



Chapter-5

Tablets—

Defination—

Tablets are the solid unit dosage form containing medicament with or without excipients

→ Prepared by compression method.

Tablet O

↓
API / Medicament
(Active pharmaceutical ingredient)

↓
Excipient

→ Tablet are present in a different shape and sizes such as circular, Flat or biconvex etc.



Ideal characteristics of Tablets—

- ① A pharmaceutical Tablet should have elegant product, which have proper shape and size
- ② Tablet should be free from any defects like chips, cracks, discoloration and contamination.



③ Tablets must be uniform in weight and in drug content.

④ Tablet should be chemically and physically stable over a long period of time.

Advantages of Tablet—

- ① Simplest oral dosage form
- ② Easy to Administration
- ③ Easy to dispensed
- ④ Easy to packaging
- ⑤ Dose accuracy
- ⑥ Longer expiry date
- ⑦ Light in weight
- ⑧ Cheapest

Disadvantages—

- ① Infant, childrens and elder person can not easily administration.
- ② Not useful for unconscious patients.
- ③ Not used in emergency (slow action)
- ④ Problem with compression to crystalline drugs.



* Classification of Tablets—

Tablets are classified according to their route of Administration

A. Tablets ingested orally—

1. Compressed Tablets
2. Multiple compressed Tablets
3. Multilayered Tablets
4. Sustained action Tablets
5. Enteric-coated Tablets
6. Sugar-coated Tablets
7. Film-coated Tablets
8. Chewable Tablets

B. Tablets used in the oral Activity

1. Buccal tablets
2. Sublingual tablets
3. Lozenge Tablets
4. Dental Cone

C. Tablets used to be administration by other routes—

1. Implantation Tablets
2. vaginal Tablets

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D. Tablets used to Prepare Solutions -

1. Effervescent tablets
2. Dispensing tablets
3. ~~Hydro~~ Hypodermic tablets
4. Tablet Bituxates

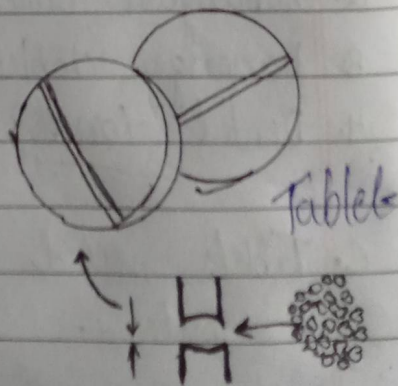
① Tablet Ingested Orally -

These are those tablets which are introduced in our body through oral route

① Compression Tablets -

Those Tablets which are generally by compression of powdered, granulation material with the help of punching Machine.

- No Special coating
- Mostly water soluble
- Rapid disintegration



Examples - Paracetamol, Diazepam

② Multiple

These Tablets physically ingredients action

→ Avoid

→ Except compression then excipients previous

a) Multilam

contain (comp

b) Comp

contain Tablets as

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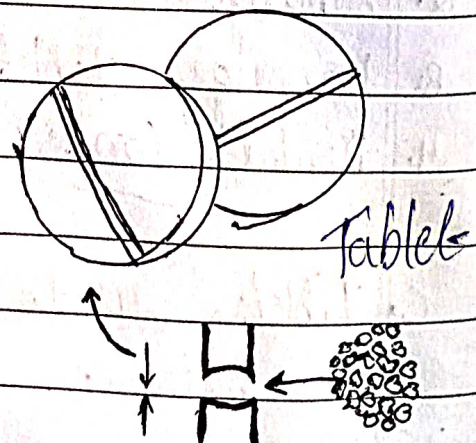
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② Multiple Compressed Tablet -

These Tablets are prepared to separate physically or chemically incompatible ingredients or to produce repeat-action

- Avoid the incompatibility of the gradients
- Except the incompatible material are compressed into a core tablet and then incompatible substance along with excipients are compressed over the previously compressed core tablet.

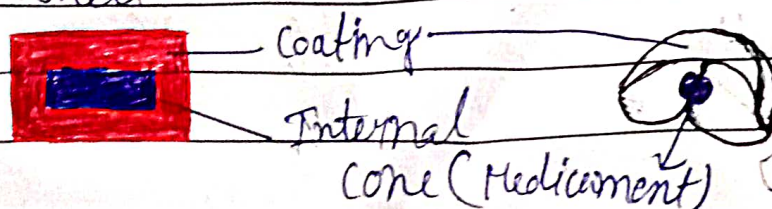
a) Multilayer or Layered Tablet -

contains either two or more layered (components)



b) Compressed Coated Tablet -

contain two parts internal (core) small Tablet and surrounding coat which act as shell.



