

Nutrition and cancer

Healthy eating is an important part of good health. It may be even more important if you have cancer. The treatment for your cancer may cause some of your food needs to change. Your needs may change during your treatment, in recovery, and beyond.

Remember, living with cancer is a different experience for everyone. Whether you are newly diagnosed, are receiving treatment, or have completed treatment, your nutritional needs may be different compared to someone else.

It may be helpful to talk with a registered dietitian. A registered dietitian can help you develop a healthy eating plan that is right for you. Talk with your healthcare provider to help you find one.





Make it a team effort

Share this booklet with your caregiver(s) and family, and talk about ways they can help you eat well. Some ways they may help might be:

- Helping to prepare healthy meals and snacks
- Helping to pick out nutritious groceries
- Tracking and managing your healthy eating plan and side effects of treatment

Making healthy food choices

A well-balanced diet includes 4 key parts:

1

Fruits and vegetables

- Fruits and vegetables are an important part of a healthy diet. They provide nutrients like vitamins A, C, and E that help keep cells healthy.
- Examples include broccoli, peppers, leafy greens, grapes, apples, and strawberries.



2

Protein

- Your body needs protein for growth and for repairing body tissue.
 It also helps your immune system defend your body against infections.
- Your need for protein during treatments like chemotherapy, surgery, or radiation may change.
- Examples include fish, beans, tofu, and chicken or turkey without the skin.



3

Whole grains

- Whole grains are a good source of carbohydrates. They give your body fuel for physical activity and help your organs work well. The carbohydrates found in whole grain foods also provide vitamins, minerals, and fiber.
- Examples include whole wheat pasta, brown rice, and barley.



4

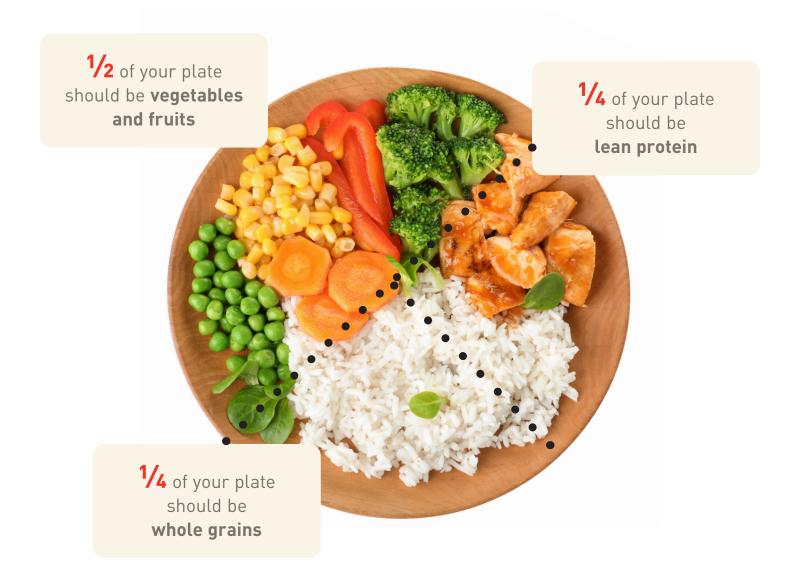
Healthy fats and oils

- Healthy fats store energy and carry vitamins throughout the body.
- Healthy, plant-based fats include olive oil, avocado, and nuts.
- Unhealthy fats can raise your bad cholesterol level. LDL (low-density lipoprotein) cholesterol is bad cholesterol that can be found in your blood. It can clog up or block your blood vessels, and can hurt your heart.
- Unhealthy fats usually come from animal sources, like butter, lard, and cream.



Making healthy meals

Thinking about your plate is a simple way of getting the right foods in the right amounts. Use this visual guide to help plan your meals.



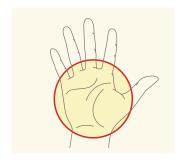


Part of your healthy eating plan includes eating the right amount of food for you. A registered dietitian can help.

It is also important to share any weight changes with your dietitian and healthcare provider during healthcare visits.

Healthy serving sizes

Nutrition labels tell you how much of a food is in one serving size. Sometimes, it can be hard to measure a serving size. Using your hand to measure your food is a helpful way to see how much to eat.









