

Get In the KNOW: Systematic Reviews of Greatest Clinical Impact from 2000-2021

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Surgery Support

Immunonutrition vs Standard Nutrition for Cancer Patients: A Systematic Review and Meta-Analysis In a systematic review and meta-analysis of 5983 patients with cancer from 61 randomized controlled trials, providing immunonutrition around surgery reduced infections and shortened hospital stay, but did not decrease the risk of sepsis or dying. These benefits are likely the greatest in malnourished patients and when immunonutrition is given through the gastrointestinal tract in the 5-7 days around surgery. Immunonutrition was defined as supplemental nutrition with arginine, glutamine, omega-3 fatty acids, and/or nucleotides. The overall quality of the evidence was low to moderate

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Probiotic/Synbiotic Treatment and Postoperative Complications in Colorectal Cancer Patients: Systematic Review and Meta-analysis of Randomized Controlled Trials In a meta-analysis of 11 randomized controlled trials on patients with colorectal cancer, using probiotics or synbiotics around surgery was found to decrease the frequency of infections and diarrhea as well as shorten antibiotic use and return to normal digestive function. The overall quality of the evidence was **fair**. <https://knowintegrativeoncology.org/shared?uuid=ec5c6a46-7e2e-474b-8690-0895cd982566&docType=Microtag>

Radiation Support

The effectiveness of probiotics in prevention and treatment of cancer therapy-induced oral mucositis: A systematic review and meta-analysis

In a meta-analysis of 368 patients with head and neck cancers from 4 randomized controlled trials, adding probiotics to chemotherapy and/or radiotherapy reduced the frequency and severity of oral mucositis. The overall quality of the studies was high.

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Radiation Support (cont.)

The Effects of Probiotic Supplementation on the Incidence of Diarrhea in Cancer Patients Receiving Radiation Therapy: A Systematic Review with Meta-Analysis and Trial Sequential Analysis of Randomized Controlled Trials In a systematic review and meta-analysis of 1116 patients with pelvic cancers from 8 randomized controlled trials, probiotics were effective at preventing diarrhea from radiation treatment and decreased the need for antidiarrheal medications. Diarrhea was not reduced in patients who received both radiation and chemotherapy. The overall quality of the studies was low.

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Prophylactic and Therapeutic Effects of Curcumin on Treatment-Induced Oral Mucositis in Patients with Head and Neck Cancer: A Meta-Analysis of Randomized Controlled Trials In a meta-analysis of 266 patients with head and neck cancer from 6 randomized controlled trials, adding curcumin to radiation with or without chemotherapy was safe, reduced weight loss, and was effective at treating painful ulcerations in the mouth. Although curcumin did not prevent oral mucositis from developing, it did lower the occurrence of severe mucositis. The overall quality of the studies was moderate. <https://knowintegrativeoncology.org/shared?uuid=6a2788d1-5fc2-476b-be2a-976e6bb27ef4&docType=Microtag>

Oral administration of herbal medicines for radiation pneumonitis in lung cancer patients: A systematic review and meta-analysis (nih.gov) In a systematic review and meta-analysis of 1819 patients with lung cancer from 22 randomized controlled trials, the use of herbal medicines significantly improved quality of life and lowered the occurrence and severity of pneumonitis caused by radiotherapy. In the one study that assessed lung function, all measures were greater in the herbal medicine group. The overall quality of the evidence was very low.

<https://knowintegrativeoncology.org/shared?uuid=0ae6802b-c5ac-444e-8d7a-3285aab92521&docType=Microtag>

Herbal Medicine for Xerostomia in Cancer Patients: A Systematic Review of Randomized Controlled Trials In a systematic review of 1586 patients with head and neck cancer from 25 randomized controlled trials, the use of herbal medicines was effective at treating dry mouth and preventing its development during radiation therapy. Several decoctions significantly improved salivary flow and all formulas except the Dark Plum gargle were effective at reducing the severity of dry mouth. The overall risk of bias was high or unclear for most studies. <https://knowintegrativeoncology.org/shared?uuid=05a34e66-1bc3-4fa6-b3ce-b8a470a619fe&docType=Microtag>

Chemotherapy

Probiotics in preventing and treating chemotherapy-induced diarrhea: a meta-analysis In a meta-analysis of 1024 patients from 13 randomized controlled trials, using probiotics reduced the incidence, severity, and duration of diarrhea when taken before or alongside chemotherapy. The overall quality of the studies was low.

