

# Oil of Oregano



## Clinical Applications

- Has powerful antioxidant and intestinal cleansing benefits\*
- Helps to maintain a healthy microbial balance \*

*Oil of Oregano has powerful antioxidant and intestinal cleansing benefits. It also helps to maintain a healthy microbial balance. This product is standardized for carvacrol and thymol, the principal phenolic compounds in oregano, with each softgel providing 36 mg carvacrol and thymol from an impressive 60-75% carvacrol oregano oil.*

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## Discussion

**Oil of Oregano** is a powerful plant extract with highly effective 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 pharmacologic 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 antibacterial properties, and when provided together as oregano oil, they have an additive effect.<sup>1,2</sup> They have both been shown to be biocidal against strains of *Staphylococcus*, *Listeria*, *Salmonella*, and *Clostridium*.<sup>3</sup> 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.”<sup>1</sup> 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 confirmed 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.<sup>4</sup> 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.<sup>5</sup> The carvacrol content of the oregano tested was 43.6%, compared to 78.9% for lavender. However, despite the lower carvacrol content, oregano was a far more effective antibacterial 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.<sup>6</sup> 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.<sup>3</sup>

### Antifungal

The antifungal efficacy of oregano oil and its two primary constituents has been proven 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.<sup>7</sup> Other studies have shown oregano oil to be highly effective against *Candida albicans*, a common fungal infection of the mouth, GI tract, and vagina.<sup>8</sup> 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*.<sup>9</sup> 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%.<sup>10</sup> 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.

**\*These statements have not been evaluated by the Food and Drug Administration.  
This product is not intended to diagnose, treat, cure, or prevent any disease.**





### Antiparasitic

Oil of oregano has been shown to be a powerful antiparasitic. 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.<sup>11</sup> 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.<sup>12</sup>

Concentrated essential oils can be irritating to gastrointestinal mucosa. To avoid this, the oil of oregano in this product is emulsified in olive oil as a carrier. Emulsification also increases the surface area of the essential oil particles, which means a smaller amount of the essential oil may be effective for coming into contact with more of the inner surface of the small intestine, which is where it exerts most of its effects.

**Recommended Use:** As a dietary supplement, take one softgel per day with a meal, or as directed by your health care practitioner.

Supplement Facts	
Serving Size 1 softgel	
Amount Per Serving	% Daily Value
Oregano Oil	60 mg *
<i>(Origanum vulgare)</i> (leaf)	
(36 mg carvacrol and thymol from 60-75% carvacrol oregano oil)	
*Daily Value not established.	

**Other Ingredients:** Olive oil, bovine gelatin, vegetable glycerine, purified water.

### Recommended Use:

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