

# Ginger

The main active ingredient in ginger is a phenolic compound called gingerol, which exhibits a “variety of biological activities including anticancer, anti-inflammation, and anti-oxidation.”<sup>104</sup>

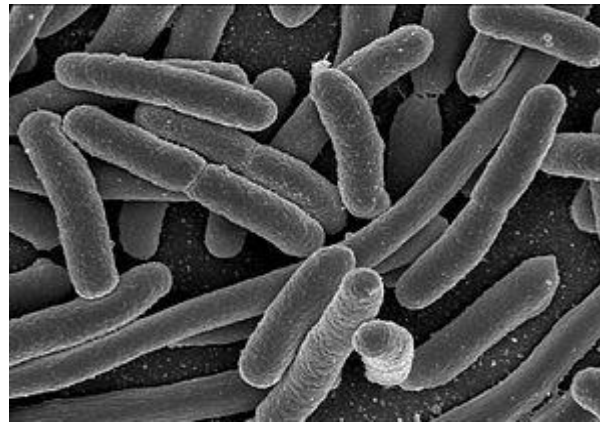


As fungal infections become more resistant to standard medical treatments, a movement is underway to find natural anti-fungal treatments.


In 2003, Carleton University compared ginger to 29 other plant species, and discovered that gingerol from ginger was the **single most effective anti-fungal agent tested.**<sup>105</sup>

Similarly, bacterial superbugs are on the rise throughout the world, often becoming resistant to multiple antibiotics.

In 2010, the *Journal of Microbiology and Antimicrobials* compared ginger's bacteria fighting ability vs. three different antibiotics: chloramphenicol, ampicillin and tetracycline. <sup>106</sup>



The study found that “ginger extract of both the plant and root showed a **higher antibacterial activity** against *Staph aureus* and *Strep pyogenes*” than the 3 antibiotics! <sup>106</sup>



Perhaps ginger's most important, yet undervalued, health benefit rests in its ability to fight several forms of cancer. For example, according to the American Cancer Society, over 20,000 women are diagnosed with ovarian cancer each year, and it accounts for “more deaths than any other cancer of the female reproductive system.”<sup>107</sup>

In 2007, the journal *BMC Complimentary and Alternative Medicine* published a landmark study that tested ginger's ability to block the growth of ovarian cancer. The results demonstrated that exposing ovarian cancer cells to ginger's active ingredient gingerol, “induced profound growth inhibition in **all** ovarian cancer cell lines tested.”<sup>108</sup>

## REFERENCES

104. Wang, S., C. Zhang, G. Yang, and Y. Yang. "Biological Properties of 6-gingerol: A Brief Review." *Natural Product Communications*. U.S. National Library of Medicine, n.d. Web. 08 Mar. 2017. <<https://www.ncbi.nlm.nih.gov/pubmed/25230520>>.
105. Ficker, C., M. L. Smith, K. Akpagana, M. Gbeassor, J. Zhang, T. Durst, R. Assabgui, and J. T. Arnason. "Bioassay-guided Isolation and Identification of Antifungal Compounds from Ginger." *Phytotherapy Research : PTR*. U.S. National Library of Medicine, n.d. Web. 10 Mar. 2017. <<https://www.ncbi.nlm.nih.gov/pubmed/13680820>>.
106. Sebiomo, A., A. D. Awofodu, A. O. Awosanya, F. E. Awotona, and A. J. Ajayi. "Comparative Studies of Antibacterial Effect of Some Antibiotics and Ginger (*Zingiber Officinale*) on Two Pathogenic Bacteria." *Academicjournals.org. Journal of Microbiology and Antimicrobials*, n.d. Web. 10 Mar. 2017. <<http://www.academicjournals.org/journal/JMA/article-full-text-pdf/0864D829693>>.
107. "What Are the Key Statistics About Ovarian Cancer?" *American Cancer Society*. American Cancer Society, n.d. Web. 10 Mar. 2017. <<https://www.cancer.org/cancer/ovarian-cancer/about/key-statistics.html>>.
108. Rhode, Jennifer, Sarah Fogoros, Suzanna Zick, Heather Wahl, Kent A. Griffith, Jennifer Huang, and J. Rebecca Liu. "Ginger Inhibits Cell Growth and Modulates Angiogenic Factors in Ovarian Cancer Cells." *BMC Complementary and Alternative Medicine*. BioMed Central, 2007. Web. 10 Mar. 2017. <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2241638/>>.