

peppermint essential oil:

Profile of a Powerful Plant

Are Christmas candy canes still lingering around your house? Many of us are still enjoying these stocking stuffers that have the sweet, fresh peppermint taste that is such a part of the holiday time. Mention peppermint, and many people instantly think of candy canes or those delightful after-dinner mints. But peppermint is, as many of you know, a powerful essential oil.

A cyber-stroll through the National Library of Medicine (PubMed) turns up just under one hundred abstracts of scientific studies on peppermint essential oil. These studies resulted in fascinating conclusions about this remarkable oil.

Surprising Effects

Peppermint oil applied topically for tension-type headaches was studied in a randomized, placebo-controlled, double-blind study at Christian Albrechts University in Germany (Badia et al., 1990). The conclusion? “Peppermint oil seems to be a harmless and effective treatment for tension-type headaches.” University of Kiel researchers also found that peppermint oil and a mixture of peppermint and eucalyptus oil reduced headaches.¹ The same study showed peppermint to be effective in reducing emotional irritation, depression, and apathy (inactivity).

Research published in 2001 in the *Journal of Sport and Exercise Psychology* found that inhalation of peppermint increased athletic performance in humans. Volunteer runners finished the 400-meter dash faster, had significant strength (determined by handgrip), and could complete more pushups after inhaling peppermint oil (Raudenbush, 2001).

Peppermint at School and at the Office

Brainiacs take heart—peppermint is not just for the athletically inclined. A 2003 study conducted at Wheeling Jesuit University found that peppermint



improved clerical productivity.² Participants showed marked improvement in a card-sorting task as well as in typing accuracy and typing speed. The researchers concluded: “These results suggest peppermint odor may promote a general arousal of attention, so participants stay focused on their task and increase performance.”

Glutathione Declines Reversed

A 2003 study published in the *Journal of Radiation Research*³ found that ingesting peppermint oil reversed declines in glutathione caused by treatment with gamma radiation. Glutathione is the most important antioxidant and detoxification enzyme in the liver. In this study, peppermint essential oil reduced levels of

oxidized (or rancid) fats in the tissues caused by radiation damage. (While you will not encounter this kind of radiation in normal life, the study showed that peppermint had antioxidant-protecting properties.) A 2004 follow-up study in *Phytotherapy Research*⁶ confirmed these findings.

Don't Forget the Tummy!

The word "dyspeptic" covers a multitude of gastrointestinal complaints. Researchers at Epsom General Hospital in England wrote: "Peppermint (*Mentha piperita*) is usually taken after a meal for its ability to reduce indigestion and colonic spasms by reducing the gastrolic reflex."⁵ But, they continued, "Less well recognized is peppermint's potential role in the management of numerous other medical conditions including certain procedures, e.g., colonoscopy." At least two studies support this use of peppermint's innate ability to control spasms.^{6,7}

For a small child who may have a tummy ache, an expectant mom experiencing morning sickness, or a person with "non-ulcer dyspepsia," peppermint is a traditional help. Researchers at the University of Exeter's Department of Complementary Medicine looked at seventeen clinical trials, including nine studies involving peppermint and caraway as constituents of herbal medicine products, and reported that 60-95 percent of patients reported improvements in symptoms.⁸

Does peppermint kill germs? Absolutely.^{9,10}

Peppermint has antioxidant properties to boot. And peppermint oil has been tested for safety in one study which noted only "isolated clinical cases of irritation and/or sensitization" and concluded "peppermint oil was not a sensitizer when tested using maximization protocol."¹¹

Celebrate the many benefits of this wonderful, invigorating essential oil!

Notes

- ¹ Gobel H, et al., "Effect of peppermint and eucalyptus oil preparations on neurophysiological and experimental algometric headache parameters," *Cephalalgia*. 1994 June;14(3):228-34; discussion 182.
- ² Barker S, Raudenbush B, et al., "Improved performance on clerical tasks associated with administration of peppermint odor," *Percept Mot Skills*. 2003 Dec;97(3 Pt 1):1007-10.
- ³ Samarth RM, Kumar A, "Radioprotection of Swiss albino mice by plant extract *Mentha piperita* (Linn.)," *J Radiat Res (Tokyo)*. 2003 Jun;44(2):101-9.
- ⁴ Samarth RM, Goyal PK, Kumar A, "Protection of Swiss albino mice against whole-body gamma irradiation by *Mentha piperita* (Linn.)," *Phytother Res*. 2004 Jul;18(7):546-50.
- ⁵ Spirling LI, Daniels IR, "Botanical perspectives on health peppermint: more than just an after-dinner mint," *J R Soc Health*. 2001 Mar;121(1):62-3.
- ⁶ Sparks MJ, et al., "Does peppermint oil relieve spasm during barium enema?" *Br J Radiol*. 1995 Aug;68(812):841-3.
- ⁷ Liu JH, et al., "Enteric-coated peppermint-oil capsules in the treatment of irritable bowel syndrome: a prospective, randomized trial," *J Gastroenterol*. 1997 Dec;32(6):765-8.
- ⁸ Thompson Coon J, Ernst E, "Systematic review: herbal medicinal products for non-ulcer dyspepsia," *Ailment Pharmacol Ther*. 2002 Oct;16(10):1689-99f
- ⁹ Mimica-Dukic N, et al., "Antimicrobial and antioxidant activities of three *Mentha* specie essential oils," *Planta Med*. 2003 May;69(5):413-9.
- ¹⁰ Schuhmacher A, et al., "Virucidal effect of peppermint oil on the enveloped viruses herpes simplex virus type 1 and type 2 in vitro," *Phytomedicine*. 2003;10(6-7):504-10.
- ¹¹ Nair B, "Final report on the safety assessment of *Mentha Piperita* (Peppermint) Oil, *Mentha Piperita* (Peppermint) Leaf Extract, *Mentha Piperita* (Peppermint) Leaf, and *Mentha Piperita* (Peppermint) Leaf Water," . 2001;20 Suppl 3:61-73.

Have you tried the pungently fragrant essential oil of peppermint? This refreshing and soothing essential oil has a number of uses!

- Known for generations to soothe upset or queasy tummies, a drop or so of peppermint in water or tea aids digestion.
- Peppermint feels warm and wonderful on an exercise-stressed muscle or joint.
- Feeling sluggish and sleepy at work? A study showed that inhaling peppermint oil increased mental accuracy by 28 percent.
- Alan Hirsh, M.D., found that peppermint stimulated the brain's satiety center and was useful in curbing appetite.

Get that "candy cane" feeling year-round with the refreshing scent of pure peppermint oil.

