Enteral Drug Administration

Do NOT Crush medications that contain these suffixes: 12-hour, 24-hour, CC, CD, CR, ER, LA, Retard, SA, Slo-, SR, XL, XR, XT, EN, or EC		
g	generic (Brand)	Comments/Recommendations
Α	Actonel - see risedr	onate
	acyclovir (Zovirax)	 Comments and Considerations: Commercially available suspension combined with Osmolite resulted in clogging 8 Fr, but not 20 Fr feeding tubes Recommendations for Administration with Enteral Nutrition: Disperse tablet in 20 mL water. Do NOT administer suspension through feeding tube.
	alendronate (Fosamax)	 Comments and Considerations: Do NOT crush tablets as a mucosal irritant. Recommendations for Administration with Enteral Nutrition: Use once-weekly tablet dispersed in 60 mL of mineral-free water. Consider holding tube feeding for 30 minutes before and 30 minutes after. Patient should remain upright to prevent esophageal damage caused by reflux.
	amoxicillin (Amoxil)	 Comments and Considerations: Avoid crushing any sustained-released product Recommendations for Administration with Enteral Nutrition: Use the suspension from reconstituted powder and further dilute 1:1 prior to administration.
	atomoxetine (Strattera)	 Comments and Considerations: Do NOT open capsule as contents are an ocular irritant Recommendations for Administration with Enteral Nutrition: Do NOT administer through feeding tube. Use therapeutic alternative.
	atovaquone (Mepron)	 Comments and Considerations: AUC significantly greater with enteral feed compared to fasting Recommendations for Administration with Enteral Nutrition: No dose adjustment required, but needs to be administered with tube feedings for maximal absorption
	Avelox - see moxifloxacin	
	teride	
B Belviq - see lorcaserin		
	benzonatate (Tessalon Perles)	 Comments and Considerations: Do NOT alter integrity of dosage form. Mucosal irritant Recommendations for Administration with Enteral Nutrition: Do NOT administer through feeding tube. Use therapeutic alternative.
	Boniva - see ibandronate	
	budesonide (Entocort EC)	 Comments and Considerations: Do NOT crush tablets, ER formulation Recommendations for Administration with Enteral Nutrition: Do NOT administer through feeding tube. Use therapeutic alternative.
	buprenorphine (Subutex)	 Comments and Considerations: Tablets are intended for SL administration Recommendations for Administration with Enteral Nutrition: Consider therapeutic alternative (transdermal, parenteral)
	buPROPion (Wellbutrin)	 Comments and Considerations: Do NOT crush SR or ER tablets. Recommendations for Administration with Enteral Nutrition: If no therapeutic alternative, use immediate-release tablet
C Calan - see verapamil		
	calcium acetate (PhosLo)	 Comments and Considerations: Therapeutic effect requires drug be taken with food. Recommendations for Administration with Enteral Nutrition: Suggest scheduling 4-6 times per day for maximum effect.
	calcium carbonate (Tums)	 Comments and Considerations: Antacids may have minimal benefit with post-pyloric tubes Recommendations for Administration with Enteral Nutrition: Check distal tube placement
	captopril (Capoten)	 Comments and Considerations: Avoid exposure from crushing if pregnant Recommendations for Administration with Enteral Nutrition: Consider holding tube feeding 1 hour before and 1 hour after
	Carafate - see sucro	Comments and Considerations: Decreases absorption as adheres to tube, dilute with equal volume

water, contains sorbitol carBAMazepine • Recommendations for Administration with Enteral Nutrition: Suggest that total daily dose should be (Carbatrol, TEGretol) divided into 4 equal doses of carBAMazepine suspension. Dilute suspension with equal amounts of diluent. Monitor levels, jejunal administration may be less effective.

