

Helping Children and Youth with Attention Deficit and Hyperactivity (ADHD) Disorders:

Information for Parents and Caregivers

What is Attention Deficit/Hyperactivity Disorder?

Everyone has trouble paying attention from time to time, especially during activities that are boring or not enjoyable. But for children and youth with ADHD, the problems with paying attention and getting distracted are so severe that school, work, and relationships can be negatively affected.

There are 3 main types of ADHD:

ADHD Combined Presentation

This is the most common type, causing troubles with attention and hyperactivity. Typical symptoms of ADHD:

Attention deficit: Being easily distracted, with trouble focusing on activities that are not very interesting or boring (like school work or chores). Able to focus when the activity is exciting and stimulating, like video games or sports.

Hyperactivity: Needing to move or fidget(unable to sit still in class or stay seated in class).

Impulsivity: Tending to do things and act before thinking.

Disorganization: Often losing or misplacing things, or forgetting about homework assignments.

Children and youth with untreated ADHD are more likely to develop problems with school and peers. This can lead to later problems with mood. Teens with untreated ADHD are more likely to 'self-medicate' with drugs.

'Classic ADHD' occurs most often in males, but females can have it too.

ADHD Predominantly Inattentive Type

Previously known as ADD (attention deficit disorder). This type of ADHD involves problems with attention, without the hyperactivity or impulsiveness seen with ADHD-combined presentation. The major symptom with this type of ADHD is:

Attention deficit: Trouble paying attention (unable to focus on school work or chores at home). A 'classic case' of this type of ADHD is an inattentive girl or boy who day dreams and is forgetful. Because children with this type of ADHD are not usually disruptive in class, they don't usually come to the attention of their teachers.

ADHD Predominantly Hyper-Impulsive

Children and youth with this type of ADHD are usually able to pay attention, but have problems with:

Hyperactivity: Needing to move or fidget (unable to sit still in class or stay seated).

Impulsivity: Tending to do things and act before thinking.



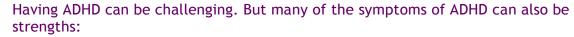


Children and youth with ADHD may also become:

Easily frustrated and have mood swings. Many children and youth with ADHD report having strong emotions and get frustrated easily. Strong emotions can make someone passionate and fun to be with, but feeling frustrated and angry too often can cause troubles.

Easily bored: Children and youth with ADHD crave stimulation (from sights, sounds, touch, movement and feelings). This can be a problem, because many situations in life (like school work and chores) aren't that exciting. This can make it hard for those with ADHD to finish tasks or stay organized. They may try to get others to give them the stimulation they crave, not always caring if they are getting positive or negative attention. For example, a boy with ADHD may do well with structure (when he is kept busy), but gets himself into trouble when he's bored because he does things to annoy his brothers and sisters.

The 'up' side of ADHD





High energy, active and 'hands on': the 'hyper activity' of ADHD may allow those with it to meet the high-energy requirements of sports, outdoor jobs, or work in the trades.

Excitement seeking: Because people with ADHD hate to be bored, they often seek out stimulating work like policing or fire fighting. In health care, they prefer working in emergency departments or as paramedics. They also tend to do better in jobs where they can work with people, instead of working behind a desk doing paperwork.

Creativity: People with ADHD often do well in creative jobs in the arts or the entertainment industry.

Other 'up' sides: enthusiastic, innovative, spontaneous, playful, genuine, funny, honest, multi-taskers, hopeful, forgiving, empathetic, see possibilities everywhere, creative, charming, compassionate, entertaining, and can have fun anywhere.

What Causes ADHD?

ADHD is complex. There isn't just one cause. There are usually a few factors together that cause ADHD:

Family history: ADHD tends to run in families. A child's chance of having ADHD is greater if other family members have it.

Brain differences: Studies show that people with ADHD have clear brain differences that are linked to the symptoms of ADHD. These include differences in:

- Brain structure. Some areas of the brain are smaller, like the prefrontal cortex and cerebellum.
- **Brain chemistry.** In children and youth with ADHD, brain chemicals like dopamine and norepinephrine are less available.
- **Brain activity** in some parts of the brain. Children and youth with ADHD have less activity in the frontal part of the brain.

