

WEB EXCLUSIVES

# Physical Activity and the Cancer Patient

BY THE AMERICAN CANCER SOCIETY

In the past, people being treated for a chronic illness (an illness a person may live with for several years, such as cancer) were often advised by their doctor to rest and reduce their physical activity. This may still be true if movement produces severe pain, rapid heart rate, or breathlessness. Research has shown though that exercise is not only safe and possible during cancer treatment, but it can improve physical functioning and quality of life.

Regular exercise is an effective way to counteract the negative effects of inactivity in chronic illness. Too much rest may result in loss of function, strength, and range of motion in the person with a chronic illness. As a result, many health care providers are now encouraging their patients to be as physically active as possible during cancer treatment.

Possible Benefits of Regular Exercise During Cancer Treatment:

1. Maintained or improved physical abilities
2. Improved balance, reducing risk of falls and fractures
3. Prevention of muscle wasting caused by inactivity
4. Reduced risk of heart disease
5. Prevention of osteoporosis
6. Improved blood flow to legs and reduced risk of blood clots
7. Less dependence on others to do normal activities of daily living
8. Improved self-esteem
9. Reduced anxiety and depression
10. Decreased nausea
11. Increased ability to maintain social contact
12. Reduced symptoms of fatigue
13. Better ability to control weight
14. Improved quality of life

We still do not know a lot about the effects of exercise and physical activity on the recovery from cancer and the impact on the immune system. But regular moderate exercise has been found to have health benefits for the cancer patient. Moderate activities is defined as those that require as much effort as a brisk walk.

## Goals of an Exercise Program

While there are many reasons for being physically active during cancer treatment, each person's exercise program should be based on what is safe, effective, and enjoyable for that individual. Your exercises should take into account any exercise program you already follow, what you can do now, and any physical limitations you have. You and your doctor should tailor an exercise program to meet your individual interests and needs.

The type of cancer you have, your cancer treatment, your stamina, strength, and fitness level all affect your ability to exercise. What may be of low or moderate intensity for a healthy person may seem like a high intensity activity for some cancer survivors. While some people can safely begin their own exercise program, many will benefit from the help of an exercise specialist, physical therapist, exercise physiologist, or personal trainer. Be sure to inform them of your diagnosis and limitations and get approval from your doctor first. These specially trained professionals can help you find the type, frequency, duration, and intensity of exercise that is right for you.

## Exercise Safety and Precautions for Cancer Survivors

1. Always check with your doctor before starting any exercise program. This is especially important if you are taking treatments that affect your lungs (such as bleomycin or radiation to the chest) or your heart (such as doxorubicin or epirubicin) or have risk of lung or heart disease.
2. Do not exercise if your blood counts are low and you are at risk for infection, anemia, or bleeding. Your cancer care team will be checking your blood counts during your treatment so check with them about the best time for exercising.
3. Do not exercise if the level of minerals in your blood, such as sodium and potassium, are not normal. This can happen if you have had a lot of vomiting or diarrhea. Ask your doctor about your blood tests. If OK with your doctor, drink plenty of fluids.
4. If you have severe fatigue and don't feel up to exercising you can try to do 10 minutes of stretching exercises every day. (Later we will discuss fatigue and exercise in more detail.)
5. Avoid uneven surfaces or excessive weight-bearing exercises which could result in a fall and injury.
6. Do not use heavy weights or do excessive weight bearing exercise if you have osteoporosis, cancer that has spread to the bone, arthritis, nerve damage, poor vision, poor balance, or weakness. These problems increase your risk for falls and injuries. You might do better with a stationary reclining bicycle, for example, than a treadmill.
7. Watch for swollen ankles, unexplained weight gain, or shortness of breath while at rest or with a small amount of exertion. Let your doctor know if you have any of these problems.
8. Watch for bleeding if you are taking blood thinners. Avoid any activity that increases your risk for falls or injury. If you notice swelling, pain, dizziness,

or blurred vision, call your doctor immediately.

9. Do not exercise if you have unrelieved pain, nausea/vomiting, or any other symptom that causes you concern. Call your doctor.
10. Do not exercise above a moderate level of exertion without talking with your doctor. Remember, moderate exertion is what you would experience during a brisk walk.

## Effective Exercise

To make your exercise effort most effective, it is important that you work your heart. Pay attention to your heart rate, your breathing, and the amount of fatigue in your muscles. If you get short of breath or very tired, rest for a few seconds, and resume exercising as you are able. Start slowly and gradually increase the length of time you exercise. Be careful if you are taking blood pressure medicine that controls your heart rate. Your heart rate will not go up, but your blood pressure can get high. Ask your doctor about this if you are not sure about your medication.

The best level of exercise for someone with cancer has not been established. But the goal is to have your exercise program help you maintain endurance, muscular strength, flexibility, and level of functioning. The more you exercise, the more your ability to exercise can improve and your ability to function can improve. It is common for individuals, who have exercised prior to a diagnosis of cancer, to need to reduce their intensity and amount of exercise during treatment. Even if planned exercise stops, it is better to continue being active by continuing your normal activities.

