

Processes involved in the production of tablets

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PREPARATION OF GRANULES FOR COMPRESSION

- The following steps are involved during the preparation of granules:
 - **Weighing of the ingredients.**
 - **Mixing the powdered ingredients and excipients.**
 - **Converting the mixed ingredients into granules.**

Methods of Granules Preparation

- **MOIST GRANULATION METHOD**
- **DRY GRANULATION METHOD**
- **GRANULES BY PRELIMINARY COMPRESSION**

MOIST GRANULATION METHOD

- ✓ API + excipients such as diluents, binding agents, disintegrating agents with q.s. moistened granulating agent.
- ✓ Make a coherent mass.
- ✓ Pass through sieve no. 8 or 10.
- ✓ Dried at 60°C.
- ✓ Then dried granules passed through sieves.
- ✓ Then add lubricating agent, any volatile subst. & mixed well.
- ✓ Ready for compression.

DRY GRANULATION

- Dry granulation process are generally use for those drugs having crystalline properties or for having present in granules & having it's own binding property.
- Those drugs are passed through sieve no.20 or any other specified sieve.
- Then mix with additional excipients such as diluents & lubricants.
- Ready for compression.
- e.g. Aspirin tablets, sodium bromide tablets etc.

GRANULES BY PRELIMINARY COMPRESSION

- This method is also called as “SLUGGING METHOD”.
- This method is used for those drugs which are unstable in presence of moisture.
- In this method firstly dry powder is compressed into large tablets or slugs.
- Then those tablets or slugs broken into small pieces & passed through a specified sieve to obtained a suitable size granules.
- Then mixed with a suitable lubricating , disintegrating & granulating agents.
- Ready for compression.

Thank you!