healthychildren.org
Powered by pediatricians. Trusted by parents.
from the American Academy of Pediatrics
CELEBRATING 10 YEARS

Common ADHD Medications & Treatments for Children

For most children, stimulant medications are a safe and effective way to relieve ADHD symptoms. As glasses help people focus their eyes to see, these medications help children with ADHD focus their thoughts better and ignore distractions. This makes them more able to pay attention and control their behavior.

Stimulants may be used alone or combined with behavior therapy to treat children with ADHD.

Studies show that about 80% of children with ADHD who are treated with stimulants improve a great deal once the right medication and dose are determined.

Two forms of stimulants are available:

- **Immediate-release (short-acting) medications** usually are taken every 4 hours, when - needed. They are the cheapest of the medications. Extended-release medications usually are taken once in the morning.
- **Extended-release (intermediate-acting and long-acting) medications** are usually taken once in the morning. Children who take extended-release forms of stimulants can avoid taking medication at school or after school. It is important not to chew or crush extended-release capsules or tablets. However, extended-release capsules that are made up of beads can be opened and sprinkled onto food for children who have difficulties swallowing tablets or capsules.

Non-stimulants can be tried when stimulant medications don't work or cause bothersome side effects.

Back to Top

Common Medications

Type of medication	Brand name	Generic Name	Duration
Short-acting amphetamine stimulants	Adderall	Mixed amphetamine salts	4 to 6 hours
	Dexedrine	Dextroamphetamine	4 to 6 hours
	Dextrostat	Dextroamphetamine	4 to 6 hours
Short-acting methylphenidate stimulants	Focalin	Dexmethylphenidate	4 to 6 hours
	Methylin	Methylphenidate (tablet, liquid, and chewable tablets)	3 to 5 hours
	Ritalin	Methylphenidate	3 to 5 hours
Intermediate-acting methylphenidate stimulants	Metadate CD	Extended-release methylphenidate	6 to 8 hours
	Ritalin LA	Extended-release Methylphenidate	6 to 8 hours
Long-acting amphetamine stimulants	Adderall-XR	Extended-release amphetamine	10 to 12 hours
	Dexedrine Spansule	Extended-release amphetamine	6+ hours
	Vyvanse	Lisdexamfetamine	10 to 12 hours
Long-acting methylphenidate stimulants	Concerta	Extended-release methylphenidate	10 to 12 hours
	Daytrana	Extended-release methylphenidate (skin patch)	11 to 12 hours
	Focalin XR	Extended-release dexmethylphenidate	8 to 12 hours
	Quillivant XR	Extended-release methylphenidate (liquid)	10 to 12 hours
Long-acting non-stimulants	Intuniv	Guanfacine	24 hours
	Kapvay	Clonidine	12 hours
	Strattera	Atomoxetine	24 hours

Products are mentioned for informational purposes only and do not imply an endorsement by the American Academy of Pediatrics. Your doctor or pharmacist can provide you with important safety information for the products listed.

Which medication is best for my child?

It may take some time to find the best medication, dosage, and schedule for your child. Be patient with the process. Your child may need to try different types of stimulants or other medication. Some children respond to one type of stimulant but not another.

- **What dosage?** The amount of medication (dosage) that your child needs also may need to be adjusted. The dosage is not based solely on his weight. Your pediatrician will vary the dosage over time to get the best results and control possible side effects.
- **When to give it?** The medication schedule also may be adjusted depending on the target outcome. For example, if the goal is to get relief from symptoms mostly at school, your child may take the medication only on school days.
- **Is it working?** It is important for your child to have regular medical checkups to monitor how well the medication is working and check for possible side effects.

What side effects can stimulants cause?

Side effects occur sometimes. These tend to happen early in treatment and are usually mild and short-lived, but in rare cases they can be prolonged or more severe.

The most common side effects include:

- Decreased appetite/weight loss
- Sleep problems
- Social withdrawal

Some less common side effects include:

- Rebound effect (increased activity or a bad mood as the medication wears off)
- Transient muscle movements or sounds called tics
- Minor growth delay

Back to Top

The same sleep problems do not exist for atomoxetine, but initially it may make your child sleepy or upset her stomach. There have been very rare cases of atomoxetine needing to be stopped because it was causing liver damage. Rarely atomoxetine increased thoughts of suicide. Guanfacine and clonidine can cause drowsiness, fatigue, or a decrease in blood pressure.