### Things to Consider in Planning an Exercise Program:

1. Discuss any exercise with your doctor before starting.
2. Start slowly with an exercise program. Even if you can only do an activity for a few minutes a day it will benefit you. The frequency and duration of a simple activity like walking can be steadily increased. Your muscles will tell you when you need to slow down and rest.
3. Try short increments of exercise with frequent rest breaks. For example, walk briskly for a few minutes, slow down, and walk briskly again, until you have done 30 minutes of brisk activity. You can divide the activity into three 10-minute sessions, if you need to. You will still get the benefit of the exercise.
4. Try to include physical activity that uses large muscle groups. Strength, flexibility, and aerobic fitness are all important features of an effective exercise program.
5. Try to include some exercises that will maintain your lean muscles mass and bone strength, such as exercising with resistance or light weights.
6. You might want to include exercises that will increase your flexibility and maintain your range of motion in your joints.
7. Always begin with warm-up exercises for about 2 to 3 minutes. Examples of warm-up exercises are shoulder shrugs, lifting arms overhead, toe tapping, marching, knee lifts. End your session with stretching or flexibility exercises. Hold the stretch for about 15 to 30 seconds and relax. Remember to breathe when you stretch. Examples of stretching are reaching overhead, deep

breathing, and bending over to touch your toes so that you relax all the muscle groups.

8. Exercise moderately.

## Too Tired to Exercise: Fatigue in Cancer

Most cancer patients experience a loss of energy. During chemotherapy and radiation, about 70 percent of patients have fatigue. For many, fatigue is severe and limits their activity. Inactivity leads to muscle wasting and loss of function.

An aerobic training program can help break this cycle. In studies, regular exercise has been associated with reduced fatigue, as well as the ability to do normal daily activities without major limitations. An aerobic exercise program can be prescribed as treatment for fatigue in cancer patients. Talk with your doctor about this.

### Tips to Reduce Fatigue:

1. Set up a daily routine that promotes activity when you are feeling your best.
2. Exercise regularly at light to moderate intensity.
3. Get fresh air.
4. Unless you are told otherwise, eat a balanced diet that includes protein (meat, milk, eggs, and legumes) and drink about 8 to 10 glasses of water a day.
5. Keep your symptoms controlled, like pain, nausea, or depression.
6. To save energy, place things you use often within easy reach.
7. Enjoy your hobbies and other activities that give you pleasure.
8. Use relaxation and visualization techniques to reduce stress.
9. Balance activity with rest that does not interfere with nighttime sleep.
10. Ask for help when you need it.

## Keep in Fun

The key is to keep your exercise program simple and enjoyable. Exercise and relaxation techniques are a great reliever of stress. Reducing your stress is a vital element in maintaining health.

### Tips to Enhance Your Interest in Your Exercise Program:

1. Set short-term and long-term goals.
2. Focus on your enjoyment.
3. Perk up your activity with variety to keep it fresh. Try yoga or Tai Chi.
4. Recruit support from others or get friends, family, and coworkers involved in your exercise program.
5. Use charts to record your exercise progress.
6. Recognize and reward your achievements.

Beginning an exercise program can be a daunting task even for a healthy individual. It may be even more difficult for you if you have a chronic illness, especially if you have not been used to exercising prior to your diagnosis. Begin

slowly and progress as you are able. If you have been exercising regularly prior to your diagnosis, your intensity and how long you exercise may need to be modified, but many patients exercise during treatment. Let exercise provide you with the benefits of stopping the progression of muscle wasting, reducing the side effects of treatment, improving your fitness, and improving your quality of life.

### Ways to Add Physical Activity to Your Routine

Remember, only do what you feel up to doing.

1. Take a walk around your neighborhood after dinner.
2. Ride your bike.
3. Mow the grass or rake the leaves instead of using the blower.
4. Scrub your bathroom.
5. Wash and wax the car.
6. Play active games with the kids, like freeze tag, jump rope, and the games you loved to play when you were a kid.
7. Weed your garden by hand.
8. Take a friend dancing.
9. Use an exercise bike or treadmill or do arm curls, squats, lunges, and sit ups while watching TV.
10. Walk to lunch.
11. Park your car in the farthest parking space at work and walk to the building.
12. Use the stairs instead of the elevator.
13. Get off the bus several stops early and walk the rest of the way to work.
14. Make appointments for yourself in your daily planner for 10-minute walking breaks.
15. Form a walking club of coworkers to help you stay motivated to walk during the workday.
16. Wear a pedometer every day and increase your daily steps.

Cancer survivors may need to exercise at a lower intensity and progress at a slower rate than people who are not getting cancer treatment. Remember, the goal is to maintain as much activity as possible. Keep it safe, keep it effective, and keep it fun.

**For more information on issues of cancer, visit the American Cancer Society's website, [www.cancer.org](http://www.cancer.org)**

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