

Medication Crushing Guidelines

Mixing with Food or Beverage

Most crushed tablets or emptied capsules may be mixed with applesauce, pudding, or jelly immediately prior to administration if necessary to improve their palatability (check compatibility before mixing). Water may also be used. Juice should only be used when so ordered by the physician. No other products should be mixed with food or beverages other than water unless a physician's specific order is obtained. Medications should not be mixed with enteral feeding solutions unless ordered by physician.

Medications that Should not be Crushed or Chewed

When a resident's condition prohibits the administration of solid dosage forms (tablets, capsules, etc.), the nurse administering the medication should check to see that there is no contraindication to crushing the medications in question. If crushing is contraindicated, the nurse should consult the pharmacist for assistance in obtaining the medication in liquid form, if possible.

The rationale for not crushing some medications includes:

- A. **Sublingual and Buccal tablets** are designed to dissolve in the oral fluids of the mouth for rapid and more complete absorption than is possible in the stomach. Swallowing, crushing, or chewing will prevent proper absorption of the medication. Many of these medications are destroyed by the gastric juices in the stomach. Some of these medications are available in both oral and sublingual forms, which are formulated differently. If the sublingual form is ordered by the physician, it should be administered sublingually only. If the resident is unable to comply with this dosage form, the physician should be notified and the order changed to the oral form, if possible.
- B. **Enteric Coated Tablets** are designed to pass through the stomach whole and then dissolve in the intestinal tract. Reasons for this type of formulation include:
 - 1) to prevent the destruction of the medication by stomach acid;
 - 2) to prevent the medication from irritating the stomach lining; and
 - 3) to achieve a prolonged action from the medication.
- C. **Timed Release Capsules** are designed to release medication over a sustained period, usually 8 to 24 hours. The beads within the capsule are designed to dissolve at different times. These formulations are utilized to reduce stomach irritation in some cases and to achieve prolonged medication action in other cases. It is acceptable to open the capsules and administer the contents in food so long as the beads are not crushed or chewed. A reference should be checked, or the pharmacist consulted before administering in this manner.
- D. **Timed Release Tablets** are designed to release medication over a sustained period, usually 8 to 24 hours. These formulations are utilized to reduce stomach irritation in some cases and to achieve prolonged medication action in other cases. In either case these tablets should not be crushed. Some specific types of timed release tablets include the following:
 - 1) **Slow Release Core:** The outer coating may dissolve immediately to provide an initial dose of medication followed by the slow dissolving of the tablet core to provide a prolonged dose of medication.
 - 2) **Mixed Release Granules:** a tablet made of individual granules with varying rates of dissolution, compressed together.
 - 3) **Multilayer Tablets:** are usually composed of two or three layers with one layer designed to dissolve rapidly to provide immediate action and the remaining layers dissolving at much slower rates to provide sustained release.
 - 4) **Porous Inert Carriers:** are plastic or wax matrix tablets with thousands of passages filled with medication. The medication leaches out of the passages very slowly. It should be noted that with some products the plastic or wax tablet may be found in a resident's stool. This is a normal finding with this type of formulation.