

Side Effects of Chemotherapy Treatment

Chemotherapy drugs affect all body cells. They affect cancer cells and also normal cells. That's the reason for some of the side effects. Chemotherapy drugs especially affect cells that grow fast like blood cells, the cells lining the stomach, and hair cells. The side effects of chemotherapy are temporary. If you experience a side effect it does not necessarily mean something is wrong or the chemotherapy is not working. You may or may not have the side effects. Each person reacts differently to chemotherapy.



Image: National Cancer Institute

Social support is critical to your recovery. Take advantage of the kindness of others. Remember that you are fighting for your life—let your family and friends help you. Ask for assistance with grocery shopping, meal preparation and clean up. If you have no one to help you, look for resources in your area, like a community assistance center, support groups, local churches, social service centers, or senior centers.



The following pages have advice about dealing with side effects of chemotherapy.

Blood cell side effects:

Blood cells fight infection. They help the blood to clot (thicken) so you don't bleed too much. They carry oxygen to all parts of the body. When chemotherapy drugs affect blood cells, patients are more likely to develop infections, bruise or bleed easily, and have less energy. New drugs given as injections can help support white and red blood cells so patients have minimal side effects.

To prevent infections, patients taking chemotherapy should wash their hands frequently, avoid sick people and crowds, immediately clean cuts and scrapes, and avoid contact with animal waste. Talk to your doctor or nurse if you develop chills, sweats, or fever at 101 degrees or greater.



To manage anemia, rest as much as needed to save your energy. Anemia is a condition that makes you tired because there aren't enough healthy red blood cells to carry enough oxygen to your tissues. Be sure to take your iron pills if they have been prescribed. If you are getting dizzy, change your position slowly. Sit on the side of the bed for a minute before standing up to help decrease the dizziness. Talk to your doctor or nurse if you are dizzy, more tired, if you have chest pain, or if you are short of breath when you are lying down.



Hair loss side effects:

Hair loss is another side effect of chemotherapy and is a big concern for many patients. Some treatments do not cause hair loss. Some chemotherapy drugs only cause the hair to thin out. Other drugs may cause the loss of all body hair. Hair will start to grow again in 3 to 4 months after treatment. Some things you can do include keeping your hair clean with a gentle shampoo, avoid bleaching, curlers, perms and hair spray. Cut your hair short. Talk to your nurse or social worker about places to get wigs and scarves and any concerns you have about your changed look.



Fatigue Side Effects:

Fatigue is the most common side effect of cancer and its treatment. People who experience fatigue often say that they feel weak and tired, and that they just don't have any energy. They may also be dizzy or sad. They may even have difficulty thinking and performing activities of daily living. There are no medical tests to measure fatigue, so it is very important to let your doctor know how you are feeling.

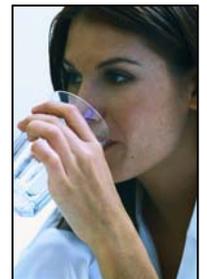
Keep a written diary of your fatigue. Keep track of what things make you more fatigued and what things make you feel better. Note how often you become fatigued and how long it lasts. You can share this information with your doctor or nurse.

Try to rest when you feel the worst. Stay as active as possible when you feel better. Nap during the day and make sure you get quality sleep at night. Ask your friends and family to help you shop for food and prepare meals.

Stock your kitchen with easy-to-prepare and easy-to-eat foods. Use timesaving, convenient foods whenever possible.

Try to eat small, more frequent meals and snacks that consist of appealing or favorite foods and beverages. Choose foods and beverages that are good sources of calories and protein to make the most of each bite and swallow.

Be sure to drink enough water. Dehydration can make you feel tired.



Smell and Taste side effects:

Cancer and its treatment can cause changes in your senses of taste and smell. These changes can affect your appetite. Regularly rinsing and brushing can help keep your mouth clean, healthy, and tasting better. Your senses of taste and smell can change from day to day. If your taste is affected by chemotherapy, you may find different foods appealing rather than your usual favorites. After chemotherapy, taste buds return to normal.



To Get Rid of Bitter or Metallic Tastes:

- Use sugar-free lemon drops, gum, or mints.
- Flavor foods with spices and seasonings, such as onion, garlic, chili powder, basil, oregano, rosemary, tarragon, barbecue sauce, mustard, catsup, or mint. (Avoid spices and tomato products if you have a sore mouth or throat)
- Use plastic utensils instead of stainless flatware.
- Smelling citrus zest may help refresh your sense of smell.



Nausea/Vomiting side effects

Nausea (the feeling of being queasy or sick to your stomach) with or without vomiting (throwing up) can be caused by your cancer, chemotherapy, or radiation therapy. If caused by chemotherapy, nausea and vomiting can occur on the day you receive your treatment and can last for 3 or more days after your chemotherapy. Some treatments do not cause nausea.

