

## ESSENTIAL OILS FROM THE GARDEN

Reported effects of essential oils are based on results that occur when using pure, unadulterated products. The quality of Young Living's pure and potent essential oils has established credibility with eminent scientists and medical professionals who continue to research and validate the effectiveness of these timeless natural wonders.

**BASIL** (*Ocimum basilicum*) Helps relax muscles and soothe away tension. Supports healthy digestion.\* Excellent choice to treat indigestion and nausea – even when due to chemotherapy. Deeply cleansing. Helps with mental fatigue. Good choice during colds or flu. Helps knock out the virus and can fight off fungal infections.

**CLARY SAGE** (*Salvia sclarea*) Related to garden sage but has a different fragrance. Helps with mild mood changes, cramps and edema associated with menstrual cycle; supportive for menopausal women. It rejuvenates tired adrenal glands that are responsible for controlling anxiety levels in the body. Quickens the senses; supports a positive mood.\*

**FENNEL** (*Foeniculum vulgare*) Encourages feelings of balance. Provides pleasant feeling when rubbed on abdomen. Evokes restorative, warming, and motivating feelings; enlivens the senses. Heals bruises, useful for rejuvenating mature skin. Drinking the tea can help increase a mother's milk. Avoid if epileptic. Use cautiously if you have estrogen-associated problems.

**LAVENDER** (*Lavandula angustifolia*) Supports normal skin; helps to replenish and protect it. Maintains healthy lung function; supports the immune system.\* Antiseptic. Calming, relaxing and balancing. Can reduce the stress that causes asthma flare-ups. Among the safest of all essential oils. This antiviral and antifungal treats lung, sinus, vaginal, and skin infections and reduces inflammation and relieves muscle pain and headaches. Hastens the healing of skin cells so can be used on burns, sun-damaged skin, wounds and rashes. Relieves pain of injuries by numbing nerve endings. Can be used to treat oily skin/acne and prevents scarring and stretch marks and slows development of wrinkles. Most effective at relaxing brain waves and reducing stress. Acts as a sedative and antidepressant.

**LEMONGRASS** (*Cymbopogon flexuosus*) Aids normal digestion; calming and relaxing. Supports proper joint and ligament function.\* Reduces the amount of pain sensations that reach the brain. It also numbs nerve endings which dulls the intensity of the pain. Promotes feelings of psychic awareness and purification. It is an insect repellent and attacks fungi by discouraging mold growth.

**MARJORAM** (*Origanum majorana*) Assists in calming the nerves; promotes a calming and relaxing feeling. Helps with occasional muscle soreness following exercise.\*

**MYRTLE** (*Myrtus communis*) May be rubbed on throat area near thyroid to encourage feelings of balance. Elevating, clarifying, and cleansing.

**OREGANO** (*Origanum compactum*) Maintains healthy lung function. Powerful antioxidant; supports the immune system.\* Deeply cleansing. Promotes a feeling of security. Can be used for pain relief and is antiseptic.

**PEPPERMINT** (*Mentha piperita*) Most highly regarded oil for support of normal digestion and gastrointestinal system; helps maintain healthy lung function.\* Helps to relax. Helpful for dry, patchy skin. Purifying, cooling, and refreshing; helps restore mental alertness when experiencing fatigue or drowsiness. Found in liniments to relieve painful muscle spasms and arthritic conditions. Relieves itching of ringworm, herpes blisters, scabies, and poison oak and ivy and stimulates oil production in dry skin and hair. Clears sinus and lung congestion.

**ROMAN CHAMOMILE** (*Chamemelum nobile*) Helps overcome simple restlessness and gently soothes away tension. Supportive to the digestive system and normal liver function.\* Supportive and regenerative to normal skin. Calming and relaxing. Helps relieve inflammation.

**ROSEMARY** (*Rosmarinus officinalis* CT 1,8 cineol) Helps promote blood circulation. Maintains healthy lung function.\* Helps restore mental alertness when experiencing fatigue; improves mental clarity and focus. Rosemary aids in the assimilation of enzymes that break down food in the stomach and helps the lymphatic system eliminate waste from the body. Reduces the discomfort of nausea. Helps get rid of canker sores and other viruses. Add to hair conditioners for dandruff and hair loss and to keep it healthy.

**SPEARMINT** (*Mentha spicata*) Supports healthy respiratory function; aids digestion; balancing to metabolism.\* Promotes feelings of lasting well being.

**THYME** (*Thymus Vulgaris*) Powerful antioxidant. Maintains healthy lung function; supports normal liver, heart, eye, and brain function.\* Supports positive mood; boosts stamina. It increases the production of white blood cells in the body, relieves indigestion, and when used in a liniment, can warm and relax sore muscles. It is an ingredient in numerous gargles, mouthwashes, cough drops and vapor chest rubs. Caution: can irritate the skin and mucous membranes as well as increase blood pressure.

Resources: Scents & Scentsability by Young Living, Aromatherapy for Dummies by Kathi Keville

An *Essential Oil* is the aromatic volatile liquid distilled from leaves, flowers, trees, shrubs, roots, bushes, seeds and the rind of citrus fruit. Steam distillation and expression are the only two methods to obtain EO.

