

# FOOD, FITNESS, AND CANCER

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Stacy Kennedy

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Nutrition and exercise play a powerful role in the prevention, treatment, and survivorship of cancer. Together, they boost energy levels, support the immune system, and provide symptom and weight management, ultimately contributing to overall health and wellness.

## **Nutrition**

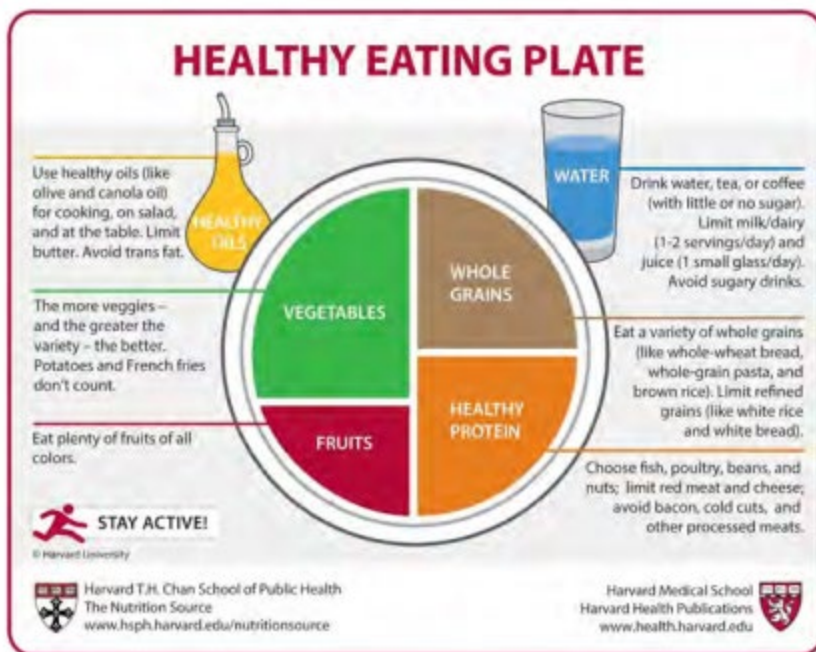
The key starting point to a healthy diet is creating a balanced plate. This means filling 50% of your plate with fruits and vegetables, 25% with lean protein, and 25% with whole grains. Include a variety of brightly colored fruits and vegetables to obtain essential nutrients that are important for the immune system. For example, cruciferous vegetables, such as broccoli, cauliflower, and kale contain potent phytochemicals that promote natural liver detoxification and immune support. Protein is essential for energy and immune function. It also helps to prevent muscle and weight loss during treatment. Consider choosing lean and plant-based protein sources, such as eggs, fish, chicken, hummus, nuts, seeds, and beans. Finally, whole grains and starchy vegetables make up the remainder of our balanced plate. Choose quinoa, brown rice, or sweet potatoes instead of refined grains like white rice and breads.

Food can also help manage treatment side effects. Here are some simple tips to ease symptoms:

- Eat 6-8 smaller meals throughout the day to help manage lack of appetite, getting full quickly, or sustaining energy levels.
- Steep fresh lemon and ginger in hot water for nausea. Include easy-to-digest foods like toast, crackers, potatoes, soups, and smoothies.

- Alleviate constipation with hydration, senna tea, adequate fiber intake, and gentle walking or activity. Try warm beverages and foods like herbal tea, hot water with lemon, oatmeal, and vegetable, lentil, or bean soups.
- Prevent electrolyte depletion and nutrient malabsorption from diarrhea by hydrating with electrolytes and achieving the right balance of dietary fiber in foods.
- Avoid concentrated sweets, lactose, spicy foods, extreme food temperatures, and excess caffeine when experiencing heartburn or diarrhea. Bland foods rich in carbohydrates with sodium can help, such as a baked potato with sea salt.
- Snack on tart, sour foods like cherries or citrus to combat taste changes. Hydrate with natural flavors like adding fresh fruits and herbs to water, season foods with spices and herbs, and avoid contact with metal utensils and packaging.
- To ease peripheral neuropathy, speak with your doctor and dietitian about a B-vitamin supplement (B6 and/or B12). Include colorful fruits and vegetables and healthy fats like those found in nuts, seeds, avocados, and olives to provide natural anti-inflammatory

compounds. Be sure to stay well hydrated with electrolytes.



*Healthy Eating Plate, from the Harvard University T.H. Chan School of Public Health*

workouts, or a kickboxing class. However, 30 minutes of walking every day can reduce treatment side effects and promote cancer survivorship. Movement therapies such as qigong, tai chi, and yoga may be helpful in relieving tired muscles and reducing stress. Remember to start slowly, pace yourself, and celebrate small accomplishments. Not only does exercise provide a physical benefit, it establishes social connections, helps fight anxiety, and it can elevate your mood. Explore the various types of physical activity and choose something that fits your lifestyle.

