

# Essential Oils Can Help ADHD

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## STORY AT-A-GLANCE

- › When children with ADHD inhaled vetiver essential oil three times a day for 30 days they had improved brain wave patterns and behavior and did better in school
- › Other research showed vetiver essential oil to have particular promise for ADHD, as it led to changes in brain activity suggestive of increased alertness
- › Other essential oils that may relieve ADHD symptoms include cedarwood, rosemary, ylang ylang, frankincense and more

***Editor's Note: This article is a reprint. It was originally published January 26, 2017.***

About 11% of U.S. children (or 6.4 million) have been diagnosed with attention-deficit hyperactivity disorder (ADHD),<sup>1</sup> which is characterized by a pattern of inattention, hyperactivity and/or impulsivity that interferes with learning, daily functioning and relationships. Rates have been increasing by about 5% a year.<sup>2</sup>

Among very young children (2 to 5 years), behavior therapy is the first-line treatment recommended for ADHD, according to the American Academy of Pediatrics (AAP).

However, data from the U.S. Centers of Disease Control and Prevention (CDC) revealed that about half of preschoolers with ADHD were taking medication, and 1 in 4 were being treated only with medication.<sup>3</sup>

Further, only half of 4- to 5-year-olds with ADHD received behavior therapy, despite it being the recommended go-to treatment. By age 6, the so-called "best practice

guidelines" for ADHD include treatment with both medication and behavior therapy.

It's a sad state of affairs on multiple fronts, the first of which surrounds the accuracy of ADHD diagnoses. Misdiagnosis is common, which means many children may be taking medications unnecessarily. The other glaring issue is the dangers of ADHD drugs, which are immense.

Kids taking these powerful drugs may suffer from side effects ranging from sleep problems and loss of appetite to seizures and increased heart rate, which is why alternative treatment options are urgently needed. Fortunately, one age-old option, essential oils, has shown promise in helping to relieve the symptoms of ADHD.

## **What Are Essential Oils?**

Essential oils are concentrated, aromatic plant extracts that have been used for thousands of years for emotional, cosmetic, medical and even spiritual purposes. The term "essential oil" actually comes from the idea of "quintessential oil."

Aristotle believed that in addition to the four physical elements (fire, air, earth and water) there was a fifth element, quintessence.

This was considered to be the "spirit" or life force of the plant, and distillation or evaporation were used to remove the "spirit" for human usage (this is also why distilled alcoholic beverages are referred to as "spirits").<sup>4</sup>

Today, essential oils, which contain complex mixtures of beneficial plant chemicals, are extracted from plants via two primary methods: distillation, which has been used since ancient times; and expression or cold pressing, which is used to extract citrus essential oils.

## **Essential Oils May Improve ADHD Symptoms**

Research by the late Dr. Terry S. Friedmann, a physician who believed in treating the body, mind and spirit as one, showed that vetiver oil (vetiver is a type of Indian grass)

was beneficial for children with ADHD.<sup>5</sup>

When the children inhaled the oil three times a day for 30 days they had improved brain wave patterns and behavior and did better in school. Eighty percent of the children also improved when using cedarwood oil similarly.<sup>6</sup>

Cedarwood essential oil was chosen for the study because it has a high concentration of sesquiterpenes (they make up 50% of its constituents), which improve oxygenation of brain cells. Vetiver is known to calm and balance the nervous system while stimulating the circulatory system, according to Friedmann. He explained:<sup>7</sup>

*"When the essential oil is inhaled, the micro droplets are carried to the limbic system of the brain, which is that portion that is the processing center for reason, emotion and smell, and to the hypothalamus, which is the hormone command center.*

*The essential micro droplets are also carried to the lungs where they enter the circulatory system."*

Improvements in brain activity were revealed via electro-encephalograph (EEG), which measures electrical impulses moving through the brain. This allowed researchers to determine whether the children's brains were functioning primarily in a beta (i.e., alert) state or a theta state (i.e., lack of focus).

Improvements in beta-theta ratios were noted following the use of vetiver essential oil, while parents also noted improvements in symptoms. Friedmann reported:<sup>8</sup>

*"I received several letters from parents of the ADHD children stating that their behavior at home had improved for the better.*

*In several cases, they also stated that school educators informed them that their performance was observed to improve in the classroom. The report cards in some of the subjects had reflected this improvement as well."*

## **Vetiver Essential Oil May Improve Alertness**

A study published in the Journal of Intercultural Ethnopharmacology also showed vetiver essential oil to have particular promise for ADHD.

