

Over 1 million people get cancer each year. Approximately one out of every two American men and one out of every three American women will have some type of cancer in their lifetimes. Cancer is the second leading cause of death in the United States. Here are some general nutrition guidelines that can help prevent cancer and other chronic diseases.

Healthy Eating Guidelines

- Eat a variety of foods from the major food groups. Use Choose My Plate to guide you in creating balanced meals.
- Choose most of the foods you eat from plant sources.
- Eat five or more servings of a variety of fruits and vegetables every day.
- Eat plenty of fiber.
- Limit your intake of high-fat foods, especially from animal sources.
- Jump-start your day with a healthy breakfast.
- Achieve and maintain a healthy weight.
- Be physically active. Engage in at least 30 minutes of moderate to vigorous physical activity, in addition to usually activities on five or more days of the week.
- Limit consumption of alcoholic beverages, if you drink at all.
- Remember, a colorful plate is a healthy plate!
- Limit consumption of processed and red meats.
- Choose whole grains in preference to processed (refined) grains.





Nutrition and Cancer

The nutrient goals of people with cancer vary from person to person depending on the type of cancer you have and the treatment(s) you undergo. In radiation therapy, radiation is directed at the parts of the body with cancer so the cells are unable to grow and divide. The type of side effects the therapy may cause depends on the area of the body receiving radiation, the size of area being treated, the total dose of radiation, and the number of treatments. Chemotherapy involves taking strong drugs that kill cancer cells. The drugs are most commonly taken by mouth or given by injection into the bloodstream. Chemotherapy drugs can damage both healthy cells and cancer cells. Cells most likely to be injured are bone marrow, hair, and the lining of the digestive tract from the mouth all the way to the rectum or anus.

If you have undergone, or are currently going through treatment such as chemotherapy or radiation therapy, you may experience side effects that can also affect your dietary intake. Eating the right kinds of foods before, during, and after treatment can help you feel better, stay stronger, decrease your risk of infection, and heal and recover quickly. See the charts below for some tips to help you cope with side effects of your cancer treatment.

When you have cancer or are undergoing treatment your immune system is weak. Be especially careful when buying foods, preparing meal, and dining out to prevent food borne illnesses. Following food safety guidelines reduces your risk of exposure to bacteria and other organisms that could multiply and cause a serious infection when your immune system is weak.

Make sure to:

- Wash hands often.
- Keep raw meats and ready-to-eat foods separate.
- Cook food to proper temperature.
- Refrigerate food promptly to below 40 degrees Fahrenheit

Your diet may need to be changed to help you build up strength and withstand the effects of your cancer and its treatment. During cancer treatment your body often needs extra calories and protein to help you maintain your weight and recover and heal as quickly as possible.



Suggestions for Increasing Calories and Protein

- Exercise lightly or take a walk before meals to increase your appetite.
- Drink high-calorie, high-protein drinks such as milkshakes and commercial liquid supplements. Cold liquids are usually tolerated well.
- Drink most of your fluids between meals instead of with meals. Drinking fluid with meals can make you feel too full.
- Try homemade or commercially prepared nutrition bars and puddings
- Eat small, frequent meals or snacks a day rather than three large ones. Don't wait until you feel hungry to eat.
- Eat favorite foods at any time of the day.
- Eat your biggest meal when you feel hungriest. For example, if you are hungriest in the morning, make breakfast your biggest meal.
- Try to eat high-calorie, high-protein foods at each meal and snack.

Meal or Snack Suggestions

- Add cheese to sandwiches, soups, eggs, noodles, casseroles, vegetables, and potatoes.
- Add cream sauces to vegetables and other dishes. Use milk in place of water when possible.
- Add ice cream to carbonated beverages, shakes, and other nutritional supplements, or eat with fruit and other desserts.
- Add nuts, seeds, or wheat germ to casseroles, fruit, ice cream, yogurt, cookies, pancakes, and muffins, or eat separately as a snack.
- Spread peanut butter on toast, or add to shakes, dessert mixes, or ice cream. Peanut butter also makes a great dip for fruits and vegetables.
- Add chopped eggs to dishes when possible. Add extra egg whites to omelets and batters.

Tips for Coping with Side Effects of Cancer Treatment

Nausea & Vomiting

- If you are experiencing vomiting, do not eat or drink until it is under control.
- Try small, frequent meals.
- Eat and drink slowly.
- Try well tolerated foods such as toast, crackers, yogurt, cream of wheat, oatmeal, boiled potatoes, rice, noodles, clear liquids, and carbonated drinks.
- Avoid fatty, greasy, or fried foods. Avoid foods that are

Diarrhea

- Drink plenty of decaffeinated liquids (water, sports drinks) to prevent dehydration.
- Eat small, frequent meals.
- Try white rice, noodles, potatoes, farina or cream of wheat, eggs (not fried), smooth peanut butter, and white bread.
- Use lactose free products if milk is problematic.
- Include foods high in potassium such as bananas.

Constipation

- Add more fiber and fluid to your diet. Use whole-grain breads and cereals (whole-wheat bread, brown rice, oatmeal) in place of refined-grain products (white bread, pasta, and rice).
- Eat a variety of fresh fruits and vegetables. Strive for 5-8 servings a day.
- Try adding ½ tablespoon of bran to cooked cereals and



very sweet, spicy, or have strong odors.

- Do not lie flat for at least 2 hrs after eating.
- Eat foods cold or at room temperature.
- Avoid eating in a room that's stuffy or warm.
- Avoid liquids at meal times. Drink them ½ hour before or after eating.

potatoes, orange juice, or sports drinks.

• Avoid: greasy, fatty, or fried foods, raw vegetables with skin and seeds, and high-fiber veggies such as broccoli, corn, dried beans, cabbage, peas, and cauliflower casseroles.

- Snack on dried fruits.
- Drink at least 8-10 full glasses of decaffeinated fluids each day.
- Try hot liquids or prune juice to stimulate bowel activity.

Loss of Appetite/Weight Loss

- Try liquid or powdered meal replacements during times when it is hard for you to eat food.
- Make the foods you eat count by using high-calorie, highprotein items.
- Try high-calorie milkshakes and supplements instead of non-caloric beverages.
- Make your meals attractive.
 Eat in a calm, pleasant atmosphere, with others if possible. Listen to relaxing music while eating. Add variety to your meals.
- Avoid foods that will cause feelings of fullness (carbonated beverages and fatty foods).

Difficulty Swallowing

- Choose foods that are liquid or soft. Some soft foods include: bananas, applesauce, watermelon, cottage cheese, yogurt, mashed potatoes, noodles, custards, puddings, gelatin, scrambled eggs, and oatmeal.
- Use a blender or food processor to puree your foods.
- Cut food into small pieces and moisten with soups, thin gravies, butter, or sauces.
- Try very cold foods. Add ice to milk and milkshakes.
- Drink small amounts of highcalorie supplements.

Change in Taste

- Use herbs and spices to make food more flavorful.
- Marinate meat, chicken, or fish in sweet fruit juices, flavorful salad dressings, or sweet-andsour dressings.
- Maximize other food characteristics such as color and texture.
- Avoid cooking in metal pots.
- Chew sugar-free mints.
- Ask your doctor about anesthetic lozenges and sprays that can numb your mouth and throat for you to eat meals.