Patient Acceptability.



DISADVANTAGES OF TABLETS AS A DOSAGE FORM:

- 1- Poor Bioavailability of Poorly Soluble Drugs or Poorly Absorbable Drugs.
- 2- Some Drugs may Cause Local Irritation Effect Harm GIT Mucosa.
- 3- Some Drugs Resist Compression into Tablet.
- 4- Difficulty in Swallowing in Some Patients; Pediatrics and Geriatrics.
- 5- In Emergency Cases, Intravenous or Intramuscular Injections are More Effective.

CLASSIFICATION OF TABLETS

ACCORDING TO DRUG RELEASE RATE FROM THE TABLETS (USP CLASSIFICATION)

A- Immediate Release (Conventional Tablets)

B- Modified Release Tablets (Extended And Delayed Release Tablets)

ACCORDING TO METHOD OF MANUFACTURING

a- Compressed Tablets

B- Modified Tablets

QUALITY ATTRIBUTES OF TABLETS:

1. The tablet should include the **correct dose** of the drug.
2. The appearance of the tablet should be **elegant and its weight, size and appearance should be consistent.**
3. The drug should be released from the tablet in a **controlled and reproducible way.**
4. The tablet should be **biocompatible .**
5. The tablet should be of **sufficient mechanical strength to with stand** fracture and erosion during handling.
6. The tablet should be **chemically, physically and microbiologically stable**

THANK YOU