<https://knowintegrativeoncology.org/shared?uuid=188a5396-b69c-410f-849a-54e11499f3aa&docType=Microtag>

Nutrition interventions to improve the appetite of adults undergoing cancer treatment: a systematic review In a systematic review of 472 patients from 5 randomized controlled trials, taking fish oil, oral nutritional support products, and/or receiving dietary counselling improved appetite in patients undergoing cancer treatment with chemotherapy and/or radiotherapy. Increases in protein and energy intake occurred when the appetite improved. The overall quality of the studies was moderate to high.

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The effectiveness of probiotics in prevention and treatment of cancer therapy-induced oral mucositis: A systematic review and meta-analysis - In a meta-analysis of 368 patients with head and neck cancers from 4 randomized controlled trials, adding probiotics to chemotherapy and/or radiotherapy reduced the frequency and severity of oral mucositis. The overall quality of the studies was high.

<https://knowintegrativeoncology.org/shared?uuid=3067df64-9892-4a0f-8654-779bf7d1fddd&docType=Microtag>

Protective effects of vitamin E on chemotherapy-induced peripheral neuropathy: a meta-analysis of randomized controlled trials In a meta-analysis of 319 patients with various cancers from 5 randomized controlled trials, taking vitamin E alongside chemotherapy was found to be safe and effective at preventing chemotherapy-induced peripheral neuropathy (CIPN). Further analysis showed this lower incidence of CIPN occurred especially when patients received cisplatin chemotherapy. The overall quality of the evidence was moderate.

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Cannabinoids for nausea and vomiting related to chemotherapy: Overview of systematic reviews In a review of 5 systematic reviews, cannabinoids appear to be as effective as several standard antiemetic medications at reducing nausea and vomiting in cancer patients being treated with chemotherapy. The rate of adverse events, such as dizziness and cognitive impairment, were however higher in the cannabinoid groups. Only 1 review was conducted with high methodological quality.

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Efficacy of Ginger (*Zingiber officinale*) in Ameliorating Chemotherapy-Induced Nausea and Vomiting and Chemotherapy-Related Outcomes: A Systematic Review Update and Meta-Analysis

In a meta-analysis of 13 randomized controlled trials, taking a low dose of ginger for greater than 3 days significantly reduced the likelihood of vomiting in patients receiving chemotherapy, however, taking > 1 g of ginger per day for any duration was not found to be effective. Ginger supplementation also lowered the likelihood of developing fatigue. The risk of bias across most of the studies was low.

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Integrative Herbal Medicine for Chemotherapy-Induced Peripheral Neuropathy and Hand-Foot Syndrome in Colorectal Cancer: A Systematic Review and Meta-Analysis

In a systematic review and meta-analysis of 4286 patients with colorectal cancer from 63 randomized controlled trials, the use of herbal medicines significantly reduced the development of peripheral neuropathy during chemotherapy, but did not prevent hand-foot syndrome. The overall risk of bias was high in most studies due to a lack of blinding and inadequate details about the methods.

<https://knowintegrativeoncology.org/shared?uuid=a4863c09-7f17-4b0e-9773-57ff4f9fa9b9&docType=Microtag>

Hormone Therapy

Therapeutic options for aromatase inhibitor-associated arthralgia in breast cancer survivors: A systematic review of systematic reviews, evidence mapping, and network meta-analysis

In a network meta-analysis of 6 systematic reviews, acupuncture, aerobic exercise, and omega-3 fatty acids significantly reduced joint pain in breast cancer survivors taking aromatase inhibitors. These 3 interventions were all more effective than vitamin D supplementation. Studies on Nordic walking, vitamin D, and pharmacological interventions for aromatase inhibitor-associated arthralgia have also been conducted, but their efficacy remains unclear. Most of the included studies were of low quality.