*Aromatherapy* refers to the skilled use of an essential oil obtained from an aromatic plant material to maintain health and well being and to prevent imbalances on the physical, emotional, mental and spiritual levels.

Key Point: *It is the chemistry of the essential oil that determines its therapeutic value.*

### **Important Points:**

Use only genuine 100% therapeutic grade essential oils (avoid synthetic fragrance oils). Be aware of individual sensitivity/allergy. (patch/skin test individual oil if necessary). Photosensitive essential oils: bergamot, lemon, lime, bitter orange, and angelica root. Keep essential oils away from eye area and never drop into the ear. Do not handle contact lenses or rub eyes with essential oils on your fingers. In case of skin irritation, apply vegetable oil or whole milk to wick away the essential oil. Store oils in a dark glass bottle away from direct sun light and heat.

### **Methods of Application:**

**Inhalation** – direct, steam inhalation, diffuser, aroma lamp, room sprays, tissue, cotton balls, humidifier, warming pot with tea light candle or electric. **Facial Steam** – 1 to 3 drops in a bowl of hot water.

**Massage** - Localized or whole body massage, topical or neat application/diluted.

**Bath** - Hand, foot, full bath. Baths are helpful for respiratory, stress, and insomnia. Use 6-8 drops per bath using milk, Epsom salts or gel to disperse into the water. Avoid irritating oils like peppermint, spice and citrus oils. They can irritate delicate skin/tissues. Water and heat increases absorption of the essential oils. Drop Eucalyptus oil on the shower mat for an aromatic steam treatment to open sinus passages.

**Compresses** – local application for headaches, muscle pain and constipation. Castor oil (cold pressed) is a useful carrier for a compress for inflammation, pain and constipation.

**Carrier Oils** include lotion, aloe vera gel, vegetable and nut oils such as grape seed, almond, apricot kernel, jojoba, fractionated coconut oil, evening primrose oil, rose hip seed oil, Young Living V6 and castor oil. Water is considered a carrier but needs an emulsifier such as milk or Epsom salts when used in the bath.

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**Ocimum sanctum L.** FAMILY NAME:

**Lamiaceae** COMMON NAME:

**Holy Basil** \_\_\_\_\_

**EVIDENCE FOR EFFICACY (HUMAN DATA)**

***Clinical Trials***

**PubMed** A herbal eye drop (Ophthacare) containing several herbs used in Ayurveda including Ocimum sanctum was found to be useful in a variety of infective, inflammatory and degenerative ophthalmic disorders when tried in an open prospective multicentre clinical trial. [Biswas 2001](#)

**PubMed** Ocimum sanctum was shown to be helpful in the treatment of mild to moderate noninsulin-dependent diabetes mellitus. [Agrawal 1996](#)

**Foeniculum vulgare** FAMILY NAME:

**Apiaceae/Umbelliferae** COMMON NAME:

**fennel** \_\_\_\_\_

**EVIDENCE FOR EFFICACY (HUMAN DATA)**

***Clinical Trials***

**PubMed** The use of fennel seed oil emulsion eliminated colic in 65% (40/62) of infants in the treatment group according to the Wessel criteria, which was superior to placebo 23.7% (14/59) in decreasing intensity of infantile colic. [Alexandrovich 2003](#)

**PubMed** Treatment of 38 patients with creams containing 1% & 2% of Fennel extract showed Antihirsutism activity with mean values of hair diameter reduction of 7.8%, 18.3% & -0.5% for patients receiving the creams containing 1%, 2% & 0% (placebo) respectively. [Javidnia 2003](#)

**PubMed** The essence of fennel can be used as a safe and effective herbal drug for primary dysmenorrhea, but has a lower potency than mefenamic acid in the dosages used for this study with 60 patients, even though 16.6% withdrew from the study due to fennel's odor. [Namavar 2003](#)

**PubMed** Fragrance inhalation of essential oils, such as pepper oil, estragon oil, fennel oil or grapefruit oil, resulted in 1.5- to 2.5-fold increase in relative sympathetic activity, representing low frequency amplitude of systolic blood pressure. [Haze 2002](#)

**PubMed** 96% of 24 colitis patients given a mix of Taraxacum, Hypericum, Melissa, Calendula & Foeniculum had relief by the 15th day [Chakurski 1981](#)

SCIENTIFIC NAME:

