

# Attention deficit hyperactivity disorder (ADHD): Youth Edition



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**Summary:** ADHD is a brain condition that can make it extremely hard to focus or sit still at school and home. As a result, it can make life very stressful. The good news, is that there are many strategies and medications that can help ADHD. Remember the classic strengths of ADHD... high energy, passion and enthusiasm for things that interest you, being creative and spontaneous.

Do you:

- Have trouble focusing on things like reading, school work and tasks?
- Have troubles paying attention in class?
- Have problems getting homework or assignments done?
- Get easily distracted?
- Often lose things that you need?
- Tend to act impulsively or without thinking?

If so, you might have ADD/ADHD, a brain condition which makes it hard for people to focus. If you have ADD/ADHD, there is good news! There are many things that can help you pay attention, and make life easier.

## What is Attention Deficit Disorder (ADD) and Attention Deficit Hyperactivity Disorder (ADHD)?

Everyone has a hard time paying attention from time to time, especially when doing things we feel are a little boring. For people living with ADD or ADHD, trouble paying attention is so severe that it causes problems at home, school, work and other areas.

Researchers have learned that the brains of people with ADD/ADHD are wired a bit differently compared to people who don't have ADD/ADHD. The difference is mostly in the brain's frontal lobe (just behind your forehead).

This part of the brain:

- Organizes thoughts;
- Helps us to focus and change focus;

- Remembers details;
- Manages time;
- Makes plans;
- Helps us think about the impact of our actions ahead of time.

## What are the Symptoms of ADHD?

If you have been diagnosed with ADHD, you might have noticed problems with things such as:

- How long you can pay attention (attention span);
- Your energy level (or hyperactivity);
- Your control over impulses (impulsivity).

<p>Attention Deficit Hyperactivity Disorder (ADHD) - Primarily Inattentive Type Aka ADD (Attention Deficit Disorder)</p>	<p>Difficulty paying attention (attention deficit) is the key symptom. People with ADD tend to get easily distracted. This makes it harder to keep your focus when you're doing dull things, like homework or chores. Quite often, you end up daydreaming or get distracted by less important things.</p> <p>People with this type of ADHD may find it hard to:</p> <ul style="list-style-type: none"> <li>• Pay attention to just one source of information;</li> <li>• Follow directions or remember details;</li> <li>• Complete tasks that are long, drawn out or boring;</li> <li>• Complete things on time or arrive on time for appointments.</li> </ul> <p>People can have ADD without really knowing. And others don't notice it so much, because you're not hyperactive.</p>
<p>Attention Deficit Hyperactivity Disorder - Primarily Hyperactive Impulsive</p>	<p>With this type of ADHD, it may be easier for you to pay attention and focus. But it's harder for you to control your activity level and impulses.</p> <p>Hyperactivity: You tend to have so much energy that you often need to move or fidget. This is difficult when people expect you to sit still for a long time, like in class, at the dinner table or during down time.</p> <p>People who are hyperactive might:</p> <ul style="list-style-type: none"> <li>• Have trouble staying seated when that is expected;</li> <li>• Need to move or fidget (pacing, tapping feet, drumming);</li> <li>• Find it hard to calm down.</li> </ul> <p>Impulsivity: You tend to do things before thinking them through. As a result, you might make more mistakes because you haven't thought ahead about the impact of your actions. So you might:</p> <ul style="list-style-type: none"> <li>• Have trouble waiting patiently;</li> <li>• React quickly when you're upset;</li> <li>• Talk too much or interrupt others when they are speaking;</li> <li>• Take more risks (for example, physical stunts, sexual activities, drugs and alcohol).</li> </ul>
<p>Attention Deficit Hyperactivity Disorder (ADHD, or combined type)</p>	<p>This is the most common type. It includes all the traits of the first two. In other words:</p> <ul style="list-style-type: none"> <li>• Attention deficit;</li> <li>• Hyperactivity;</li> <li>• Impulsivity.</li> </ul>

People with any type of ADHD may also have problems with:

- **Disorganization:** Losing or misplacing things. This happens because you get easily distracted and have trouble paying attention to what you are doing. So you may:
  - Forget to finish or hand in homework, projects and tasks;
  - Have trouble managing your time and are often late for things;
  - Forget things like where your keys are, important dates and directions someone has given you.
- **Frustration and Mood Swings.** It can be hard to cope with ADHD, and frustration and emotional ups and

downs are common. It is normal to feel these emotions.

