

Suppositories Introduction Suppositories are solid pharmaceutical dosage forms designed to be inserted into body orifices where they soften, melt, dissolve, or disperse to liberate the incorporated drug(s) that exert local or systemic effect. Such bases are divided into 2 major categories: – Fatty bases; which are divided into natural fatty bases like theobroma oil (cocoa-butter) and synthetic fats (prepared from vegetable oils). **Preparation of suppositories Displacement value and calculations** Because the density of each medicament varies from that of the base, the weight of the base required to make a suppository will vary depending on the drug used. For example, bismuth subgallate suppositories are used as astringent in treating hemorrhoids – **Suppositories for systemic effect:** Drugs are sufficiently absorbed to exert systemic effect. Active and inactive ingredients are dispersed in an inert matrix composed of solid bases. – **Water-soluble and water miscible bases:** For example, glycerol-gelatin suppositories which are a mixture of glycerol and water stiffened with gelatin. Theobroma oil has a major drawback of undergoing polymorphism when overheated, and should be stored at a cool place preferred at 4 °C. A major disadvantage of glycerol-gelatin suppositories is osmosis which produces a laxative effect. Theobroma oil is obtained from the roasted seeds of theobroma cocoa. Gelatin is a natural protein obtained from collagenous tissue, such as skin and bones of animals. They can be classified according to the site of action into 2 major types: – **Suppositories for local effects:** laxative and anti-hemorrhoidal suppositories. For example, Anti-asthmatics, anti-rheumatics and analgesics suppositories.