

PACKAGING AND STORING TABLETS

Tablets are stored in tight containers, in places of low humidity, and protected from extremes in temperature. Products that are prone to decomposition by moisture generally are packaged with a desiccant packet. Drugs that are adversely affected by light are packaged in light-resistant containers. With a few exceptions, tablets that are properly stored will remain stable for several years or more.

In dispensing tablets, the pharmacist is well advised to use a similar type of container as provided by the manufacturer of the product. The patient is well advised to keep the drug in the container dispensed. Storage conditions, as recommended for the particular product, should be maintained by the pharmacist and patient alike and expiration dates observed.

The pharmacist should be aware also that the hardness of certain tablets may change upon aging, usually resulting in a decrease in the disintegration and dissolution rates of the product. The increase in tablet hardness can frequently be attributed to the increased adhesion of the binding agent and other formulative components within the tablet. Examples of increased tablet hardening with age have been reported for a number of drugs, including aluminum hydroxide, sodium salicylate, and phenylbutazone (22).

In tablets containing volatile drugs, such as NTG, the drug may migrate between tablets in the container, resulting in a lack of uniformity among the tablets (23). Also, packing materials, such as cotton and rayon, in contact with NTG tablets may absorb varying amounts of NTG, reducing potency of the tablets (24). The USP directs that NTG tablets be preserved in tight containers, preferably of glass, at controlled room temperature. Also, migration within tablets can occur resulting in unequal distribution within a single tablet; this can be problematic if the tablet is scored and designed to be broken in half where the two halves may not contain equal portions of the drug. Storage of a container next to a heat source may result

in greater loss or movement of the volatile drug in the portion of the bottle closest to the heat. Some third party payors require the dispensing of higher strength tablets with the patient to divide them prior to administration to decrease costs. In addition to the difficulties just mentioned, it is troublesome for many patients to split tablets into two equal halves.

The USP further directs that NTG tablets be dispensed in the original unopened container, labeled with the following statement directed to the patient. "Warning: to prevent loss of potency, keep these tablets in the original container or in a supplemental NTG container specifically labeled as being suitable for NTG tablets. Close tightly immediately after use" (4).

The pharmacist also should caution patients about handling medication when it poses a risk. For example, as noted earlier, finasteride tablets are taken by men to treat benign prostatic hyperplasia. Finasteride has the potential to harm a male fetus if absorbed by a pregnant woman either through direct contact with finasteride or possibly through semen. Therefore, a woman who is pregnant or who may become pregnant should not handle finasteride tablets or come into contact with finasteride powder. In addition, when the male patient's sexual partner is pregnant or may become pregnant, the patient should avoid exposure of his partner to semen or should discontinue the use of this drug.

Finally, rapidly dissolving tablets tend to be softer than regular compressed immediate-release tablets and require special packaging. An example is shown in Figure 8.38.

OTHER SOLID DOSAGE FORMS FOR ORAL ADMINISTRATION

Lozenges (Troches)

Lozenges (troches) are solid oral dosage forms that are designed to dissolve or disintegrate slowly in the mouth. They contain one or more active drugs that are slowly released from the flavored and sweetened base. They are used for both local and systemic action.