- Being easily bored. Everyone needs stimulation, but with ADHD, you often need high levels of non-stop stimulation. Your senses (sights, sounds, touch, smell, taste) constantly crave more stimulation and your body is yelling at you to move.

## What Causes ADHD?

There's no single cause for ADHD. It comes from a mix of factors that we have little control over, like:

Family History	<ul style="list-style-type: none"> <li>• ADHD is more likely if you have family members living with it.</li> <li>• 8 out of 10 people with ADHD will have close family members who also have ADHD.</li> </ul>
Brain differences	<p>There are differences between the brains of people who live with ADHD and those who don't such as:</p> <ul style="list-style-type: none"> <li>• The shape and size of the brain;</li> <li>• Brain chemicals (lower levels of dopamine and norepinephrine in people with ADHD);</li> <li>• Brain activity (less brain activity in the frontal part of the brain in people with ADHD).</li> </ul>

## Another Way to Look at ADHD: The Hunter Hypothesis

Some researchers believe there is another way to think about ADHD. They suggest that ADHD traits in people helped human groups to survive as hunter-gatherers. This was long ago, before humans began to farm and create villages, towns and cities.

A good hunter would need to be:

- Aware of everything in his or her surroundings;
- Able to act or respond quickly;
- Energetic for chasing and hunting.

It is thanks to people with these traits that humans survived. We were able to settle in one place to farm and establish towns and cities. And while the way we live has changed, many people still carry these 'hunter' traits. Modern life doesn't always suit the hunters among us. Hunters don't get to spend their time outside; watching, listening, stalking or chasing. Like most of us, they spend most of the time inside, sitting.

When you ask hunters to sit still for long periods, it is then that they appear:

- Distractible;
- Impulsive;
- Hyperactive.

This way of thinking about ADHD can also help us to see the strengths of ADHD.

The 'up' side of ADHD

While ADHD can be viewed as a disability, it doesn't mean that it's all bad. With time, we've come to see that it's more a different way of doing things. We do know that people with ADHD do well in certain environments. With time, you'll learn to manage your symptoms to your advantage. Here are a few examples of traits you might recognize in yourself:

High energy, active and "hands on":	<p>People with ADHD often excel in situations where a lot is going on at once. They learn to pay attention to many things at the same time and good at 'multitasking'. Their "hyperactivity" allows for them to meet the high energy requirements of:</p> <ul style="list-style-type: none"> <li>• Sports;</li> <li>• Outdoor jobs;</li> <li>• Trades;</li> <li>• Construction;</li> <li>• Computer sciences.</li> </ul>
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Excitement seeking	<p>People with ADHD hate being bored, so they often seek out work that stimulates them. They have a great sense of fun and adventure, and are often very social. They are often attracted to careers like:</p> <ul style="list-style-type: none"> <li>• Policing;</li> <li>• Firefighting;</li> <li>• Working in the emergency department;</li> <li>• Being a paramedic;</li> <li>• Armed forces;</li> <li>• Teaching.</li> </ul>
Energized by change	<p>People with ADHD often find change exciting, and will seek out new and interesting experiences. This also helps them to adapt and thrive in many different situations. When faced with change, they often respond by showing they can be:</p> <ul style="list-style-type: none"> <li>• Persistent;</li> <li>• Resourceful;</li> <li>• Outgoing;</li> <li>• Ready for action;</li> <li>• Good at improvising;</li> <li>• Good in crisis situations.</li> </ul>
Creative	<p>People with ADHD can be very innovative and full of ideas. This may be helpful in:</p> <ul style="list-style-type: none"> <li>• Design;</li> <li>• The arts;</li> <li>• The entertainment industry;</li> <li>• Technology and innovation.</li> </ul>

## What should I do if I think I have ADHD?

ADD/ADHD is quite common so you are not alone! A good first step is a visit to your family doctor, if you think you have ADHD symptoms, and they are getting in the way of your daily activities like school, work and keeping positive relationships with friend and family.

Your family doctor will help decide if you have ADHD, or if you need to see another professional. Figuring out the type of ADD/ADHD early will also help to make sure you get the right help to meet your needs and take positive steps in your life.

Your family doctor will check to see if your symptoms could be caused by other things, like:

- Low iron in your blood;
- Hormone imbalances;
- Not enough omega 3 fatty acids in your diet;
- Exposure to lead or mercury;
- Certain food or environmental sensitivities;
- Being gifted or being bored;
- Hearing, vision or movement problems;
- Learning or language disability;
- Mood disorders like anxiety or depression.

