

Orange Essential Oil Could Help PTSD

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STORY AT-A-GLANCE

- › Experts suggest nearly 13 million adults in the U.S. suffer from post-traumatic stress disorder (PTSD), a condition which historically has been difficult to treat
- › Based on studies involving mice, scientists at George Washington University have suggested orange essential oil may offer a non-drug option for PTSD sufferers
- › Lab mice inhaling orange essential oil were significantly less likely to exhibit fear-based freezing behavior when exposed to a traumatizing stimulus than mice receiving other treatments

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Just like the name implies, post-traumatic stress disorder (PTSD) is a trauma- and stress-related disorder. It may develop after exposure to any intense, frightening or stress-filled event or ordeal. PTSD is most often linked to a traumatic accident, act of violence, military-combat experience or disaster. Experts suggest nearly 13 million adults in the U.S. suffer from PTSD, a condition which historically has been difficult to treat.¹

Antidepressants such as Effexor, Paxil, Prozac and Zoloft are the most commonly prescribed drugs for PTSD, but their effectiveness varies widely. As with all pharmaceutical drugs, these medications carry with them the potential for harmful side effects. Due to their dangers, as well as the reality that research has shown placebos to

be as effective as some prescription drugs, I would like to draw your attention to research suggesting a potential natural treatment for PTSD.

Specifically, scientists at George Washington University have suggested **orange essential oil** may offer a non-drug option for individuals with PTSD. A 2017 animal study has demonstrated the value of orange essential oil in the reduction of fear and stress associated with the disorder.² Of course, similar studies involving humans would be needed to fully validate this body of work.

That said, this research marks a promising step forward in identifying potential natural remedies for PTSD that could be used alongside other non-drug interventions such as cognitive therapy, exposure therapy and EMDR (eye movement desensitization and reprocessing).

PTSD's Effects on Your Body Can Linger for Years

According to Psychology Today,³ if you suffer from PTSD, you may relive or re-experience aspects of your traumatic event(s) through flashbacks and nightmares long after the original occurrence. PTSD effects are particularly noticeable when you are exposed to anything reminiscent of the original trauma.

The effects of PTSD can linger for months or even years, sometimes profoundly affecting your ability to enjoy a productive, high-quality life. PTSD sufferers often experience one or more of the following symptoms:⁴

Anxiety

Intense emotions such as anger, guilt or sadness

Breathing difficulties

Intrusive memories or flashbacks

Dissociative experiences

Irritability

Emotional numbness

Lack of concentration and focus

As mentioned above, pharmaceutical drugs are a common approach used to treat PTSD, even though the medications may have little or no long-term effect in eliminating or reducing symptoms.

Animal Study Suggests Orange Essential Oil Counteracts PTSD

As noted above, an animal study performed at George Washington University evaluated the impact orange essential oil may have on the symptoms of PTSD.⁵

The influence of orange essential oil was tested using a method called Pavlovian fear conditioning (or classical conditioning), a behavioral paradigm applied to mice as a means of uncovering how fear memories are formed, stored and expressed as a model for PTSD. Medical News Today explains:⁶

"Pavlovian fear conditioning pairs a tone with a negative stimulus, such as a shock to the foot, which provokes fear as a response in the mice. The mice form an associative memory between the tone and the stimulus. When presented with the tone alone, the mice exhibit a fear response and typically freeze. This response diminishes slowly as time goes on.

[Researchers] divided the mice into three groups. The first group of 12 mice was exposed to the audio tone alone, 12 mice received water and fear conditioning, and the remaining 12 mice were exposed to orange essential oil by inhalation 40 minutes prior to and after the fear conditioning."

Notably, mice exposed to orange essential oil were significantly less likely to exhibit fear-based freezing behavior. In fact, the oil-treated mice stopped freezing altogether and earlier than the mice receiving other types of treatment.

Moreover, these mice experienced a significant decrease in the immune cells linked to the biochemical pathways associated with PTSD.⁷ Based on these outcomes,

researchers recognize essential oil as a potential nonpharmaceutical option to help alleviate symptoms of PTSD in mice.

How Might Orange Essential Oil Affect Humans With PTSD?

Cassandra Moshfegh, research assistant in Paul Marvar's laboratory at George Washington University, says additional studies are needed to better understand the specific effects orange essential oil may have on your brain and nervous system, as well as how it may counteract fear and stress associated with PTSD.⁸ About the benefits of orange essential oil, Moshfegh said:⁹

"Relative to pharmaceuticals, essential oils are much more economical and do not have adverse side effects. The orange essential plant oil showed a significant effect on the behavioral response in our study mice. This is promising because it shows that passively inhaling this essential oil could potentially assuage PTSD symptoms in humans."