**Lavandula sp.** FAMILY NAME:

**Lamiaceae/Labiatae** COMMON NAME:

**Lavender** \_\_\_\_\_

**EVIDENCE FOR EFFICACY (HUMAN DATA)**

***Clinical Trials***

- PubMed** In a cross-over randomized trial of 70 Chinese older adults with dementia in Hong Kong, *Lavandula angustifolia* (lavender) was found to be effective as an adjunctive therapy in treating agitated behaviors. [Lin 2007](#)
- PubMed** Aromatherapy using topically applied lavender, clary sage, and rose was found to be effective in decreasing the severity of menstrual cramps in 67 female college students who rated their menstrual cramps to be greater than 6 on a 10-point visual analogue scale. [Han 2006](#)
- PubMed** In a quasi-experimental between-groups trial of healthy postpartum mothers - 16 experimental and 20 controls -, results suggest aromatherapy-massage might be an effective intervention to improve physical and mental status and facilitate mother-infant interaction. [Imura 2006](#)
- PubMed** Lavender fragrance had a beneficial effect on insomnia and depression in 42 women college students who complained of insomnia. [Article in Korean] [Lee 2006](#)
- PubMed** The lavender fragrance blend had a significant transient effect of improving mood, making people feel more relaxed, and performing the math computation faster in 11 healthy adults. [Field 2005](#)
- PubMed** A Lavender aromatherapy hand massage program is effective on emotions and aggressive behavior of elderly with dementia of the Alzheimer's type. [Article in Korean] [Lee 2005](#)
- PubMed** Statistical analyses reveal that compared to control, both ambient odors of orange and lavender reduced anxiety and improved mood in 200 patients waiting for dental treatment. [Lehrner 2005](#)
- PubMed** Lavender created an improvement of -2.5 points in Pittsburgh Sleep Quality Index in volunteers with defined insomnia. Women and younger volunteers with a milder insomnia improved more than others. [Lewith 2005](#)
- PubMed** Investigation of exposure to aromas during recess periods with 36 healthy male students shows that lavender is a sedative-type aroma & use during recess periods after accumulation of fatigue seems to prevent deterioration of performance in subsequent work sessions. [Sakamoto 2005](#)
- PubMed** The hypothesis that elderly adults have intact though reduced activity in the central olfactory system was tested using functional magnetic resonance imaging with lavender and spearmint as stimulants. [Wang 2005](#)
- PubMed** It is suggested that lavender oil or one of the main components, linalool may contribute to relieving tension and may be applicable to the treatment of menopausal disorders in human beings. [Yamada 2005](#)
- PubMed** The role of suggestion in studying the effects of ambient odor (lavender, neroli or placebo) on mood (relaxing, stimulating or none) was explored in 90 undergraduate women. [Campenni 2004](#)
- PubMed** In a study of 26 pain subjects, it is suggested that aromatherapy with essential oil of lavender and rosemary, may not elicit a direct analgesic effect but instead may alter affective appraisal of the experience and consequent retrospective evaluation of treatment-related pain. [Gedney 2004](#)
- PubMed** Odour and music therapies did not reduce the pain intensity in 8 patients during vascular wound dressing change, but there was a significant reduction in pain intensity for the lavender therapy and a reduction in pain intensity for the relaxing music therapy after the dressing change. [Kane 2004](#)

- PubMed** A 4 week double-blind, randomized trial with forty-five adult outpatients shows the combination of imipramine and lavandula tincture was more effective than imipramine alone in the management of mild to moderate depression. [Akhondzadeh 2003](#)
- PubMed** It is indicated that the olfactory properties of the essential oils from Lavandula angustifolia and rosemary can produce objective effects on cognitive performance, as well as subjective effects on mood of healthy volunteers. [Moss 2003](#)
- PubMed** The progress and problems of a small study of five patients with chronic wounds, who were treated with lavender and chamomile essential oils is described. [Hartman 2002](#)
- PubMed** Vital signs as well as levels of pain, anxiety, depression, and sense of well-being were measured in 17 cancer hospice patients to humidified essential lavender oil aromatherapy. Results reflected positive, yet small, changes in a range of measures. [Louis 2002](#)
- PubMed** Examination of EEG asymmetry responses to lavender and rosemary aromas in adults and infants reveals that either aroma may induce left frontal EEG shifting in adults and infants who show greater baselines relative to right frontal EEG activation. [Sanders 2002](#)
- PubMed** Study on the effect of the lavender odorant on a Japanese version of Cox and Mackay's stress/arousal adjective checklist for three groups suggests that lavender odorants were associated with reduced mental stress and increased arousal rate. [Motomura 2001](#)
- PubMed** Eighty-five per cent of respondents in hospital believed that there had been an improvement in the work environment of the hospital following the use of the lavender oil burners. [Tysoe 2000](#)
- PubMed** Jasmine had a negative and lavender a positive effect on test performance to identify a set of 12 odors with their correct names in a study with 108 people [Degel 1999](#)
- PubMed** Prostate cancer trials reviewed: monoterpenes (perillyl alcohol), vitamin D analogs, flavones (flavopyridol) and angiogenesis inhibitors [Ripple 1999](#)
- PubMed** Diastolic blood pressure recovery after moderate exercise fell just short of statistical significance in a study with 20 men [Romine 1999](#)
- PubMed** 3 minutes of aromatherapy to 40 adults increased frontal beta power, suggesting increased drowsiness. They also had less depression, were more relaxed and performed math computations faster and more accurately [Diego 1998](#)
- PubMed** Alopecia improved in 44% of 43 patients with scalp massage of essential oils (thyme, rosemary, lavender and cedarwood) in carrier (jojoba and grapeseed) vs. 15% of 41 controls massaged with just carrier [Hay 1998](#)
- PubMed** Normalization of the level of total lipids, ratio of total cholesterol to its alpha-fraction, was seen with lavender oil in 150 patients with chronic bronchitis [Article in Russian] [Siurin 1997](#)
- PubMed** Clinical trials referral resource. Clinical trials with perillyl alcohol. [Zweibel 1997](#)
- PubMed** Clinical development plan: l-perillyl alcohol. [anon 1996](#)
- PubMed** No reduction in perineal discomfort was found by six drops of lavender oil in bath water for 10 days following childbirth but it was considered pleasant to use and there were no side effects [Cornwell 1995](#)