Your palm or 3 ounces is about 1 serving of meat, poultry, or tofu.

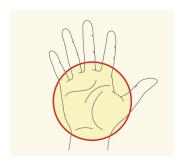








Your fist is about 1 serving of beans, starchy vegetables, or grains.

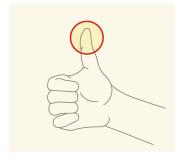








Your palm is about 1 serving of fruits, vegetables, or nuts.









The tip of your thumb or 1 teaspoon is about 1 serving of butter or oil.

Managing side effects through nutrition

Cancer and its treatment may affect the way you feel and eat. Tell your healthcare provider if you are having any of the following side effects. Some of these side effects may make it harder to eat healthy meals. You may not experience any or all of these side effects. The nutrition-related tips below may help manage side effects, but you should also talk to your healthcare provider about ways to manage them while undergoing cancer treatment.

Nausea and vomiting



Ways to manage

- Eat smaller meals throughout the day if the nausea only happens between meals.
- Sip slowly on cold, clear liquids for nausea.
- Try sucking on ice or frozen juice chips after the vomiting stops.



Food tips

- Try bland foods like crackers or toast.
- Avoid spicy, fatty, fried, or very sweet foods.
- Try grating fresh ginger on foods or drinking ginger tea.
- Try sipping homemade protein shakes or smoothies. Ask your dietitian about how to make one.



Constipation



Ways to manage

- Drink at least 8 cups of water or other liquids a day.
- Try drinking warm or hot beverages after a meal.
- Stay active with exercise, such as walking.



Food tip

 Eat foods high in fiber, such as whole grains, dried beans, and fruits and vegetables.



Diarrhea



Ways to manage

- Drink lots of fluids, including water and sports drinks that say "contains electrolytes" on the label.
- Eat smaller, more frequent meals.
- Serve food and drinks at room temperature.



Food tips

- Choose foods low in fiber, like white toast or white rice.
- Avoid foods high in fat, sugar, caffeine, and alcohol.
- Eat foods/drink liquids high in potassium and sodium, including bananas, potatoes, and broth.



Mouth sores and chewing/swallowing problems



Ways to manage

- Cut up, mash, or puree foods.
- Drink liquids with a straw.
- Soothe your mouth by sucking on ice chips.
- Avoid tobacco products and alcohol.



Food tips

- Limit foods that can make your mouth issues worse. These include citrus fruits, salty and spicy foods, and foods that are rough on your mouth such as granola and crackers.
- Choose soft foods like scrambled eggs, mashed sweet potatoes, soups, or homemade milkshakes.

Changes in appetite, taste, and smell



Ways to manage

- Eat smaller meals more often during the day and keep snacks on hand.
- Replace food with liquids or powdered meal mixes like "instant breakfast."
- Get extra calories from healthy fats and proteins whenever possible.
- Take a walk to help increase your appetite.



Food tips

- Select foods with a variety of colors and textures to make meals more appealing.
- Add flavor to your food with fresh herbs or sauces.
- Try tart foods and drinks such as oranges and lemonade. Do not eat tart foods and drinks if your mouth is sore.



Anemia (uh-NEE-mee-uh)

(not enough red blood cells to carry oxygen to the body's cells)



Ways to manage

 Ask your healthcare provider about ways to help manage anemia.



Food tips

- Try eating more foods that are rich in iron, such as red meat, leafy vegetables, and beans.
- Speak with your healthcare provider about which foods and supplements would be best for you.

Neutropenia (noo-truh-PEE-nee-uh) (not enough white blood cells to help fight infections)



Ways to manage

- Avoid meat that is raw or rare and avoid eggs that are uncooked or undercooked.
- Steer clear of food that is served in public areas where people can serve themselves, like salad bars and buffets.
- Choose pasteurized dairy products like milk, cheese, and yogurt. Check the label of fruit juices to make sure it says pasteurized.



Food tips

- Cook meat until it is cooked all the way through (well done).
- Refrigerate eggs, seafood, dairy products, and all meats.
- Wash fruits and vegetables before eating.



Setting nutrition goals

Setting goals helps you figure out exactly what you want to achieve and how to develop a plan for it.

