

COMPLEMENTARY & ALTERNATIVE THERAPIES FOR LEUKEMIA, LYMPHOMA, HODGKIN'S DISEASE, & MYELOMA

Standard medical treatment for leukemia, lymphoma, Hodgkin's disease, or myeloma usually involves either chemotherapy, radiation therapy or both. This treatment has been proven through scientific studies to be effective against these cancers and safe for the patient. There is no evidence that anything but current medically approved standard therapy can stem the progression of or cure these cancers. Therefore, standard therapy should not be replaced by any unproven remedy.

Although standard treatment has greatly improved survival for individuals with these cancers, the side effects can be difficult. Some persons will wish to seek out other remedies or techniques, sometimes called *complementary and alternative therapies*, in addition to the treatment prescribed by their doctor. The information provided here is meant to assist persons who have leukemia, lymphoma, Hodgkin's disease, or myeloma — diseases which are referred to from this point as *blood-related cancers*.

Many complementary therapies — from vitamins and herbal therapies to massage and acupuncture — work well for persons with blood-related cancers, helping to relieve the side effects of the radiation and chemotherapy involved in the standard medical



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treatment of cancer. However, because many complementary and alternative therapies have not yet been studied, it is not know which are potentially helpful, which potentially harmful. For this reason, it is important to speak with your doctor about any complementary or alternative therapies you are currently using or considering. Asking about your concerns — such as which therapies are likely to be helpful, which therapies might have no effect or might be harmful, or where to find reliable information — will help you to make informed treatment decisions that are right for you.

Is There a Difference Between Complementary and Alternative Therapies?

Although many people use the term *alternative therapies* to include both complementary and alternative therapies, these two types of treatment have important differences. Complementary therapies are those that are used *in combination with, or in addition to*, the standard medical treatment prescribed by your doctor. Complementary therapies are usually used to relieve symptoms, alleviate pain or the side effects of standard cancer treatment, and to improve overall physical, emotional, and spiritual well-being. Alternative therapies are promoted for use *instead of* the standard cancer treatment prescribed by your doctor. Any therapy promoted for use *instead of* the standard medical treatment to fight cancer is considered alternative.^{1,2}



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What is the Difference Between These Treatments and Those Prescribed by My Doctor?

Until recently, complementary and alternative therapies were not offered by medical doctors or hospitals and were not taught in medical schools. All the standard treatments (also called *mainstream*, *conventional*, or *proven* treatments) prescribed by your doctor to fight blood-related cancers have been well studied, and the drugs used in your treatment have been approved by the Food and Drug Administration (FDA). To receive approval from the FDA, a treatment must undergo a thorough series of investigations, called clinical trials. In these clinical trials, researchers determine whether the treatment works against the cancer (or treatment side effects) and whether it is safe for your use. The researchers also determine the side effects, any dangerous reactions that might occur if the treatment is combined with certain other drugs, and the dose of the drug that will work best against the cancer and still be safe for your use. The standard treatment prescribed by your doctor has been approved by the FDA to be effective against blood-related cancers and, importantly, its side effects and possible interactions with other drugs are known.

FDA approval is required for drugs to be prescribed for a particular condition or illness. Complementary and alternative therapies such as vitamins or herbal medicines are not considered drugs, but foods. Although there are FDA regulations for these diet products, thorough studies have not been conducted



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for many of these therapies, leaving their effectiveness and safety unknown.^{3,4,5} Fortunately, science has responded to the public's growing interest in and use of these products. Scientific studies of numerous complementary and alternative therapies are underway, and others are being planned by the National Institutes of Health and other organizations.

Do Complementary and Alternative Therapies Work? Are They Safe?

Complementary therapies. Many complementary therapies work well to relieve pain, alleviate the side effects of radiation therapy and chemotherapy, and enhance overall health and well-being. It is possible that some complementary therapies may interfere with or have a dangerous reaction with your medical treatment. For this reason, it is important to consult your doctor about any therapies you are considering or using. Your doctor can advise you about which therapies might be helpful and which are potentially harmful.