**PubMed** Improvement in mood and perceived levels of anxiety by lavender oil aromatherapy in a study with 122 patients in general intensive care [Dunn 1995](#)

**PubMed** Perineal discomfort following childbirth was alleviated by lavender oil as a bath additive between the 3rd and 5th days in a placebo controlled study with 635 women [Dale 1994](#)

**PubMed** Flight controllers felt less tired, and had normalized REG-wave amplitude and tonic tension of cerebral vessels by aromatherapy with brandy mint, lavender and anise [Article in Russian] [Leshchinskaia 1983](#)

**PubMed** Peak metabolite levels 1-3 hr after taking 800-1600 mg/m<sup>2</sup>/dose, 4 times daily in a phase I study of perillyl alcohol with 15 cancer patients. Pharmacokinetics was unaffected by food. 2 had disease stabilization. Abstract at the American Society of Clinical Oncology [\[ASCO\]](#)

**PubMed** A sponsor of clinical trials, [Endorex](#)

SCIENTIFIC NAME:

**Boswellia serrata** FAMILY NAME:

**Burseraceae** COMMON NAME:

**Frankincense**

**EVIDENCE FOR EFFICACY (HUMAN DATA)**

**Clinical Trials**



Update of prior Cochrane evidence-based reviews of interventions for treating collagenous colitis found that clinical improvement was noted in 44% of patients who received active treatment with *Boswellia serrata* extract compared to 27% of patients who received placebo (n=31; p=0.32). [Chande 2005](#)

**PubMed** In a study conducted in humans to determine its optimal dosing and safety, *Boswellia serrata* extract was found to be a safe and well tolerated drug on oral administration in treatment of inflammatory diseases. [Sharma 2004](#)

**PubMed** 30 patients with osteoarthritis of knee, 15 each receiving active *Boswellia serrata* extract or placebo for eight weeks were assessed. Patients receiving drug treatment reported decrease in knee pain, increased knee flexion and increased walking distance. [Kimmatkar 2003](#)

**PubMed** Out of 83 patients with Crohn's disease 44 treated with H15 and 39 treated with mesalazine. Crohn Disease Activity Index between the status of enrolment and end of therapy after treatment with H15 was reduced by 90 and after therapy with mesalazine by 53 scores in the mean.[Article in German]. [Gerhardt 2001](#)

**PubMed** Twenty patients with chronic colitis were given a preparation of the gum resin of *Boswellia serrata* (900 mg daily divided in three doses for 6 weeks). 18 patients showed an improvement in more than one of the parameters, including stool properties and histopathology. [Gupta 2001](#)

**PubMed** Bronchial asthma was reduced in 70% of 40 patients treated with gum resin at 300 mg thrice daily for 6 weeks in a double-blind trial [Gupta 1998](#)

**PubMed** Usage of NSAIDs declined 5.8% in the *Boswellia* group vs. 3.1% in the placebo group but no other benefit was noted in a study with 78 rheumatoid arthritis out-patients taking 9 tablets (3600 mg) *Boswellia* or placebo daily [Sander 1998](#)

**PubMed** Ulcerative colitis (where leukotrienes have been implicated) was put into remission for 82% of the Boswellia gum resin (350 mg thrice daily) group vs. 75% of the sulfasalazine (1 g thrice daily) group after 6 weeks [Gupta 1997](#)

**PubMed** Osteoarthritic pain and disability were reduced by a mixture of Withania somnifera roots, Boswellia serrata stem, Curcuma longa rhizomes and a zinc complex in a double-blind trial with 42 patients [Kulkarni 1991](#)

SCIENTIFIC NAME:

**Mentha piperita** FAMILY NAME:

**LAMIACEAE** COMMON NAME:

**Mint** \_\_\_\_\_

**EVIDENCE FOR EFFICACY (HUMAN DATA)**

### ***Clinical Trials***

**PubMed** Consumption of a cup of herbal tea steeped with Mentha spicata for 5 days twice a day in 21 female hirsute patients, in the follicular phase of their menstrual cycles shows that spearmint can be an alternative to antiandrogenic treatment for mild hirsutism. [Akdoğru 2007](#)