## Treatments for ADD/ADHD

There are many ways to manage ADD/ADHD. Treatment options depend on how severe your ADHD is. A combination of medication, an adapted school learning plan and counselling can be very effective and help you reach your potential. But everyone is different, you may not need all of these treatments.

### Treatment for ADD/ADHD: Medication

Although some people are concerned about using medication for ADHD, research shows clearly that the right type

of medication will dramatically decrease problem symptoms of ADHD. About 8 out of 10 people with ADHD will respond well to medication. When it's easier to manage your symptoms, it's easier to learn at school. It's also easier to use other strategies to control your symptoms. This could allow you to manage your symptoms without medication in the future. Medication doesn't have to be permanent. Ask your doctor about the different types of medication as well as the advantages and disadvantages.

## Treatment for ADD/ADHD: Non-Medication Strategies

Diet	<p>Changes in diet don't bring the same improvements as medication, but some people find that the kind of food they eat can make ADHD symptoms better or worse. Some studies suggest that a lack of Omega 3 fatty acids, (found in fish and nuts) could make ADHD symptoms worse. Some people may be sensitive to certain food additives that may get turned into brain chemicals that "excite" the brain too much and may wish to avoid:</p> <ul style="list-style-type: none"> <li>• Artificial sweeteners, for example:</li> <li>• Aspartame (e.g. Nutrasweet®, Equal®);</li> <li>• Acesulfame Potassium (Sunett® and Sweet One®);</li> <li>• Saccharin ( Sweet'N Low®).</li> <li>• MSG (monosodium glutamate), often found in:</li> <li>• Many restaurants and fast foods;</li> <li>• Many packaged processed food.</li> <li>• Caffeine and energy drinks</li> <li>• Caffeine found in drinks like Pop, coffee and Red Bull® can make you feel more restless and hyperactive by boosting your energy level for a short time.</li> <li>• Artificial food coloring, often found in:</li> <li>• Kool-Aid®;</li> <li>• Jell-O®;</li> <li>• Fruit drinks like Hi-C®.</li> </ul> <p>A varied, balanced diet that includes more home cooked meals and unprocessed food will be better for your body and brain. Eating regular meals and snacks will also help a lot. Contact your doctor or a trained dietician to learn more about nutrition and how it impacts your body.</p>
Daily exercise in nature	<p>Having enough exercise every day will help you to use some of your excess energy in a positive way. Some studies show that people are able to focus better after physical activity. For example, biking to school can help you to focus in the morning. Try:</p> <ul style="list-style-type: none"> <li>• Active transportation (walk, bike or rollerblade to where you need to go);</li> <li>• Joining a sports team or other activity (like swimming, dancing or gymnastics);</li> <li>• A fitness or yoga class;</li> <li>• Working out at a gym.</li> </ul>

## Self-Regulation in ADHD

People with ADHD tend to do better in situations that stimulate them "just right". This could be one reason why adults notice improvement in their symptoms, when they find a job that is just right for them.

Finding situations that offer the right amount of stimulation will allow you to perform at your best. It might take some time to get it just right, as this is different for everyone and is a question of 'feel'. For example, people who need lots of movement may be in a situation where they can't move around the way they'd like.

Understanding their own needs, they could plan to have fidget tools or other strategies ready to help them focus on the task at hand. Other ideas for adding the right amount of stimulation to help with focus:

Remember: There can be a fine line between getting just enough stimulation, and being overstimulated and distracted. Make sure that these tools are actually helping you and are not distracting you more.

**Relaxation Techniques**

These techniques can help if you're feeling a strong urge to move, or if you're afraid you'll do something impulsive. If you feel you need to move or you're afraid you'll be impulsive, try belly breathing or a relaxation exercise.

**Basic muscle relaxation exercise**

- Sit or stand and relax your shoulders.
- Close your eyes if you're in a place where you can do this
- Breathe in deeply through the nose (if your nose is clear).
- Expand your belly out as you breathe in.
- Hold your breath for a brief moment and release slowly through your nose (if your nose is clear).
- Focus on the feeling in your belly or your nostrils as you breathe.
- Repeat a few times.

Mindfulness exercises, yoga or slow movement exercises are also good ways to gain more control. You might also want to combine some of these activities with visualization, guided imagery and relaxing music.