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carbidopa-levodopa

generic (Brand)

Comments/Recommendations

(Sinemet)

- Comments and Considerations:
- Recommendations for Administration with Enteral Nutrition: Do not need to hold tube feeds. May increase dose for desired effect

Cardizem - see diltiaZEM

cefdinir (Omnicef)

- Comments and Considerations: Capsule and oral suspension are not bioequivalent. High-fat meal reduces suspension bioavailability by 30%. Iron-containing and Mg-containing preparations further reduce bioavailability
- Recommendations for Administration with Enteral Nutrition: Consider holding tube feeding 1 hour before and 1 hour after
- cefuroxime (Ceftin)
- Comments and Considerations: Tablets and oral suspension are not bioequivalent. Do NOT crush tablets (risk of sensitization), unacceptable taste
- Recommendations for Administration with Enteral Nutrition: Use available suspension or disperse tablet (do not crush) in 20 mL water prior to administration
- celecoxib (CeleBREX)
- Comments and Considerations:
- Recommendations for Administration with Enteral Nutrition: Not recommended for post-pyloric tubes

Cellcept - see mycophenolate mofetil

cephalexin (Keflex)

- Comments and Considerations: Do not crust tablet or manipulate capsules (sensitization). Suspension may contain sorbitol.
- Recommendations for Administration with Enteral Nutrition: Use available suspension
- ciprofloxacin (Cipro)
- Comments and Considerations: Binds to divalent ions (absorption reduced by 50%)

 Recommendations for Administration with Enteral Nutrition: Recommend changing to IV for severe infections. For mild/moderate infections suggest 750 mg BID. Use crushed tablets (suspension may NOT be used with any feeding tube). Consider holding continuous EN for 1-2 hours before and after

Coumadin - see warfarin

Creon - see pancrelipase

Cymbalta - see DULoxetine

dabigatran (Pradaxa)

- Comments and Considerations: Capsules should not be broken or opened.
- Recommendations for Administration with Enteral Nutrition: Suggest using another form of anticoagulation until patient is able to take capsule whole.

Depacon - see valproic acid

Depakote - see valproic acid

diazePAM (Valium)

- Comments and Considerations: Commercially available solution has lower bioavailability due to binding with NG tubing
- Recommendations for Administration with Enteral Nutrition: Suggest using diazepam tablets instead of solution.

diclofenac (Voltaren)

- Comments and Considerations: Do NOT crush modified-release capsules or tablets
- Recommendations for Administration with Enteral Nutrition: If no therapeutic alternative, consider holding tube feeding for 30 minutes prior to administration if used for acute effect.

digoxin (Lanoxin)

- Comments and Considerations: High-fiber containing meals may reduce oral bioavailability
- Recommendations for Administration with Enteral Nutrition: Separate from fiber-containing tube feeds, otherwise no need to hold beyond flush-administer-flush

Dilacor - see diltiaZEM

Dilantin - see phenytoin

diltiaZEM

• Comments and Considerations: Food increases absorption by 28%.

(Dilacor, Tiazac, Cardizem)

 Recommendations for Administration with Enteral Nutrition: Suggest dividing total daily dose into immediate release tables every 6-8 hours

diltiaZEM

• Comments and Considerations: May open Tiazac capsule but do NOT crush the contents

(Dilacor, Tiazac, Cardizem)

• Recommendations for Administration with Enteral Nutrition: Tiazac capsule may be opened contents may be emptied into feeding tube, but do NOT crush contents.

Dopar - see levodopa

Iredell Health System

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lanthanum (Fosrenol)

- Comments and Considerations: Therapeutic effect requires drug be taken with food.
- Recommendations for Administration with Enteral Nutrition: Suggest scheduling 4-6 times per day for maximum effect.

