PHARMACOLOGY

Pills Made Easy To Take

Medicines today are packaged in sugar-coated tablets and gelatin capsules to camouflage their bitter taste. Some containers are colored to avoid confusion.

➤ YOU SWALLOW many bitter pills these days without knowing that the medicine is bitter, thanks to sugar-coated tablets and gelatin capsules.

Hard, non-flexible capsules and soft, elastic ones are both used as containers for individual doses of medicine. Powders are packaged in the tough body of the familiar capsules before the cap is fitted on; measured quantities of oily liquids are poured into the flexible gelatin as the elastic capsules are being made.

Gelatin is usually preferred as the container for medicines because it is tasteless, dissolves easily and does not harm the patient. Gelatin shells made soft and elastic through the addition of glycerin permanently retain this flexibility.

Colored capsules are used to avoid confusion when a person is taking several kinds. Sometimes the transparent capsule shell is colored, sometimes the ingredients are tinted. When necessary, the shell can be made opaque to keep light from destroying light-sensitive ingredients such as vitamin B_2 or riboflavin.

Medicine today is compounded and packaged quite differently from the way it was prepared 25 to 50 years ago. New practices make possible more exact dosages, greater cleanliness and more appetizing preparations.

Tablets and capsules are rapidly replacing the pills of our grandparents' time. Cachets or wafers for bitter powders today are seldom seen in the United States. New processes for preparing unstable liquids have been introduced.

As many as 50 microscopic coatings of sugar solution are applied to a compressed tablet to give it the desired thickness. No color is added to the coating material used at the beginning; only the last few additions are tinted pastel shades to make them more appealing and palatable, and to protect the medication against the deteriorating action of the atmosphere. It often takes eight hours to apply the numerous coatings.

The drug industry employs a special method of dehydration to increase the stability of biological and pharmaceutical products which are unstable in liquid form. This lyophile process consists of freezing the liquid and evaporating the water in a vacuum. The water never becomes liquid, but passes directly from ice to vapor.

Samples demonstrating the latest methods of preparing medicines have been collected for you through the cooperation of Sharp & Dohme, one of the country's leading pharmaceutical houses, and Science Service. Several of them were specially prepared for the kit so none of the nine specimens would contain medication. Thus you, or your pet cat, will be none the worse for swallowing the tablets and capsules.

The capsules range in length from a half-inch, for small doses for humans, to 2 1/4 inches, to give large amounts of medication to horses and pigs. One is soft and elastic, the other stiff and non-flexible.

Uncoated and coated compressed tablets, a lozenge and a molded tablet demonstrate the more common methods of preparing medicine. Directions are given for making pills, today largely replaced by compressed tablets.

Lyophilized gelatin and distilled water are also included so that those unfamiliar with this process can see a product dehydrated in this manner, now widely used in preparing penicillin, streptomycin and blood plasma.

These specimens, with a leaflet telling how they were made and experiments that can be performed with them, may be secured by sending 50 cents to Science Service, 1719 N St., N. W., Washington 6, D. C. Just ask for unit No. 97.

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