<https://knowintegrativeoncology.org/shared?uuid=4dd04267-18ef-4f43-b01b-f1303bd40541&docType=Summary>

Pediatrics

A systematic review of integrative clinical trials for supportive care in pediatric oncology: a report from the International Society of Pediatric Oncology, T&CM collaborative

In a systematic review of 44 clinical studies, using traditional and complementary medicine was found to reduce side effects and play a supportive role in pediatric cancer treatment. Positive evidence exists for using acupuncture to reduce nausea and vomiting and massage to reduce anxiety and pain. Zinc appears to be useful at preventing weight loss and infections, whereas milk thistle, omega 3 fatty acids and black seed oil may reduce treatment-related liver damage. Wheat germ, probiotics, and honey reduced episodes of fever. Studies on vitamin E or glutamine for mucositis and glutamic acid for nerve toxicity have been mixed, with either positive results or no effect. Most studies were fair or poor quality.

<https://knowintegrativeoncology.org/shared?uuid=5879a422-d158-4b6d-8e9a-62961ba044cd&docType=Summary>

The gut microbiome, symptoms, and targeted interventions in children with cancer: a systematic review

In a systematic review of 2 case-control studies, 2 cohort studies, and 3 randomized controlled trials, the diversity of the gut microbiome and the abundance of healthy microbes in children with cancer was found to be lower than healthy children before and after cancer treatment. The use of probiotics and/or prebiotic fibers like fructooligosaccharides can support higher levels of healthy microbes and may reduce side effects such as infections and nausea and vomiting. The overall quality of the non-randomized studies was good whereas that of the randomized controlled trials was poor.

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Cancer-related side effects

Dietary supplements and fatigue in patients with breast cancer: a systematic review In a systematic review of 932 women with breast cancer from 8 randomized clinical trials, the use of chlorella, guarana, and CoQ10 with or without branched chain amino acids and acetyl-L-carnitine were found to be beneficial at reducing cancer-related fatigue. Acetyl-L-carnitine was not effective on its own and may increase peripheral neuropathy if taken alongside taxane chemotherapy. A diet high in whole grains, fruit, vegetables, and omega-3 fatty acids may also be effective. Most interventions were taken alongside chemotherapy. The overall quality of the evidence was moderate.

<https://knowintegrativeoncology.org/shared?uid=f478b8dc-42e6-4919-875d-cf0460eae35e&docType=Summary>

Efficacy of complementary and integrative medicine on health-related quality of life in cancer patients: a systematic review and meta-analysis- In a systematic review and meta-analysis of 3010 patients from 34 randomized controlled trials, using complementary and integrative medicine was effective at improving the quality of life in cancer patients. Beneficial interventions included qigong, mindfulness, Chinese herbal medicine, nutritional supplements (omega 3 fatty acids, CoQ10, chlorella, L Carnitine, creatine, kefir) acupuncture, yoga, and massage. The overall quality of the studies was high.

<https://knowintegrativeoncology.org/shared?uid=daec85dc-a195-4e08-a609-12f38b45e780&docType=Microtag>

Comparative effectiveness and safety of traditional Chinese medicine supporting Qi and enriching blood for cancer related anemia in patients not receiving chemoradiotherapy: a meta-analysis and systematic review In a systematic review and meta-analysis of 1198 patients from 13 randomized controlled trials, the use of Traditional Chinese Medicine was more effective at correcting cancer-related anemia than iron supplements or erythropoietin. A lower rate of adverse events was also observed. The overall quality of the studies was low.

<https://knowintegrativeoncology.org/shared?uid=01b75dd6-ee35-4311-9a31-b6ed685a5b3a&docType=Microtag>

Safety Studies and Reviews that Challenge Commonly Held Beliefs

Systematic review and meta-analysis investigating the efficacy and safety of probiotics in people with cancer. In a systematic review and meta-analysis of 2982 patients from 21 randomized controlled trials, the use of probiotics reduced the incidence of diarrhea and the length of fever in patients with cancer. Evaluation of 2242 patients from 25 studies found that probiotic supplementation was safe in this population, with only 5 case reports of probiotic-related infections.

