

# ADHD: Medications and Side Effects



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**Summary:** Although ADHD medications may be helpful for symptoms of ADHD, they can cause side effects. The good news is that there are ways to deal with side effects so that one can benefit from the medications. Over time, many side effects will go away on their own. If side effects are severe, or do not go away, then the medication can always be stopped.

## Introduction

Attention deficit hyperactivity disorder (ADHD) is a common condition, and can make it hard to focus on necessary tasks at school, work and home life.

When symptoms of ADHD are mild, professionals may recommend starting with non-medication strategies.

For example

- In the classroom, allowing the person to sit closer to the front of the class in order to limit distractions.
- Using visual supports, e.g. making lists of their daily routines to help them with organization, or making TO DO checklists to help with remember what tasks need to be done, etc.

Have non-medication interventions been tried, but are not enough? Are the symptoms of ADHD (e.g. inattention, impulsivity) getting in the way of life?

If so, then medications may be very helpful.

## General Comments about Medications

To ensure that there are no medical explanations for AD/HD, and no medical reasons that would make treating your child with stimulant medications risky, your doctor may ask for a physical examination form to be completed by your family doctor.

Stimulant medication is usually started at a low dose and increased slowly each week. Your doctor may ask to get teacher checklists to see how your child is responding to medication, and the minimum dose needed to obtain a reasonable response. Make sure you leave the doctor's office with the prescription and the checklist.

If requested by your doctor, give the teacher a checklist immediately to describe how your child has been functioning. Date the checklist and write the medication name (and dosage) on the form. Given the teacher a checklist either at each new dose, or for the week prior to your return appoint as per your doctors instructions. ALWAYS bring the checklist with you to your appointment. Never email, fax or mail the checklists in.

All children are different in terms of the medication dose that is right for them. If your child is doing fine and having no response and no side effects the doctor will increase the dose. If you get to a dose in which your child is responding but also the side effects are causing significant problems, the doctor will either stay at that dose until the side effects abate or lower the dose. Follow your doctor's specific directions regarding how to take your medication.

Parents often ask how much is too much with regard to side effects. You may need to reduce the dose of the medication or stop the medication until your next visit if the following occur:

- Your child is too quiet, has lost their sparkle or personality, has dilated pupils or seems “zombie-like”
- Your child is rapidly losing weight and not eating
- If it is taking more than 1 hour to fall asleep or your child is getting less than 8½ hours of sleep a night

If for any reason you need to stop taking this medication it can be stopped abruptly. The only likely difficulty is a return of AD/HD symptoms. If you do stop the medication, make sure to return to see your doctor to discuss the difficulty which led you to stop taking the medication. You may wish to consider stopping the medication temporarily when your child is not in school (e.g. during holidays, summer break – this is sometimes called a “drug holiday”). This may be done to see if you still need to take the medication, promote growth, and to prevent the body from getting too used to the medication. However, if your child has been off of stimulant medication for an extended period of time, they need to restart medication by increasing the dose gradually as tolerated.

## Managing Appetite

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Stimulant medication strongly lowers appetite. This can be explained to children by saying:

“The medicine does a trick on your brain. It makes you think you are not hungry, but your body really is hungry. If you don’t feed it, you might get a headache, or a stomach ache, or feel cranky and tired, so it’s really important to eat. If you do get a headache or stomach ache the first thing you should do is eat or drink something.”

While starting treatment with a stimulant medication, some children will lose weight.

If weight loss is a problem however, the good news is that there are techniques have been developed over the years, and can prevent weight loss, both in the short- and long-term.