Feeling nauseous for a long time can affect your appetite and can cause you to lose weight. If you vomit a lot, you can get dehydrated and have other problems from losing body salts. Effective treatment for nausea may be different for each person. At times, it may seem difficult to eat when you're receiving chemotherapy. Usually, the change in appetite is temporary and your appetite should return once you have completed chemotherapy. Even if you don't have an appetite, it is very important that you get enough nutrition to handle treatment and to heal. Not eating can lead to weight loss, and weight loss can cause weakness and fatigue. Eating as well as you can during your cancer treatment and recovery is an important part of taking care of yourself.

New drugs have made nausea and vomiting side effects less common and, when they do occur, much less severe. These powerful drugs can prevent or lessen nausea and vomiting in most patients. Different drugs work for different people. You may need more than one drug to get relief. Do not give up. Continue to work with your doctor and nurse to find the drug or drugs that work best for you. Also, be sure to tell your doctor or nurse if you are very nauseated or have vomited for more than a day. Tell your doctor or nurse if your vomiting is so bad that you cannot keep liquids down. If you are having problems eating, ask your doctor for a referral to a dietitian. A dietitian can help you develop eating plans that may be better tolerated, while providing nutrition.



Here are some eating tips that may help reduce nausea and vomiting:

- Eat small meals every 1-2 hours throughout the day, instead of three larger meals a day
- Drink liquids at least one hour before or after mealtime, instead of with your meals. Drink frequently and drink small amounts.
- If you are vomiting, dehydration is a serious concern. While it may be very difficult, you need to drink clear liquids as often as possible during this time. After vomiting, rinse your mouth and spit out the water. Try not to drink for 30 minutes. Then try to drink sips of apple juice, cranberry juice, flat soda pop, broth, or bites

of frozen flavored ice.

- Eat and drink slowly. Chew your food well for easier digestion.
- Eat foods cold or at room temperature so you won't be bothered by strong smells. Avoid eating in the room where food was prepared; the odor may be too strong. Avoid eating in a room that is too warm.
- If nausea is a problem in the morning, try eating dry foods like cereal, toast, or crackers before getting up. (Do not try this if you have mouth or throat sores or are troubled by a lack of saliva.)
- Drink cool, clear, unsweetened fruit juices, such as apple or grape juice or light-colored sodas such as ginger ale that have lost their fizz and do not have caffeine.
- Suck on mints or tart candies. Suck on hard candies, like peppermints or lemon drops, if there is a bad taste in your mouth. (Do not use tart candies if you have mouth or throat sores.)
- Prepare and freeze meals in advance for days when you do not feel like cooking.
- Wear loose-fitting clothes.
- Breathe deeply and slowly through your mouth when you feel nauseated.
- Distract yourself by chatting with friends or family, listening to music, or watching a movie or TV show.
- Use relaxation techniques, such as meditation.
- Try to avoid odors that bother you, such as cooking smells, smoke, or perfume.
- Avoid fried, or fatty foods. Sweet or salty foods may be tolerated better.
- Rest, but do not lie flat for 1-2 hours after you finish a meal. Sit up or lie with the upper body raised.
- Avoid eating for at least a few hours before treatment if nausea usually occurs during chemotherapy. If nausea usually occurs after treatment, eat a light meal before treatment.
- Eat dry, bland foods like crackers, toast, or breadsticks throughout the day.
- Rinse out mouth before and after eating.



Avoiding Food-Borne Illnesses:

When you undergo cancer treatment, you can develop a weakened immune system. This means your body is weak against other illnesses. Avoiding food-borne illnesses is essential. To help prevent food-borne illnesses:

- Wash all fruits and vegetables thoroughly, even if you plan on peeling the fruit or vegetable
- Wash your hands and food preparation surfaces before and after preparing food, especially after handling raw meat
- Thaw meat in the refrigerator, not on the kitchen counter
- Be sure to cook meat and eggs thoroughly
- Avoid raw shellfish and sushi
- Use only pasteurized or processed ciders and juices and pasteurized milk and cheese



The following side effects rarely occur in breast cancer patients.

Call Your Doctor If Any of the Following Occurs:

Sores in your mouth or lips
White patches in your mouth
Difficulty or pain with swallowing
Diarrhea or constipation
Vomiting that prevents you from holding down fluids
Blood in your vomit
Easy bruising
Nosebleeds, bleeding gums, vaginal bleeding
Blood in your urine or stool
Burning or frequency of urination
Chest pain
Severe weakness
Shortness of breath, cough
Calf pain, swelling, or redness in the legs or feet
Abnormal vaginal discharge, itching, or odor
Signs of infection, including fever and chills
Pain in a new location
Numbness, tingling, or pain in your extremities
Redness, swelling, increasing pain, excessive bleeding, or "pimple" at the site of your IV
Headache, stiff neck
Hearing or vision changes
Exposure to someone with an infectious illness, including chicken pox
Fever

