

Oncology Nutrition



Dietary Supplements for Oncology Patients



What are dietary supplements?

- **Dietary supplements are products such as**
 - vitamins, minerals, herbal/botanical supplements, amino acids, enzymes, etc.
- **Dietary supplements are not intended to treat, diagnose, prevent, or cure diseases**
- **Some supplements may be safe, but others may be unsafe and may interfere with cancer treatments**



Dietary Supplements during Treatment

- Taking a multivitamin with minerals may be beneficial if you are eating less than usual for yourself.
- There is not enough evidence to support taking any specific dietary supplements during treatment
- Needs to be addressed by a healthcare professional on an individual basis as some supplements can

Supplement Considerations and Potential Interactions

- The United States Food and Drug Administration (FDA) does not evaluate the safety and labeling of dietary supplements before they are sold.
- Dietary supplements do not have to prove safety and efficacy before being sold.
- Be sure to read the label carefully. Look at the claims, ingredients and directions for use.
- There are three organizations that provide quality testing and the evaluate purity, potency, composition and other criteria of the product.
 - US Pharmacopeia
 - Consumerlabs.com
 - NSF International
- Consult with your physician/treatment team before taking any dietary supplements.
- High doses of antioxidants in the form of supplements interfere with treatment/make some chemotherapies less effective.
- Some supplements can cause severe skin sensitivity and reactions if taken during radiation
- Some supplements can also interfere with medications and can block or speed up the body's ability to break them down, such as St. John's wart, goldenseal, echinacea, and Allium (garlic) oil.

Tips for choosing and using dietary supplements

- Do your research – find materials from reliable third parties such as researchers or government agencies
- Supplements made by national food or drug companies are likely to have tighter regulations
- Check with your doctor or healthcare provider before taking any dietary supplements
- Try to avoid mixtures of many different supplements
- Start only one product at a time
- If you have any planned surgeries be sure to speak with your surgeon about whether or not you need to stop taking your supplements beforehand
- Follow dosage limits on label
- Talk with your doctor before taking any self-prescribed remedies

Supplements For Symptom Management

- Ginger for nausea
- Vitamin B6 for nausea
- Aromatherapy
 - Essential oils such as lavender, peppermint, and ginger for nausea
 - May help improve sleep which may help reduce fatigue
 - Lavendar or Sweet marjoram may help reduce anxiety
 - Sweet marjoram may help with pain



Functional Foods

Whole foods along with fortified, enriched, or enhanced foods that have a potentially beneficial effect on health when consumed as part of a varied diet



Functional Foods – Antioxidants

- Consuming antioxidant foods have not been found to have a negative impact on treatments and may be beneficial
- Plant-based foods are the best source of antioxidants. These include fruits, vegetables, whole grains, nuts, seeds, herbs and spices, and even cocoa.
- Vegetables- Artichokes, bell peppers, sweet potatoes, tomatoes, carrots, kale, spinach, and broccoli
- Fruits - Blueberries, blackberries, raspberries, strawberries
- Nuts, seeds, and grains—walnuts, pecans, buckwheat, millet, barley, sunflower seeds, pumpkin seeds
- Best to consume a variety of antioxidant rich foods



Functional Foods - Prebiotics

- Prebiotic foods – typically high fiber foods, provide foods for the good bacteria in your gut
 - Beans
 - Nuts and seeds
 - Fruits – apples, bananas, watermelon, peaches, nectarines, grapefruit, pomegranate, berries
 - Vegetables—onion, garlic, leeks, chicory root, asparagus, artichokes, beets, fennel, peas, cabbage, tomatoes, leafy greens
 - Whole grains



Functional Foods -- Continued

- Flaxseed meal – needs to be ground, but has both soluble and insoluble fiber and a source of omega-3
- Chicory root – prebiotic food, promotes bowel regularity, and helps with absorption of calcium and magnesium, helps increase good bacteria and decrease pathogenic bacteria in your gut
- Oats – source of many micronutrients and cancer-fighting phytochemicals
- Algae – protein quality of some forms of algae is as good as that of eggs; Planktonic algae are a predominant source of omega-3 fatty acids in fish; also rich in vitamins
- Green tea -- antioxidant properties



Resources

- American Cancer Society
- National Cancer Institute's Office of Cancer Complementary and Alternative Medicine
Website: <https://cam.cancer.gov>
- National Institutes of Health's Office of Dietary Supplements
Website: <https://ods.od.nih.gov>
- National Center for Complementary and Integrative Health (NCCIH) ; Website: <https://www.nccih.nih.gov>
- Memorial Sloan Kettering Cancer Center - About Herbs and Botanicals
Website: <https://www.mskcc.org/cancer-care/diagnosis-treatment/symptom-management/integrative-medicine/herbs>
- US Food and Drug Administration – Dietary Supplements
Website: <https://www.fda.gov/food/dietary-supplements>

Question

Which supplement in high doses can interfere with treatment/make some chemotherapies less effective?

A) Vitamin A

B) Vitamin B12

C) Vitamin D

D) Vitamin C & vitamin E