**PubMed** Seventy-one percent (72/102) of the children preferred the taste of the ranitidine effervescent tablets compared with 29% (30/102) who preferred the syrup. Adverse events like headache, drowsiness, abdominal pain/cramps and bloating/gas were reported in 4 children and 3 adults. [Ameen 2006](#)

**PubMed** Of the 56 female and 54 male children who tasted both samples, 95% (105/110) of children preferred the flavor and taste of the strawberry-flavored lansoprazole delayed-release oral suspension compared with the peppermint-flavored ranitidine oral syrup. [Tolia 2004](#)

**PubMed** The effects on humans inhaling the fragrance of essential oils of basil and peppermint, were examined in terms of a sensory test, a multi-channel skin thermometer study and a portable forehead surface electroencephalographic measurement. [Satoh 2003](#)

**PubMed** Peppermint essential oil inhalations may be used in combined multidrug therapy in patients with disseminated and infiltrative pulmonary tuberculosis. [Article in Russian] [Shkurupii 2002](#)

**PubMed** Estimation of the effects of different polyphenol-containing beverages on Fe absorption from a bread meal in adult human subjects from the erythrocyte incorporation of radio-Fe shows that inhibition by black tea was 79-94% & peppermint tea 84%. [Hurrell 1999](#)

**Matricaria chamomilla** FAMILY NAME:

**Asteraceae/Compositae** COMMON NAME:

**Chamomile** \_\_\_\_\_

**EVIDENCE FOR EFFICACY (HUMAN DATA)**

### ***Clinical Trials***

**PubMed** In a double-blind, randomised trial with 79 children, pectin-chamomile added to the usual rehydration method ended the diarrhea in 3 days for 33/39 compared with 23/40 in the normally treated group [Article in German] [de la Motte 1997](#)

**PubMed** Chamomile mouthwash did not alleviate 5-fluorouracil toxicity in a double-blind, placebo-controlled clinical trial with 164 patients [Fidler 1996](#)

**PubMed** Skin penetration studies of Chamomile flavones apigenin, luteolin and apigenin 7-O-beta-glucoside with 9 healthy, female volunteers for 7 hours [Merfort 1994](#)

**PubMed** Chamomile or hamamelis cream were inferior to hydrocortisone for UV induced skin inflammation [Korting 1993](#)

**PubMed** Kamillosan cream had about the same therapeutic results as 0.25% hydrocortisone and was better than the non-steroidal anti-inflammatory agent, 5% bufexamac, as well as to 0.75% fluocortin butyl ester, in a trial with 161 patients [Article in German] [Aertgeerts 1985](#)

**PubMed** Protection against insects infesting stored chamomile [Article in Czech] [Neubauer 1969](#)

 The purpose of this study is to investigate novel methods from CAM aimed at alleviating chronic pain related to functional bowel disorders in children. To that end, the use of Chamomile teas as a form of botanical therapy will be investigated. [ClinicalTrials.gov](#)

**PDF**<sup>[2]</sup> ([Download](#))

Rosemary (*Rosmarinus officinalis*)  
 Alzheimer's Disease

**Date:** June 30, 2008

**HC#** 020383-355

**Re:** Rosemary Is "Well Endowed" to Prevent and Treat Alzheimer's Disease

Duke JA. Rosemary, the herb of remembrance for Alzheimer's disease. *Altern Complement Ther*. December 2007;287-290.

In 1993, the U.S. Food and Drug Administration (FDA) approved Cognex (tacrine) as the first drug to treat Alzheimer's disease. Cognex inhibits the breakdown of the enzyme acetylcholinesterase (AChE) and the neurotransmitter acetylcholine (ACh), a key factor in stimulatory messaging in both the peripheral and central nervous systems. Aricept® (donepezil hydrochloride), a newer drug approved by the FDA to treat Alzheimer's disease, also is an AChE inhibitor.

Jim Duke, owner, founder, and executive director of the Green Farmacy Garden, in Fulton, Maryland, and an emeritus member of the American Botanical Council Board of Trustees, writes about the herb rosemary (*Rosmarinus officinalis*) and its phytochemical constituents reported to also prevent the breakdown of ACh.

According to the US Department of Agriculture database, rosemary, long known as the "herb of remembrance,"<sup>1</sup> has been reported to contain nearly a dozen aromatic compounds potentially active against AChE. Rosemary belongs to the mint family, Lamiaceae. In general, says Duke, the aromatic species in the mint family appear to be especially "well endowed with natural AChE antagonists as well as anticomplementary, anti-inflammatory, antioxidant, and cyclo-oxygenase-2 (COX-2)-inhibiting phytochemicals."

Recently, pharmaceutical companies have promoted synthetic COX-2 inhibitors for the off-label use of preventing Alzheimer's disease. Rosemary contains the following natural COX-2 inhibitors: apigenin, carvacrol,

eugenol, oleanolic acid, thymol, and ursolic acid. "If a synthetic COX-2 inhibitor could prevent Alzheimer's disease, so could a natural COX-2 inhibitor," writes Duke.