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Herb–drug interactions between the medicinal mushrooms Lingzhi and Yunzhi and cytotoxic anticancer drugs: a systematic review In a systematic review of 213 studies, including 77 studies in humans, reishi and turkey tail mushrooms were found to be safe when taken alongside chemotherapy. The evidence supports their use for improving survival, quality of life, and response to treatment. Use of these mushrooms during chemotherapy can also decrease treatment side effects and help maintain function of the immune system. The overall quality of the studies was moderate. <https://knowintegrativeoncology.org/shared?uid=832b5838-c98f-4660-809a-312650c5e09f&docType=Microtag>

Fish oil LC-PUFAs do not affect blood coagulation parameters and bleeding manifestations: Analysis of 8 clinical studies with selected patient groups on omega-3-enriched medical nutrition In a systematic review of 1561 patients from 7 double blind randomized controlled trials, 3 of which were conducted in patients with cancer, there was no increased risk of bleeding with using oral nutritional products enriched in omega-3 fatty acids. Laboratory measures of coagulation were also not significantly different in the patients who took the omega-3s. The overall quality of the studies was not assessed. Levels of n-3 LC-PUFAs administered orally ranged from 1.5 to 3.6 g/day. <https://knowintegrativeoncology.org/shared?uid=a430a767-cb17-4f88-887b-b99154b75098&docType=Summary>

Fish-Derived Omega-3 Fatty Acids and Prostate Cancer: A Systematic Review In a systematic review of 54 publications reporting on 44 studies, the impact of fish oil-derived omega-3 fatty acids on prostate cancer risk and progression were assessed. The 4 clinical trials in patients with prostate cancer found that fish oil supplements did not impact prostate-specific antigen levels, but it did lower markers of inflammation or cell growth in 2 of these studies. No association between fish intake and the risk of developing prostate cancer was found in most of the observational studies. Several studies did however support an association between higher fish intake and a lower risk of prostate cancer-related death. There was a high risk of bias in the clinical trials, whereas the observational studies were overall high quality. <https://knowintegrativeoncology.org/shared?uid=0339b5a8-071d-4fe6-b393-f5e3a93afc2d&docType=Summary>

Black Cohosh and Breast Cancer: A Systematic Review In a systematic review of 14 randomized controlled trials, 7 uncontrolled trials, and 5 observational studies, the use of black cohosh was found to be safe among women with or at risk of breast cancer. Observational studies found either no association between black cohosh and the risk of breast cancer or a reduce risk in postmenopausal women. 2 studies also found a reduced risk of breast cancer recurrence with black cohosh use. Black cohosh does not impact hormone levels, but mixed evidence suggests it may still be beneficial for hot flashes. There was a low to moderate risk of bias in the included studies. <https://knowintegrativeoncology.org/shared?uid=eb8c6f51-20ee-4653-b355-f7e2f6e55e67&docType=Summary>

Flax and Breast Cancer: A Systematic Review A systematic review of 2 randomized controlled trials, 2 uncontrolled trials, 1 biomarker study, and 5 observational studies supports the use of flax in breast cancer risk reduction and management. The evidence suggests flax can decrease HER-2 expression and markers of blood vessel formation and cell growth. Its effect on hot flashes remains unclear with mixed results. The observational data shows an association between flax intake and a lower risk of breast cancer, an effect that may be particularly relevant in postmenopausal women and those with a high body mass index. The overall quality of the studies was not reported. <https://knowintegrativeoncology.org/shared?uid=f0aecfcf-af41-4942-8c25-8ec4129b7bbc&docType=Summary>