When thinking about some of your nutrition goals, ask yourself the following questions:

- What do I want to achieve?
- How will I track my progress? Can I measure my progress?
- What is the time limit for reaching my goal? Can I choose a specific date, like one month from now?





Talk with your healthcare provider or dietitian for help planning and achieving your nutrition goals.

My nutrition goals

Use the space below to plan some nutrition goals. Review the examples to help you get started.

What is my goal?	How will I do it?	When will I do it?	
Eat more vegetables	Fill half of my dinner plate with veggies, 5 days a week, every week	Next Monday	
Eat more fruits	Fill half of my breakfast plate with fruits, 5 days a week, every week	This Sunday	
Drink more water	Cut out the soda	Now	

Test your nutrition knowledge

Take a minute to review the questions and answers below. They may help you better understand nutrition and healthy eating.



Are ALL supplements, such as vitamins, herbs, and minerals, safe and good for you?

No. Not all supplements are healthy or safe for you to use. They may have ingredients that may cause harm or affect your cancer treatment.

What I should do: Talk with your healthcare provider before taking any supplements and learn more at www.cancer.org.

Is it OK to eat out during or after cancer treatment?

Of course you can still eat out! Because cancer treatment may weaken your immune system, food safety is important whether you eat out or eat at home. The following tips may help keep you from getting sick:

- ✓ Avoid food that has been sitting out for more than 2 hours.
- ✓ Avoid food that may be in contact with a lot of people, such as a salad bar or buffet.
- ✓ Ask for a container to pack up your leftover food yourself and be sure to put your food in the refrigerator as soon as possible.



✓ Choose clean restaurants that will prepare your food fresh at the time you order it.

What I should do: Make smart choices when eating out and learn more about food safety at www.cancer.net.



Does drinking alcohol, even in small amounts, have risks during cancer treatment?

It may. Many drugs that treat cancer are broken down in the liver. Alcohol can make the liver work harder. Limit how much alcohol you drink during cancer treatment.

What I should do: Talk with your healthcare provider about drinking alcohol and learn more at www.cancer.org.

Is it hard to eat healthy foods without spending a lot of money?

Not at all! Here are some helpful tips:

- Check prices. Often fresh produce costs less, but depending on the type of produce and the time of year, frozen or canned goods may be cheaper.
- ✓ Frozen produce has similar nutritional content as fresh fruits and vegetables.
- ✓ Frozen fruits and vegetables are also ready to eat and easy to cook.
- ✓ Watch out for high salt levels in canned vegetables.

What I should do: Consider frozen options when choosing fruits and vegetables. Be sure to choose kinds without added sugar, sauces, or other high-calorie ingredients.



My food diary

Keeping a food diary can be a helpful tool. It can help you track what foods you ate, when you ate them, how much you ate, and how you felt afterward. With this information, you may start to see that certain foods make you feel better or worse. You may want to talk about these findings with your healthcare team or dietitian.

Fill in the chart below to track your food.

When (date/time):	What I ate:	How much:	How I felt:
16/3/2020 8:00 am	Eggs, wheat toast, banana smoothie	2 eggs 2 slices of toast 8 oz of banana smoothie	My stomach hurt a bit
16/3/2020 12:30 pm	Tuna salad sandwich on wheat toast	Tuna salad measuring the size of my palm 2 slices of toast	I felt fine

My healthy choices shopping list

Use the spaces below to write a list of foods that you enjoy eating from each group of healthy food. Some examples are listed to help you get started. Bring this list with you (or give it to a caregiver) when grocery shopping to help you make healthy food choices to keep you feeling your best.



Fruits	Vegetables	Proteins	Whole grains	Healthy fats
Berries	Spinach	Skinless chicken	Brown rice	Salmon
Apples	Broccoli	Low-fat yogurt	0ats	Olive oil



Additional resources

Below are a few additional resources to help you learn more about healthy nutrition during and after cancer treatment. This list is meant to be a starting point and is not a list of all of the resources that are available.

American Cancer Society

www.cancer.org

National Cancer Institute

www.cancer.gov

National Comprehensive Cancer Network

www.nccn.org

Cancer.net

www.cancer.net

