

Eating Well During Cancer Treatment

This handout suggests ways to eat well and maintain good nutrition during cancer treatment.

People with cancer have different diet needs

When you have cancer, you need to keep up your strength to deal with the side effects of treatment. When you are healthy, eating enough food is often not a problem. But when you are dealing with cancer and treatment, this can be a real challenge.

Eating well during treatment can help you:

- Feel better
- Keep up your muscle strength and energy
- Maintain your weight and your body's store of nutrients
- Lower your risk of infection
- Heal and recover quickly

Try to keep your weight stable during treatment. Your health care team can watch your weight for any rapid weight loss or weight gain. Often, you will need extra protein and calories due to the cancer and treatment. Even though you may not be as active, you may need to eat more to keep from losing weight.



Ask your doctor or nurse if you should speak with a dietitian about diet changes you may need to make.

If your appetite is good and your weight is steady, eat a balanced diet:

Fruits and Vegetables	<ul style="list-style-type: none"> • Eat 5 to 7 servings (or more than 4 cups) each day. • Focus on different colors of fruits and vegetables.
Grain products	<ul style="list-style-type: none"> • Eat at least 6 servings of grain products each day 3 of your 6 servings should be whole grain products. • Examples: ½ cup oatmeal, ½ cup of brown rice, 1 slice of whole grain bread, ½ cup of whole wheat pasta.
Low-Fat Meat, Fish and Poultry	<ul style="list-style-type: none"> • Do not eat more than 18 ounces of cooked red meat each week. Cooked red meats are beef, lamb and pork. • Choose: Lean beef trimmed of fat, such as round, sirloin, flank, and tenderloin; ground beef that is 90 percent lean or greater; cuts of pork trimmed of all visible fat; and skinless chicken breast
Low-Fat Dairy Foods	<ul style="list-style-type: none"> • Choose no more than 3 servings a day of low-fat dairy foods. • Examples: 1 cup of low-fat milk, 1 cup of low-fat yogurt, 2 cups of low-fat cottage cheese, 1/3 cup of low-fat shredded cheese (3 grams of fat or less per ounce)
Cut Back on Fat, Sugar, Alcohol and Salt	

Getting enough liquids

- Try to drink 6 to 8 cups of fluids each day. 1 cup equals 8 ounces. 8 cups equals 64 ounces. Water is the best liquid to drink to stay hydrated. If water does not taste good, try flavored water. Limit your intake of liquids with caffeine to 2 to 3 servings a day.
- Foods that are liquid at room temp can be counted as liquids. Examples are: ice cream, sherbet, gelatin, cream soups and popsicles.
- Keep something to drink with you at all times so you can sip on it throughout the day.
- If you've been told to limit how much you drink, follow those guidelines. If you're unsure, talk to your cancer doctor.



If you are having trouble eating well:

During treatment, you may not feel hungry and foods may not taste right to you. Even small amounts of food may make you feel full. If you have trouble eating, choose high calorie and high protein foods listed in the tables on the next 2 pages. Push yourself to eat even when you are not hungry. Try to eat 5 to 6 small, frequent meals instead of 3 large meals.

If you are not eating well, or if you have vomiting, diarrhea or night sweats, you may need more than 6 to 8 servings of liquids a day. Choose liquids that contain calories such as fruit juices and sports drinks, milk or smoothies. You can also try liquid supplements or meal replacements such as Boost Plus, Carnation Breakfast Essentials or Ensure Plus. Drinking electrolyte containing beverages, like Gatorade or Pedialyte can help replenish fluid loss from diarrhea or throwing up.

Other things you need to know

- Tell your doctor or dietitian if you are on a special diet for high blood sugar (diabetes), kidney or heart disease or any other problem. Talk with your doctor or dietitian before starting any special diets.
- **Talk to your doctor or dietitian about any herbs, herbal products, vitamins, minerals, antioxidants or supplements you take, or are thinking about taking. Some of these products can be unsafe and cause problems by changing how cancer treatments work.**
- Talk with your doctor, nurse, or dietitian **before** taking probiotics. Ask if it's safe for you to take them. Some patients should avoid taking certain probiotics based on their diagnosis and/or treatment plan.

Taste or smell changes

Cancer, cancer treatment or dental problems can cause changes in your sense of taste or smell. Although there is no way to prevent these problems, they often get much better after treatment ends. Some ways to manage these changes include:

- If you have a metal or bitter taste in your mouth, use plastic or bamboo utensils and glass cookware. Use sugar-free lemon or orange candy or mints. Add extra flavor to foods using herbs like basil, oregano or rosemary, or add barbecue sauce to meat or chicken.
- If foods lack flavor or don't taste right, try tart foods and drinks. Use recipes that contain lemon, lime, orange or vinegar. Add citrus fruits to water or drink lemonade. If your mouth or throat is sore, avoid tart or acidic foods.
- If foods taste salty, choose foods that are naturally sweet like carrots or sweet potatoes.
- Reduce food smells by serving foods cold or at room temperature, keeping foods covered and drinking through a straw. Use a fan when cooking.

- Brush your teeth before and after meals. Rinse mouth with a solution of ½ teaspoon of baking soda and ½ teaspoon of salt in 1 cup of warm water. Do this before eating and up to 6 times a day.

