



*Pharmaceutical Technology for  
3rd year students  
2<sup>nd</sup> Course, Lec. 6*

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- ✓ Depending on the formulation, suppository molds may require lubrication before the melt is poured to facilitate clean and easy removal of the molded suppositories.
- ✓ Lubrication is seldom necessary when the base is cocoa butter or polyethylene glycol????

Lubrication is usually necessary with glycerinated gelatin.

A thin coating of mineral oil applied with the finger to the molding surfaces usually suffices.

However, no material that might irritate the mucous membranes should be employed as a mold lubricant.

## ✓ PREPARATION BY COMPRESSION

- ✓ Suppositories may be prepared by forcing the mixed mass of the base and the medicaments into special molds using suppository-making machines. In preparation for compression into the molds, the base and the other formula ingredients are combined by thorough mixing, the friction of the process softening the base into a paste-like consistency.

- ✓ On a small scale, a mortar and pestle may be used. Heating the mortar in warm water (then drying it) greatly facilitates the softening of the base and the mixing.
- ✓ On a large scale, a similar process may be used, employing mechanical kneading mixers and a warm mixing vessel

- ✓ Compression is especially suited for making suppositories that contain heat-labile medicinal substances or a great deal of substances that are insoluble in the base.
- ✓ The disadvantage to compression ..????

# PREPARATION BY HAND ROLLING AND SHAPING

- ✓ Hand rolling and shaping is a historic part of the art of the pharmacist

## ✓ PACKAGING AND STORAGE

- 1- Glycerin suppositories and glycerinated gelatin suppositories are packaged in **tightly closed glass** containers.
  
- 2- Suppositories prepared from a cocoa butter base are usually individually **wrapped or otherwise** separated in compartmented boxes.

3-Suppositories containing light-sensitive drugs are individually wrapped in an opaque material such as a metallic foil.

In fact, most commercial suppositories are individually wrapped in either foil or plastic. Some are packaged in a continuous strip,.

4- Because suppositories are adversely affected by heat, it is necessary to maintain them in a cool place. Cocoa butter suppositories must be stored below 30°C (86°F), and preferably in a refrigerator (2-8°C, or 36°F to 46°F).

Glycerinated gelatin suppositories can be stored at controlled room temperature (20°C-25°C, or 68°F to 77°F). Suppositories made from a base of poly-ethylene glycol may be stored at usual room temperatures.

5- Suppositories stored in high humidity may absorb moisture and tend to become spongy, whereas suppositories stored in places of extreme dryness may lose moisture and become brittle