In other words:

- ADHD is not the child's fault
- ADHD is not the parent's fault—parents cannot cause ADHD through 'bad parenting'.

What should we do if we think our child has ADHD?

Start by taking your child to your family doctor to rule out other problems. Then consider asking for a referral to a pediatrician for assessment (if you don't have one). Problems to rule out include:



Medical: low iron, hormone imbalances, lack of omega 3 fatty acids, exposure to lead or mercury **Other conditions**: for example, a gifted child who is bored in school, or a student who is not paying attention at school because of a learning disability. If your child has other mental health concerns, your doctors can help by suggesting specialized mental health services.





My child is very intelligent. How can he have ADHD?

Having ADHD is not related to a child's intelligence. But their troubles focusing make it harder for these children and youth to succeed at school. This is why teachers often report that children with ADHD are not reaching their full potential. Children with ADHD can also be inconsistent in demonstrating their abilities. A child or youth may be able to focus one moment and not the next, sometimes giving the impression that she is lazy or not trying hard enough.

Is treatment really needed for ADHD? Can ADHD cause other problems?

Studies tell us that children and youth with ADHD are more likely to have problems with:

- Behaviour
- Learning
- Mood
- Anxiety

If children with ADHD don't get the right help, they are more likely to have depression, anxiety and oppositional disorder now and as they get older. Impulsivity and hyperactivity tend to get better for adults with ADHD. But without treatment, problems paying attention and getting easily distracted don't usually get better in adults. This can cause severe problems with work and relationships.

Diet and ADHD

Food additives

In a small number of children and youth with ADHD, parents notice that some food additives may make behavior and concentration worse. Some researchers think that in these children and youth, food additives may get turned into brain chemicals that 'excite' the brain too much. If you have noticed this in your child, you can try removing these additives from your child's diet for a few weeks:



- MSG (monosodium glutamate), which is used in many restaurants and fast foods, and in some packaged processed foods
- **Artificial food coloring**, especially red dyes (avoid Jell-O™, Kool-Aid™, fruit drinks like Hi-C™)
- Artificial sweeteners such as a spartame (e.g.Nutrasweet™)

Omega 3 fatty acids

Some studies suggest that some cases of ADHD may be caused by a lack of omega 3 fatty acids. Symptoms of a lack of omega 3 fatty acids are:



- Skin problems like eczema, dry skin or dandruff
- Brittle nails or hair
- Feeling very thirsty, and needing to pass more urine (pee!)
- Problems with sleep, concentration or mood

Future research may tell us if taking Omega 3 fatty acid supplements could help children and youth with ADHD.





How is ADHD treated?

The most effective treatment is usually a combination of medications, school programs and behaviour management training to work on behaviour.

Medications

Many parents (and children) prefer to start treatment without medications. But a large research study has found that treatment with medication alone was more effective than using non-medication treatments (like school programs or behavior therapy). This study did not receive any funding from drug companies. It was carried out by the US government's research team at the National Institute of Mental Health.

Medications help decrease ADHD symptoms. When ADHD symptoms are more manageable, it's easier for children and youth to develop and practice coping and behavioural strategies.

Medications often used for ADHD:

- Stimulant medications. These stimulate the focus and impulse control centres of the brain. For example, Methylphenidate (Ritalin® regular, Ritalin SR®, or Concerta®) and Dextroamphetamine (Dexedrine®, or Adderall XR®)
- Non-stimulant medications
 For example, Buproprion (Welbutrin SR®) and Atomoxetine (Strattera®)

Coping with side effects

Like all medications, ADHD medications can have side effects. Usually side effects are mild and will go away. Let your doctor know if the side effects don't go away. Usually there are ways to help with side effects, such as changing the dose, the time of day one takes medication, or the type of medication.

If your child is having trouble sleeping, try:

- Talking to the prescribing doctor about giving medications at a different time of day or switching to shorter-acting medication
- Using sleep strategies like:
 - Background movement
 - Soothing movement and routines before bedtime

If sleep problems still don't get better, a low dose of medication to help with sleep, (like Melatonin or Clonidine) is something to think about.