However, since research on these therapies is limited, little is known about how these therapies might affect adults. Less is known about their impact on children. Because children are still developing and growing, some therapies that are safe and helpful in adults could be harmful to children. One example is that of craniosacral therapy, a manual method of healing that involves manipulation of the head, neck, and spine. Because young children's bones are still forming, this



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therapy could be hazardous to very young children.⁶ If you are considering a complementary therapy for your child with a blood-related cancer, we urge you to consult your child's doctor before beginning any new treatment.

Alternative therapies. Alternative therapies have not been tested and approved by the FDA for effectiveness against cancer or for safety. There are no alternative therapies that have been proven to kill cancer cells or stop the malignant process. Like complementary therapies, all the potential side effects and hazards of these therapies are not known, but the biggest danger of alternative therapies is the requirement to forego the standard medical treatment for cancer. The use of alternative therapies may cost persons with cancer their best opportunity for survival.

What Types of Complementary and Alternative Therapies are Available?

Complementary and alternative therapies are available for treatment of physical, psychological, and spiritual needs. The National Center for Complementary and Alternative Medicine lists seven categories of complementary and alternative therapies — alternative systems of medical practice; diet, nutrition, and lifestyle changes; mind/body control; bioelectromagnetic applications; pharmacologic and biologic treatments; manual healing; and herbal medicine — with each category consisting of a large number of remedies or techniques.⁷



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The National Center for Complementary and Alternative Medicine, American Cancer Society, and University of Texas Center for Alternative Medicine provide detailed descriptions of these and more therapies. They describe information on how each therapy works, whether it works, and whether it is safe or potentially harmful. In addition, the American Institute for Cancer Research Nutrition Hotline provides information to help you determine the best diet for you in achieving optimal health and well-being (see page 11 for resources).

Are There Complementary and Alternative Therapies Specifically for Persons with Leukemia and Related Cancers?

At this time, many complementary and alternative “cancer therapies” are not marketed to persons with specific cancers. Certain advocates of alternative therapies claim their treatments work to cure or slow all types of cancer. Some complementary therapies are said to relieve nausea, fatigue, and other common side effects of chemotherapy and radiation. Persons with leukemia, lymphoma and related cancers may benefit from the use of helpful complementary therapies. Also of particular interest might be those therapies that are promoted to “boost the immune system” or “build the blood.” The following is a select list of therapies — some potentially helpful, some potentially harmful — which claim to relieve treatment side effects or stimulate the immune system.



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Potentially Promising Results

Acupuncture. Developed in China more than 2000 years ago, this is a complementary therapy that has been studied thoroughly. Acupuncture is a technique which involves the placing of needles into the skin at certain points, called meridians. This therapy has been proven effective as a complementary therapy against general muscle pain and the nausea and vomiting of chemotherapy.⁸

Coenzyme Q10 (CoQ10). CoQ10, an antioxidant and potential immune stimulator, is sold in capsule form and is being studied in persons with leukemia, nonHodgkin's lymphoma, and other cancers. Some results indicate that this therapy may be useful as a complementary therapy, enhancing the immune system and providing protection against the harmful effects of radiation and/or some chemotherapy drugs on healthy tissues. On occasion, individuals taking this supplement have experienced mild side effects such as headache, heartburn, fatigue, diarrhea, and rash. CoQ10 is being studied to further determine whether it is beneficial, whether it is safe, and for whom.⁹

Polysaccharide K, or PSK. This mushroom-derived treatment is used in Japan, usually in combination with surgery, chemotherapy, and/or radiation to treat some cancers. In addition, one US company sells PSK extract as a tea to various clinics. Some studies have shown this treatment to have immune-enhancing qualities, and it remains under study for possible anticancer activity. Some individuals have experienced gastrointestinal upset while on this treatment.¹⁰

