



Medicine & Your Child:

THE PHYSICAL AND EMOTIONAL ASPECTS OF
MEDICATION MANAGEMENT



CONTENTS

Introduction

page 4

Medication Basics: Tips and Guidelines

pages 5-6

Infants

page 7

Young Children

page 8

Older Children

page 9

Teenagers & Young Adults

pages 10-11

Alternatives to Pill Swallowing

pages 12-14

Teaching Pill Swallowing

pages 15-18

Identifying and Addressing Psychological Barriers to Adherence

pages 19-20

INTRODUCTION

Taking medication can be challenging for many children and adolescents, as well as their caregivers. There are many causes for these difficulties, including:

a lack of understanding of illness and/or purpose of medication/treatment;

complexity of the treatment regimen, which leads to difficulty remembering, scheduling or organizing how one will follow the plan;

issues with the medication itself (i.e., medication taste, side effects, problems swallowing, or cost);

not feeling ill and therefore, feeling less need for treatment;

embarrassment/stigma associated with one's illness or a reluctance to self-treat because it reminds patient of illness; or

depression interfering with self-care or anxiety interfering with ability to do treatments, such as injections or swallowing pills.

There are several ways to help make taking medicine easier for your child. This booklet provides tips on how to help your child.

While reviewing the information in this booklet, keep in mind that all children develop these skills at a different pace, depending on their age, maturity, and on their medications. Children who begin taking medications at a younger age tend to have less difficulty than those children who start later in life. Simple medication schedules tend to be less difficult than those that require many changes (i.e., activity restriction, diet changes, etc.).

Even after trying several different options, some children may still have trouble taking medication. It is important to maintain a positive attitude and provide age-appropriate education when needed. It can be helpful to take breaks when things become too challenging, so that both you and your child can calm down. Remember to stay kind and firm, reminding your child that taking medicine is not a choice, and that you are there to help make the process as easy as possible.

MEDICATION ADMINISTRATION: General Guidelines

Always talk to a doctor/pharmacist before cutting or crushing pills

- This may change the way a pill is supposed to dissolve in one's stomach.
- It can make the medication less effective and/or cause unpleasant side effects.
- Sometimes cutting/crushing pills makes the pill taste worse.

Read pill labels

- There are many medications that lose their effectiveness or produce unpleasant side effects when mixed with certain beverages or foods.
- Some medications need to be taken with food/liquid, while others require your child to take them on an empty stomach.

Always use appropriate medication dispensers

- Appropriate tools include:

- o Droppers



- o Oral syringes (no needle)



- o Cylindrical Dosage Spoons



- o Dosage Cups



- Never use a kitchen spoon as measurements are not as exact and can cause your child to get the wrong amount of medication.

MEDICATION ADMINISTRATION: General Guidelines

Be honest and sympathetic

- “Your body needs the medicine to get better. I know that you don’t like taking medicine”.
- "I'm sorry it tastes bad. Let’s try mixing it with something you like".
- Do not hide medicines in your children’s food/drinks.
- Never tell your child that pills are candy.

Be firm and give a reason

- "You have to take this medicine to help you get well. Let’s look at the different ways you can take it..."
- “This medication is important because it...”
- Do not waver on missing doses. The more structured and consistent you are with the medicine, the more your child will learn and value their importance.

Avoid criticizing your child or attacking self-esteem

- Avoid saying things like "You're acting like a baby"
- Talk about specific difficulties and work together to find solutions.

Avoid punishment

- Ignore negative behaviors. Taking medicine should not be a negative experience. Stay positive and try to work with your child on understanding what difficulties they are feeling.
- Never physically force your child to take their medications.
- Spanking/Yelling can create a negative environment which can increase their anxiety, stress and behavioral problems.

Avoid bargains/bribes

- Bargains/bribes teach your child that taking medication is negotiable, rather than an expected part of their care.
- Rewards can be used with a young child. Rewards (unlike bribes) are identified and laid out in advance, and are typically small, like stickers on a sticker chart.

