

# Are Medications Hard to Swallow? Ways to Help!



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**Summary:** Medications can be life-saving, but it's not always easy swallowing medications. The good news is that many things can be done to help. To help make swallowing easier, the Head Posture Swallowing Technique is a way of swallowing where you turn your head to find the best posture for swallowing. Another strategy is to practice swallowing with different-sized candies, ranging from small to larger. Finally, a compounding pharmacy can create a liquid version of the medication.

## First try the Head Posture Swallowing Technique...

For those who have troubles swallowing medications, perhaps one of the easiest things to try first is the "Head Posture Practice" swallowing technique from Dr. Bonnie Kaplan at the University of Calgary. Most people try to swallow with their head in the 'centre' position. But it turns out that many people swallow better if they try a different head position such as:

- Turning one's head to one side;
- Turning one's head down slightly;
- Turning one's head up slightly.

If there are problems with swallowing pills, try different head positions to see which one works best. Watch this 8-minute video to learn how:

- <http://research4kids.ucalgary.ca/pillswallowing>

## Practice Swallowing with Different-Sized Candies

### Do's

- Practice swallowing with candy first, before trying out medications. Get an assortment of candies of different sizes from small to larger:
  - Cupcake sprinkles
  - Nerds
  - Tic Tacs
  - Smarties
  - Skittles
- Do practice ideally for at least 14-days before trying medications. Be patient as it can take time.

## Still Troubles with Medications?

Are there still troubles swallowing a tablet or capsule?

Many medications can be modified from their tablet or capsule form into an easier-to-swallow form (aka extemporaneous solutions), such as when:

- A tablet is crushed and mixed with food or dissolved in a liquid;
- A capsule is opened up, and the contents are mixed with food or dissolved in liquid.

## Still Struggling? Consider a Compounding Pharmacy

A compounding pharmacy is a pharmacy that can create a liquid version of the hard to swallow medication. The patient's specific needs can be taken into account (e.g. taste preferences, intolerance of certain ingredients or tastes), and compounds can be flavoured (e.g. apple, banana, etc.) to make them more appealing or palatable.

How long do compounded versions of medication last?

- 14 days with water-based formulations
- Up to 6-months with oil-based formulations.

Note that only a few recipes are validated, because of the cost of stability testing; stability testing requires outsourcing to analytical labs with HPLC capability, which is prohibitive even to hospital pharmacies.

## Where Can I Find a Compounding Pharmacy?

Option 1

- Many hospitals have pharmacies that serve the public, and generally they will do compounding.

Option 2

- Contact your friendly neighborhood pharmacy and ask if they do compounding. If not, they should be able to tell you a local pharmacy that does.

## Ways to Make ADHD Medications Easier to Swallow

Medication	Dosage Forms	Ways to Modify Formulation
Amphetamine-based stimulants		
• Dextroamphetamine (Dexedrine) tablets	Tablet 5 mg	Can be crushed. Can be compounded into 5 mg/mL suspension; lasts 14 days in fridge.
• Dextroamphetamine (Dexedrine) spansule	Capsule 10,15 mg	Spansule contents can be opened up and sprinkled on applesauce.
• Mixed amphetamine salts (Adderall XR)	Capsule 5,10,15,20,25,30 mg	Capsules can be opened and granules can be sprinkled on apple sauce, pudding, yogurt, etc.
• Lisdexamfetamine (Vyvanse)	Capsule 10,20,30,40, 50,60,70 mg	Capsule content can be dissolved in liquid, such as water, orange juice and yoghurt.
Methylphenidate-based stimulants		

<b>Medication</b>	<b>Dosage Forms</b>	<b>Ways to Modify Formulation</b>
• Methylphenidate short-acting (Ritalin)	Tablet 5 mg	Can be crushed. Can be compounded into 1 mg/mL suspension; lasts 14 days in fridge.
• Methylphenidate LA (Biphentin)	Capsule 10,15,20,30,40,50,60,80 mg	Can be cracked open and tiny beads sprinkled on applesauce, pudding, yoghurt, ice cream, etc. Beads cannot be crushed or opened nor compounded.
• Methylphenidate OROS (Concerta)	Extended-release tab (shaped like a capsule) 18,27,36,54 mg	Cannot be crushed or opened (thus not able to be compounded).
• Methylphenidate Controlled Release CR (Foquest)	Capsule 25,35,45,55,70,85,100 mg	Cannot be crushed, opened nor compounded.
Non-stimulant		
• Atomoxetine (Strattera)	Capsule	Needs to be swallowed whole (i.e. cannot crush) to reduce GI side effects. No extemporaneous recipe available -- not to be opened and sprinkled as can be an ocular irritant.
• Guanfacine (Intuniv XR)	Extended release tablet	Cannot be crushed or opened; must be swallowed whole due to the delivery system
• Clonidine immediate release	Tablet	Can be crushed, dissolved in liquid. Can be compounded into 0.1mg/10ml or 0.2mg/10ml. Stable 90 days in the fridge.
• Clonidine XR (extended-release) -- NOT AVAILABLE IN CANADA.	Tablet	Extended-release cannot be crushed or opened due to the delivery system.

