

Do Not Crush

Some patient's, due to swallowing difficulties, may need their medications crushed for administration. It is important to remember that not all medications can be crushed for administration. There are different reasons for why a medication may not be crushed:

- ◆ 1) Extended release/Controlled release/Delayed release/Slow release/Long Acting (ER, XL, CR, CD, DR, LA): The release mechanism will be compromised if the medication is crushed. If a medication has one of these abbreviations attached, it should **NOT** be crushed as it will alter the way drug is released and the medication will not work in the manner it was designed. This may result in too much medication being released or not enough.
- ◆ 2) Some medications have an outer protective layer that, when crushed, lose their ability to protect the GI tract from the irritating medication inside. This can cause mucosal irritation, leading to heartburn, dyspepsia, ulceration, cough, etc.
- ◆ 3) Some medications can leave an unpleasant taste in the mouth when crushed. This can deter patients from taking these medications.
- ◆ The table on the next page lists several medications seen in long term care that should not be crushed. Please note: medications that contain the abbreviation ER, XL, SR, CD, CR, LA, etc. are not included in the chart, but should **NOT** be crushed, as stated above. This table is not all-inclusive. You should refer to the package insert if you are unsure if a medication can be crushed. Please consult your Health Direct Pharmacist for alternatives if patient cannot swallow whole. Several medications come in a capsule form which can be opened and placed in food for administration as long as the contents are not crushed or chewed.

Mucosal Irritants-Coated Medications	Special Release Medications	Miscellaneous
Aspirin EC (enteric-coated)	Aciphex (rabeprazole)	Colace (docusate)—capsule form-taste
Actonel, Atelvia (risedronate)	Aggrenox	Evista (raloxifene)-taste
Bisacodyl Tablets	Amitiza (lubiprostone)	Keppra (levetiracetam)--taste
Boniva (ibandronate)	Aricept 23 mg tablet only (Donepezil)	Pradaxa (dabigatran)—breaking, chewing or emptying contents, may result in increased exposure. Swallow whole.
Fosamax (alendronate)	Cardizem (Diltiazem) tablets (non-SR, CD, LA)--***see below	Tessalon perles (benzonatate)—crushing can result in local anesthesia of the oral mucosa, choking can occur
Feosol, Feratab, Fergon (ferrous sulfate)	Cymbalta (Duloxetine)	Topamax (topiramate)--taste
Lovaza	Depakote (divalproex)—all tablets and capsules except the sprinkle capsules	Urocit-K (Potassium citrate)—wax coated-prevents upper GI release
Vesicare (solifenacin)	Enablex (darifenacin)	Drisdol (Ergocalciferol) capsule—liquid filled
	Flomax (Tamsulosin)	Levsin (Hyoscyamine)—sublingual tablet, should be dissolved under the tongue
	Imdur (isosorbide mononitrate)	Ibuprofen--taste
	K-Dur (Potassium tablets)	Nitrostat (Nitroglycerin)-- sublingual tablet, should be dissolved under the tongue
	Magnesium salts	Renagel (sevelamer)
	Mucinex (guaifenesin) tablets	
	Prilosec OTC tablets	
	Protonix (pantoprazole) tablets	
	Ranexa (ranolazine)	
	Tylenol Arthritis (APAP ER)	
	Uroxatral (alfuzosin)	

***Diltiazem tablets still have a controlled release mechanism that can result in an instant release of drug, causing faster absorption when crushed.

References:

- 1) ISMP Do not crush list 2016. Accessed 1/8/2018 from: <http://www.ismp.org/tools/donotcrush.pdf>
- 2) www.clinicalpharmacology.com