



OIL OF OREGANO

SOURCE OF ANTIOXIDANTS

60 SOFTGELS | NPN80071121 | ORG060-CN

Oil of Oregano is a powerful plant extract with antimicrobial properties, as well as important antioxidant and intestinal cleansing benefits. Similar to rosemary, garlic, ginger, turmeric, and other common herbs and spices, oregano is a familiar culinary ingredient whose potential beneficial role can be exploited when its essential components are isolated and provided in concentrated doses. The oil extracts of Mediterranean oregano (*Origanum vulgare*) and other varieties have a history in botanical medicine for efficacy in the gastrointestinal tract as antimicrobial, antifungal, and antiparasitic agents.

ANTIMICROBIAL

The principal phenolic compounds in oregano—carvacrol [2-methyl-5-(1-methylethyl)phenol] and thymol (2-isopropyl-5-methylphenol)—are well known for their individual antimicrobial properties, and when provided together as oregano oil, they have an additive effect.^{1,2} They have both been shown to be biocidal against strains of *Staphylococcus*, *Listeria*, *Salmonella*, and *Clostridium*.³ A study of two strains of *Staphylococcus* microorganisms in vitro showed oil of oregano to be highly effective in attenuating the growth of the *Staph* biofilm. The researchers proposed that the hydrophobic properties of carvacrol and thymol enabled them to interact with the lipid bilayer of bacterial cell membranes, “causing loss of integrity and leakage of cellular material such as ions, ATP and nucleic acids.”¹ In the presence of these compounds, bacterial cells grew as looser colonies and the amount of biofilm was reduced in direct proportion to the dose of oregano extracts.

The activity of oil of oregano at the subcellular level is exhibited by a study that demonstrated disruption of the cell membrane, alterations in intracellular pH, and ion leakage in *Staph* and *Pseudomonas* organisms exposed to oregano oil.⁴ Other studies support the efficacy of oil of oregano against multiple strains of *Staph*, showing oregano to be the most powerful antimicrobial when compared to several other essential oils, including rosemary, basil, and mint.⁵ The carvacrol content of the oregano tested was 43.6%, compared to 78.9% for lavender. However, despite the lower carvacrol content, oregano had far more effective antimicrobial activity than lavender, suggesting a synergistic role for oregano’s other chemical constituents. The antimicrobial properties of oregano’s principal compounds have proven effective, even against two strains of methicillin-resistant staphylococci—a key finding, with MRSA and other antibiotic-resistant organisms being a major cause of nosocomial infection as well as infection via sub-sanitary conditions in everyday encounters, such as at gyms.⁶ Additionally, oil of oregano was shown to be effective against the enterobacterium *Escherichia coli*, and in contrast to other essential oils tested (clove, thyme, and cinnamon), oregano oil had the least disruptive impact on healthy intestinal cells.³

ANTIFUNGAL

The antifungal properties of oregano oil and its two primary constituents has been shown in vitro and in vivo. Compared to other essential oils tested (mint, sage, and lavender), oregano oil had the highest antifungal activity, and it was effective even when diluted to one-tenth the strength of the

other oils.⁷ Other studies have shown oregano oil to be highly effective against *Candida albicans*, a common fungal infection of the mouth, GI tract, and vagina.⁸ In an animal model of oral candida infection, treatment with carvacrol resulted in a nearly 95% reduction in colony-forming units, with just 3 of 7 infected rats still testing positive for *Candida*.⁹ The authors suggested that the efficacy of these essential oils is strong enough to warrant their use in combination with more conventional antifungal drugs in order to reduce the amount of the drugs required, thereby limiting or preventing altogether unpleasant or toxic side-effects. Carvacrol was also shown to be highly effective against vaginal candidiasis in an animal model. Treatment with the compound for 7 consecutive days eradicated the fungal overgrowth in 7 of 9 infected rats and significantly reduced the number of colony forming units in the remaining 2 rats by 98%.¹⁰ The same study demonstrated the use of carvacrol as a potent prophylactic against vaginal candidiasis, suggesting a potential role in the prevention of recurring chronic infections in susceptible women.

ANTIPARASITIC

Oil of oregano has been shown to have antiparasitic activity. A small study involving 13 patients with three different intestinal parasites and complaints of GI distress and fatigue resulted in the complete eradication of parasites in 10 patients, along with amelioration of bloating, cramping, fatigue, and alternating diarrhea and constipation after 6 weeks of supplementation with 600 mg oil of oregano (200 mg t.i.d.). This powerful result was obtained with no other dietary or lifestyle modifications.¹¹ A study investigating the antiparasitic properties of Mexican oregano showed it to be more effective against multiple strains of *Giardia* than the common antiparasitic drug, tinidazole. The mechanisms of action were similar to those observed in antibacterial studies: disruption of cell membranes leading to changes in osmotic balance, as well as irreversible damage to the anchor proteins of the nucleus.¹²

WHY EMULSIFY WITH OLIVE OIL?

Concentrated essential oils can be irritating to gastrointestinal mucosa. To avoid this, the oil of oregano in our product is emulsified in olive oil as a carrier. Additionally, emulsification increases the surface area of the essential oil particles, with one study estimating that 200 mg of oil could theoretically cover the entire luminal surface of the small intestine.¹¹

OIL OF OREGANO MAY BE EFFECTIVE AGAINST:

- Intestinal parasites
- Yeast overgrowth
- Fungal infections
- Bacterial infections

Medicinal Ingredients (per softgel):

Oregano Essential Oil (*Origanum vulgare*-Leaf) (Thymol 1 mg, Carvacrol 35 mg) 60 mg

Non-Medicinal Ingredients: Olive oil, gelatin, vegetable glycerine, purified water (includes softgel).

Recommended Dose: Adults: Take one softgel per day with a meal, or as directed by your health care practitioner. Take a few hours before or after taking supplements containing iron, zinc, calcium or copper.

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