Ways to Add Calories

To These Foods	Try Adding
Soups, Potatoes, Hot Cereals, Grits, Rice, Cooked Vegetables, Gravies, Sauces or Noodles	1 tablespoon of butter, margarine adds 120 calories 1 tablespoon of sour cream adds 26 calories
Hot chocolate, Desserts, Gelatin, Pudding, Pancakes, Waffles or Fruit	2 tablespoons of whipped cream adds 25 calories
Soups, Sauces, Scrambled Eggs, Pudding, Hot Cereals, Mashed Potatoes, Hot Chocolate, Meatloaf or Hamburgers	1 cup of whole milk adds 150 calories 1 cup of half and half adds 315 calories
Breads, Muffins, Fruits, or Crackers	1 tablespoon of cream cheese adds 51 calories
Breads, Cereals, Shakes, Fruit or Yogurt	1 tablespoon of honey or jam adds 64 calories 1 tablespoon of sugar adds 30 calories
Cookies, Muffin or Bread Mixes, Yogurt, Fruit or Ice Cream	½ cup of granola adds 210 calories
Muffins, Cookies, Breads, Cakes, Cereals or Puddings	1 mini box of raisins or 2 dried apricots adds 40 calories
Sandwiches, Dips, Toast, Omelets	½ of a medium avocado adds 125 calories

Ways to Add Protein

To These Foods	Try Adding
<ul style="list-style-type: none"> • Sandwiches • Bread • Tortillas • Chili • Hamburgers • Eggs • Vegetables • Soups • Casseroles • Potatoes • Rice • Pasta 	<p>1 ounce of cheese adds 7 grams of protein</p>
<ul style="list-style-type: none"> • Hot cereals • Soups • Hot chocolate 	<p>1 cup of whole milk adds 8 grams of protein</p>
<ul style="list-style-type: none"> • Shakes • Milk • Casseroles • Bread • Meatloaf • Pasta • Sauces • Soups • Mashed potatoes • Puddings • Hot cereals • Scrambled eggs 	<p>¼ cup of powdered milk adds 6 grams of protein</p> <p>1 to 2 scoops of protein powder adds 20 to 35 grams of protein</p> <p>½ cup of Greek yogurt adds 13 grams of protein</p>
<ul style="list-style-type: none"> • Shakes • Cakes • Cookies • Brownies • Pies • Bubbly drinks 	<p>½ cup of ice cream or frozen yogurt adds 4 grams of protein</p>
<ul style="list-style-type: none"> • Salads • Casseroles • Soups • Vegetables 	<p>1 hard cooked egg adds 7 grams of protein</p>
<ul style="list-style-type: none"> • Casseroles • Breads • Muffins • Pancakes • Cookies • Waffles • Fruit, Cereal • Ice Cream • Yogurt • Vegetables • Salad 	<p>¼ cup of nuts or seeds adds 6 to 9 grams of protein</p> <p>¼ cup of wheat germ adds 8 grams of protein</p>

More Ways to Add Protein

To These Foods	Try Adding
<ul style="list-style-type: none"> • Sandwiches • Toast • Crackers • Muffins • Waffles 	<ul style="list-style-type: none"> • Pancakes • Vegetables • Fruits • Shakes <p>2 tablespoons of peanut butter adds 8 grams of protein</p>
<ul style="list-style-type: none"> • Soups • Casseroles • Pasta 	<ul style="list-style-type: none"> • Grains • Vegetables <p>¼ cup of beans or legumes adds 4 grams of protein</p>
<ul style="list-style-type: none"> • Vegetables • Salads • Casseroles • Soups • Sauces • Baked potatoes 	<ul style="list-style-type: none"> • Omelets • Soufflés • Quiches • Stuffing • Sandwich fillings <p>1 ounce of cooked and chopped meat or fish adds 7 grams of protein</p>

A special note for caregivers

Do not be surprised or upset if your loved one's food preferences change from day to day. There may be days when they do not want a favorite food or says it now tastes bad.

Keep food within easy reach. This way, your loved one can snack when they are ready to eat. Put a snack pack of applesauce or diced fruit along with a spoon on the bedside table. Keep roasted nuts on the counter. Keep cut-up fruits and vegetables in the refrigerator. Encourage eating fruits and vegetables with dips for extra calories and protein. Carrots go well with hummus and apples can be dipped in peanut butter.

Offer gentle support rather than pushing your loved one to eat. Suggest that they drink plenty of liquids when their appetite is low. Talk with your loved one about ways to manage eating problems. If you need help, ask their cancer doctor for a referral to a dietitian.

Call your doctor or nurse:

- If you start to have eating problems.
- If you have white, cheese-like patches in your mouth or throat or a white coating on your tongue. These can be a sign of infection.
- If you have swelling in your mouth or mouth sores.



Call your doctor's office right away if you:

- Cannot eat or drink for more than 12 hours
- Have a fever of 100.4°F (38°C) or higher or chills

To learn more

- Read **Eating Hints** from the National Cancer Institute

For a free copy, call our Cancer Information Service line at 216-844-5432 or ask your nurse. To view online, visit cancer.gov/eating-hints or scan the QR code to the right.



- Read our **Food Safety Guidelines for People with Cancer** handout. For a copy, ask your nurse or call our Cancer Information Service line at 216-844-5432.
- Read the booklet **Food Safety for Older Adults and People with Cancer, Diabetes, HIV/AIDS, Organ Transplants and Autoimmune Diseases** - from the Food and Drug Administration (FDA).

To order a free copy, call 1-888-674-6854 or email fsis.outreach@usda.gov
To view online, visit: foodsafety.gov. Click on People at Risk > People with Weakened Immune Systems

This info is a general resource. It is not meant to replace your doctor's advice. Ask your doctor or health care team any questions. Always follow their instructions.