

Essential Oils – An Effective and Healthy Option to Treat Headaches

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STORY AT-A-GLANCE

- › Headaches account for approximately 8 million doctor visits each year and may affect nearly 90% of people around the world at some point during their lifetime, ranking globally as the third costliest illness
- › There are 24 different major types of headaches; the most common are tension headaches, cluster headaches and migraines
- › Certain essential oils, inhaled or massaged onto your skin, may help reduce the immediate pain of a headache and may be used as a preventive measure to help reduce stress and anxiety, induce sleep and reduce depression
- › Consider tracking your headaches to determine your individual triggers, such as foods, sleep deprivation, blue light and vitamin deficiencies; addressing these may reduce your frequency and intensity

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Headaches are a common complaint, suffered by 45 million Americans each year, or nearly 17% of the population. They also are the most common medical complaints accounting for 8 million doctor visits each year.¹ Less severe, but not less frustrating, are tension headaches, affecting up to 90% of all people at some point during their lifetime.

When tension headaches occur occasionally, or less than 15 times each month, they are called episodic tension headaches. When they occur more than 15 times a month, they are chronic tension headaches. The diagnosis is given without regard to the severity of the headache, dependent only on the number of times you might experience a tension headache each month.²

Severe headache pain places a significant financial and production burden on communities. Using a comprehensive database kept by the U.S. Armed Forces,³ researchers found headaches were the fourth leading cause of emergency room visits and remain an important public health condition, particularly in women during their reproductive years. The researchers also discovered opioids were dispensed in 35% of the emergency room visits for headaches.

According to the Global Burden of Disease study,⁴ **migraines** alone ranked as the sixth greatest cause of lost productivity days worldwide, and collectively headaches ranked third. You may be able to reduce the number of headaches you experience and the time you suffer by using easily incorporated natural options, including essential oils.

What Headache Do You Have?

There may be up to 150 different types of headaches,⁵ but the National Headache Foundation recognizes 24 different major types.⁶ Millions who experience headaches will usually suffer from one of 10 more common types of headaches. The most common are tension, cluster and migraine headaches.⁷

Although some may categorize cluster headaches with migraines, cluster headaches feel and act differently.⁸ Cluster headache triggers are not known, but you may learn to identify your migraine triggers.

By far, the most common type of headache is tension headache. Often triggered by stress, this type of headache isn't throbbing, but feels like a dull ache over your head or tenderness around your neck, forehead, scalp or shoulder muscles. The second most common type is a migraine headache, which may occur with or without an aura.⁹

An aura is a warning symptom that your headache is imminent. These symptoms may be visual disturbances or physical. Within 30 minutes the warning symptoms subside, followed by severe head pain. These primary [types of headaches](#) occur when the pain in your head isn't triggered by something else in your body. You may also suffer from secondary headaches, such as a headache resulting from:

- Sinus infection or an allergic reaction
- Hormonal fluctuations
- Drugs, such as the withdrawal of caffeine or overuse of over-the-counter pain relievers like acetaminophen or ibuprofen

Another type of secondary headache that is short-lived is called an exertional headache. These occur after a short burst of intense exercise, such as running, weightlifting or even sex. Increased blood flow to your head may result in throbbing on both sides of your head and typically last from several minutes up to an hour.

Secondary headaches may also be triggered by conditions that affect the meninges, or covering of your brain, such as head trauma, meningitis or brain hemorrhage.¹⁰ Features that help your doctor distinguish between primary headaches and those triggered by other more medically serious conditions include:¹¹

- Stable pattern of pain over many months or years
- Family history of a similar type of headaches
- Physical examination
- Headaches have identifiable triggers

Essential Oils May Help Soothe the Savage Beast

[Essential oils](#) are created using a large quantity of plant material. The final product is highly concentrated and often must be diluted before use. These oils are biologically active compounds that have therapeutic effects in minute quantities. Quality is important when choosing your essential oils. They must be made from natural plant

products and not produced synthetically in the way perfumes and fragrances are created.

Essential oils have a wide variety of medicinal properties and few side effects, while synthetic fragrances may be toxic and typically contain allergenic chemicals. One of the most important considerations when choosing your oils is to look for a statement of purity.

You are looking for 100% essential oils that are not diluted, mixed or altered with anything else. More often the price will reflect the quality of the product, as pure oils are costly to manufacture. If the product is cheap, it is probably a reflection of a poor-quality product.