Praise and hug your child for all cooperation

- Provide enough time for swallowing the pills so your child does not feel pressured.
- Emphasize that your child is doing a great job trying and taking care of themselves.
- Provide your child with a sense of control when possible (i.e., which medication do you want to take first, what would you like to drink with your medication, etc.).

INFANTS (birth-age 2)



Infants should be administered medications via a syringe (oral syringes that do not have a needle), dropper, or calibrated spoon.

Hold the baby in a cradling position and open their mouth by gently pulling down on their chin.

Place the syringe/dropper in the corner of the baby's mouth and discharge the medicine slowly into the side or back of the mouth.

Have a pacifier or bottle at hand to use between and after medications. For infants 6 months or older, you may follow medications with baby food or a few teaspoons of diluted fruit juice.

Sometimes blowing softly in an infant's face triggers a swallow reflex.

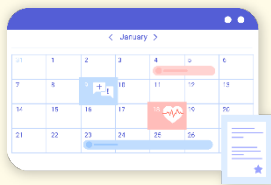
For active infants, sometimes it is helpful to gently wrap the baby in a blanket.

YOUNG CHILDREN (age 2-age 5)

Young children sometimes refuse medication. It can be helpful to explain the purpose of the medicine in clear and simple terms.

- Help your child understand that medication is supposed to make them better.
- If there are negative side effects, be sure to explain these to your child before administering medication and talk about what could improve the side effects. Helpful suggestions are offered later in this guide.

Set a routine. This can be done by giving medications at the same time and place every day. For example:



- Include medications in daily routines and take medication at the same time each day (e.g., after brushing teeth, before a meal).
- Use visual reminders (e.g., notes on the medicine cabinet or refrigerator).

Some children do better when distracted. Examples of distractions include playing with a favorite toy or watching a favorite TV show/movie while taking their medication.

Provide choices! Allow your child to have control over an otherwise uncontrollable situation. Be firm that your child does not get to choose whether or not they take the medicine, but they can decide:

- What medication to take first/last
- What drink/snack they want to take with meds
- For children who are old enough, you can allow your child to hold the spoon or syringe to take their own medication

Allow your child to help with the mixing process of crushed/dissolvable medications.

OLDER CHILDREN (age 6-age 11)

Older children are usually able to understand the importance of their medications. Therefore, this is the age range when you should begin to engage children in their own care so they can learn to develop responsibility for their own health.

By age 6, children should be able to start taking their medications in pill form. This is an important skill to learn, because:

- the amount of liquid medication your child will have to take to equal a pill dose will increase significantly with age;
- pills often don't have a bad taste like liquids do; and
- some medications will not be available in liquid form.



Allow your child to have some control by providing choices. For example,



- What medication to take first/last
- What drink/snack they want to take their meds with
- If your child is taking liquid medication, being able to hold the spoon or syringe on their own.

Teenagers (age 12-age 18)



Teenagers are able to understand the importance of their medications but are more likely to resist taking their medication. This resistance is a normal part of adolescent development and can include:

- A sense of immortality
- Resistance to caregiver and medical authority
- Wanting control
- Wanting to assert their independence

This is also a stage of life where social relationships are very important. Therefore, teenagers may resist taking medications because they want to avoid 'being different'. This is particularly relevant if medications need to be taken in public, like during the day at school.

There are several creative ways to help your teenager take medication in public without drawing attention to themselves. For example:

- Some teenagers will use mint containers to store their medicines for the day.
- Teenagers can excuse themselves to the bathroom to take medications privately.

It is recommended that you:

- Be supportive of these challenges and remain aware of the difficulties they present to your teenager.
- Work together to develop a plan of care which allows the teenager to exert control and increase their responsibility, while allowing you to feel confident your child's medical needs are being met.
- Remind your child that tending to their own health needs demonstrates maturity and trustworthiness.