## Ways to Make Antidepressants Easier to Swallow

<b>Medication</b>	<b>Dosage Forms</b>	<b>Ways to Modify Formulation</b>
Amitriptyline	Tablet: 10,25,50 mg	Can be crushed. Can also be compounded in 10 mg/mL or higher strength
Bupropion SR (Wellbutrin)	Tablet: 100, 150 mg ;	Do not crush/ cut/ chew. Can be compounded; compound is short-acting (not extended release); 150 mg/5mL; stable for 14 days refrigerated
Bupropion XL (Wellbutrin)	Tablet: 150, 300 mg ;	Do not crush/cut/chew.
Citalopram (Celexa)	Tablet: 10,20,40 mg	Can be cut or crushed (score line). Compounded in oral solution typically 4 mg/ml
Clomipramine	Tablet: 10,25,50 mg	Compounding in oral solution Information on opening capsule is not listed in product labeling

Desvenlafaxine (Pristiq)	Tablet: 50,100 mg	Tablet cannot be divided, crushed, chewed or dissolved. Some pharmacies may compound but this changes its release.
Duloxetine (Cymbalta)	Capsule: 20, 30, 60 mg	Label states capsule should not be opened, but Institute of Safe Medication Practices states capsule can be opened and contents added to apple sauce or apple juice. Stable for up to 2 hours after sprinkling the contents of capsule on applesauce or in apple juice (not chocolate pudding) taking care not to crush the pellets and damage the enteric coating; take mixture without crushing or chewing. For NG tube admin, the beads can be suspended in a syringe, shaken and given through a 12 French or larger NG tube.
Escitalopram (Cipralext)	Tablet: 5,10,20 mg	Can be cut or crushed (score line). Can be compounded to 2 mg/mL or 8 mg/mL
Fluoxetine (Prozac)	Tablet: 10,20, 40 Liquid	Manufacturer has a 4mg/mL (20 mg/5 mL) peppermint version. However, for children who refuse the peppermint-version, compounding pharmacies can make a "no sub" suspension using Prozac ® capsules without peppermint.
Fluvoxamine (Luvox)	Tablet: 50,100 mg	Tablet can be cut or crushed. Can be compounded as 50 mg/5 mL. There are situations where slow release capsules can be made into an immediate-release (IR) suspension.
Mirtazapine (Remeron)	Tablet: 15,30,45 mg	Cut or crush (score line)
Paroxetine (IR and ER) (Paxil)	Tabs: 10,20,30,40 mg	Do not crush, break, or chew ER or IR film-coated tablets. Compound 10 mg/5 mL of IR formulation; store at room temperature
Sertraline (Zoloft)	Tabs: 25,50,100 mg	Can be cut or crushed (score line). Can also be compounded in 10 mg/mL or higher. In USA, there is an oral concentrate 20 mg/mL.
Trazodone (Desyrel)	Tab: 50, 100, 150	Immediate release trazodone can be crushed. Long acting release trazodone cannot be crushed. Compounded as 10 mg/ml or higher strength.
Venlafaxine XR (Effexor XR)	Caps 37.5, 75, 150 mg	Capsule may be opened, and contents sprinkled in food (e.g. apple sauce) and then ingested. Do not store for future use; do not chew the pellets of the capsule. Afterwards, drink water to ensure all pellets are ingested. Can be compounded into a 15 mg/ml solution, however doing so changes it into immediate release with 5-hr half-life, thus needs to be taken three times / daily.