3. Sustained Action Tablet -

- These Tablet are used to get a sustained action of medicaments.
- Prolong action tablet, repeat action Tablets
- A Tablet that release its active ingredient in specified doses at time intervals

4. Enteric Coated Tablet -

These are compressed Tablets meant for administration by swallowing and are designed to by pass the stomach and get disintegrated or dissolution in the intestine only polymers Ex -

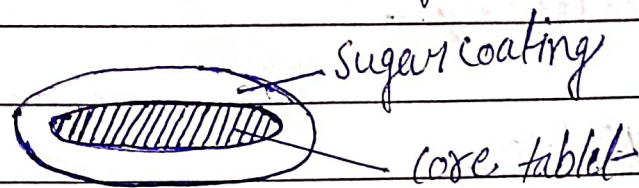
Hydroxy propyl methyl cellulose
phthalate etc.

5. Sugar Coated Tablet -

Those Tablets which having a sugar coating are called Sugar Solution.

→ This sugar-coated Tablet is coated with sugar to disguise the taste

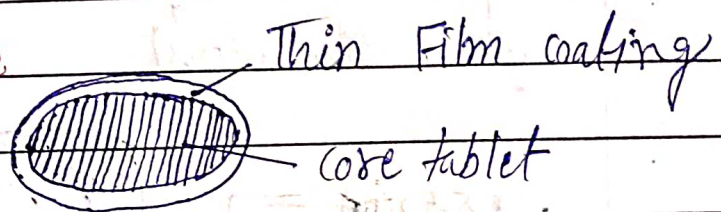
→ sugarcoating are basically used to used to mask the taste or smelling (odour) drugs.



⑥ Film-coated Tablet -

These are compressed Tablets coated with a thin layer of polymer, forming a skin like film over the tablet.

Ex - Antibiotics etc



⑦ Chewable Tablets -

These Tablets are chewed in the mouth and broken into smaller pieces. In this way, the disintegration time is reduced and the rate of absorption of the medicament is increased.

Examples— Antacid Tablet (Phenophtalein tablet used as laxative)

2. Tablet used in Oral cavity—

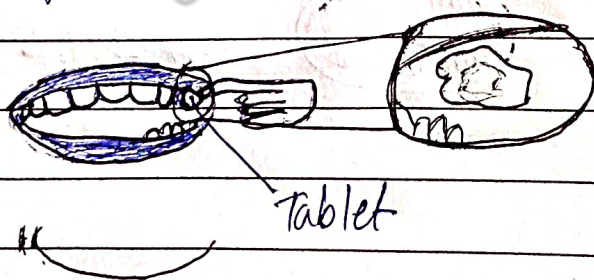
The following types of Tablets come under this category—

① Buccal Tablets—

These Tablet are to be placed in pouch or between the gum and lips of cheek.

→ Tablet dissolve and disintegrated slowly & absorb directly (without passing alimental canal)

Example— Tablets of ethisterone (amenorrhoea (Gynaecological disorders))

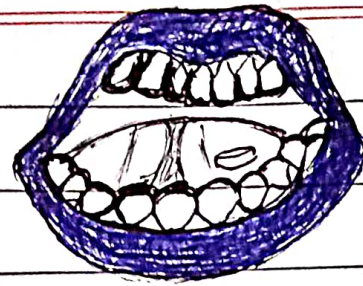


② Sublingual Tablets—

These are to be placed under the tongue where they dissolve or disintegrate quickly and absorbed directly without



Passing into G.I.T.



Examples — Tablet of glyceryl trinitrate (high b.p)

③ Lozenge Tablets —

These tablets are designed to exert a local effect in the mouth or throat.

→ These tablet are commonly used to treat sore throat or to control coughing in common cold.

④ Dental cones —

These are relatively minor compressed tablets meant for placing them in empty sockets after tooth extraction. They prevent the multiplication of bacteria in the socket following such extraction by using slow-releasing antibacterial compound, or to reduce bleeding by containing the astringent.