## Strategies for school

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School is a pretty structured place, so it can create difficulties for youth with ADHD. Even so, schools can help you do well by offering the supports and accommodations you need. Your school can also help by placing you with a teacher who understands ADHD and how to help.

You can also try:

- Sitting in the front of the class and away from windows to limit distractions;
- Taking a body break when you are feeling restless (stretch, walk around, or a quick physical activity);
- Breaking down complicated tasks into smaller, more manageable ones;
- Check in with your teacher often to make sure you are on track;
- Ask a friend or a teacher about what you need to do if you've dozed off or are unsure;
- Create an agenda to plan out assignments;
- Leave yourself plenty of time to finish your work-don't leave things to the last minute.

### Getting organized

Not being well organized can cause you a lot of problems. These tips can help you stay on top of things:

- Learn from your bad habits and develop new, helpful ones;
- Try keeping a regular schedule;
- Use agendas, calendars or electronic reminders (add new tasks right away so you don't forget);
- Use checklists or to do lists;
- Use visual reminders (like taking pictures);
- Stop what you are doing when people are giving you directions, try doing only one thing at a time;
- Ask a family member or friend to remind you.

### Counselling or personal coaching

Meeting with a counsellor or a personal coach can really help youth and adults to find the best ways to reach their goals.

Counselling or coaching can help you to:

- Understand your needs;
- Highlight your goals;
- Learn ways to cope and manage your symptoms better;
- Identify and make the most of your strengths.

## Summary

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ADHD is a brain condition that can make it extremely hard to focus or sit still at school and home. As a result, it can make life very stressful. The good news, is that there are many strategies and medications that can help ADHD. Remember the classic strengths of ADHD... high energy, passion and enthusiasm for things that interest you, being creative and spontaneous.

## References and information

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Arcos-Burgos M, Acosta MT; Acosta, Maria Teresa (June 2007). Tuning major gene variants conditioning human behavior: the anachronism of ADHD. *Curr. Opin. Genet. Dev.* 17 (3): 234-8. doi:10.1016/j.gde.2007.04.011. PMID 17467976.

Barkley, R.A. (1998) *Attention Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment* (2nd ed.) New York: The Guilford Press.

Nadeau, Kathleen, Littman, Ellen & Quinn, Patricia (1999) *Understanding Girls with AD/HD*. Silver Spring, MD: Advantage Books pp. 25-26.

Nigg JT, Lewis K, Edinger T, Falk M. Meta-analysis of attention-deficit/hyperactivity disorder or attention-deficit/hyperactivity disorder symptoms, restriction diet, and synthetic food color additives. *J Am Acad Child Adolesc Psychiatry.* 2012 Jan;51(1):86-97.e8.

[http://en.wikipedia.org/wiki/Hunter\\_vs.\\_farmer\\_hypothesis](http://en.wikipedia.org/wiki/Hunter_vs._farmer_hypothesis)

Hartmann, Thom (1995). *ADD Success Stories*. Grass Valley, California: Underwood Books. xvii.

## On the Web

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Learning Disabilities Association of Ottawa-Carleton (LDAO-C)

A non-profit organization dedicated to promoting increased awareness and respect for persons with learning disabilities (LDs). [www.laottawa.com](http://www.laottawa.com)

Learning Disabilities Association of Ontario (LDAO)

The Learning Disabilities Association of Ontario is a registered charity dedicated to improving the lives of children, youth and adults with learning disabilities. [www.ldao.ca](http://www.ldao.ca)

Attention Deficit Disorder Association

The Attention Deficit Disorder Association provides information, resources and networking opportunities to help with Attention Deficit Hyperactivity Disorder. <http://www.add.org/>

Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD) is a national non-profit organization providing education, advocacy and support for individuals with ADHD. [www.chadd.org](http://www.chadd.org)

## Books on ADHD

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*Putting on the Brakes: Activity Book for Young People with ADHD*, by Patricia O. Quinn and Judith M. Stern, 1993.

*Academic success strategies for adolescents with learning disabilities and ADHD*, by Minskoff, Esther H. - Baltimore, MD: Paul H. Brookes, 2003.

## Authors

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Reviewed by the Mental Health Information Committee at the Children's Hospital of Eastern Ontario (CHEO). Thanks to YouthNet's Youth Advisory Committee (YAC-CHEO) for reviewing and providing feedback to this fact sheet!

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