Updated: 10/11/2020 Iredell Health System

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generic (Brand) Comments/Recommendations • Comments and Considerations: Absorption decreased by high protein diet levodopa • Recommendations for Administration with Enteral Nutrition: Use IR or apomorphine infusion (Dopar) levodopa-carbidopa - see carbidopa-levodopa Comments and Considerations: Oral levoFLOXacin tablets with food prolongs Tmax by 1h and decreases Cmax by 14%. Oral solution with food decreased Cmax by 25% levoFLOXacin Recommendations for Administration with Enteral Nutrition: Suggest changing to IV levoFLOXacin for (Levaquin) severe infection. No dosing changes for oral tablet. For oral solution, consider holding tube feedings 1 hour before and 2 hours after. • Comments and Considerations: Decreased levels due to binding to feeding tubes. levothyroxine Recommendations for Administration with Enteral Nutrition: For < 7days, no adjustment needed. For > 7 (Synthroid) days, Consider holding tube feeding 1 hours before and after dose. Monitor TSH weekly linaclotide • Comments and Considerations: Do NOT break or chew capsule (Linzess) Recommendations for Administration with Enteral Nutrition: Do NOT administer through feeding tube linezolid Comments and Considerations: Oral suspension rapidly and completely absorbed. (Zyvox) • Recommendations for Administration with Enteral Nutrition: Change to oral suspension Comments and Considerations: Capsules should not be broken or opened (pregnancy X) **lomitapide** Recommendations for Administration with Enteral Nutrition: Do NOT administer through feeding tube. (Juxtapid) Use therapeutic alternative. • Comments and Considerations: Do NOT crush XR product Iorcaserin Recommendations for Administration with Enteral Nutrition: Do NOT administer through feeding tube. (Belvig) Use therapeutic alternative. Mepron - see atovaquone Metamucil - see psyllium

Comments and Considerations: Extremely viscous

mineral oil Recommendations for Administration with Enteral Nutrition: Do NOT administer through feeding tube.

May cause occlusion.

minocycline Comments and Considerations: Do not crush XR products or open pellet-containing capsules (Minocin)

• Recommendations for Administration with Enteral Nutrition: Not recommended for post-pyloric tubes

 Comments and Considerations: Binds to divalent ions and reduces bioavailability moxifloxacin

 Recommendations for Administration with Enteral Nutrition: Consider holding tube feeding 2 hours before and after dose

Mucinex - see guaiFENesin

(Avelox)

sodium

mycophenolate

nabumetone

omeprazole

(PriLOSEC)

(Relafen)

mycophenolate • Comments and Considerations: Food has no effect on AUC, but shown to decrease AUC mofetil Recommendations for Administration with Enteral Nutrition: No dose adjustment required. Do NOT (Cellcept) manipulate tabs/caps due to teratogenic effect. Use available suspension.

• Comments and Considerations:

• Recommendations for Administration with Enteral Nutrition: Do not use mycophenolate tablets, which

(Myfortic) cannot be crushed, chewed or cut due to teratogenic risk. Suggest converting

Comments and Considerations: food increases bioavailability

 Recommendations for Administration with Enteral Nutrition: Consider therapeutic alternative (naproxen)

Nizoral - see ketoconazole

Noxafil - see posaconazole

 Comments and Considerations: Food may delay absorption and reduce bioavailability. Administration with liquid protein may result in a gas-producing reaction.

 Recommendations for Administration with Enteral Nutrition: Substitute to esomeprazole delayed-release granules. Consider holding tube feeding for 1 hour before and after dose. Recommend alternative (esomeprazole). Hold liquid protein

