

Treatment of ADHD in Children and Adolescents

The best way to treat ADHD is with a 'multimodal' approach. Simply put, this means using a combination of different types of treatment. For children and adolescents in school, this usually means;

- Educating Parents and Children on ADHD (referred to as psychoeducation)
- School Accommodations (put in place in the classroom through the special education system)
- Parenting strategies
- Additional family therapy and supports such as tutoring
- Healthy lifestyle choices such as, physical exercise, a balanced diet, good sleep habits and mindfulness
- Medication, if required

Educating parents and any other adults who routinely interact with the child about ADHD is the first and most important component of the treatment plan. Studies have shown that providing education on ADHD greatly increases the chance that treatment will continue long term. The more a family understands about ADHD and how it affects their child, the better they will be at making informed choices and implementing strategies and accommodations in the home. The more informed they are, the better advocates they will be when requesting resources and classroom accommodations for their child at school. Long term treatment of ADHD should always include regular follow-up visits with a medical practitioner, allowing for review of the treatment plan and additional information on the management of ADHD.

If symptoms continue to be impairing medication may be considered as part of the treatment plan. Parents should expect to have an in-depth discussion with their physician about medication treatment; they should discuss which symptoms are expected to decrease and which may not, and potential side effects before their child begins medication treatment. Parents need to be fully informed of all the benefits and risks of any treatment, drug or non-drug. In addition, for informed decisions to be made they will need to know about the risks of not treating this disorder.

In uncomplicated cases of ADHD, medication management is fairly straight forward and typically effective with minimal side effects. The type of medication that is most often used to manage ADHD is stimulant medication. There are two basic compounds of stimulant medication; Methylphenidate and Dextroamphetamine. Stimulant medications are controlled substances and are therefore strictly regulated, however, they have been around for more than fifty years and thousands of published research papers are available detailing their safety and effectiveness.

In the last ten years, the development of time-released, once-a-day, formulations of these same compounds, have significantly improved medication options. Time-released products help to prevent medication levels from fluctuating or causing peaks and valleys during the day. These time-released medications usually cover a child during the whole school day and into the early evening. However, some children do metabolize these medications more quickly than others and may not have coverage for as many hours. Children who are concerned about having to take medication at school are happier taking medication just once, at the start of their day. These medications are in a form that is difficult to abuse. There are several Methylphenidate-based and Dextroamphetamine-based medications available in Canada at this time.

There are now also non-stimulant medications available in Canada however they are considered second line treatment options. One is classified as a noradrenalin reuptake inhibitor; this medication's active ingredient is Atomoxetine Hydrochloride. This medication stays in the child's system longer and may therefore be beneficial for those children who experience symptoms late into the evening. This medication may also be your doctor's choice of treatment if stimulant trials have shown an increase in anxiety, or tic spectrum disorder symptoms. The other non-stimulant medication is classified as an alpha 2A-adrenergic receptor agonist; the active ingredient is Guanfacine Hydrochloride. This medication may be used in addition to a stimulant medication or on its own.

For more extensive information on medications please access our [first](#) and [second](#) line medication charts.

The first medication that your child tries may not always be the best one for them. Physicians should always start with a low dosage and increase it gradually. Unfortunately, it may take a few trials to discover the right medication for your child. Fortunately, eighty percent of children respond to the first type of stimulant medication tried and of the twenty percent who do not, eighty percent of those respond to the second type of stimulant medication. Side effects may also be an issue with one type of stimulant medication, but not the other. This trial and error approach does not mean that your doctor does not know what he/she is doing. Individuals react differently to medication compounds and unfortunately, at this time, we have no way of knowing which medication will work best for your child without actually doing a drug trial. Now that we have several options of stimulant and non-stimulant medications to choose from we have a better chance of finding the right option for your child.

Medication treatment can improve core symptoms of ADHD in a very short period of time however, medication should never be the only treatment used. A multi-tiered approach including what are referred to as psychosocial interventions, listed above, should always be initiated before or with medication therapy.

Information on Alternative Treatment/Therapies

Access a comprehensive article reviewing the evidence on Cognitive Training (brain training games) and brain training strategies by [clicking here](#)

Access the Canadian Paediatric Society's article on Alternative ADHD Therapies by [clicking here](#)