If your child has headaches:

- These will usually go away
- Speak to your doctor if they don't
- Give the medication with food, and not on an empty stomach

If your child or teen doesn't feel like eating, try:

- Having your child eat more when medication is not active in the body, like having breakfast before taking medication, or a meal before bedtime
- Serving many small meals rather than a few, large meals
- Giving snacks and finger foods, especially while your child is relaxing. Aim for healthy snacks like yogurt, fruit, dried fruit, energy bars, nuts, peanut butter and crackers.
- Serving drinks with calories, like homogenized milk, fruit juices or milkshakes
- Giving medications **after** meals
- Serving more 'high calorie' meals
- Offering favourite foods whenever possible
- Having your child 'catch up' by eating more in the evenings or on weekends (times when she is not taking medication)





Common questions about medications:

Aren't people with ADHD already : 'hyper'! wouldn't came, stimulant make them worse? 'hyper'? Wouldn't taking a

Will taking stimulant medications lead to drug addiction?

.....

Do ADHD medications cause tics?

Stimulant medications will stimulate the focus and impulse control areas of the brain, which helps with ADHD symptoms. In fact, many people with ADHD report that stimulants such as caffeine (and nicotine) can be soothing. Many people with ADHD say that a mild dose of stimulants in the evening (like having a cup of coffee) helps them sleep!

Studies show that proper treatment of ADHD will **reduce** the risk of future problems like drug addiction, or troubles with the law. By helping people function better at home, school and work, medications can keep them from engaging in negative behaviours such as street drug use, and crime.

Tics are muscle movements that people can't completely control. Examples include repeated winking, eye blinking, armor facial twitches, and sounds like humming, throat clearing, or sniffing. About half of people with a tic disorder (or Tourette's Syndrome) also have ADHD. It is usually the ADHD that is diagnosed first. So ADHD medications don't cause tics- it's just that tic disorders often happen along with ADHD. If it seems that ADHD medications make tics worse, talk with your doctor about reducing the dose or changing medications.

Non-Medical Treatments for ADHD

Understanding ADHD

Children and youth with ADHD have trouble controlling or 'regulating' their attention. So they have trouble paying attention in the right situations. To focus properly, a child or teen needs to have "just enough" stimulation from the senses (movement, touch, sound, smell, sight) and feelings (like good relationships without too much conflict).



'Under' stimulated: bored You can help by: Increasing stimulation: Adding activity, movement, sights, sounds, using hands



doing!

Just right: just enough stimulation : 'Over' stimulated: stressed, You can help by: Keep doing whatever you're



overwhelmed

- Information overload
- Too much happening at once
- Too many feelings
- Upsetting feelings

You can help by:

- Cutting down on stimulation (fewer people, less activity, less noise)
- Using calming techniques

'Just enough' stimulation- is why children who aren't paying attention in class can pay attention to video games and favourite activities. These activities give them 'just enough' stimulation. They can be 'hyper-focused' on an activity they like, but have trouble moving their attention to other things.

Over-stimulation – children with ADHD tend to be easily over-stimulated by things like noise, too much to look at and too much activity in classrooms. Yet in other areas, that child may be under-stimulated and bored. Hyper active children are often under-stimulated when it comes to movement, and may need to move or fidget. At other times, like when studying or trying to fall asleep, they find background noise from the television or radio helpful.



Helping a child at school:

For children and youth who have problems with attention:

- Get the student's attention first, before asking a question or making a request.
- Make sure you don't ask for too many things at once.
- Write down what you want to say and give it to the child (this may help with 'boring' requests like homework or chores).

For children and youth who get easily distracted:

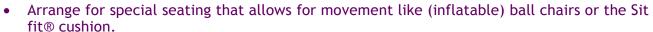
- Move the child closer to the front of the class to prevent distractions from classmates
- Move the student away from visual distractions like open windows or the classroom door

Many ADHD students tune out when there is too much 'lecturing' over blah instruction. Try other learning strategies, like:

- Visual (e.g. pictures and diagrams)
- Kinesthetic (using movement and touch)

For children and youth who are hyperactive and those who need to move to think:

- Don't expect a hyper active child to be able to sit still for long per
- Alternate "thinking activities" with movement activities; times given here are guidelines only.
 - O Thinking activities for 10-20 minutes
 - "Body Break" session of 2-5 minutes of physical movement, (jumping jacks, squeezing a stress ball, push-up against a wall, 'chair push-ups')
 - O Give the child more washroom breaks to walk around, send the child for errands, ask her to clean the board.