Intravenous Vitamin C and Cancer: A Systematic Review A systematic review of 2 randomized controlled trials, 15 uncontrolled trials, 6 observational studies, and 14 case reports documented the safety and efficacy of intravenous vitamin C (IVC) therapy in cancer care. IVC did not interfere with gemcitabine and erlotinib or paclitaxel and carboplatin treatment and had positive impacts alongside chemotherapy by decreasing toxicities and improving quality of life. The addition of IVC to chemotherapy reduced tumor size and improved time to relapse and survival, but this was predominantly based on case reports or small studies and therefore needs further validation. <https://knowintegrativeoncology.org/shared?uid=d92f78b1-d20b-476f-a05f-a95f18da3cfa&docType=Microtag>

Natural Health Products

The role of pro-, pre- and symbiotics in cancer: A systematic review In a systematic review of 2287 patients with cancer from 22 randomized controlled trials, adding probiotics, prebiotics, or symbiotics to chemotherapy, radiation, and/or surgery reduced the occurrence of diarrhea and infections. Most studies were low to moderate quality. <https://knowintegrativeoncology.org/shared?uuid=4f61a08b-5adc-4b47-a2d5-07b82c8b884c&docType=Microtag>

Zinc as a complementary treatment for cancer patients: a systematic review In a systematic review of 1120 patients with head and neck cancer from 18 randomized controlled trials and 1 meta-analysis, adding zinc to radiotherapy decreased the occurrence of mucositis. The evidence for zinc to reduce oral pain, dry mouth, and loss of taste was mixed. It was deemed ineffective at preventing mucositis during chemotherapy, weight loss, and fatigue as well as improving quality of life or extending survival. Zinc supplementation was safe with minimal side effects. The overall quality of the trials was moderate <https://knowintegrativeoncology.org/shared?uuid=fc3798f0-c3fb-4c0d-85e3-a3178d9cefe6&docType=Microtag>

Vitamin D supplementation and total cancer incidence and mortality: a meta-analysis of randomized controlled trials In a meta-analysis of 5 randomized controlled trials, cancer mortality was reduced by daily vitamin D supplementation but not infrequent bolus dosing. Meta-analysis of 10 trials showed vitamin D supplementation did not lower the risk of developing cancer. The overall quality of the studies was not evaluated. <https://knowintegrativeoncology.org/shared?uuid=7b19c358-6dcc-4b4e-908d-697b54cf59f5&docType=Microtag>

Therapeutic strategies of melatonin in cancer patients: a systematic review and meta-analysis In a systematic review and meta-analysis of 3853 patients from 20 randomized controlled trials, the use of melatonin alongside conventional cancer treatments improved remission and survival. The side effects of treatment were also significantly reduced, including weakness, neurotoxicity, and low platelet levels. The overall quality of the studies was not evaluated, but the risk of publication bias was high because most of the research was conducted at only one research center. <https://knowintegrativeoncology.org/shared?uuid=313a7913-9a43-494e-bb7f-8cca0beb56d1&docType=Microtag>

Effect of aromatherapy on cancer complications: A systematic review In a systematic review of 3239 patients from 43 clinical studies, inhalation and massage-based aromatherapy frequently improved physical and psychological cancer-related complications such as anxiety, nausea and vomiting, poor sleep quality, fatigue, and quality of life. Lavender, chamomile, and ginger were the most used aromas. The overall quality of the studies ranged from moderate to high. <https://knowintegrativeoncology.org/shared?uuid=765ad77c-3d74-4d18-a305-0c73bdf99ff1&docType=Microtag>

The consumption of omega-3 polyunsaturated fatty acids improves clinical outcomes and prognosis in pancreatic cancer patients: a systematic evaluation In a systematic review of 1367 patients from 11 randomized controlled trials, the use of an omega-3 fatty acid-enriched nutritional supplement increased body weight, lean body mass, and survival in patients with unresectable pancreatic cancer. Supplementation also decreased energy use at rest. The overall quality of the studies was not reported. <https://knowintegrativeoncology.org/shared?uuid=af3f5470-5504-402f-9de3-a4f756f60b62&docType=Microtag>

Natural Health Products (cont.)

