About Dietary and Herbal Supplements

This section has been reviewed and approved by the Cancer.Net Editorial Board [1], August / 2012

Listen to the Cancer.Net Podcast: Dietary and Herbal Supplements [2], adapted from this content.

Key messages:

- It's important to be an informed consumer before taking dietary and herbal supplements to treat or prevent cancer.?
- Talk with your doctor to learn about the safety of any supplements, including any interactions with current cancer treatments and other side effects.

People living with cancer may consider taking dietary and herbal supplements as a way to boost health, improve nutrition, or reduce treatment side effects. It?s important to discuss the possible benefits and risks of specific supplements with your doctor before taking them. There are different types of supplements:

- Dietary supplements have one or more dietary ingredients, such as vitamins, minerals, herbs, enzymes, amino acids, hormones and more. These can be purchased without a prescription in pharmacies, grocery stores, health food stores and over the Internet. They come in many forms, such as pills, capsules, tablets, liquids, creams or powders.?
- Herbal supplements and botanicals are products that contain plants or ingredients from plants. These too come in several forms, such as tablets, capsules, powders, liquids and tea bags.

Supplements as complementary and alternative medicine

Supplements are considered part of complementary and alternative medicine (CAM), a diverse group of treatments, techniques, and products that are not considered conventional medicine, such as those that have been scientifically tested, found to be safe and effective, and approved by the U.S. Food and Drug Administration (FDA). Supplements can be used in addition to conventional medicine or in place of conventional therapy. Learn more about CAM [3].

For example, if someone takes ginger to help reduce nausea during chemotherapy, it is considered a complementary therapy. Some supplements can be safely used with a doctor's guidance to manage side effects of conventional treatment or to improve a patient's physical or emotional well-being.

However, if someone takes ginger in an effort to cure the cancer instead of undergoing chemotherapy, it is considered an alternative therapy. Despite promotional claims, there is no dietary or herbal supplement that cures or treats cancer. Many supplements interfere with cancer treatment and can be harmful to your health.

Evaluating the safety of supplements

It can be difficult to determine the safety and effectiveness of dietary supplements. Information about dietary supplements is often based on anecdotal evidence (people's personal observations) instead of scientific studies. People commonly believe that herbs and other supplements are safe because they are "natural" and because they have been used for centuries for medicinal purposes. However, safety varies depending on the dietary supplement?s ingredients, dose, preparation, and effect on the body.

The FDA regulates dietary supplements differently than prescription or over-the-counter medications; it does not approve dietary supplements as safe and effective before they are sold. The FDA can only claim that a supplement is unsafe after consumers have reported problems with it. Thus, the degree of quality control depends on the manufacturer, the supplier, and others in the supplement's production process.

The claims made on supplement labels are often confusing. The FDA allows dietary supplements labels to include one of three types of claims: a health claim (which describes an FDA-approved link between a food, food component, or dietary supplement and a disease or health-related condition), a nutrient content claim (which describes the level of a nutrient or dietary substance contained in the product), and a structural or functional claim (which describes how a dietary ingredient is intended to affect the body). Product labels with a structural or functional claim must also include a disclaimer that reads, "This statement has not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease." In other words, the claim has not been rigorously tested and may not be true.

People undergoing cancer treatment must be extremely cautious about the safety of dietary supplements because some can interfere with surgery, chemotherapy, and radiation therapy. For instance, the herb kava can interfere with anesthesia for surgery, some herbs interfere with blood clotting, and many interfere with chemotherapy effectiveness.

Talking with your doctor about supplements

Deciding whether, when, and how to use a dietary supplement to complement standard cancer treatments is complicated. It's important to be an informed consumer. Discuss the choice with a member of your health care team, and use one of the scientific websites listed below to address the following considerations:

- Possible benefits and risks, depending?in part?on personal medical history?
- Possible interactions with current cancer treatments?
- Possible side effects?
- Dosage levels and length of treatment?
- New information about the supplement, preferably from clinical trials [4], rather than personal stories

Learn more about questions to ask when considering CAM [5].

Warnings about supplements

- Some supplements can cause serious side effects, such as high blood pressure, nausea, diarrhea, constipation, fainting, headaches, seizures, heart attack, or stroke, even when taken at the recommended dose. Contact your doctor immediately if you experience any harmful side effects.?
- Ingredients in some supplements can interfere with prescription and over-the-counter medications you may already be taking. In addition, as stated above, some can interact with cancer treatments.?
- Certain dietary supplements may be unsafe if you have specific health problems, including high blood pressure, diabetes, mental health conditions, or heart disease.

Recommendations if you decide to use supplements

- Purchase only single-ingredient products approved by your doctor that clearly show how much each dose contains and use brands from companies you or your doctor know are reputable. Most supplements contain more than one ingredient, and many have been found to be contaminated with other unlabeled herbs, pesticides, prescription drugs, heavy metals, or other substances.?
- Look for a certification mark or seal from an independent, third-party organization, such as U.S. Pharmacopoeia [6], the Good Housekeeping Research Institute, or ConsumerLab.com. Although tests differ, such labels indicate that the supplement has met certain manufacturing standards.?
- Check the product label to see whether the supplement has been scientifically tested. Contact the manufacturer for the test results, and ask your doctor to explain anything that isn't clear.?
- Be skeptical of claims on the labels of supplements, particularly those that claim to cure cancer. There is no single device, remedy, or treatment that can successfully treat all cancers. There is no dietary supplement that can cure cancer.

More Information

Managing Side Effects [7]

Vitamins and Minerals [8]

Additional Resources

Federal Trade Commission: ?Cure-ious? Ask.? Campaign to Avoid Cancer Scams [9]

Memorial Sloan-Kettering Cancer Center: About Herbs, Botanicals & Other Products [10]

National Center for Complementary and Alternative Medicine: Using Dietary Supplements Wisely [11]

National Institutes of Health?s Office of Dietary Supplements: Background Information [12]

FDA: Tips For The Savvy Supplement User: Making Informed Decisions And Evaluating Information [13]

Links:
[1] http://www.cancer.net/about-us
[2] http://www.cancer.net/sites/cancer.net/files/Dietary_and_Herbal_Supplements.mp3
[3] http://www.cancer.net/all-about-cancer/treating-cancer/complementary-and-alternative-medicine-cam/about-complementary-and-alternative-medicine
[4] http://www.cancer.net/node/25040
[5] http://www.cancer.net/node/25041
[6] http://www.usp.org/
[7] http://www.cancer.net/node/25238
[8] http://www.cancer.net/node/24987

[9] http://www.ftc.gov/curious
[10] http://www.mskcc.org/cancer-care/integrative-medicine/about-herbs-botanicals-other-products
[11] http://nccam.nih.gov/health/bottle/
[12] http://ods.od.nih.gov/factsheets/dietarysupplements.asp
[13] http://www.fda.gov/food/dietarysupplements/consumerinformation/ucm110567.htm