

Black cumin is recommended for breast cancer

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[Black cumin](#) (*Nigella sativa*) seeds are used as a spice in Indian and Middle Eastern cooking. Thymoquinone, the major bioactive compound in black cumin seeds, has been shown to have anti-oxidant, anti-inflammatory, neuroprotective, radioprotective and chemopreventive properties.

In addition to its role as a spice, black cumin has traditionally been used to treat various diseases, including fever, intestinal problems, diabetes, asthma and cancer.

Breast cancer-related effects of eating black cumin

Numerous studies have reported that thymoquinone and black cumin seed extracts have anti-cancer activity in animal models of triple negative ([ER-/PR-/HER2-](#)) breast cancer, as well as in triple negative breast cancer cells. Thymoquinone has anti-proliferative effects and promotes programmed cell death. The picture is less clear in hormone receptor positive ([ER+/PR+](#)) breast cancer—some studies have reported only a modest reduction in growth or proliferation as a result of treatment with thymoquinone.

Thymoquinone has been shown to increase the effectiveness of [Taxol](#), [Taxotere](#), [Adriamycin](#) and [cisplatin](#) in both ER+/PR+ and ER-/PR-/HER2- breast cancer models while reducing toxic chemotherapy side effects. For example, one study using tumor-bearing mice reported that the combination of thymoquinone plus Adriamycin suppressed tumor growth more than treatment with Adriamycin alone. Moreover, thymoquinone appears to reduce Adriamycin-induced heart damage. Thymoquinone also potentiates the cytotoxic effects of [tamoxifen](#) in ER+/PR+ breast cancer. In addition, thymoquinone has been shown to radiosensitize ER+/PR+ breast cancer cells, thereby increasing the treatment effects of [radiotherapy](#).

Additional comments

Black cumin is a member of the buttercup family (*Ranunculaceae*). It is also known as black seed, Roman coriander, fennel flower, nutmeg flower and black caraway. Hence, it is important to verify that you are purchasing *Nigella sativa*. [Organic](#) is best since it reduces the likelihood of contamination or admixture of other spices. Black cumin can be ground and used similarly to [black pepper](#) in cooking. Black cumin is not related to [cumin](#) (*Cuminum cyminum*), which is a member of the parsley family.

Although black cumin seed oil is available as a supplement, we do not recommend it. The safety of this more concentrated source of thymoquinone has not been established. Like other compounds with anti-cancer effects found in food, we favor using thymoquinone at the relatively low dose available in black cumin seeds rather than attempting to obtain pharmacological effects from a higher dose.

Tags: [blackCuminthymoquinone](#)

Selected breast cancer studies

[A Narrative Review of the Antitumor Activity of Monoterpenes from Essential Oils: An Update](#) Cite

[Curcumin and Thymoquinone Combination Attenuates Breast Cancer Cell Lines' Progression](#) Cite

[Therapeutic implications and clinical manifestations of thymoquinone](#) Cite

[Protective Effect of Curcumin, Chrysin and Thymoquinone Injection on Trastuzumab-Induced Cardiotoxicity via Mitochondrial Protection](#) Cite

[Modulation of gene expression by thymoquinone conjugated Zinc Oxide nanoparticles arrested cell cycle, DNA damage and increased apoptosis in triple negative breast cancer cell line MDA-MB-231](#) Cite

[Synergistic anti-cancer effects of Nigella sativa seed oil and conventional cytotoxic agent against human breast cancer](#) Cite

[Potential anticancer properties and mechanisms of thymoquinone in osteosarcoma and bone metastasis](#) Cite

[Therapeutic Potential of Certain Terpenoids as Anticancer Agents: A Scoping Review](#) Cite

[Prevention of doxorubicin-induced experimental cardiotoxicity by Nigella sativa in rats](#) Cite

[Insights into the Protective Effects of Thymoquinone against Toxicities Induced by Chemotherapeutic Agents](#) Cite

[Therapeutic Potential of Thymoquinone in Triple-Negative Breast Cancer Prevention and Progression through the Modulation of the Tumor Microenvironment](#) Cite

[Thymoquinone and its pharmacological perspective: a review](#) Cite

[PIK3CA hotspot mutations p. H1047R and p. H1047L sensitize breast cancer cells to thymoquinone treatment by regulating the PI3K/Akt1 pathway](#) Cite

[Thymoquinone upregulates miR-125a-5p, attenuates STAT3 activation, and potentiates doxorubicin antitumor activity in murine solid Ehrlich carcinoma](#) Cite

[Targeting Autophagy with Natural Products as a Potential Therapeutic Approach for Cancer](#) Cite

[1764P A dose and time-dependent inhibitory effect of thymoquinone on inflammasome pathway in hormone receptor positive breast cancer: A novel personalized adjuvant therapy](#) Cite

[Thymoquinone and its derivatives against breast cancer with HER2 positive: in silico studies of ADMET, docking and QSPR](#) Cite

[Synergistic Role of Thymoquinone on Anticancer Activity of 5-fluorouracil in Triple-Negative Breast Cancer Cells](#) Cite

[Abstract PS19-28: Thymoquinone and tamoxifen co-treatment synergistically inhibit proliferation, invasion and induce apoptosis in human breast cancer cell lines in vitro and in vivo](#) Cite

[Combination of Docetaxel with Thymoquinone in Nanoemulsion Impedes the Migration of Breast Cancer Stem Cells](#) Cite

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