Essential oils are the basis for aromatherapy, the practice of using natural oils to affect physical and psychological health. The inhaled aroma from these oils may have a powerful effect on brain function, and thus an effect on physical function. You may have experienced how scent can trigger memories of past experiences, as science has discovered the link between memory and smell.¹² Scent may also drive your behavior and has been linked to physical attraction.¹³

Aromatherapy dates back nearly 6,000 years when essential oils were used for spiritual, physical and therapeutic purposes.¹⁴ Although the mechanism is unclear, some experts believe your sense of smell plays a central role. Breathing in scent molecules stimulates your hippocampus and amygdala, central parts of your brain that store your emotions and memories. Stimulation of these areas may influence your physical and emotional health.

For instance, there is evidence that lavender will stimulate your brain cells in a manner similar to the way sedatives work, thus effectively inducing relaxation.¹⁵ There is also evidence that the molecules from the oils are absorbed into your bloodstream and interact with your hormones and enzymes. Aromatherapy massage is a popular way to use essential oils as the oils are absorbed through your skin, you inhale the scent and you experience the physical therapy of the massage.¹⁶

Your Headache May Respond to These Oils

Just as there are a number of different types of headaches, there are several different essential oils you may consider to help relieve your pain. Pharmaceutical relief usually comes with a price to your health, experienced as short- and long-term side effects.

You may want to consider using essential oils that not only help relieve your pain but come with additional benefits as well. Consider trying each of these oils separately or in combination until you find what best helps relieve your headaches.

Lavender – This essential oil is derived from lavender flowers and is often used to help reduce stress, anxiety and depression,¹⁷ all of which are triggers for tension headaches. There is growing evidence it may also be effective in the treatment of neurological disorders.

In a placebo-controlled clinical trial using lavender in the treatment of migraine headaches,¹⁸ researchers found inhaling lavender for 15 minutes reduced the severity of symptoms and concluded the "inhalation of lavender essential oil may be an effective and safe treatment modality in acute management of migraine headaches."¹⁹

Massage with lavender oil may improve sleep quality, reduce anxiety and promote better concentration.²⁰ Lavender has also been effective in reducing agitation in people suffering from **dementia** and is routinely used by aromatherapists for the treatment of headaches and exhaustion. Interestingly, lavender has also demonstrated improved pain control following surgery.²¹

Frankincense – The root of cluster headaches and migraines is thought to lie in the chemical activity of your brain, nerves and blood innervation, or in the muscles supporting your head and neck. Frankincense oil is a potent treatment for these debilitating headaches, likely because of the anti-inflammatory activity of the bioactive compounds found in the essential oil.²²

Monoterpenes are the compounds found in essential oils that researchers have concluded demonstrate pharmacological potential to act as anti-inflammatory

drugs.²³ Frankincense has 34 different monoterpenes, increasing the potential benefits. Oral frankincense has also been tested on a small sample of individuals who suffered from chronic cluster headaches.²⁴

The results demonstrated evidence of reduced frequency and intensity of headaches in the participants. Keep in mind essential oils should never be ingested if you are in any way unsure about their quality and purity. It's highly recommended you work with a qualified aromatherapist who can guide you on the safe and appropriate use of the oils.

Topical administration is typically recommended and is far safer. You may administer the oil by adding a couple drops to your fingers and massaging your temples until the oil is absorbed.

Rosemary – This oil is traditionally used to improve circulation and in the treatment of headaches. One study using an animal model demonstrated the effectiveness of the oil as a painkiller and an anti-inflammatory agent.²⁵

Another study demonstrated rosemary oil was beneficial in the treatment of opioid withdrawal symptoms, reducing pain and treating insomnia.²⁶ In this way, rosemary may help reduce the pain of your headache and improve your sleep, a common trigger for further headaches.

Chamomile – Chamomile tea and essential oil are calming, used to help you relax, unwind and drift off to sleep more easily. Not surprisingly, the oil that helps you relax has also demonstrated effectiveness in treating anxiety and depression.²⁷

Many tension headaches are triggered by high levels of stress and anxiety, so it follows that you may prevent these by reducing your stress levels. Chamomile also has anti-inflammatory properties and can be used as a topical relief for your headaches.²⁸

Peppermint – This is one of the more popular essential oils as it has a number of health benefits. Applying and massaging it to your temples and forehead helps to

reduce tension headaches.²⁹ The active ingredient, menthol, may relieve migraine headaches when applied to your temples as a gel.³⁰

But the benefits don't stop with headaches. The oil helps eliminate bad breath and kill the germs on your teeth and gums that cause tooth decay, can reduce nail fungal infections, reduce stress, and may help clear your respiratory tract if you suffer from an upper respiratory infection.³¹

Eucalyptus — This oil has traditionally been used to clear your nose and sinuses. If you suffer from headaches as the result of a cold or flu, lightly massaging this oil on your chest may help clear those areas and reduce your headache.

