HERBCLIP

FILE: • Essential oils
• Aromatherapy
• Gastrointestinal disorders
• Peppermint (*Mentha* x *piperata*)
• Fennel (*Foeniculum vulgare*)

DATE: September 13, 1997 HC 091377

RE: Peppermint Fennel Oils for Gastric Relief

Holt, Stephen, Igor Muntyan, Larisa Likver. Essential Oils Smooth Gastric Functioning. *Alternative & Complementary Therapies*, January/February 1996, pp. 46-50.

This article discusses the clinically tested ability of essential oils (particularly peppermint, *Menthia* x *piperita*, and fennel, *Foeniculum vulgare*) to soothe the digestive system and combat functional gastrointestinal diseases such as irritable bowel syndrome.

Fennel is said in herbal circles to possess stomachic, carminative, pectoral, diuretic, diaphoretic and aromatic medicinal properties. The author states that the active components of fennel essential oil are "at least as effective as the qualities of peppermint oil," and adds that it is reputed to be an excellent obesity remedy, due to a supposed appetite suppressing effect (there is little if any scientific research that documents this assertion).

Peppermint possesses aromatic, stimulant, stomachic, carminative, rubefacient, and short-lived local anesthetic effects. As well, in Russia and Eastern Europe peppermint products are widely used to treat various manifestations of cardiovascular disease.

The carminative effects of peppermint and fennel essential oils have been clinically linked to expulsion of intestinal gas, hypothetically brought about by breakdown of excess intestinal foam in the gastrointestinal lumen. The oils also relax and mildly anesthetize the gut, which supports the belief that gastric bloating is caused by impaired motor function or spasming of the GI tract. The anesthetic effect occurs "as a consequence of a change in the membranes of sensory cells;" the smooth-muscle-relaxant effect is thought to be related to "inhibition of cellular calcium entry (calcium channel blocking)." Studies show that oral administration of peppermint oil results in decreased lower esophageal sphincter pressure; the effect occurs within 1-15 minutes

but lasts only 5 minutes. Delayed-release preparations significantly prolong the pharmacologic effects.

The author draws upon the book *The Scientific Validation of Herbal Medicine*, by Dr. D. B. Mowrey, in which essential oils are said to aid digestion by stimulating "contractile activity in the gall-bladder" and promoting the flow of bile, and by inhibiting microorganisms that may cause digestive problems, including "influenza A virus, *Herpes simplex*, mumps virus, *Streptoccus pyogenes, Staphylococcus aureus, Pseudomonas aeruginosa*, and *Candida albicans*." The author recommends that research be done on whether *Helicobacter pylori*, a microorganism that is the key focus of current treatments to cure peptic ulcer disease, may be suppressed by peppermint.

Clinical trials conducted in 1979 and 1984 support peppermint's use for the relief of irritable bowel syndrome symptoms (The German Commission E approves the use of peppermint oil—enteric coated—to treat irritable colon). Other possible clinical applications under consideration are relief of abdominal pain and colic, and colon spasming induced by enemas. Peppermint and fennel essential oils are very widely used as food additives. There are no known significant toxicities when the oils are taken in recommended therapeutic doses. —Betsy Levy

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