TEENAGERS TRANSITIONING TO EARLY ADULthood

Adolescence is an important time for you to transition responsibility about taking medicine to your child. Specifically, this is a time to make sure your teenager learns:



The names and doses of their medications:

- It can also be helpful to have your teenager carry a list of their medications in their purse/wallet in the event of an emergency.
- There are also several apps teenagers can use on their phone to list their medications and remind them to take their medications.



Their medication schedule:

- Some teenagers benefit from using a watch or cell phone alarm as a reminder to take their medications



How to fill their own pill boxes:

- First, have your teenager watch you fill the pill box. Then you can watch your child fill the pill box several times until you are confident they know how to do this.



How to call in refills for their medications:

- Again, have your teenager watch you call in refills, then watch them call in refills until you are confident they know how to do so.



Scheduling doctor appointments

- Teenagers should be involved in planning appointments. Encourage your child to schedule their own appointments and keep track of them in their planner/cell phone calendar.



Advocating for themselves at medical appointments

- Encourage your teenager to spend time alone with medical professionals (without you in the room). This helps establish trust within the patient-provider relationship, lets your child speak openly and ask questions they might be embarrassed to ask in your presence. Know any personal history of major medical conditions, hospitalizations, operations, or treatments.

TALK TO YOUR CHILD'S PHARMACIST



While there are many ways to make a medication more appealing to the child, not all medicine can be altered.

- Some medicines need to be taken on an empty stomach or with food
- Some medications can't be mixed with certain liquids or foods
- Some medications need to be temperature controlled

There are often a lot of options for different formulations of medications.

- Talk to your child about their likes and dislikes
- Work with the pharmacist to prescribe something that your child will be more willing to take.
- Sometimes changes can't be made, but it never hurts to ask about other options.

Changing a medication can change its effectiveness or have bad effects on your child. Here are some sample questions to ask your child's pharmacist:

- Can the medication be mixed with food or liquid?
- Can the medication be taken in liquid form?
- Can the pill be crushed?
- Are there any foods/liquids that should be avoided when my child is taking the medication?

ALTERNATIVES TO PILL SWALLOWING

Liquids, Syrups, Elixirs

- Some pills can be dissolved with liquids and then given in a syringe or cup.
- Some pharmacies are also now able to flavor liquid medications with a variety of different flavors at a low cost. Talk to your pharmacist about options.

Crushed or Opened Capsules

- Always talk to your doctor/pharmacist to make sure that the medication can be safely crushed or opened. Some medicines work over a few hours instead of all at once. That won't happen if the pill or tablet changes form.

If the medicine can be crushed:

- Use a pill crusher and be cautious to not lose any of the pill.
- Add it to favorite foods that do not require chewing:

-Pudding	-Jell-O
-Yogurt	-Applesauce
-Baby Food	-Peanut Butter
-Nutella	-Chocolate Syrup
-Jelly	-Ice Cream
-Kool-Aid	-Maple Syrup
- Be sure your child finishes the entire serving to ensure that they take the full dose (helpful to limit serving size to 1 or 2 tablespoons).
- For pills that have a bad taste, use sweeter foods to help mask the medication flavor. You can also use foods with thicker textures, such as Nutella or peanut butter.
- There is a product available at some pharmacies, called Flavor-X. The pharmacy can take the meds, crush them, make them into a suspension and flavor them with almost any flavor you choose - there are over 40 flavors.
- SwallowAid is a gel that can mask bad tastes and smells, help the mouth make saliva (which helps pills go down easily), and prevent pills from staying in the mouth too long.

ALTERNATIVES TO PILL SWALLOWING

Dissolving tablets

- The pills are crushed and mixed with liquids, then placed in an oral syringe. Then, you can slowly squirt the mixture into your child's mouth. A syringe is likely to be used with the younger kids.
- If you dissolve the medicine into a liquid, be sure to dissolve it into a small amount of liquid that you are sure your child will finish in order to receive the full dose.