Unknown or Potentially Harmful Effects

Camphor, or 714-X. This treatment, taken by injection, drops, or nebulizer, is said by some to bolster the body's immune system, thereby curing cancer and other diseases. Those who promote 714-X claim that it arms the immune system by interfering with cancer cells' protection against the immune system, regaining balance and killing the cancer cells. While there are no major risks reported, no clinical studies have been performed with 714-X. Therefore, there is no evidence to support the use of 714-X for the treatment of leukemia or any other cancer and its safety has not been established.¹¹

Green tea. Green tea is used widely, and is said by some to enhance the immune system. However, this tea has been studied mainly for its ability to prevent cancer, not to treat cancer. Ten studies have shown a protective effect against developing cancer, while two studies have shown the opposite effect. Some laboratory studies show that green tea may slow tumor growth. However, it is not known whether this is true in humans, and it is not known whether this is the case for different types of cancers. Mild insomnia has been experienced by some persons taking green tea.¹²

Hoxsey. Purported to be an immune-boosting remedy, this herbal formula was developed in the early 1900s to treat cancer and is now offered in Tijuana. The formula, which may be used on the skin or taken as a liquid, consists of agents such as bloodroot, arsenic sulfide, sulfur, licorice, red clover, burdock root,



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barberry, cascara, and other herbs. Advocates of this treatment say that it strengthens the immune system and causes cancer cells to die. Side effects, such as diarrhea, nausea and vomiting—and some more serious conditions—have been observed with the ingredients used in the Hoxsey treatment.¹³

Vitamin megadoses. Taking vitamins as dietary supplements may be helpful to promote health in some persons with cancer; however, large overdoses of these same vitamins can be harmful. In the 1970s, some began recommending high doses of vitamin C (10 grams or more daily) to prevent and cure cancer. However, studies showed that these vitamin megadoses had no benefit in comfort and survival, and may cause diarrhea, renal stones, iron overload and gastrointestinal discomfort. Other vitamin overdoses that might cause harmful effects include vitamin A (25,000 IU or more daily), which may cause severe liver disease and vitamin B6 (more than 100 mg daily), which may cause balance difficulties or nerve injury.^{14, 4}

Will My Insurance Pay for Complementary and Alternative Therapies?

More and more, insurance policies are covering the costs of certain complementary and alternative therapies. Several insurers have developed major medical plans that include select complementary and alternative therapies as part of their regular plans. Other insurance companies are developing plans to



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cover complementary and alternative therapies specifically. For detailed information about insurance coverage, consult your insurance provider and your healthcare providers.¹⁵

How Do I Talk to My Doctor About Complementary and Alternative Therapies?

Because of possible side effects and dangerous interactions of some complementary and alternative therapies, we urge you to consult your doctor about any therapies you are considering or using. Likewise, if you are considering foregoing standard treatment for an alternative therapy, please discuss your options with your doctor. Together, you and your doctor can determine which therapies will be the most effective and safe for you.

In the past, some patients have had difficulty talking with their doctors about complementary and alternative therapies. They felt that their doctors believed only in standard medical treatment and were not willing to consider the benefits of some complementary and alternative medicine. Fortunately, this is changing. The potential benefits and risks of complementary and alternative therapies are now being taught in many medical schools, and select complementary therapies are being offered at hospitals and cancer clinics. In addition, cancer healthcare professionals are eagerly awaiting the results of ongoing studies of such therapies.



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The following questions are examples of how you might ask your doctor about complementary and alternative therapies:

- “I was on the Internet recently and came across some information that said acupuncture might be helpful in relieving the nausea after chemo. Is that something that might be helpful for me?”
- “A friend said that using echinacea really helped her to feel less fatigued. Do you think that is something I should try?”
- “With my recent diagnosis and difficult treatments, I am feeling discouraged lately. Do you have any suggestions to help me get through this?”