***Coriolus Versicolor* and *Ganoderma Lucidum* Related Natural Products as an Adjunct Therapy for Cancers: A Systematic Review and Meta-Analysis of Randomized Controlled Trials**

In a systematic review and meta-analysis of 4246 patients with various cancers from 26 randomized controlled trials, the use of supplements containing reishi or turkey tail mushrooms improved survival and response to radiation and/or chemotherapy. Quality of life and markers of immune function were also improved. The risk of publication bias was low, but other biases were not evaluated. <https://knowintegrativeoncology.org/shared?uuid=89fbf7f2-3e91-4e73-8c60-189cd8f9b263&docType=Microtag>

Quality of life in cancer patients treated with mistletoe: a systematic review and meta-analysis

In a systematic review and meta-analysis of 26 publications, including 25 randomized controlled trials, the use of mistletoe alongside conventional cancer treatments improved patients' quality of life and decreased nausea and vomiting, shortness of breath, pain, and diarrhea. The overall risk of bias was high because of difficulties with blinding the patients, but this is unlikely to affect the results.

<https://knowintegrativeoncology.org/shared?uuid=88041083-497a-4d88-b17b-963a0eddc3fb&docType=Microtag>

Ginseng and Cancer-Related Fatigue: A Systematic Review of Clinical Trials In a systematic review of 940 patients with various cancers from 7 clinical trials and 1 retrospective study, using ginseng alongside or following conventional cancer treatments was found to be safe and effective at decreasing fatigue. The quality of the studies was highly variable. <https://knowintegrativeoncology.org/shared?uuid=dd1d013d-79f5-4050-8fa2-ef8a49432939&docType=Microtag>

Vitamin C and survival among women with breast cancer: a meta-analysis In a meta-analysis of 17,696 women with breast cancer from 10 observational studies, dietary vitamin C intake and vitamin C supplementation after diagnosis were both associated with a lower risk of breast cancer-specific and overall mortality. The quality of the included studies was not reported <https://knowintegrativeoncology.org/shared?uuid=6e405224-67d4-4f03-a431-64097f0416c9&docType=Microtag>

Phytherapeutic interventions in the management of biochemically recurrent prostate cancer: a systematic review of randomised trials In a systematic review of 368 patients with a biochemical recurrence of prostate cancer, all 5 included randomized trials found prostate-specific antigen levels stabilized, decreased, or slowed its rate of increase when specific dietary supplements or interventions were used. These interventions, which included sulphoraphane, lycopene, soy isoflavones, POMx, and Pomi-T, were all safe and produced minimal adverse effects. The overall quality of the studies was good.

<https://knowintegrativeoncology.org/shared?uuid=fee8daf2-f9fb-4537-81bf-fd3296b54078&docType=Microtag>

Nutrition

Ketogenic diets in medical oncology: a systematic review with focus on clinical outcomes

In a systematic review of 13 clinical studies, including 2 randomized controlled trials, there was insufficient evidence to make conclusions about the efficacy of the ketogenic diet for treating patients with cancer. The evidence from 6 studies suggests the ketogenic diet may have beneficial effects on body composition in both overweight and frail patients. Based on the preliminary findings, more high-quality studies are indicated to determine its impact on survival and treatment efficacy. <https://knowintegrativeoncology.org/shared?uuid=bc9743c8-bb2f-4834-8711-a3096059b34b&docType=Microtag>

Green Tea Consumption and Risk of Breast Cancer and Recurrence—A Systematic Review and Meta-Analysis of Observational Studies

In a meta-analysis of 163,810 women from 8 cohort studies and 5 case-control studies, higher consumption of green tea was associated with a lower risk of breast cancer development and recurrence. When assessed by menopausal status, green tea intake was protective in pre-menopausal women, but not post-menopausal women. The quality of the studies ranged from moderate to high.

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The Effect of Green Tea Consumption on Prostate Cancer Risk and Progression: A Systematic Review

In a systematic review of 15 studies, the evidence for using green tea to prevent or treat prostate cancer was mixed. Only 5 out of 11 studies found that green tea reduced the risk of prostate cancer development, but this included 2 high quality randomized controlled trials in men with established high-grade prostate intraepithelial neoplasia. Therefore, green tea may be useful for prostate cancer prevention, particularly in this at-risk population. Only 1 out of 4 studies found a significant decrease in prostate-specific antigen levels by supplementing green tea in men with prostate cancer. Most of the included studies were moderate to high quality.

