



# Myth **vs** Fact

## Nutrition & Cancer

Developed by Cholangiocarcinoma Foundation's partner, Savor Health®

### **Myth**

I can eat whatever I want during cancer treatment.

### **Fact**

It's important to eat a balanced diet during cancer treatment, avoiding certain foods due to food safety reasons. Following food safety guidelines is important, as cancer or cancer treatment can weaken the immune system, making it harder for the body to fight off food-borne infections or bacteria. Foods to avoid include raw or undercooked animal products, fish, shellfish, sushi, sashimi, and eggs. Also, avoid unpasteurized dairy products and juices, raw sprouts (e.g., alfalfa, mung bean, radish), and deli meats like ham, turkey, and roast beef if not heated properly. If you are neutropenic (very low white blood cells), you may require a more restrictive diet; consult your medical team. Reducing highly processed foods and beverages with added sugar, fat, and salt is generally healthy. It is recommended to avoid processed meats and limit red meat (beef, pork, lamb) to less than 12-18 ounces of cooked meat per week. It also may be recommended to avoid alcohol during treatment, this can be discussed with your medical team. Focusing on energy and protein-rich foods during treatment is best to support your body. Choose colorful fruits, vegetables, plant-based protein, and lean animal protein during treatment.

### **Myth**

Nutrition can't help with side effects during treatment.

### **Fact**

Nutrition interventions can help patients self-manage symptoms during treatment. Up to 90% of patients have addressable nutrition symptoms during cancer treatment. Nutrition intervention can help improve symptom management. For each nutrition-related symptom, there are nutrition and diet interventions that can help with foods to eat or avoid and how to modify textures, temperatures of food, and timing of meals. Some examples are eating smaller, more frequent meals if you are managing fatigue, early satiety, or loss of appetite. If you have experienced unintentional weight loss, choosing high-calorie and protein foods may be recommended. For gastrointestinal-related symptoms, such as nausea or vomiting, easy-to-digest, bland meals and snacks may be recommended, as well as foods/beverages that contain ginger. Working with a registered dietitian ("RD") who is certified in oncology (Certified Specialist in Oncology "CSO") would be recommended if available to you.

Cancer patients often have higher calorie and protein needs due to the body's increased demands during treatment and recovery. Chemotherapy, radiation, and surgery can lead to tissue damage, inflammation, and changes in metabolism, requiring more energy and protein to repair and maintain muscle mass. Unintentional weight loss can weaken the immune system, reduce treatment effectiveness, and delay recovery. Therefore, it is crucial for cancer patients to focus on consuming nutrient-dense foods to meet these elevated nutritional needs and prevent malnutrition. Choose calorie-dense foods such as nuts or nut butters, avocados, olives, seeds, fatty fish, and plant-based oils (olive, avocado). Also, choose protein-dense foods such as plant-based sources (beans, peas, lentils, nuts, seeds, whole soy foods) and lean animal sources (eggs, turkey or chicken breast, low-fat ground poultry or fish). Limiting unintentional weight loss is often one of the most important nutrition goals a patient has during treatment. Therefore, often, patients are advised to liberalize their diet to include other sources of calorie-dense foods that otherwise may not be recommended. Since patients face side effects and appetite changes, often the focus is on eating enough calories and protein, aiming for healthy sources but including a variety of foods as needed.



## **Myth**

Patients should fast before chemo.

## **Fact**

Fasting's direct role in cancer prevention and treatment remains unclear. There is some promising research to suggest that fasting may be beneficial in certain circumstances, but larger, well-designed studies on each cancer type and with each treatment are required to provide conclusive evidence before it is recommended that it is appropriate for everyone. With fasting, it's also important to consider that eating less may lead to weight loss due to lower calorie and protein intakes, which may not be appropriate for patients undergoing treatment or with high-risk diagnoses. Secondly, it is important to focus on balanced meals and meeting nutrient needs when fasting since it imposes a restriction on the diet. Although some small studies have shown improved quality of life and symptoms when fasting while undergoing chemotherapy, it can not yet be safely recommended for everyone with cancer. It is always recommended to discuss any significant dietary changes with your medical team before starting a special diet or vitamin/supplement to ensure safety.

## **Myth**

Sugar causes cancer.

## **Fact**

Sugar does not cause cancer. While glucose is essential for all cells in the body, including cancer cells, eliminating carbohydrates entirely can be counterproductive for cancer patients, potentially causing weight loss and other side effects. High insulin levels, often triggered by intake of a diet high in simple sugars, may influence cancer growth over many years, especially since cancer cells often have more insulin receptors. Cutting out all carbohydrates from the diet is counterproductive, as the body will still produce glucose but, in turn, break down protein or fats from the body. A balanced diet and regular physical activity help maintain healthy blood sugar and insulin levels, reducing insulin resistance and associated risks, including cancer. The glycemic index ("GI") can guide food choices, favoring low GI options, but it is not the sole factor in cancer risk. Choosing whole grains and complex carbohydrates is a healthy way to keep your diet balanced while avoiding simple carbohydrates and sweetened beverages.

## **Myth**

Patients should take supplements to control cancer and prevent cancer recurrence.

## **Fact**

Patients should avoid supplements for cancer prevention unless prescribed or approved by your medical team. For most people with cancer, it is not recommended to take vitamins, herbs, or supplements. Supplements are not held to the same rigorous testing standards or regulated by the FDA, leading to potential concerns about their safety and effectiveness, especially for cancer patients.

The use of herbs alongside chemotherapy has not been well-studied, and dangerous interactions may occur. Antioxidant supplementation during cancer treatments is controversial, with conflicting evidence on whether it helps or hinders chemotherapy and radiation therapy. Other potential interactions include affecting how medications are metabolized, affecting blood clotting or blood counts, and more. While whole foods rich in antioxidants are not seen as problematic, high doses of antioxidant supplements may interfere with treatment effectiveness. It's essential to communicate with healthcare providers before using any supplements to ensure they do not interfere with cancer treatments or increase risks. Generally, the "whole food" form of herbs or supplements is best to include in your diet. It is always recommended to discuss any dietary supplements, herbs, or vitamins with your medical team before starting a special diet or vitamin/supplement to ensure safety.



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