You might also consider bringing any materials that you find from the Internet¹⁶, from a friend, or from various cancer organizations for your doctor’s review. Your doctor can then address your questions, keep a record of which therapies you are using, and avoid any harmful interactions. Your doctor may also refer you to a nurse or social worker who can help you further.



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Where Can I Find Reliable Information?

American Cancer Society
(800-ACS-2345; www.cancer.org)

provides Fact Sheets on specific complementary and alternative therapies, how to speak with your doctor, and how to choose a reliable provider.

American Institute for Cancer Research Nutrition Hotline
(800-843-8114; www.aicr.org/)

provides information on different nutritional regimens and potential health benefits.

Boston University Medical Center
(www.bu.edu/COHIS/)

provides information on various types of cancer as well as specific complementary and alternative therapies.

Food and Drug Administration
(www.fda.gov/)

provides a number of articles on dietary supplements, discussions of specific products with potentially serious side effects, and warnings about specific products.

National Cancer Institute
(800-4-CANCER; www.nci.nih.gov/)

provides information on clinical trials and Fact Sheets on complementary and alternative therapies.



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National Center for Complementary & Alternative Medicine, National Institutes of Health
(888-644-6226; altmed.od.nih.gov/)

provides Fact Sheets on specific complementary and alternative therapies and ongoing studies; its clearinghouse provides information and publications on various topics, including how to discuss the topic with your doctor and how to find a practitioner in your area.

Oncolink
(www.oncolink.upenn.edu/)

provides information and video segments on specific complementary and alternative therapies, how to discuss the topic with your doctor, how to choose a reliable provider.

Reuters Health
(www.reutershealth.com/)

provides the latest news in medical advances, including those related to complementary and alternative therapies.

University of Texas Center for Alternative Medicine Research
(www.sph.uth.tmc.edu/utcam/)

provides extensive information on specific complementary and alternative therapies, with detailed scientific summaries of study results.

Quackwatch
(www.quackwatch.com)

provides information on claims of complementary and alternative therapies that are unproven, proven to be ineffective, or proven to be unsafe.



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Glossary

- Acupuncture:** Well studied Chinese therapy that uses placement of needles to relieve various symptoms including the nausea and vomiting associated with chemotherapy.
- Alternative Therapy:** Treatments or techniques that are used instead of standard medical treatment to fight cancer. Also called unproven, unconventional, or unorthodox treatments.
- Bioelectromagnetic Application:** Type of complementary or alternative treatment, such as electrostimulation, as categorized by the National Cancer Institute.
- Chemotherapy:** Treatment with drugs, often prescribed by the doctor as part of standard medical treatment, to fight cancer cells.

Complementary Therapy:

Treatments or techniques that are used in addition to the standard treatment prescribed by the doctor. Also called unproven, unconventional, unorthodox, or integrated treatments.

Craniosacral Therapy:

Type of complementary or alternative therapy which involves massage or manipulation of the head, neck, and spine.

Herbal Medicine:

Type of complementary or alternative treatment, involving use of herbs, as categorized by the National Cancer Institute.

Immune System:

The body's defense system against disease or infection.

Manual Healing:

Type of complementary or alternative treatment, such as massage, as categorized by the National Cancer Institute.

Mind/body Control:

Type of complementary or alternative treatment, such as biofeedback or meditation, as categorized by the National Cancer Institute.



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Pharmacologic & Biologic Treatment:	Type of complementary or alternative treatment, such as the use of antioxidizing agents or metabolic therapy, as categorized by the National Cancer Institute.
Radiation Therapy:	Treatment with radiation, often prescribed by the doctor as part of standard medical, to fight cancer cells.
Side Effect:	Symptoms or discomfort that can be caused by certain standard medical treatments for cancer as well as by some complementary and alternative therapies.
Standard Medical Treatment:	Treatment prescribed by the doctor to fight cancer cells. Drugs and techniques, such as those used in chemotherapy and radiation therapy, have been studied and proven safe and effective. Also called proven, conventional, or mainstream medicine.

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