Gel caps

- Medications with a bad flavor are easier to take if they are crushed and then put in gelatin capsules (gel caps).
- This is also helpful for large pills, which can then be taken in many smaller capsules. These capsules are available at pharmacies for a small fee and come in several sizes. Gel caps are often easier to swallow when dipped in ice water before swallowing, as it makes the coating slippery.

Patches

- Some medications are available as patches worn on the skin. This method is more commonly used to deliver a steady dose of medication over a lengthy period of time.
- When available, this format of medication administration decreases issues with taste, pill swallowing, gastrointestinal upset, etc., and don't need to be taken as often.

Injections

- Some medications are available as an injection which can be given more directly into the bloodstream or intended body tissue and, therefore, have a faster response.
- Not all medications can be administered as an injection, and those that can will either require training for self-injections or the help of a trained professional.

IF YOUR CHILD HAS TO SWALLOW A PILL

Ways to Facilitate Swallowing

Numb your child's mouth/throat by having them suck on a popsicle/ice beforehand.

Some children find it helpful to coat the inside of their mouths with something sticky like maple syrup.

Serve medicine cold or with a cold drink to reduce the taste.

Avoid dry mouth. Dry mouth makes pill swallowing more difficult. It can be helpful to have your child drink some liquids just before putting the pill into their mouth.



Drinking a carbonated beverage straight from the bottle may also be helpful, because the bubbles make the pill not as easy to detect and the motion of drinking from the bottle can help the pill go down.



For some children, using a straw to drink the water or beverage helps because the suction used to pull the liquid through the straw makes it easier to swallow the pill. Many kids concentrate on the straw and don't think about the pill, so it goes down easily.

Try using a spoonful of jam or jelly to help your child swallow the pill. Since it's sweet, it will mask any bad flavor, and jelly is slimy and goes right down. You could also use pudding, yogurt, applesauce, or ice cream.

Pill Glide, a non-prescription flavored spray, may also be helpful.

Some children have success using a pill cup, which has a small basket that holds the pill in place while your child takes a drink, then releases it into the mouth.

TEACHING PILL SWALLOWING



Materials:

- Glass of water, juice, or other liquid
 - 3-5 different sizes of cookie decorators or candy, sprinkles, Nerds, Tic-Tacs, Skittles, M&M's, Mike&Ikes
- ** BE SURE TO USE CANDY THAT DISSOLVES EASILY
IN ORDER TO PREVENT RISK OF CHOKING.
- A chart you can use to track your progress
(sample provided at the end of the booklet)

Step 1: Have child place one of the smallest size candies on their tongue. Then take a small sip of water. Then swallow. This should be easy as the sugary sprinkle is likely to just dissolve sitting on your tongue before you drink the water. You can repeat this step a few times to get comfortable with it. Only swallow one at a time.

Step 2: Try again, having the child place the next sized candies on their tongue, and then sipping water and swallowing. When they are able to do this for at least 5 trials, move on to the next step.

Step 3: Repeat step 2 with increasingly bigger sized candies until you reach pill-sized candy. This step may take longer to get comfortable with, but after doing the other size candies, the child will find it is much easier.

Step 4: Once your child has mastered swallowing pill-sized candies, you can try practicing with sugar-filled gel caps. This will help ensure that your child can swallow what looks like medication.