Jasmine — Jasmine has a light scent used by aromatherapists to help balance hormones, for pain relief and to improve mood. Women suffering headaches as the result of fluctuating hormones may find jasmine oil helps to reduce the number and intensity of the headaches they experience.

How to Use Essential Oils

Essential oils may be used a number of different ways. It is important to understand the side effects of the oils you choose before trying them. Some may make your skin more sensitive to sunlight, increasing your risk of burning, or you may experience an allergic reaction. Others should not be used when you are pregnant, so it's important to be familiar with the oil before using it. Once you are familiar with the oil you choose, you may try:

- Inhaling the scent using a room diffuser, or by placing a few drops on a cotton ball close by
- Direct inhalation using an individual inhaler and placing a drop or two in hot water
- Added to bathwater or a hot compress
- Aromatherapy massage where the oil is added to a carrier oil for better absorption into the skin

- Applying the oil directly on your skin with lotion or dressings, being careful to watch for skin reactions

Avoiding Headache Triggers and Other Treatment Options to Consider

Avoiding the things that trigger your headaches may help reduce the number and intensity of the headaches you may experience. In this short news segment, you'll discover some of the more common triggers.

Keeping a log of what you eat, drink or experience prior to your headaches will help you identify your triggers. Some factors you may be able to avoid, while others (such as the weather) may just give you a clue to when you may consider starting essential oil treatment. Other common triggers listed below may be addressed through supplementation or by changing lifestyle habits.

Weather — You can't do too much about the weather, short of moving to a different climate. If your headaches are triggered by warm weather or declining barometric pressure, watch the forecast and consider a preemptive strike using frankincense or lavender oils.

Food — This is a common trigger you have control over. Common food triggers include fermented foods, such as alcohols and aged cheeses; foods with nitrites, such as bacon and other processed meats; foods sweetened with the artificial sweetener aspartame, such as diet soda and other diet drinks; and chocolate.

Hormone fluctuations — The late Ray Peat, a pioneer in bioenergetic medicine, argued that estrogen is a major cause of migraines and headaches, and in 2018, research^{32,33,34} was published that offered fresh support for that view. Researchers found that estrogen sensitizes cells around the trigeminal nerve and connected blood vessels in the head, thereby augmenting pain signals.

Additionally, the study in question not only implicated estrogen as a causative factor in migraines, but also stated that progesterone is protective. This makes sense if estrogen is causative, as progesterone is an estrogen blocker. You can read more about this topic in my article, "[Migraines Strongly Associated With High Estrogen and Low Thyroid.](#)"

Exercise – Headaches that result from exercise are called exertion headaches and occur most frequently in people who exercise infrequently. When you exercise consistently your potential for experiencing an exertional headache is significantly reduced.

Brain freeze – These short-term headaches happen when something cold hits the roof of your mouth. The headache is sudden, sharp and intense. Stop eating the cold food and put something warm in your mouth to counteract the effect.

Sleep deprivation – Lack of quality sleep affects your ability to withstand stress in your life, therefore increasing your risk of tension headaches. Getting less than six hours of quality sleep may increase your potential risk for a greater number of headaches.

To develop good sleep habits consider following the suggestions in my previous article, "[Tips and Tricks to Resolve Common Sleep Problems.](#)" Both chamomile and lavender oils may help you to relax and fall to sleep more easily.

Vitamin deficiency – There is strong scientific evidence that some vitamin deficiencies increase your risk for migraine headaches, including magnesium, CoQ10, riboflavin and vitamin D. Researchers found participants with low [vitamin D](#) levels experienced an increased risk of frequency of headaches.³⁵

Magnesium deficiency may play a role in insulin resistance, diabetes, cardiovascular health and trigger an increased number of migraine headaches. Researchers have linked deficiencies in [CoQ10](#), riboflavin and folate with an increased risk of migraines.³⁶

While essential oils may help reduce the immediate pain, it is important to address the underlying reason for your headaches if they are the result of a vitamin deficiency.

Blue light – If you suffer from migraines, you likely know your pain is worse when you are exposed to light. However, researchers have found that exposure to blue light, one wavelength within the full spectrum of light, would increase pain and activate the trigeminal nerve associated with the pain of migraines.³⁷

Another study found that exposure to green light during a migraine would reduce sensitivity to light and the perception of pain.³⁸ There are glasses that block blue light that may reduce your pain. For green light exposure, you could use Spectro-Chrome glasses or colored filters.

Stress – Emotional stress and distress may cause an imbalance in your physical and emotional health, triggering a higher number of tension headaches.

Emotional Freedom Techniques (EFT) is a simple, easy and effective method of reducing your stress levels and preventing headaches. Greek researchers have demonstrated dramatic results, finding people who learned how to do EFT on their own could reduce the frequency of headaches by 62% and the intensity by 60%.³⁹

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