Omnicef - see cefdinir

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generic (Brand) Comments/Recommendations pancrelipase Comments and Considerations: Occlusion -use granule formulation, use > 10 french tubes (Creon, Pancrease) • Recommendations for Administration with Enteral Nutrition: • Comments and Considerations: Crushing DR tablet can clog tubes. pantoprazole Recommendations for Administration with Enteral Nutrition: Substitute to esomeprazole delayed-release (Protonix) granules. No dose adjustment when using compounded suspension. Do NOT use DR or EC tablets. Consider holding tube feeding 1 hour before dose • Comments and Considerations: Unpredictable absorption with tube feeds. penicillin VK Recommendations for Administration with Enteral Nutrition: Suggest holding enteral nutrition 1 hour (Pen-VK) before and 1 hour after dose. Consider alternative (amoxicillin) Comments and Considerations: Stop EN 2hours before and after (up to70% reduction in serum drug levels) phenytoin Recommendations for Administration with Enteral Nutrition: Suggest IV fosphenytoin or phenytoin. (Dilantin, Phenytek) Suggest holding tube feeds 1 hour before and 1 hour after dose. Total daily dose should be divided into twice-daily dosing. Monitor level. PhosLo - see calcium acetate Plendil - see felodipine Comments and Considerations: Cmax increased 4x and AUC increased 2.5x with high fat meals. Tablet posaconazole and liquid doses are not interchangeable • Recommendations for Administration with Enteral Nutrition: Suggest giving each dose with 240 mL of (Noxafil) nutritional supplement or 15 mL of canola oil. Not recommended for post-pyloric administration Pradaxa - see dabigatran Prevacid - see lansoprazole PriLOSEC - see omeprazole Protonix - see pantoprazole • Comments and Considerations: Metamucil powders may occlude the enteral tube psyllium Recommendations for Administration with Enteral Nutrition: Do NOT administer through feeding tube. If (Metamucil) patient requires more fiber, suggest an enteral product with higher fiber content. Comments and Considerations: Successful clinical effects through NGT QUEtiapine Recommendations for Administration with Enteral Nutrition: Suggest dissolving table in water with no (SEROquel) dose adjustments raloxifene • Comments and Considerations: Do NOT Crush - unacceptable taste, teratogenic potential (Evista) Recommendations for Administration with Enteral Nutrition: Do NOT administer through feeding tube Relafen - see nabumetone Renvela - see sevelamer • Comments and Considerations: Do NOT crush tablets as a mucosal irritant. risedronate Recommendations for Administration with Enteral Nutrition: Use once-weekly tablet dispersed in 60 mL (Actonel) of mineral-free water. Consider holding tube feeding for 2 hours before and after. Patient should remain upright to prevent esophageal damage caused by reflux. Comments and Considerations: Exposure to drug reduced with release in distal small intestine. rivaroxaban Recommendations for Administration with Enteral Nutrition: Suggest no dose adjustment if enteral tube (Xarelto) ends in stomach. Suggest using alternative anticoagulant if enteral tube ends distal to stomach.

SEROquel - see QUEtiapine

sevelamer (Renvela)

- Comments and Considerations: Therapeutic effect requires drug be taken with food.
- Recommendations for Administration with Enteral Nutrition: Recommend change to suspension and scheduling 4-6 times per day for maximum effect.

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generic (Brand)

Comments/Recommendations

Sporonox - see itraconazole

Strattera - see atomoxetine

Stromectol - see ivermectin

Subutex - see buprenorphine

sucralfate (Carafate) • Comments and Considerations: Suspension may cause insoluble mass (bezoar) by binding to proteins.

fate Minimal benefit with post-pyloric tubes.

• Recommendations for Administration with Enteral Nutrition: Do NOT administer through feeding tube.

Do NOT use suspension. Recommend NexIUM or H2RA instead.

Synthroid - see levothyroxine

T

tamsulosin (Flomax)

- Comments and Considerations: Do NOT crush or open capsule, contains slow-release product
- Recommendations for Administration with Enteral Nutrition: Do NOT administer through feeding tube

TEGretol - see carBAMazepine

Tessalon Perles - see benzonatate

theophylline (Theo-24)

- Comments and Considerations: Absorption decreases 30% with enteral nutrition
- Recommendations for Administration with Enteral Nutrition: Suggest holding enteral nutrition 1 hour before and 1 hour after dose. Use rapid release products/solutions. Divide total daily dose into 3-4 doses.

Tiazac - see diltiaZEM

Tums - see calcium carbonate

V

Valium - see diazePAM

valproic acid (Depacon,

Comments and Considerations: Administration with food may delay rate of absorption

Depakote)

• Recommendations for Administration with Enteral Nutrition: Suggest administering same total daily dose, but use valproic acid solution dosed every 6-8 hours. Monitor levels.

verapamil

Comments and Considerations: May open Verelan capsule but do NOT crush the contents

(Isoptin,

(Vfend)

• Recommendations for Administration with Enteral Nutrition: Verelan capsule may be opened contents may be emptied into feeding tube, but do NOT crush contents.

Calan, Verelan) may Vfend - see voriconazole

Voltaren - see diclofenac

voriconazole

- Comments and Considerations: AUC decreased by 22% when taken with food.
- Recommendations for Administration with Enteral Nutrition: Suggest holding tube feeding 1 hour before and 1 hour after administration

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warfarin • Comments and Considerations: Variable Vit-K content, protein binding

Wellbutrin - see buPROPion

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Xarelto - see rivaroxaban

Zohydro - see HYDROcodone Zovirax - see acyclovir

Zyvox - see linezolid