

ADHD (Attention Deficit Hyperactivity Disorder)

Can Neurofeedback Help Treat ADHD?

Written by Kimberly Holland

Medically Reviewed by Timothy J. Legg, PhD, CRNP on September 7, 2016



Neurofeedback and ADHD

Attention deficit hyperactivity disorder (ADHD) is a common childhood behavioral disorder. According to the Centers for Disease Control and Prevention (CDC), as many as 11 percent of children in the United States have been diagnosed with ADHD.

An ADHD diagnosis can be difficult to manage. It's a complex disorder that can affect many aspects of your child's daily life and behavior. Early treatment is important.

Learn how neurofeedback might help your child cope with their condition.

Advertisement

Advertisement

Medication

Traditional treatments for ADHD

Your child may be able to learn to cope with ADHD by adopting simple behavioral changes that make their life easier. Changes to their daily environments can help reduce their level of stimulation and ease their ADHD-related symptoms.

In some cases, your child may need stronger and more targeted treatment. Their doctor might prescribe stimulant medications. For example, they might prescribe dextroamphetamine (Adderall), methylphenidate (Ritalin), or other medications to treat your child's symptoms. These medications actually help children to focus their attention.

Stimulant medications come with a host of side effects. It's important to talk to your doctor about these potential side effects if you're thinking about treating your child's ADHD with medication. Common side effects include:

- having a decreased appetite
- displaying stunted or delayed growth
- having difficulty gaining and retaining weight
- experiencing sleep problems

In very rare cases, your child can also develop an abnormal heartbeat as a side effect of stimulant medications. Their doctor can help you weigh the potential benefits and risks of using medications to treat their condition. In some cases, they may recommend alternative treatment strategies, in addition to or instead of medications. For example, they might recommend neurofeedback training.

Advertisement

Neurofeedback training for ADHD

Is there an ADHD expert in the house?

You've come to the right place. Sign up for our ADHD newsletter.

SIGN UP

Your [privacy](#) is important to us

encephalogram (EEG) biofeedback. Neurofeedback may help your child learn to control their brain activity, which will help them concentrate better at school or work.

Neurofeedback training on a task helps to speed up brain activity. This makes your brain more efficient. The opposite is true for children with ADHD. If your child has this condition, the act of concentrating can leave them vulnerable to distraction and less efficient. That's why simply telling them to pay attention isn't the most effective solution. Neurofeedback training might help your child learn to make their brain more attentive when it needs to be.

During a neurofeedback session, your child's doctor or therapist will attach sensors to their head. They will connect these sensors to a monitor and allow your child to see their own brain wave patterns. Then their doctor or therapist will instruct your child to focus on certain tasks. If your child can see how their brain functions when they're focusing on particular tasks, they might be able to learn to control their brain activity.

In theory, your child can use the biofeedback sensors and monitor as a guide to help them learn to keep their brain active while concentrating or performing certain tasks. During a therapy session, they can try a variety of strategies to maintain their focus and see how it affects their brain activity. This might help them develop successful strategies to use when they're no longer attached to the sensors.

Advertisement
Advertisement

Evidence

Neurofeedback isn't widely accepted yet

According to a review of research published in the journal *Clinical EEG and Neuroscience*, some studies have linked neurofeedback to improved impulse control and attention among people with ADHD. But it isn't widely accepted as a stand-alone treatment yet. Your child's doctor might recommend neurofeedback as a complementary treatment to use alongside medications or other interventions.

Advertisement

The takeaway

One size doesn't fit all

Each child is unique. So is their journey with ADHD. What works for one child may not work for another. That's why you should work with your child's doctor to develop an effective treatment plan. That plan might involve neurofeedback training.

For now, ask your child's doctor about neurofeedback training. They can help you understand how it works and whether or not your child is a good candidate.

References:

- Arns, M., de Ridder, S., Strehl, U., Breteler, M., & Coenen, A. (2009, July). Efficacy of neurofeedback treatment in ADHD: The effects on inattention, impulsivity and hyperactivity: A meta-analysis. *Clinical EEG and Neuroscience*, 40(3), 180-189. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/19715181>

- Attention deficit hyperactivity disorder. (2016, March). Retrieved from <http://www.nimh.nih.gov/health/topics/attention-deficit-hyperactivity-disorder-adhd/index.shtml>
- Attention-deficit / hyperactivity disorder (ADHD): Data and statistics. (2016, May 4). Retrieved from <http://www.cdc.gov/ncbddd/adhd/data.html>
- Mayo Clinic Staff. (2016, March 11). Attention-deficit/hyperactivity disorder (ADHD) in children. Retrieved from <http://www.mayoclinic.org/diseases-conditions/adhd/home/ovc-20196177>