## Ways to Make Antipsychotic Medications Easier to Swallow

Medication	Dosage Forms	Ways to modify
Aripiprazole (Abilify)	Tab: 2,5,10,15,20,30	Split or crush Although the manufacturer indicates to not crush the tablets, they do not possess any long-acting coating plus the drug is available in a liquid form in the US. Can be compounded in 1mg/5mL or 5mg/5mL
Brexipiprazole		Split or crush
Clozapine		Split or crush
Haloperidol	Oral solution 2 mg/mL	N/A
Lurasidone (Latuda)	Tab: 20,40, 60, 80, 120 mg	Split or crush
Olanzapine (Zyprexa)	Tab: 2.5,5,7.5,10,15,20 mg Rapid dissolve Zydys: 5,10,15,20 IM solution 10 mg	
Paliperidone (Invega)	Tabs: 3,6,9 mg Susp: Sustenna, Trinza	Tablets cannot be split or crushed.
Quetiapine (Seroquel)		
• Seroquel IR (Immediate Release)	Tab: 25,50,100,150,200,300 mg	Split or crush
• Seroquel XR (Extended Release) • Quetiapine ER (generic version of brand name Seroquel XR)	Tab XR: 50,150,200,300,400 mg	Both XR / ER tablet cannot be split or crushed. Consider switching to Quetiapine IR and dosing it more frequently in the day.
Risperidone (Risperdal)		
• Risperidone (Risperdal)	Tab: 0.25,0.5,1,2,3,4	May mix with water, coffee, orange juice, or low-fat milk; do not mix with cola or tea
• Mylan-Risperidone • Risperdal	Disintegrating tablet: 0.5,1, 2, 3 mg	May mix with water, coffee, orange juice, or low-fat milk; do not mix with cola or tea
• Risperidone liquid	Liquid (1 mg/mL)	May mix with water, coffee, orange juice, or low-fat milk; do not mix with cola or tea
Ziprasidone (Zeldox)	Capsules 20,40,60,80 mg	Do not split, chew or crush.

## Ways to Make Mood Stabilizers Easier to Swallow

Medication	Dosage Forms	Ways to modify
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Lamotrigine	Tablets 25, 100,150, 200 mg	Crush or order chewable tablet (doses 2 mg, 5mg, 25 mg) may chew or disperse in water or diluted fruit juice. Oral tablets crushed or chewed might result in poor taste. Can also be compounded in 2.5 mg/mL or 5 mg/mL
Lithium carbonate extended release (ER)	ER tab 300 mg	Cannot be crushed or split. Consider switching to IR formulation.
Lithium carbonate immediate release (IR)	Capsules 150,300	Can be split, crush or chewed. Can be compounded in 10 mg/mL or higher strength.
Lithium citrate	Syrup (8 mEq/5 mL)	N/A
Valproate sodium immediate release (IR)	Oral solution (250 mg/5 mL)	N/A
Valproic acid (Enteric Coated)	Caps: 250, 500 mg Cannot be split, crushed or chewed.	Consider switching to IR oral solution.

## Ways to Make Benzodiazepines Easier to Swallow

Medication	Dosage Forms	Ways to modify
Clonazepam	Tab: 0.5, 2 mg	Compound oral solution 0.1mg/mL; stable 60 days in the fridge.
Diazepam (Valium)	Tab: 2,5,10 mg	Compound oral solution 1 mg/mL
• Diazepam injection	Injectable IM solution: 5 mg/ML	
• Diastat	Rectal Gel-2 x 5 mg, 2x10 mg, 2x15 mg	
Lorazepam (Ativan)	Tabs: 0.5,1,2 mg SL (sublingual) 0.5,1,2 mg Injectable 4 mg/mL	Standard tablet can be split/crushed. Sublingual rapid dissolve tablet.

## Ways to Make Sleep Medications Easier to Swallow

Medication	Dosage Forms	Ways to modify
Melatonin	Troubles with usual forms/ Try gummy versions.	May be compounded as 1mg/ml flavoured suspension (peppermint-free as well)
Trazodone (Desyrel)	Tabs: 50,100,150	Split or crush (score line) Might result in poor taste Can also be compounded in 10 mg/mL or higher strength

## References

BJ Kaplan, RA Steiger, J Pope, A Marsh, M Sharp, SG Crawford. Successful treatment of pill-swallowing difficulties with head posture practice. Paediatr Child Health 2010;15(5):e1-e5.

## About This Document

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Information in this fact sheet may or may not apply to your child. Your health care provider is the best source of information about your child's health.