- Children with AD/HD do not sit at the table and eat a meal. They find this boring and if eating is associated with sitting still they will avoid eating. Therefore let them “graze” eating on the go, or while they do something else like watch TV. This means that the usual rules families have may be problematic for AD/HD children. For example, in many families if you don’t eat your supper you can’t eat later.
- Since appetite is reduced by the medication, most of the eating your child does will be at breakfast before taking medication, and in the evening after the medication wears off.
- We want to encourage children to eat as much as possible, whenever they are hungry. Some families also have concerns about eating late at night. “Second supper” or giving a full meal with fat, protein, carbohydrate (not a snack) when the medication wears off and the child experiences a rebound of appetite right before falling asleep allows them to make up at night all the calories they lost during the day. “Second supper” should become routine. If the child is also taking melatonin for sleep, they can be given together.
- Since this puts a lot of demands on the parent, have the “second supper” and nutritious snack pre-prepared. They can be frozen and then thawed out as needed to provide variety.
- Try meal replacement supplements, such as Boost® or Ensure®. If your child has something salty at recess or lunch he or she will be thirsty and these can be consumed quickly but are a full meal replacement with vitamins, minerals, fat, carbohydrate and protein. Meal replacements come in many forms, including pudding, and are available at any pharmacy or grocery store. If your child doesn’t like commercially available flavors/varieties, try making smoothies at home as a substitute.
- Switch to using homogenized milk.
- While children can enjoy dessert, do not allow them to eat candy or pop right before a meal, since it can reduce their appetite for eating nutritionally balanced food later.
- Many schools have a procedure at lunch time in which children are given free time or allowed outside to play “after they finish their lunch”. This leads many children, and especially AD/HD children, to throw out their lunch and go play. As part of an Individual Education Plan it is very helpful to have the lunch monitor (usually an older child) ensure that the child has some lunch, or drinks a Boost/Ensure, and has something to drink.

## Managing Sleep

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AD/HD is associated with an increased risk for sleep difficulties:

- Children with AD/HD are much more likely to have “difficulty turning their thoughts off” and falling asleep.
- They may be more tired during the day even when they are active, and they may experience “restless legs syndrome” which is a feeling of needing to move the legs before falling asleep.
- Many children with AD/HD have a history of sleep problems even before starting stimulant medications, and stimulant medication can make these difficulties worse.

Good sleep habits and other measures are essential to correcting sleep problems, which can cause as much difficulty as the AD/HD itself.

Further information on sleep is available online at [www.kidzzzsleep.org](http://www.kidzzzsleep.org)

- Your child’s brain eventually gets trained to go to sleep at the same time every day and wake up at the same time every day. This is called “circadian rhythm”. The sleep clock is set in the morning. If you want your child to go to bed early Sunday night, wake him up early Sunday morning. A sleep schedule should be worked out with you, your child and your doctor. Most children need about 9½ hours of sleep per night. This means your child needs to avoid sleeping in on the weekend and avoid changes in sleep routines for children that are living in different households.
- Screen activities (television, video games, computer games, DS, play station, mobile phones) should not take place after supper. They are a source of bright light which suppresses melatonin, the natural hormone that produces sleepiness normally. AD/HD children often have difficulty falling asleep and have a 90 minute delay in the release of melatonin. Gaming in particular tends to “rev” up the brain and has an addictive quality for many AD/HD children, which not only makes it hard to turn the game off, but leaves the child highly alert and resistant to going to bed. Remove all electronics from your child at night, including mobile phones, to prevent a common but harmful habit that has developed in which children are texting each other at night.
- Some children have to be off stimulants when they go to sleep and will need stimulant medication just for school hours, so that by the time they go to bed it is six hours after medication has left the body. The time when it is most difficult to induce sleep is when a child is in “rebound”. Rebound means that for some children when the medication wears off they feel edgy, irritable, reactive or agitated. Paradoxically, it should be noted that some children fall asleep better when they are on a low dose of stimulant medication.
- The only medication which has research evidence to support its efficacy for sleep in AD/HD children is melatonin. Melatonin has been studied in several countries with long term follow-up. Since children with AD/HD are deficient in the release of melatonin, which is on the same brain pathway as AD/HD itself, taking melatonin is in some ways similar to how insulin works for diabetes: melatonin provides something the body normally makes itself. As a result, there are few, if any side effects. We recommend you purchase a pharmaceutical grade melatonin product [ask the pharmacist for a brand with a “DIN” number] and give your child 3 to 6 mg of melatonin 30 minutes before bedtime. This usually solves sleep issues, but if difficulties with sleep continue, further interventions may be recommended by your doctor.

## About this document

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