• 'Fidgets' (stress balls to squeeze, or oral fidgets like chewing gum, candies, coffee stir sticks)

For children and youth who have trouble with organization:

- Break down complicated tasks into smaller ones
- Use schedules
- Ensure the student writes down assignments right away, because he may forget if he waits until the end of class

For children and youth who have trouble with motivation:

Work out a good system to reward positive behaviour. Many ADHD students have not yet been able to develop internal motivation (wanting to d things or do well because it feels good and is important to them). They usually do better when their positive behavior is noticed by others (external motivation). At first, external rewards like stickers or extra privileges can help encourage positive behaviour.



Help for parents

Understanding and supporting a child with ADHD isn't easy. You may have many arguments with your child or teen. This cycle of conflict and negative feelings is not healthy, and hurts everyone in the family.

If you (or other family members) are feeling overwhelmed, make sure that you get support for yourself and other family members. Seek support from health care professionals, family, friends and other parents who share your experience.





e to Find Help			
☐ In a crisis? Mental Health Mobile Crisis Team, 902-429-8167 or toll-free, 1-888-429-8167			
□ IWK Mental Health & Addictions, offers programs for ages up to 19, 902-464-4110 or toll-free,1-888-470-5888 (ask for Central Referral), www.iwk.nshealth.ca/mental-health			
☐ Capital Health Addictions & Mental Health Program, offers programs for ages 19 and up, www.cdha.nshealth.ca/addictions-and-mental-health-program			
☐ To find a Psychologist in Nova Scotia: Association of Psychologists of Nova Scotia, 902-422-9183, www.apns.ca			
Support Groups			
☐ Excalibur ADHD Association, www.excaliburadhd.org			
☐ Healthy Minds Cooperative , offers resources for peer support, <u>www.healthyminds.ca</u>			
☐ Dartmouth (or Truro) Adult & Youth AD/HD Empowerment Group, open to adults/spouses and youth/parents, 902-580-2343, www.addvocacycoach.ca			
□ Women Living with ADHD, open to women with ADHD, 902-466-2011			
Want more information?			
Useful websites			
Oscial Websites			
□Centre for ADHD Awareness Canada, <u>www.caddac.ca</u>			
□Centre for ADHD Awareness Canada, <u>www.caddac.ca</u>			
□Centre for ADHD Awareness Canada, www.caddac.ca □National Resource Centre on ADHD, www.help4adhd.org			
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Books
☐ Taking Charge of ADHD: The Complete, Authoritative Guide for Parents, By Russell A.Barkley, 2000
□ Delivered from Distraction: Getting the Most out of Life with ADHD, By Edward Hallowell and John Ratey, 2005
☐ The "Putting on the Brakes" Activity Book for Young People with ADHD, By Patricia O.Quinn and Judith M. Stern,1993
☐ Teaching Teens with ADD and ADHD: A Quick Reference Guide for Teachers and Parents By Chris A. Zeigler Dendy, 2003
☐ The ADHD Workbook for Kids: Helping Children Gain Self-Confidence, Social Skills and Self-Control by Lawrence E. Shapiro

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Disclaimer: Information in this fact sheet may or may not apply to your child. Your Health Care Provider is your best resource for information about your child's health

Provided By:

References

Bateman et al.: The effects of a double blind, placebo controlled, artificial food colourings and benzoate preservative challenge on hyperactivity in a general population sample of preschool children, Archives of Disease in Childhood, 2004; 89:506-511.

Burgess JR, Stevens L, Zhang W, Peck L: Long-chain polyunsaturated fatty acids in children with ADHD, J. of Clinical Nutrition; 2000; 71(suppl):327S-30S.

Richters, JE et al.: NIMH collaborative multi site multi modal treatment study of children with ADHD: I. Background and rationale. Journal of the American Academy of Child and Adolescent Psychiatry, 1995; 34,987-1000.

Koenig et al.: Comparative Outcomes of Children with ADHD: Treatment Versus Delayed Treatment Control Condition, presented May 13, 2005 at the 2005 American Occupational Therapy Association Meeting.

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