A 2012 study published in the Journal of Alternative and Complementary Medicine¹⁰ validated sweet orange essential oil for its anxiolytic effects in humans, meaning it was shown to be an effective treatment for soothing anxiety. The study was composed of 40 male volunteers, separated into five groups, who inhaled one of the following:

- Orange essential oil (aromatic test: 2.5, 5 or 10 drops)
- Tea tree essential oil (aromatic control aroma: 2.5 drops)
- Water (non-aromatic control: 2.5 drops)

Immediately after inhalation, each participant was engaged in a model of anxiety involving the Stroop Color and Word Test, a screening tool that requires participants to read a succession of color words or name ink colors as quickly as possible.

Compared to the control groups, participants exposed to orange essential oil during the anxiety-provoking test presented with little to no changes in levels of anxiety or subjective tension during the experiment. The study authors stated:¹¹

"Although more studies are needed to find out the clinical relevance of aromatherapy for anxiety disorders, the present results indicate an acute anxiolytic activity of sweet orange aroma, giving some scientific support to its use as a tranquilizer by aromatherapists."

PTSD Is a Serious Concern Requiring Professional Help

Related to Moshfegh's study, neuroscientist John Bekkers of the Australian National University cautions people to await further research to confirm the connection between aromatherapy and PTSD.¹²

"I wouldn't want to encourage people to depend on aromatherapy. PTSD is a serious problem, and people shouldn't think they just need to smell something to feel better," Bekkers said.

I agree it may be premature to rely only on orange essential oil for help with PTSD. If you have not yet sought a professional opinion for your condition, it's best to start there first, and this will help you to be certain of your diagnosis as well (although it can't hurt to try orange essential oil in the meantime).

That said, it is also worth your time to evaluate your diet and lifestyle choices to see if anything related to them may be contributing to the levels of post-traumatic anxiety and stress you may be experiencing.

Non-Drug Options for Dealing With Anxiety and Depression

When considering your mental health, it's important to recognize your diet and lifestyle as foundational factors that must be optimized if you hope to fully address mental health concerns of any kind, including anxiety and depression. Your body and mind are closely interrelated, so while you may think of your brain as the primary organ in charge of your mental health, your gut may play an equally important, if not more important, role.

In my opinion, the drugs available today to treat depression fail miserably in addressing mental health problems. Often, the side effects of antidepressant and anti-anxiety drugs can be worse than the original complaint, running the gamut from lack of emotions to sexual side effects and irritability, to sleep disturbances.

These powerful medications can even put you at risk for homicide and suicide. Because antidepressants may result in chronic, long-term, worsening depression, you'll want to avoid them unless absolutely necessary, and generally only as a "last resort."

Healthy Diet, Lifestyle Are Crucial for Optimal Mental Health

As with most medical conditions, your diet is a crucial first place to start when looking for ways to improve your health and sense of well-being. Research tells us that the composition of your gut flora not only affects your physical health but also has a significant impact on your brain function and mental state.

As such, your gut microbiome can be quickly impacted by dietary changes — for better or for worse. Research has also revealed a number of other safe and effective ways to address depression that do not involve hazardous drugs. So, if you suffer from an anxiety- or depression-related disorder, please consider addressing the following diet and lifestyle factors before you resort to drugs.

If you are already taking prescription medication for mental health, you can make these changes along with taking the medication until you are able to successfully wean off the drugs — with the help and oversight of your doctor, of course.

Eat real food — Making a commitment to eat whole, organic, naturally occurring food will mean you also choose to ingest less processed foods, added sugar (particularly fructose), grains and genetically engineered (GE) foods.

High-sugar processed foods can create inflammation in your body and cause excessive insulin release, which can trigger hypoglycemia. Hypoglycemia causes your

brain to secrete glutamate in levels that can cause agitation, anger, anxiety, depression and panic attacks.

Moreover, processed foods typically contain damaging polyunsaturated fats (PUFAs), particularly omega-6 fat **linoleic acid**, and many chemical additives that can affect your brain function and mental state. Aspartame and MSG are two I would most definitely seek to avoid. Gluten sensitivity is also a common, hidden cause of depression, so you may want to consider implementing a gluten-free diet.