### Exercise

Physical activity can help reduce the risk of developing cancer. According to the National Cancer Institute, exercise can also play a role in preventing future cancers and may impact quality of life after cancer. Many of us think that physical activity should include running, long gym

## **Nutrition Myths and Cancer: Fact or Fiction?**

A healthy, balanced diet may seem impossible to achieve with the countless myths regarding food and the development of cancer. Let's take a closer look at some of them:

**Myth:** All meat causes cancer.

**Truth:** A large amount of red meat in your diet may raise the risk of getting cancer. Limit servings to less than 18 oz per week. Processed meats, such as hot dogs, bacon, and salami should be consumed less than once a week because of their link with colorectal and breast cancer.

**Myth:** Fresh fruit and vegetables are healthier than frozen fruit and vegetables.

**Truth:** Frozen fruit and vegetables are just as healthy as fresh.

**Myth:** Sugar causes cancer.

**Truth:** There is no proven, direct link between sugar and cancer risk. However, large amounts of refined sugar can lead to obesity, which increases cancer risk. Limit added sugars to less than 25 grams a day for women and less than 36 grams a day for men.

**Myth:** All carbohydrates are bad.

**Truth:** Different carbohydrates have different effects on our body. Stick to lower glycemic foods, like starchy vegetables and whole grains. Avoid higher glycemic foods like cakes, cookies, and candy. (*Editor's note: Glycemic refers to a food's ability to affect blood glucose levels.*)

**Myth:** Organic foods prevent cancer.

**Truth:** While experts agree that consuming a variety of fruits and vegetables is healthy, the consensus about consuming organic continues to emerge. According to the National Comprehensive Cancer Network, there is limited evidence to suggest that eating organic foods can reduce your cancer risk. A recent study observed a reduction in the risk of non-Hodgkin lymphoma among women who "usually/always" ate organic foods. These results were compared to women who reported "never" eating organic foods. Look for locally sourced produce, meat, dairy, and eggs in your community; they may have less pesticide compared to store bought items, even without the organic stamp of approval.

**Myth:** Superfoods such as chia seeds, seaweed, and acai have powerful cancer-fighting properties you can't get with your average fruit or veggie.

**Truth:** Unfortunately, there is little research to support the overstated claims we often hear associated with these foods. All fruits, veggies, herbs, and spices are "super" for a variety of reasons. Many super foods can be found in one's own local produce and other ingredients unique to the locale. "Superfoods" can be a part of a well-balanced diet to offer new and interesting flavors and options for plant-based foods.

## **Should I be taking supplements?**

Many patients ask if they should take vitamin and mineral supplements during treatment. Taking a “food first” approach is recommended. This means trying to get as many nutrients from food as possible. The National Cancer Institute, American Cancer Society, and American Society of Clinical Oncology discourage the use of high dose antioxidants such as vitamins C, E, and carotenes, in pill or supplement form, during radiation and chemotherapy, as they may reduce treatment effectiveness. However, eating foods rich in antioxidants like blueberries, oranges, spinach, and sweet potatoes do not pose any risk during treatment; they provide important nutrients in an ideal dose and form.

If you’re concerned, micronutrient deficiencies in magnesium or iron, for example, can be detected through blood tests. Talk to your physician and registered dietitian to discuss a safe approach for correcting deficiencies.

Another popular interest is the benefit of probiotics. Probiotics are healthy bacteria that can improve upon the gut flora that live inside our digestive system. They can be found naturally in foods like Greek yogurt, kefir, and fermented foods, but also in supplement form. While probiotics can provide gastrointestinal benefits, like helping control diarrhea, they are not necessary for everyone. Consult your physician or registered dietitian before adding probiotics into your diet.

Click on the following links for further information:

“A Prescription for Healthy Living: How Diet and Exercise Can Help Cancer Patients”  
*[blog.dana-farber.org/insight/2018/09/prescription-healthy-living-diet-exercise-can-help-cancer-patients/](http://blog.dana-farber.org/insight/2018/09/prescription-healthy-living-diet-exercise-can-help-cancer-patients/)*

“What Is a Balanced Diet?”  
*[blog.dana-farber.org/insight/2019/02/what-is-a-balanced-diet/](http://blog.dana-farber.org/insight/2019/02/what-is-a-balanced-diet/)*

“Exercise as Part of Cancer Treatment”  
*<https://www.health.harvard.edu/blog/exercise-as-part-of-cancer-treatment-2018061314035>*

“More Evidence of Exercise for Cancer Prevention”  
*[www.aicr.org/cancer-research-update/2016/05\\_18/cru-More-Evidence-of-Exercise-for-Cancer-Prevention.html](http://www.aicr.org/cancer-research-update/2016/05_18/cru-More-Evidence-of-Exercise-for-Cancer-Prevention.html)*

“Debunking Common Nutrition Myths [Infographic]”  
*[blog.dana-farber.org/insight/2014/04/debunking-common-nutrition-myths/](http://blog.dana-farber.org/insight/2014/04/debunking-common-nutrition-myths/)*

“Sugar and Cancer: What Is the Relationship?”

*blog.dana-farber.org/insight/2015/05/does-sugar-cause-cancer/*

“Nutrition for Cancer Survivors”

*www.nccn.org/patients/resources/life\_after\_cancer/nutrition.aspx*

“Human Health Implications of Organic Food and Organic Agriculture: a Comprehensive Review”

*https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5658984/*