In addition, rosemary contains nearly two dozen antioxidants and another dozen anti-inflammatory compounds. One of the strongest antioxidant substances in the herb is carnosic acid, which has even greater reported antioxidant activity than the widely common synthetic antioxidants butylated hydroxytoluene (BHT) and butylated hydroxyanisole (BHA).<sup>2</sup>

Rosemary also contains ferulic acid, which may be another preventive agent for Alzheimer's disease. An in vivo study found that mice who consumed ferulic acid and then were injected with beta-Amyloid peptide (Abeta), the major constituent of the senile plaques observed in the brains of Alzheimer's disease patients and thought to be central in the pathogenesis of the disease, retained more cognitive function than control mice. <sup>3</sup>

Duke also mentions ginkgo (*Ginkgo biloba*) as another possible herbal alternative to Aricept for the treatment of Alzheimer's disease. Ginkgolides have antioxidant, neuroprotective, and cholinergic activities relevant to the disease. The therapeutic efficacy of ginkgo extracts in Alzheimer's disease in placebo-controlled clinical trials has reportedly been similar to that of drugs such as tacrine or donepezil, and importantly, with minimal unwanted side effects.<sup>4</sup>

To conclude, Duke writes that "rosemary shampoo, rosemary tea (and aromatic mint teas), and rosemary in skin lotions and in bath water are safe and pleasant ways to reduce the risk of Alzheimer's disease." He also recommends cholinergic foods, such as "choline chowder" (for which he provides a recipe), followed by an anti-AChE herbal tea, also loaded with antioxidants and COX-2 inhibitors, to retard dementia.

—Shari Henson

#### References

- 1Duke JA. *The Green Pharmacy*. Emmaus, PA: Rodale Press; 1997.
- 2Doolaee EH, Raes K, Smet K, et al. Characterization of two unknown compounds in methanol extracts of rosemary oil. *J Agric Food Chem*. 2007;55:7283-7287.
- 3Yan JJ, Cho JY, Kim HS, et al. Protection against beta-amyloid peptide toxicity in vivo with long-term administration of ferulic acid. *Br J Pharmacol*. 2001 May;133(1):89-96.
- 4Kennedy DO, Scholey AB. The psychopharmacology of European herbs with cognition-enhancing properties. *Curr Pharm Des*. 2006;12:4613-4623.

***Mentha spicata* L.** FAMILY NAME:

**Lamiaceae** COMMON NAME:

**spearmint** \_\_\_\_\_

#### **EVIDENCE FOR EFFICACY (HUMAN DATA)**

#### ***Clinical Trials***

**PubMed** After treatment with spearmint teas, there was a significant decrease in free testosterone and increase in luteinizing hormone, follicle-stimulating hormone and estradiol in 21 female hirsute patients, 12 with polycystic ovary syndrome and 9 with idiopathic hirsutism. [Akdoğru, 2007](#)

**PubMed** Effectiveness of Carmint containing *Melissa officinalis*, *Mentha spicata*, & *Coriandrum sativum* was evaluated in 32 irritable bowel syndrome patients with abdominal pain/discomfort & it was found that severity & frequency of abdominal pain/discomfort were lower in Carmint group compared to placebo. [Vejdani 2006](#)

**Thymus vulgaris** FAMILY NAME:

**Lamiaceae/Labiatae** COMMON NAME:

**thyme**

## EVIDENCE FOR EFFICACY (HUMAN DATA)

### *Clinical Trials*

- PubMed** A clinical study demonstrated that fixed combination of thyme fluid extract & primrose root extract & combination of thyme fluid extract & primrose root tincture were well tolerated in patients & showed comparable results in their efficacy, e.g. decrease of bronchitis & relief of symptoms. [Gruenwald 2006](#)
- PubMed** Prospective double blind RCT of efficacy and tolerability of fluid extract combination of thyme and ivy leaves and matched placebo in patients with acute bronchitis with productive cough found oral treatment of acute bronchitis with thyme-ivy combination for c. 11 days was superior to placebo. [Kemmerich 2006](#)
- PubMed** In an open clinical trial, combined herbal cough syrup (containing dry ivy leaf extract, decoction of thyme and aniseed, and mucilage of marshmallow root) was found to alleviate cough associated with common cold, bronchitis or respiratory tract diseases with formation of mucus. . [Buechi 2005](#)
- PubMed** The fixed combination of thyme fluid extract & primrose root tincture was well tolerated & resulted in clinically relevant & more pronounced decrease of bronchitis symptoms & in shortening the duration of acute bronchitis when compared to placebo. [Gruenwald 2005](#)
- PubMed** A controlled trial of aromatherapy with lavender oil, thyme oil & unscented grapeseed oil found no support for the use of a purely olfactory form of aromatherapy to decrease agitation in severely demented patients. [Snow 2004](#)
- PubMed** Saliva Mutans streptococci was decreased by 1% chlorhexidine/thymol-containing varnish dental treatment (Cervitec) in a study of 110 healthy children [Tvetman 1999](#)
- PubMed** Rubbing oils (thyme, rosemary, lavender, and cedarwood) into the scalp helped with alopecia for 44% of patients vs. 15% of controls in a 7 month, double blind study of 86 patients [Hay 1998](#)

## Peppermint

Mentha piperita

Principal Proposed Uses

- Oral: [Dyspepsia](#), [Irritable Bowel Syndrome](#), Other Forms of Spasms in the Digestive Tract

Other Proposed Uses

- Inhaled (Aromatherapy): Respiratory Congestion, [Nausea](#)
- Topical: [Tension Headaches](#)
- Oral: [Gallstones](#)

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Peppermint is a relative of numerous wild mint plants, deliberately bred in the late 1600s in England to become the delightful tasting plant so well known today. It is widely used as a beverage tea and as a flavoring or scent in a wide variety of products.

