

Medicinal Benefits of Linalool

Medicinal Benefits of Linalool include being an anti-inflammatory to reduce swelling and pain, a sedative to relax the central nervous system and relieve stress and anxiety, it is anti-epileptic, and is an insect repellent.

Over 200 different plants contain linalool including lavender, cinnamon, citrus fruits and some strains of cannabis. Linalool comes in two forms: R-linalool (known as linalyl acetate) and S-linalool (known as linalyl alcohol). R-linalool and S-linalool have slightly different properties including different aromas. The more common form, R-linalool, is the one found in lavender. S-linalool is predominant in coriander which gives it the name coriandrol.

In [lavender essential oil](#), linalool comprises between 23.03 to 57.48% of the essential oil.

Linalool Overview

Medicinal Benefits of Linalool as an Anti-inflammatory Agent

An article ([Anti-inflammatory activity of linalool and linalyl acetate constituents of essential oils](#)) in the journal *Phytomedicine* reports on tests of the anti-inflammatory activity of linalool.

The experimenters injected an irritant (carrageenin) into the hind paw of rats. They administered linalool at doses of 25, 50 and 75 mg/kg body weight. They monitored swelling after 1, 3, and 5 hours after carrageenin injection. The results indicated very significant reduction in swelling ($P = 0.008$ or better).

The authors conclude that their results “support the hypothesis that linalool and linalyl acetate play a major role in the anti-inflammatory activity displayed by some essential oils containing them. The present data suggest that all plant species producing a relevant amount of these monoterpene compounds are potential anti-inflammatory agents.”

Medicinal Benefits of Linalool for Sedation

An article ([Inhaled linalool-induced sedation in mice](#)) in the journal *Phytomedicine* tested the sedative properties of linalool.

The experimenters used vaporizers to distribute vapors in the inhalation chamber. Experimental mice were exposed to various concentrations of linalool. Controls were exposed to Tween 80 or no vapor. Mice were placed in the inhalation chamber for 60 minutes, then placed in observation cages. Locomotion, body temperature and sleep time were observed.

The results shows that linalool caused significant reductions in locomotion, reductions in body temperature and increased sleep time. The experiment demonstrated that linalool was able to induce sedation without impairment of motor abilities.

Medicinal Benefits of Linalool for Antimicrobial Effectiveness

An article ([Antimicrobial effect of linalool and \$\alpha\$ -terpineol against periodontopathic and cariogenic bacteria](#)) in the journal *Anaerobe* describes and investigation of linalool and α -terpineol as agents to fight bacteria that cause tooth decay.

Both linalool and α -terpineol exhibit strong antimicrobial activity. In this experiment researchers cultured 15 strains of bacteria related to dental caries (tooth decay). They added varying concentrations of linalool and α -terpineol to the cultures to determine the concentrations needed to stop the

growth of bacteria (Minimum Inhibitory Concentration or MIC) and the concentration needed to kill the bacteria (Minimum Bactericidal Concentration or MBC).

The results indicated that the “MIC and MBC values of linalool or α -terpineol against *mutans streptococci* of the bacterial model system ranged from 0.1 to 3.2 mg/ml and 0.1-1.6 mg/ml, respectively.” This study shows that both linalool or α -terpineol are very effective in fighting bacteria.

Continuing Research on the Medicinal Benefits of Linalool

Several studies are planned to study linalool for its varied properties. A couple of these studies are:

- [Efficacy of Natural Seawater Based Throat Spray in Acute Sore Throat Relief \(FLASH\)](#) Here a throat spray (20 ml) containing hypertonic seawater, vegetable glycerin, natural mint, acacia honey, propolis extract, essential oils of thyme linalool, ravintsara and wintergreen, natural lemon flavor will be used.
- [A Study of the Effects of Lavender Aromatherapy on Preoperative Anxiety in Breast Surgery Patients](#) This study will look at changes in pulse rate and anxiety core using Spielberger State-Trait Anxiety Index questionnaires and on postoperative pain medicine usage.

The medicinal benefits of linalool are well researched and well documented. Additional clinical trials continue to verify the benefits of linalool.