<https://knowintegrativeoncology.org/shared?uuid=62fb33c1-5d8f-4738-ac91-0264ab7d66b5&docType=Microtag>

Dietary phytoestrogens and biomarkers of their intake in relation to cancer survival and recurrence: a comprehensive systematic review with meta-analysis

While there was insufficient evidence to evaluate the role of dietary phytoestrogens in other cancers, a systematic review and meta-analysis of 15 observational studies found that dietary phytoestrogens may improve survival in patients with breast cancer, particularly in postmenopausal women. The overall quality of the evidence was high.

<https://knowintegrativeoncology.org/shared?uuid=dd13713d-991b-4e35-ac67-f850a73711f9&docType=Microtag>

The Facts about Food after Cancer Diagnosis: A Systematic Review of Prospective Cohort Studies

The Western Diet and a high intake of saturated fats were associated with higher mortality in patients with breast, colorectal, or prostate cancer in a systematic review of 29 observational studies. Contrarily, a higher consumption of omega 3 fatty acids and fibers from whole grains, fruit, and vegetables, as seen with a Mediterranean diet, were found to be protective against cancer progression and death. The impact of diet on mortality for other cancers needs to be further explored. The overall risk of bias was low to

moderate. <https://knowintegrativeoncology.org/shared?uuid=25317904-6381-429a-838b-efaaa20cb8dd&docType=Microtag>

Nutritional Interventions to Improve Clinical Outcomes in Ovarian Cancer: A Systematic Review of Randomized Controlled Trials

In a systematic review of 14 randomized controlled trials, early oral feeding, an immune-enhancing nutritional formula, coffee consumption, and the use of chewing gum were found to reduce the length of post-surgical hospital stay in women with ovarian cancer. Nutritional interventions may also be useful to improve post-operative infections and bowel function in this population. Short-term fasting prior to chemotherapy and a ketogenic diet are other interventions with preliminary evidence to improve quality of life in women with ovarian cancer. Over half of the studies had a low risk of bias.

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Traditional Chinese Medicine (TCM)

Rg3 Ginseng: Combined Treatment of Non-Small-Cell Lung Cancer Using Shenyi Capsule and Platinum-Based Chemotherapy: A Meta-Analysis and Systematic Review In a systematic review and meta-analysis of 2663 patients with non-small cell lung cancer from 27 randomized controlled trials, adding the ginseng-based supplement Shenyi capsule to platinum chemotherapy improved response to treatment, survival, immune function, and quality of life. Using Shenyi capsule also minimized side effects such as vomiting and reductions in platelet, hemoglobin, and white blood cell counts.

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Ginsenoside Rg3 (Shenyi Capsule) Combined with Chemotherapy for Digestive System Cancer in China: A Meta-Analysis and Systematic Review In a systematic review and meta-analysis of 1531 patients with digestive system cancers from 18 randomized controlled trials, adding the ginseng-based supplement Shenyi capsule to chemotherapy improved response to treatment, gastrointestinal side effects, white blood cell counts, and survival. Shenyi supplementation did not significantly impact liver or kidney function. The overall quality of the evidence was moderate. <https://knowintegrativeoncology.org/shared?uuid=e665c7b4-5805-4bac-b901-8902a632364a&docType=Microtag>

Danshen Formulae for Cancer: A Systematic Review and Meta-Analysis of High-Quality Randomized Controlled Trials In a systematic review and meta-analysis of 1045 patients from 13 randomized controlled trials, the use of Danshen formulae alongside Western medicine improved response to treatment and survival. A subgroup analysis found that Danshen may be particularly beneficial for liver cancer and leukemia. The overall quality of the studies was high. <https://knowintegrativeoncology.org/shared?uuid=11bcae30-9893-429b-9fee-eadc98213a7a&docType=Microtag>

Efficacy of traditional Chinese Medicine combined with chemotherapy in patients with non-small cell lung cancer (NSCLC): a meta-analysis of randomized clinical trials In a meta-analysis of 1669 patients with non-small cell lung cancer from 20 randomized controlled trials, combining Traditional Chinese Medicine with chemotherapy improved response to treatment and quality of life. Side effects were also reduced, including nausea and vomiting, diarrhea, liver and kidney damage, and impacts on platelet, hemoglobin, and white blood cell counts. The overall quality of the studies was high.