Peppermint tea also has a long history of medicinal use, primarily as a digestive aid and for the symptomatic treatment of cough, colds, and fever. Peppermint oil is used for chest congestion (Vicks VapoRub), as a local anesthetic (Solarcaine, Ben-Gay), and most recently in the treatment of irritable bowel disease, also known as spastic colon.

## What Is Peppermint Used for Today?

Germany's Commission E authorizes the use of oral peppermint oil for treating colicky pain in the digestive tract. Some preliminary evidence suggests that peppermint oil may indeed be effective for this purpose.

The active ingredient of peppermint oil for this purpose is thought to be menthol. This substance relaxes the muscles of the small intestine in dilutions as low as 1:20,000, and has been found to counter the effect of drugs that cause intestinal spasm.<sup>3-5</sup> Peppermint oil may also be helpful for [dyspepsia](#) (minor indigestion), as well as pain caused by medical examinations of the colon and stomach.

One study found that peppermint oil reduced pain after [surgery](#) (C-section), in part by reducing pain related to intestinal gas.<sup>28</sup> (Intestinal gas is a common problem in the hours or days after major surgery.)

Oral peppermint oil has also shown some promise for helping to dissolve [gallstones](#),<sup>1</sup> but it is far from a proven treatment for this condition.

Peppermint oil is also used in another way: as [aromatherapy](#). This means that it is inhaled, often by adding it to a humidifier. The Commission E has authorized inhaled peppermint oil for relief of mucus congestion of the lungs and sinuses; however, there is only weak supporting evidence for this use.<sup>21,22</sup> Even weaker evidence hints that inhaled peppermint oil might relieve postsurgical [nausea](#).<sup>2</sup>

Similarly weak evidence hints that peppermint oil, applied to the forehead, might relieve [tension headaches](#).<sup>23,24</sup>

## What Is the Scientific Evidence for Peppermint?

### Irritable Bowel Syndrome

There have been a total of 12 double-blind, placebo-controlled studies of peppermint oil for irritable bowel syndrome.<sup>31</sup> However, all of these studies were small, and most were poorly designed and/or reported.<sup>25</sup>

Of these, eight found benefit, and four did not. In the largest of these studies, 110 people with irritable bowel syndrome were given either enteric-coated peppermint oil (187 mg) or placebo three to four times daily, 15 to 30 minutes before meals, for 4 weeks.<sup>8</sup> The results in the 101 individuals who completed the trial showed significant improvements in abdominal pain and bloating, stool frequency, and flatulence.

### Other Forms of Spasm in the Digestive Tract

A barium enema involves introducing a solution containing the metal barium into the lower intestines. It commonly causes intestinal pain and spasm. A double-blind study of 141 individuals found that adding peppermint oil to the barium reduced the amount of spasming that occurred.<sup>14</sup> Benefits were also seen in a large study conducted by different researchers.<sup>29</sup>

Another study found that peppermint oil reduced spasm in the stomach during a procedure called upper endoscopy.<sup>27</sup>

## Dyspepsia (Minor Indigestion)

Peppermint oil is often used in combination with other essential oils to treat [minor indigestion](#).

A double-blind, placebo-controlled study including 39 individuals found that an enteric-coated peppermint-caraway oil combination taken three times daily for 4 weeks significantly reduced dyspepsia pain as compared to placebo.<sup>15</sup> Of the treatment group, 63.2% was pain free after 4 weeks, compared to 25% of the placebo group.

Results from a double-blind, comparative study including 118 individuals suggest that the combination of peppermint and caraway oil is comparably effective to the no-longer-available drug cisapride.<sup>16</sup> After 4 weeks, the herbal combination reduced dyspepsia pain by 69.7%, whereas the conventional treatment reduced pain by 70.2%.

A preparation of peppermint, caraway, fennel, and wormwood oils was compared to the drug metoclopramide in another double-blind study enrolling 60 individuals.<sup>17</sup> After 7 days, 43.3% of the treatment group was pain free compared to 13.3% of the metoclopramide group.

## Dosage

The proper dosage of peppermint oil when treating irritable bowel syndrome is 0.2 to 0.4 ml three times a day of an enteric-coated capsule. The capsule has to be enteric-coated to prevent stomach distress.

