

Stimulant Medications for ADHD

What Parents Need to Know

Your child's doctor prescribed a stimulant medication for ADHD. This handout covers the key facts: how these medications work, what to expect, and what to watch for. Keep it as a reference.

How Do Stimulants Work?

ADHD involves lower-than-normal levels of two brain chemicals (dopamine and norepinephrine) in the part of the brain that controls focus, planning, and impulse control. Stimulant medications raise those chemical levels so the brain can do its job more effectively.

There are **two classes** of stimulant medications. They work in different ways, which means if one does not work well for your child, the other might.

- **Methylphenidate (MPH):** Ritalin, Concerta, Focalin, Aptensio XR, Jornay PM, Daytrana patch, and others.
- **Amphetamine (AMP):** Adderall, Vyvanse, Mydayis, Dyanavel XR, Xelstry patch, and others.

What If the First Medication Doesn't Work?

Key fact: When children try both classes (one at a time), about 87 to 91% respond well to at least one. If the first medication does not help, that tells you very little about whether the other class will work. Do not give up after trying only one.

What to Expect in the First Few Weeks

- **You'll notice effects quickly.** Unlike many psychiatric medications, stimulants begin working the same day. You may see improved focus and reduced impulsivity right away.
- **Side effects usually settle in 1 to 2 weeks.** Most children adjust to the medication within the first couple of weeks. Common early side effects like headache or stomachache often fade on their own.
- **Dose increases happen every 1 to 4 weeks.** Your child's doctor will start low and increase gradually. How often depends on your schedule and availability. The goal is the dose with the best symptom control and fewest side effects.
- **Rating scales matter.** Your child's doctor should ask you (and your child's teacher) to fill out short checklists at each visit. These are much more useful than "how's it going?" for finding the right dose.

Possible Side Effects and What to Do

- **Decreased appetite (about half of children):** This is the most common side effect. If it happens, give a good breakfast before the medication kicks in. Offer snacks when it wears off in the late afternoon. Smoothies and protein shakes can help because many kids find it easier to drink calories than eat

them.

- **Sleep changes:** Some children may take longer to fall asleep. If this happens, keep a consistent bedtime routine. If sleep remains a problem, tell your child's doctor. Melatonin, a formulation change, or dose timing adjustments can help.
- **Growth:** Stimulants may slow growth modestly in some children, typically about 1 to 2 cm in height and 2 to 3 kg in weight over the first two years. Bone development is not affected. Your child's doctor will track height and weight at every visit. Summer medication breaks can help with catch-up growth if needed.
- **Mood changes:** Some children may get irritable or seem "flat" on a dose that is too high. If your child seems unlike themselves, tell your child's doctor. Lowering the dose or switching to the other stimulant class usually resolves this.

Safety Facts

- **Heart health:** Stimulants may raise heart rate by 1 to 2 beats per minute and blood pressure slightly. Your child's doctor will check vitals at every visit. No routine EKG is needed unless your child has a history of fainting, chest pain with exercise, or a family history of sudden cardiac death before age 50.
- **Tics:** Older guidelines warned against stimulants if a child had tics. Current evidence shows that stimulants do not cause or reliably worsen tics. If tics appear, they usually come and go on their own. Tics alone are not a reason to stop.
- **Addiction risk and the "meth" myth:** You may hear that stimulants are "legal meth." They are not. Prescribed ADHD doses are far lower, taken by mouth (not smoked or injected), and absorbed slowly. At these doses stimulants do not cause addiction. Treating ADHD actually lowers the risk of substance problems later. The prescription belongs only to your child. Never share it.

Formulations and Medication Breaks

Short-acting vs. long-acting: Short-acting forms last 3 to 5 hours. Long-acting forms last 8 to 16 hours. Most children do best on a long-acting form taken once in the morning. If coverage runs out before homework, an afternoon booster dose can fill the gap.

Medication breaks: Some families skip medication on weekends or over summer. Summer breaks (8 to 12 weeks) have the best evidence for growth catch-up. Weekend breaks may help with appetite and sleep. If your child drives or plays sports on weekends, weigh that against the benefits of a break.

Call Your Child's Doctor If You Notice:

Severe mood changes, unusual aggression, or your child seems very unlike themselves. Chest pain, racing heart, or fainting. Seeing or hearing things that are not there (very rare, about 1 in 660). Any thoughts of self-harm.

Source: VeriPsych ADHD Clinical Education Series, Module 3: Stimulant Pharmacotherapy. Full evidence base at veripsych.com.