Most side effects can be relieved by:

- Changing the medication dosage
- Adjusting the schedule of medication
- Using a different stimulant or trying a non-stimulant

Close contact with your pediatrician is required until you find the best medication and dose for your child. After that, periodic monitoring by your doctor is important to maintain the best effects. To monitor the effects of the medication, your pediatrician will probably have you and your child's teacher(s) fill out behavior rating scales, observe changes in your child's target goals, notice any side effects, and monitor your child's height, weight, pulse, and blood pressure.

Stimulants, atomoxetine, and guanfacine may not be an option for children who are taking certain other medications or who have some medical conditions, such as congenital heart disease.

More than half of children who have tic disorders, such as Tourette syndrome (http://www.healthychildren.org/English/health-issues/conditions/emotional-problems/Pages/Tics-Tourette-Syndrome-and-OCD.aspx), also have ADHD.

Tourette syndrome is an inherited condition associated with frequent tics and unusual vocal sounds. The effect of stimulants on tics is not predictable, although most studies indicate that stimulants are safe for children with ADHD and tic disorders in most cases. It is also possible to use atomoxetine or guanfacine for children with ADHD and Tourette syndrome.

Are children getting high on stimulant medications?

When taken as directed by a doctor, there is no evidence that children are getting high on stimulant drugs such as methylphenidate and amphetamine. At therapeutic doses, these drugs also do not sedate or tranquilize children and do not increase the risk of addiction.

Stimulants are classified as Schedule II drugs by the US Drug Enforcement Administration because there is abuse potential of this class of medication.If your child is on this medication, it is always best to supervise the use of the medication closely. Atomoxetine and guanfacine are not Schedule II drugs because they don't have abuse potential, even in adults.

Are stimulant medications gateway drugs leading to illegal drug or alcohol abuse?

People with ADHD are naturally impulsive and tend to take risks. But patients with ADHD who are taking stimulants are not at a greater risk and actually may be at a lower risk of using other drugs. Children and teenagers who have ADHD and also have coexisting conditions may be at higher risk for drug and alcohol abuse, regardless of the medication used. *See ADHD and Substance Abuse: The Link Parents Need to Know* (http://www.healthychildren.org/English/health-issues/conditions/adhd/Pages/ADHD-and-Substance-Abuse-The-Link-Parents-Need-to-Know.aspx) *for more information.*

Back to Top

Unproven ADHD Treaments:

There is no scientific evidence that the following methods work and they are not recommended.

- Megavitamins and mineral supplements
- Anti–motion-sickness medication (to treat the inner ear)
- Treatment for candida yeast infection
- EEG biofeedback (training to increase brain-wave activity)
- Applied kinesiology (realigning bones in the skull)
- Reducing sugar consumption
- Optometric vision training (asserts that faulty eye movement and sensitivities cause the behavior problems)

Always tell your pediatrician about any alternative therapies, supplements, or medications that your child is using. These may interact with prescribed medications and harm your child.

Additional Information:

- Understanding ADHD: Information for Parents (http://www.healthychildren.org/English/health-issues/conditions/adhd/Pages/Understanding-ADHD.aspx)
- ADHD and Substance Abuse: The Link Parents Need to Know (http://www.healthychildren.org/English/health-issues/conditions/adhd/Pages/ADHD-and-Substance-Abuse-The-Link-Parents-Need-to-Know.aspx)
- Treatment & Target Outcomes for Children with ADHD (http://www.healthychildren.org/English/health-issues/conditions/adhd/Pages/Treatment-of-ADHD-and-Related-Disorders.aspx)
- All About ADHD Medication (https://www.understood.org/en/learning-attention-issues/treatments-approaches/medications/adhd-medication) (Understood.org)
- Children and Adults with Attention Deficit Hyperactivity Disorder (CHADD) (http://www.chadd.org/) or 800/233-4050
- National Institute of Mental Health (http://www.nimh.nih.gov/) or 866/615-6464

Last Updated 9/27/2019

Source American Academy of Pediatrics (Copyright © 2019)