## Safety Issues

At the normal dosage, enteric-coated peppermint oil is believed to be reasonably safe in healthy adults.<sup>18,19</sup> However, case reports and one study in rats hint that peppermint might reduce [male fertility](#).<sup>30</sup> The species *Mentha spicata* may be more problematic in this regard than the more common *Mentha piperita*.

Excessive doses peppermint oil can be toxic, causing kidney failure and even death. Very high intake of peppermint oil can also cause nausea, loss of appetite, heart problems, loss of balance, and other nervous system problems.

Safety in young children, pregnant or nursing women, or those with severe liver or kidney disease has not been established. In particular, peppermint can cause jaundice in newborn babies, so don't try to use it for colic.

Use of peppermint oil may increase levels of the drug cyclosporine in the body.<sup>26</sup> If you are taking cyclosporine, and wish to take peppermint oil, notify your physician in advance, so that your blood levels of cyclosporine can be monitored and your dose adjusted if necessary. Conversely, if you are already taking both peppermint oil and cyclosporine, do not stop taking the peppermint without informing your physician. When you stop peppermint, your cyclosporine levels may fall.

## Interactions You Should Know About

If you are taking [cyclosporine](#), do not use peppermint oil (or stop using it) except in consultation with your physician.

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seek the advice of your physician or other qualified health provider prior to starting any new treatment or with any questions you may have regarding a medical condition.

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## ***Boswellia***

Boswellia serrata

Alternate Names

- Frankincense

Principal Proposed Uses

- [Asthma](#), [Osteoarthritis](#), [Rheumatoid Arthritis](#)

Other Proposed Uses

- [Bursitis](#), [Crohn's Disease](#), [Tendonitis](#), [Ulcerative Colitis](#)

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[What Is the Scientific Evidence for Boswellia?](#)

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The gummy resin of the boswellia tree has a long history of use in Indian herbal medicine as a treatment for arthritis, bursitis, respiratory diseases, and diarrhea.

### ***What Is Boswellia Used for Today?***

Growing evidence suggests that boswellia has anti-inflammatory effects. <sup>5-8</sup> On this basis, the herb has been tried for a number of conditions in which inflammation is involved, including painful conditions such as [bursitis](#), [osteoarthritis](#), [rheumatoid arthritis](#), and [tendonitis](#). For the same reason, it has also been tried for [asthma](#) and inflammatory bowel disease ( [ulcerative colitis](#) or [Crohn's Disease](#)).

In addition, extracts of boswellia have been studied as an aid to standard care for malignant glioma (a type of incurable brain tumor). <sup>9-11</sup> Use of boswellia appears to decrease symptoms, probably by decreasing inflammation in the brain (as well as through other mechanisms.) However, this has not been proven, and individuals with cancer should not use boswellia (or any other herb or supplement) except on physician's advice.

### ***What Is the Scientific Evidence for Boswellia?***

#### **Rheumatoid Arthritis**

According to a review of unpublished studies, preliminary [double-blind trials](#) have found boswellia effective in relieving the symptoms of [rheumatoid arthritis](#). <sup>2</sup> Two placebo-controlled studies, involving a total of 81 people with rheumatoid arthritis, reportedly found significant reductions in swelling and pain over the course of 3 months. In addition, a comparative study of 60 people over 6 months found that boswellia extract produced symptomatic benefits comparable to oral gold therapy. However, this review was rather sketchy on details.

A more recent double-blind, placebo-controlled study that enrolled 78 people with rheumatoid arthritis found no benefit. <sup>3</sup> However, about half of the patients dropped out, which seriously diminishes the significance of the results.

## Asthma

A 6-week, double-blind, placebo-controlled study of 80 people with relatively mild [asthma](#) found that treatment with boswellia at a dose of 300 mg 3 times daily reduced the frequency of asthma attacks and improved objective measurements of breathing capacity. <sup>4</sup>

## Osteoarthritis

In a double-blind study of 30 people with [osteoarthritis](#) of the knee, researchers compared boswellia against placebo. <sup>13</sup> Participants received either boswellia or placebo for 8 weeks, and were then switched over to the opposite treatment for an additional 8 weeks. The results showed significantly greater improvement in knee pain, knee mobility, and walking distance with boswellia compared to placebo.

## Inflammatory Bowel Disease

An 8-week, double-blind, placebo-controlled trial of 102 people with [Crohn's disease](#) compared a standardized boswellia extract against the drug mesalazine. <sup>12</sup> Participants taking boswellia fared at least as well as those taking mesalazine, according to a standard score of Crohn's disease severity. A small, poorly designed trial found some indications that boswellia might also offer benefit in [ulcerative colitis](#). <sup>4</sup>

## Dosage

A typical dose of boswellia is 300 to 400 mg 3 times a day of an extract standardized to contain 37.5% boswellic acids. Some studies have used dosages as high as 1200 mg 3 times daily.

## Safety Issues

In clinical trials of pharmaceutical grade standardized boswellia extract, no serious side effects have been reported. Crude herb preparations, however, may not be as safe as the specially manufactured extract. Safety in young children, pregnant or nursing women, or individuals with severe liver or kidney disease has not been established.

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