

# How Essential Oils Work on the Body

Whether at your yoga studio, in the office, or at home - the ambiance produced by essential oils is becoming more prevalent in all environments. Their presence is unmistakable, as they produce a calming aroma and pleasantly moisten the air as they burn calmly in their oil-burning containers.

Their contrast to incense burning is significant - you can immediately tell the difference between a stick of incense burning, leaving a musty trail of smoke and sweet smells, and the diffusion of essential oils, whose scents are released in a completely different fashion, and which are more gentle and therapeutic to the senses. Incense is made primarily from aromatic plant materials, while essential oils are a more pure and complete form of aroma, and have a different effect on the body as they do not produce harsh smoke when heat is applied.

While they are a growing trend in the health and wellness industry, essential oils have been known for their healing powers for centuries, and science has confirmed the many beneficial properties they have on the body.

## **Sensory Receptor Connection**

Essential oils can have an impact on our sensory receptors by entering the body after being applied topically to the skin, inhaled, or, on more rare occasions, ingested. Topical application often has the most powerful effects, although this depends on the oil. This is because once you begin to rub or massage the oils into your skin, you trigger and activate sensory receptors in the body. Receptors are protein molecules, which bind to other types of molecules. Magnesium oil, for example, is most effective when applied topically, though other essential oils may have a more noticeable effect when inhaled. Many oils are diluted before use.

Popular essential oils which can be ingested, for example in the form of a tea, include chamomile, rose, and lavender, while others such as eucalyptus may be used to infuse towels to produce a relaxing effect when placed on the body.

Inhaling essential oils such as peppermint can also help with colds and blocked noses. This is achieved through the olfactory system, which refers to all our organs and cells which are connected to our sense of smell. Inhalation, the nose, and airborne molecules from the diffused oils, all communicate with the brain, lungs, and respiratory system, therefore entering the body through several pathways. Once an external molecule binds to your receptor molecules, signals

are communicated to the brain and are transmitted to your olfactory receptors (also known as the [amygdala](#)) which include your organs, muscles, and emotions.

### **Limbic System and Stress Reduction**

The limbic system is also known as the emotional brain. It plays an extremely important role in the structure of the brain, and the word comes from the Latin *limbus*, which means “border,” as it forms a curve around the [cerebral cortex](#) and [diencephalon](#) areas of the brain. The activities which take place in our limbic system are closely linked with our emotional state, and its functioning also controls our visceral reactions to our environment, whether stressful, exciting, painful, or relaxing.

In the context of essential oils, the limbic system plays a part in our response to sensory information, especially our sense of smell, and this is why inhaling the scent of various essential oils can have a calming and therapeutic effect. In this way, essential oils have been proven to help our body cope and deal with stress and anxiety, because of their relationship they can form with our brain and limbic system. The limbic system is very sensitive to stimuli, and when diffused or applied topically, essential oils connect to receptors which are linked to this part of our brain. The [hypothalamus](#) part of the limbic system is one of the main instigators of these therapeutic effects, as its role is to control our stress responses.

The strong fragrances of essential oils have a direct effect on the limbic system because once they make their way into your bloodstream, they connect with receptors which travel straight to this part of the brain. Essential oils therefore have the potential to maintain brain health, regulate emotional responses, and promote relaxation throughout the body and mind.

Thanks to modern methods and technology, we now have many more ways of diffusing oils and scents, other than using a potpourri or a candle or smoke, which can distort the scent and produce unhealthy carbon. Now, essential oil droplets can be inhaled in their pure form, using nebulizing diffusers, which may also be turned on and off when needed. These nebulizers and diffusers have further enhanced and increase the therapeutic effects of essential oils, allowing us to enjoy them at any time of the day, whether working at our desk, or enjoying a relaxing massage.