Research also shows that **glyphosate**, used in large quantities on genetically engineered crops like corn, soy and sugar beets, limits your body's ability to detoxify foreign chemical compounds. As such, the damaging effects of those toxins are magnified, potentially resulting in brain disorders with both behavioral and psychological effects.

Increase your consumption of fermented foods – Reducing gut inflammation is imperative when addressing mental health issues, so optimizing your gut flora is vital. To promote healthy gut flora, increase your consumption of probiotic foods, such as fermented vegetables, kefir, kimchi and natto. If none of these foods is available, consider taking a probiotic supplement daily.

Get adequate vitamin B12 – Several vitamin B deficiencies are capable of producing symptoms of neuropsychiatric disorders. As such, B vitamins can be a valuable adjunct in the treatment of anxiety, attention-deficit disorder, depression and schizophrenia, among other mental illnesses. I recommend you pay attention to vitamins B1, B2, B6, B8 and B9, but most especially B12. One in 4 people are thought to be deficient in vitamin B12.

Optimize your vitamin D levels – **Vitamin D** is very important for your mood. Remember, Seasonal Affective Disorder is a type of depression related to sunshine deficiency, so it would make sense to optimize your vitamin D levels through UV exposure.

Be sure to check your levels via a blood test at least annually to ensure you achieve the therapeutic range of 60 to 80 nanograms per milliliter (ng/ml) year-round. If you cannot get sufficient sun exposure to meet the ideal range, taking an oral vitamin D3 supplement, along with magnesium and vitamin K2, would be advisable.

Get sufficient animal-based omega-3 fats — Since your brain is 60% fat, DHA, an **animal-based omega-3 fat**, along with EPA, is crucial for proper brain function and mental health. **Anchovies**, sardines and krill oil are excellent sources. However, be careful about consuming too much omega-3 fats, as they're still considered PUFAs, which can be problematic when consumed in excess.

Evaluate your salt intake — Believe it or not, sodium deficiency creates symptoms similar to those of depression. Take a pass on processed salt (regular table salt), however, and choose all-natural, unprocessed salt like Himalayan salt, which contains more than 80 different micronutrients.

Get adequate daily exercise — Studies have highlighted a strong connection between aerobic activity and improved mood. There is also growing acceptance that the mind-body connection is very real, which means maintaining good physical health can significantly lower your risk of developing depression in the first place.

Exercising also boosts your levels of dopamine and norepinephrine, which help elevate your mood and counteract the effects of stress.

Get enough sleep — You can have the best diet and exercise program possible, but if you do not get enough **high-quality sleep**, you put yourself at risk for depression and other illnesses. The two are so intricately linked that it is often difficult to tell if depression is causing your sleep problems or if sleep problems are causing or contributing to depression and other mood disorders.

Regardless of the connection, most adults require seven to nine hours of high-quality sleep a night. Children and teenagers require even more.

Emotional Freedom Techniques (EFT) – **EFT** can be very effective in reducing symptoms of anxiety and depression by correcting the bioelectrical short-circuiting that causes your body's reactions. This technique is particularly powerful for treating anxiety and stress because it targets your amygdala and hippocampus, parts of your brain designed to help you decide if something is a legitimate threat.

In the video below, EFT practitioner Julie Schiffman demonstrates how to use EFT to address panic attacks and other anxiety disorders. For serious issues such as PTSD, you will be best served by seeking out a qualified health care professional trained in EFT to help guide you through the process.

Important Considerations When Using Orange Essential Oil

While more research is needed to validate the benefits of orange essential oil for the treatment of PTSD, we already know it can help improve your digestion and is effective for constipation relief. Beyond that, orange essential oil also has been found to inhibit angiogenesis, metastasis and cell death in human colon cancer cells in a 2012 study, prompting researchers to assert that oil from blood oranges "may offer great potential for prevention of cancer."¹³

Orange essential oil is also effective for nourishing dry, irritated and **acne-prone skin** when mixed with a carrier oil and used as a cream or ointment. It also may be used effectively to soothe foot calluses.

When using orange essential oil, it is important to avoid direct sunlight because it may cause phototoxicity. Also, if consumed in large amounts, orange oil may result in vomiting and nausea. No matter where you apply it to your skin, it's always best to dilute orange essential oil with a base oil or lotion. Keep in mind using this oil in high concentrations may cause dermatitis or skin inflammation.

If you are pregnant, epileptic or have other medical problems, you should consult a professional aromatherapy practitioner before using orange essential oil.

Sources and References

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