<https://knowintegrativeoncology.org/shared?uuid=39e1c1f6-c5d7-44b2-a405-73278734e23a&docType=Microtag>

Efficacy and safety of TCM combined with chemotherapy for SCLC: a systematic review and meta-analysis In a meta-analysis of 1887 patients with small cell lung cancer from 22 randomized controlled trials, combining Traditional Chinese Medicine with chemotherapy prolonged survival and improved response to treatment and patient quality of life. Side effects were also reduced, including the negative impacts of chemotherapy on the digestive system and bone marrow. The overall quality of the studies was low.

<https://knowintegrativeoncology.org/shared?uuid=918968cc-2aeb-48fa-91b0-9ab9175f3e25&docType=Microtag>

TCM (cont.)

Chinese Herbal Medicine for Reducing Chemotherapy-Associated Side-Effects in Breast Cancer Patients: A Systematic Review and Meta-Analysis In a systematic review and meta-analysis of 4032 patients with breast cancer from 54 randomized controlled trials, using Traditional Chinese Medicine significantly reduced side effects from chemotherapy, including severe nausea and vomiting, diarrhea, hair loss, and low platelet or white blood cell counts. The overall quality of the studies was moderate.

<https://knowintegrativeoncology.org/shared?uid=ce791583-f295-4e57-b799-ee8c7c63cefc&docType=Microtag>

Meta-analysis of effectiveness of traditional Chinese medicine or its combination with Western medicine in the treatment of triple negative breast cancer In a meta-analysis of 1186 patients with triple negative breast cancer from 16 randomized controlled trials, the use of Traditional Chinese Medicine alone or in conjunction with Western medicine improved remission, quality of life, and survival compared to receiving Western medicine alone. The overall quality of the studies was low.

<https://knowintegrativeoncology.org/shared?uid=1fc196a3-e7ca-4d93-97a3-040902b73187&docType=Microtag>

Xi huang pills enhance the tumor treatment efficacy when combined with chemotherapy: A meta-analysis and systematic review In a systematic review and meta-analysis of 815 patients from 15 randomized controlled trials, using the Traditional Chinese Medicine Xi huang pill (*Boswellia carteri*, *Commiphora myrrha*, *Moschus moschiferus*, and *Calculus bovis*) significantly reduced the platelet and white blood cell-lowering side effects of chemotherapy as well as improved response to treatment, quality of life, and survival. The overall quality of the studies was low.

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Meta-Analysis of Astragalus-Containing Traditional Chinese Medicine Combined With Chemotherapy for Colorectal Cancer: Efficacy and Safety to Tumor Response In a systematic review and meta-analysis of 1409 patients with colorectal cancer from 22 randomized controlled trials, combining astragalus-based Chinese medicines with chemotherapy improved response to treatment and patient quality of life. Chemotherapy-related side effects were also reduced, including nausea and vomiting, diarrhea, neurotoxicity, and impacts on platelet, hemoglobin, and neutrophil counts. The overall quality of the studies was low.

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Efficacy and Safety of Chinese Herbal Medicine on Ovarian Cancer After Reduction Surgery and Adjuvant Chemotherapy: A Systematic Review and Meta-Analysis In a systematic review and meta-analysis of 18 randomized controlled trials, which included 975 women who completed surgery and chemotherapy for ovarian cancer, the use of Chinese herbal medicine alongside Western medicine significantly improved performance status, CA 125 tumor marker levels, and survival. Hemoglobin, white blood cell, and platelet levels were improved by the addition of Chinese herbal medicine, as well as the frequency of nausea and vomiting, and urinary symptoms. The quality of the studies was low to moderate.

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