

herbs at a glance

Tea Tree Oil



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This fact sheet provides basic information about tea tree oil—common names, what the science says, potential side effects and cautions, and resources for more information.

Common Names—Australian tea tree oil, tea tree essential oil, melaleuca oil

Latin Name—*Melaleuca alternifolia*

Tea tree oil comes from the leaves of the tea tree and has been used medicinally for centuries by the aboriginal people of Australia. Today, tea tree oil is often used externally as a folk or traditional remedy for a number of conditions including acne, athlete's foot, nail fungus, wounds, and infections; or for lice, oral candidiasis (thrush), cold sores, dandruff, and skin lesions.

Tea tree oil is primarily used topically (applied to the skin).

What the Science Says

- A 2004 NCCAM-funded review examined the ability of tea tree oil to kill bacteria and found that *in vitro* (in a test tube) studies may provide some preliminary evidence for the use of tea tree oil as an adjunctive (additional) treatment for wounds involving difficult-to-treat bacterial infections such as methicillin-resistant *Staphylococcus aureus* (MRSA). However, large, well-designed clinical trials on tea tree oil are lacking, and it remains unclear whether tea tree oil is effective against these emerging resistant strains of bacteria in people.
- Some smaller-scale clinical studies have had positive results for treating athlete's foot, nail fungus, dandruff, and acne, but more large-scale, well-designed clinical studies are needed.
- Tea tree oil may be effective for acne. One clinical trial compared a 5 percent tea tree oil gel to a 5 percent benzoyl peroxide product for the treatment of acne and found that the benzoyl peroxide worked slightly better but that the tea tree oil had fewer side effects.

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Side Effects and Cautions

- Tea tree oil contains varying amounts of 1,8-cineole, a skin irritant. Products with high amounts of this compound may cause skin irritation or contact dermatitis, an allergic reaction, in some individuals. Oxidized tea tree oil (oil that has been exposed to air) may trigger allergies more than fresh tea tree oil.
- Tea tree oil should not be swallowed. Poisonings, mainly in children, have caused drowsiness, disorientation, rash, and ataxia—a loss of muscle control in the arms and legs causing a lack of balance and coordination. One patient went into a coma after drinking half a cup of tea tree oil.
- Topical use of diluted tea tree oil is generally considered safe for most adults. However, one case study did report a young boy who had developed breast growth after using a styling gel and shampoo that contained both lavender oil and tea tree oil.
- Tell all your health care providers about any complementary health practices you use. Give them a full picture of what you do to manage your health. This will help ensure coordinated and safe care. For tips about talking with your health care providers about complementary and alternative medicine, see NCCAM's Time to Talk campaign at nccam.nih.gov/timetotalk/.

Sources

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For More Information

Visit the NCCAM Web site at nccam.nih.gov and view *Using Dietary Supplements Wisely* (nccam.nih.gov/health/supplements/wiseuse.htm).

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