The animal study revealed changes in brain activity suggestive of increased alertness,<sup>9</sup> while research on human subjects revealed faster reaction times and stimulation of sympathetic nerve activity following inhalation.<sup>10</sup> The former study's researchers wrote:<sup>11</sup>

*"Ultimately, the stimulating effects of vetiver EO [essential oil] might be beneficial for learning and memory processes. In conclusion, the present findings provide information that vetiver EO may be used as a stimulant to improve alertness and task performance."*

## **Rosemary, Lavender and Other Essential Oils**

Beyond vetiver and cedarwood, rosemary essential oil has also shown promise for increasing cognitive performance. When study participants completed tasks in a cubicle diffused with the aroma of rosemary essential oil, their performance improved in both speed and accuracy.<sup>12</sup>

"The unique relationships between plant essential oil aromas and any behavioral impact are potentially due to the complex molecular composition containing a range of alcohols, aldehydes, acids, phenols, esters, ketones and terpenes," the researchers wrote, continuing:<sup>13</sup>

*"[T]his study supports the suggestion that active compounds present in aromas may be absorbed through the nasal or lung mucosa and thus provide the potential for pharmacological activity ...*

*The small size of these lipid-soluble compounds facilitates passage across the blood-brain barrier and consequently they may produce effects at the neuronal level by either acting directly on receptor sites, or indirectly by impacting on enzyme activity."*

Lavender essential oil, on the other hand, is most known for its sedative properties. Some people with ADHD have trouble sleeping, and lavender essential oil has been found to improve sleep.<sup>14</sup> Other essential oils that may relieve various symptoms of ADHD include **peppermint oil** for improved alertness as well as:

- Ylang ylang, which is known for its relaxing properties
- Frankincense, valued for inducing feelings of mental peace and calm
- Bergamot, which may help reduce feelings of stress and anxiety
- Eucalyptus, which may relieve mental exhaustion and stimulate blood flow to the brain
- Lemon, valued for improving mood and preventing emotional outbursts

## **Parents See Dramatic Improvements**

One Wellington, Florida, mother, Tina Sweet, spoke with WPTV to share her experience using essential oils as a treatment for ADHD in her 11-year-old son.

"Every single day I was getting (messages from teachers saying) he won't stay on task. He won't stay focused. He won't stay in his seat. He's talking. He's just up and running around. He just could not stay focused," she said.<sup>15</sup>

After starting him on aromatherapy using essential oils, she said his grades improved from Cs and Ds to As and Bs. Now in fifth grade, the student is in advanced classes and described as a "calm child." She applies essential oils to several body areas each morning and he also wears an essential oil bracelet.

Describing the use of essential oils as "life-changing," Sweet also credits her son's ability to cut back on his ADHD medications to the use of essential oils.

## **How to Use Essential Oils for ADHD**

Inhalation or applying the oils topically to the skin are two effective ways to use essential oils for ADHD. Placing three to four drops of oil into a diffuser is one of the simplest methods, while some of the studies on essential oils for ADHD involved participants inhaling the scent directly from the bottle (for two or three deep breaths) three times a day.

You can also try steam inhalation by placing three to seven drops of essential oil into boiling water, then covering your head with a towel and breathing through your nose (keep your eyes closed and be careful not to get burned).

To use the oils topically, first do a test to be sure they don't irritate your skin (apply one drop to your skin and observe it for one to two hours). Oils should be applied very sparingly to your neck, wrists, bottom of feet and/or behind your ears. You can blend them with a carrier oil, such as coconut oil, as well.

Some people like to pre-mix essential oils with fractionated coconut oil and put the mixture into a rollerball dispenser. This way you can roll on the oils whenever you feel you need them.

## **Other Natural Options for Treating ADHD**

Essential oils may relieve ADHD symptoms, but for best results they should be combined with other natural strategies to relieve ADHD. If your child struggles with behavioral difficulties or other ADHD-like symptoms, whether he or she has been diagnosed with ADHD or not, I strongly recommend addressing the following factors:

- **Too much sugar** – High-sugar foods and starchy carbohydrates lead to excessive insulin release, which can cause falling blood sugar levels, or hypoglycemia. Hypoglycemia, in turn, causes your brain to secrete glutamate in levels that can cause agitation, depression, anger, anxiety and panic attacks.