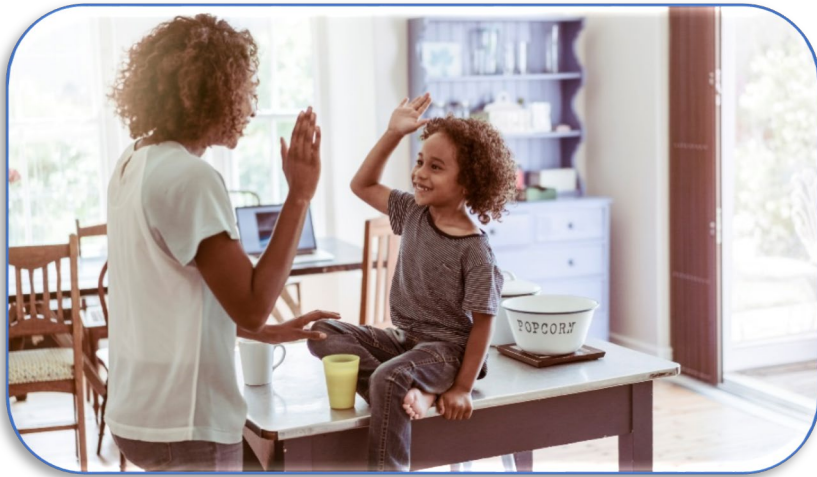
** It is very important to remember to keep a positive attitude, as well as to encourage and praise your child often through the learning process, just as if you were teaching them to ride a bike. And remember to practice, practice, practice!

It is best to only practice for about 20-30 minutes per day and end with a "success". This means making sure your child swallows the last pill of the practice session, even if they need to go back to a smaller size.

HELPFUL INFORMATION

Helpful Positioning for Pill-Swallowing

- Your child's posture also affects how easy it is to swallow. Standing up is the best position, however, sitting down is also feasible as long as your child sits up straight.
- Teach your child not to throw their head back as this gives a straight shot to their "windpipe." It's safer to have them hold their head straight or even tip it forward to avoid choking.
- It can also be helpful to allow your child to hold something comforting, such as a blanket or stuffed animal.



Helpful Hints when Teaching Pill-Swallowing

- It is important to approach pill swallowing as your child learning a new skill, like dressing, or jumping rope.
- Use brief and short commands in a positive tone: "Sit up straight", "Put the pill on your tongue", "Drink the water."
- Modeling pill swallowing for your child is helpful. Adults can demonstrate using vitamins, candy, or sugar filled gel caps.
- When switching to a bigger pill, say "Let's try the next one." Do not say "Let's try the bigger one."

SAMPLE TEACHING CHART

Pill Swallowing Progress Chart		
Trial	Type of Candy Used	Number of Successful Swallows
1		
2		
3		
4		
5		

PSYCHOLOGICAL BARRIERS TO ADHERENCE



Discussing issues related to the medication itself may help your child become more willing to take their medications, but for some children, there is a psychological component that is often overlooked. For many people, taking a medication, especially for a chronic condition, is a negative experience. It can be a frequent reminder that you are a patient with a condition, and often has no immediate benefits. This can be particularly challenging for kids who developmentally (based on their age and development) are not thinking about their mortality in the same way older adults do.

Psychological barriers can stem from:

Prior bad experience like gagging or vomiting when they tried to swallow a pill.

Feeling embarrassed, stigmatized or isolated as a result of having an illness/needing treatment.

Stress related to lifestyle changes because of medications/treatments (i.e., activity limitations, diet changes, time away from desired activities).

Illness factors, including whether the child identifies with the illness, as well as what they perceive to be the cause, timeline, consequences and anticipated controllability of their illness.

Developmental delays, oral-motor problems (such as speech problems or refusal to eat certain food textures) or behavioral problems (which could include refusing to take any medicine).

ADDRESSING PSYCHOLOGICAL BARRIERS

To help overcome these psychological barriers, it can be helpful to:

1. Connect your child with others who share their illness so they feel less alone, embarrassed, or stigmatized.
2. If any depression, anxiety or adjustment issues are contributing to your child's difficulty following a treatment regimen, consider getting a referral to a mental health provider. A mental health professional can provide behavioral approaches to medication adherence, such as:

Problem solving

Building motivation

Working on the thoughts and actions that are making things difficult (i.e., targeting fears/thoughts about gagging/choking.

Developing relaxation strategies- the fear of swallowing pills (even in the absence of any physiological problem) can lead to the throat tightening up.

Addressing any depression, anxiety or adjustment issues related to the child's illness/treatment.

