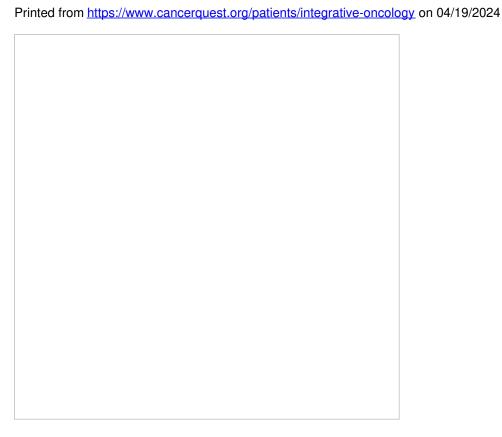
## **Integrative Oncology**



Oncology is the branch of medicine dedicated to treating cancer. The cornerstones of traditional Western oncology are surgery, radiation therapy, and chemotherapy, though the practice encompasses more. The term 'integrative oncology' describes an approach to treating cancer that integrates, or combines, standard Western treatments with other treatments or activities in an attempt to further treat the disease, reduce side effects, and/or improve overall patient wellbeing. For example, participating in yoga can significantly improve a patient's quality of life.

A term commonly used to describe this fusion is "complementary and alternative medicine" (CAM). Complementary medicine refers to treatments or activities used in conjunction with standard Western treatments, while alternative medicine refers to treatments or activities that replace standard Western treatments. Though some centers estimate CAM usage to be 70% in the United States, 1 alternative medicine specifically is rarely used. 2 In fact, in 2014, the National Center for Complementary and Alternative Medicine changed its name to the National Center for Complementary and Integrative Health. 3 A branch of the National Institutes of Health, this agency funds research related to complementary medicine. In August of 2017, researchers from the Cancer Outcomes, Public Policy and Effectiveness Research (COPPER) Center at Yale School of Medicine and Yale Cancer Center stated. "Patients who choose to receive alternative therapy as treatment for curable cancers instead of conventional cancer treatment have a higher risk of death." 4 These researchers studied 840 patients with breast, prostate, lung, and colorectal cancer in the National Cancer Database. They then compared the 280 alternative medicine patients to 560 conventional treatment patients. The outcome of patients receiving alternative medicine instead of chemotherapy, surgery, and/or radiation, was a greater risk of death. The researchers stated, "We now have evidence to suggest that using alternative medicine in place of proven cancer therapies results in worse survival." They hope that this information can be used when physicians and patients are discussing the impact of cancer treatment decisions. 4 Another study, of almost two million cancer patients, showed that patient who use 'complementary medicine' were more likely to refuse conventional cancer treatments and had a higher risk of dying than patients who received only conventional treatments. Patients who used complementary treatments and also used conventional treatments did not show decreased survival.5

Many CAM treatments are touted as "natural" and, as a result, assumed to be better. However, in the United States, conventional medical practices are subject to a rigorous testing process; they are the results of many decades of research. In contrast, research regarding complementary treatments is more recent. Though it has risen in popularity, it is not as robust, and more research is necessary to determine whether many complementary therapies are effective.

Accordingly, claims on Internet websites may not be accurate or supported by the latest research Always consult a doctor before trying a new treatment. For finding an integrative oncologist, the Society for Integrative Oncology's directory may be helpful. Even medical professionals who are not integrative oncologists may support complementary therapies, perhaps because they allow patients to play a more active role in their journey to better health. 6 However, those who do not receive training in complementary therapies are less likely to recommend specific practices. 7 They may also hesitate to make

recommendations because there is a shortage of strong research supporting many complementary therapies.8

Indeed, a lack of conclusive evidence is demonstrated in many of the pages below. Before reading about these treatments or activities, please see our our <u>Note on Complementary Approaches</u> and our <u>Introduction to Scientific Research</u>.

- Treatments and activities with supporting results from human research\*:
  - Hypnosis
  - Religion and Spirituality
  - Support Groups
  - · Yoga, Tai Chi
- Treatments and activities with supporting results from animal models (in vivo) and/or human cells (in vitro)\*:
  - Anthocyanin
  - Bromelain
  - Coenzyme Q10
  - Curcumin
  - EGCG (Green Tea Polyphenols)
  - Homeopathy
  - Lycopene
  - Phytoestrogens
  - Pycnogenol
  - Resveratrol
  - Selenium
- Treatments and activities LACKING substantial supportive evidence in any model\*:
  - Antineoplastons
  - · Cannabis and Hemp Oil
  - Controlled Amino Acid Therapy
  - Dichloroacetate (DCA)
  - Essiac®, Flor-Essence®
  - Graviola (Soursop)
  - Gerson Therapy
  - Shark Cartilage

You can also view CAM treatment tables and additional resources.

- <u>1</u>Huebner J, Micke O, Muecke R, Buentzel J, Prott FJ, Kleeberg U, Senf B, Muenstedt K; PRIO (Working Group Prevention and Integrative Oncology of the German Cancer Society). User rate of complementary and alternative medicine (CAM) of patients visiting a counseling facility for CAM of a German comprehensive cancer center. Anticancer Res. 2014 Feb;34(2):943-8. [PUBMED]
- 2National Institutes of Health. Complementary, Alternative, or Integrative Health: What's In a Name? 2016. NCCIH
- 3National Institutes of Health. NIH complementary and integrative health agency gets new name. 17 December 2014. [NIH]
- 4 a b Doerr, Anne. Using only alternative medicine for cancer linked to lower survival rate. Yale News. 2017 Aug 10.[YALE NEWS]
- 5Johnson SB, Park HS, Gross CP, Yu JB. Complementary Medicine, Refusal of Conventional Cancer Therapy, and Survival Among Patients With Curable Cancers. JAMA Oncol. 2018 Jul 19. doi: 10.1001/jamaoncol.2018.2487. PubMed [PUBMED]
- <u>6</u>Wortmann JK, Bremer A, Eich HT, Wortmann HP, Schuster A, Fýhner J, Büntzel J, Muecke R, Prott FJ, Huebner J. Use of complementary and alternative medicine by patients with cancer: a cross-sectional study at different points of cancer care. Med Oncol. 2016 Jul;33(7):78.[PUBMED]
- ZSpencer CN, Lopez G, Cohen L, Urbauer DL, Hallman DM, Fisch MJ, Parker PA. Nurse and patient characteristics predict communication about complementary and alternative medicine. Cancer. 2016 May 15;122(10):1552-9. [PUBMED]
- <u>8</u>Chakraborty R, Savani BN, Litzow M, Mohty M, Hashmi S. A perspective on complementary/alternative medicine use among survivors of hematopoietic stem cell transplant: Benefits and uncertainties. Cancer. 2015 Jul 15;121(14):2303-13. [PUBMED]

<sup>\*</sup>These classifications are based on evidence for the agent's ability to treat, not prevent, cancer and/or its side effects. For more on preventing cancer, see our <u>Prevention</u> page.