Besides that, sugar promotes chronic inflammation in your body, and many studies have demonstrated the connection between a high-sugar diet and worsened mental health.

- **Gluten sensitivity** – The evidence suggesting that gluten sensitivity may be at the root of a number of neurological and psychiatric conditions, including ADHD, is quite compelling.

According to a 2011 study, celiac disease is "markedly overrepresented among patients presenting with ADHD,"<sup>16</sup> and a gluten-free diet has been shown to significantly improve behavior in kids. The study went so far as to suggest celiac disease should be added to the ADHD symptom checklist.

- **An unhealthy gut** – As explained by Dr. Natasha Campbell-McBride, a medical doctor with a postgraduate degree in neurology, toxicity in your gut can flow throughout your body and into your brain, where it can cause symptoms of autism, ADHD, dyslexia, dyspraxia, depression, schizophrenia and other mental disorders. Reducing gut inflammation is imperative when addressing mental health issues, so optimizing your child's gut flora is a critical step.

This includes not only avoiding processed, refined foods but also eating traditionally fermented foods. Fermented vegetables are perhaps among the most palatable fermented foods, although many kids enjoy fermented dairy products like kefir, especially if you blend them into healthy smoothies.

If you cannot get your child to eat fermented foods on a regular basis, a high-quality probiotic supplement may be highly beneficial in correcting abnormal gut flora that may contribute to brain dysfunction.

- **Animal-sourced omega-3 deficiency** – Research has shown that kids low in omega-3 fats are significantly more likely to be hyperactive, to struggle with learning disorders and to display behavioral problems. A clinical study published in 2007 also examined the effects of krill oil on adults diagnosed with ADHD.<sup>17</sup>

In that study, patients improved their ability to concentrate by an average of over 60% after taking a daily 500-milligram (mg) dose of krill oil for six months. They also reported a 50% improvement in planning skills and a close to 49% improvement in social skills.

- **Food additives and GMO ingredients** – A number of food additives are thought to worsen ADHD, and many have subsequently been banned in Europe. Potential culprits to avoid include Blue No. 1 and No. 2 food coloring; Green No. 3; Orange B; Red No. 3 and No. 40; Yellow No. 5 and No. 6; and sodium benzoate, a preservative.

Research also shows that glyphosate, the active ingredient in Monsanto's Roundup herbicide, used in large quantities on genetically engineered Roundup Ready crops, limits your body's ability to detoxify foreign chemical compounds. As a result, the damaging effects of those chemicals and environmental toxins are magnified, and may result in a wide variety of diseases, including brain disorders that can affect behavior.

There are many other natural options that have been shown to improve ADHD symptoms as well, including the following. For more information, please consult with a holistic physician who is experienced in treating ADHD using natural methods.

- Address nutrient deficiencies, including vitamin B6, zinc and magnesium
- Exercise and/or active playtime
- Spend time outdoors in nature
- Limit exposure to radiofrequency microwave radiation, cell and portable phones and electro-pollution
- Reduce toxic exposures to pesticides, artificial sweeteners, monosodium glutamate (MSG), cleaning products, detergents, perfumes and more

## Sources and References

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- [Medical News Today January 10, 2017](#)
- [WPTV February 11, 2016](#)
- [Journal of Intercultural Ethnopharmacology January-February 2016](#)
- [1, 2, 3 U.S. CDC, ADHD Data and Statistics](#)
- [4 National Association for Holistic Aromatherapy, Exploring Aromatherapy](#)
- [5, 7, 8 ADHD, Terry S. Friedmann](#)
- [6 Epoch Times November 17, 2015](#)
- [9, 11 Journal of Intercultural Ethnopharmacology January-February 2016](#)
- [10 Biomed Res. 2012;33\(5\):299-308](#)



- <sup>12, 13</sup> Ther Adv Psychopharmacol. 2012 Jun; 2(3): 103–113
- <sup>14</sup> Explore (NY). 2016 Nov - Dec;12(6):427-435
- <sup>15</sup> WPTV February 11, 2016
- <sup>16</sup> Prim Care Companion CNS Disord. 2011; 13(3): PCC.10br01104
- <sup>17</sup> Nutraingredients.usa.com January 5, 2007