



EXERCISE AND THE CANCER PATIENT AND - SURVIVOR



Surviving cancer and making it through cancer treatment are major accomplishments. Most, if not all, survivors find a new priority in life: keeping cancer from returning. "Several recent studies suggest that higher levels of physical activity are associated with a reduced risk of the cancer coming back and a longer survival after a cancer diagnosis," said Kerry Courneya, PhD, professor and Canada Research Chair in Physical Activity and Cancer at the University of Alberta in Edmonton, Canada.

In the past, people being treated for a chronic illness, 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. However, 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, such as fatigue. The fatigue that a cancer patient experiences is said to be worse than that previously experienced before treatment. Fatigue leads to emotional and physical function decline. But, 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 soon as possible during and after cancer treatment (*Physical Therapy Reviews, 2005*).

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 patients and survivors.

Benefits of regular exercise *during* and *post* treatment:

- Maintained or improved physical abilities
- Improved balance, reducing risk of falls and fractures
- Prevention of muscle wasting caused by inactivity
- Reduced risk of heart disease
- Prevention of osteoporosis
- Improved blood flow to legs and reduced risk of blood clots
- Less dependence on others to do normal activities of daily living
- Improved self-esteem
- Improved mood
- Reduced anxiety and depression
- Decreased nausea
- Increased ability to maintain social contact
- Reduced symptoms of fatigue
- Better ability to control weight
- Improved quality of life
- Improved pulmonary function, especially in post mastectomy patients



According to cancer statistics available in 2004 a study found the following results after a 20 week exercise programme (comparison pre-programme and post-programme test results):

	PROSTRATE CANCER SURVIVORS	CARCINOMA / LEUKEMIA SURVIVORS
Quality of Life	84% improvement	84% improvement
Total Body Strength	38% improvement	52% improvement
Time on aerobic machines	24% longer	30% longer
Functional Aerobic Capacity (METs) / Fitness Improvement	5% improvement	51% improvement

Safety and precautions when exercising:

- 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.
- 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.
- 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 diarrhoea. Ask your doctor about your blood tests. If OK with your doctor, make sure to drink plenty of fluids.
- If you have severe fatigue and don't feel up to exercising you can try to do 10 minutes of stretching exercises every day.
- Avoid uneven surfaces or excessive weight-bearing exercises which could result in a fall and injury.
- 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.
- 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.
- 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.
- Do not exercise if you have unrelieved pain, nausea/vomiting or any other symptom that causes you concern. Call your doctor.
- 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.

AN AEROBIC TRAINING PROGRAM CAN HELP BREAK THE CYCLE OF FATIGUE. IN STUDIES, REGULAR EXERCISE HAS BEEN ASSOCIATED WITH REDUCED FATIGUE AND AN INCREASED ABILITY TO DO NORMAL DAILY ACTIVITIES. AN AEROBIC EXERCISE PROGRAM CAN BE PRESCRIBED AS TREATMENT FOR FATIGUE IN CANCER PATIENTS.

Tips to Reduce Fatigue:

- Set up a daily routine that promotes activity when you are feeling your best.
- Exercise regularly at light to moderate intensity.
- Get fresh air.
- Keep your symptoms controlled, like pain, nausea, or depression.
- To save energy, place things you use often within easy reach.
- Enjoy your hobbies and other activities that give you pleasure.
- Use relaxation and visualization techniques to reduce stress.
- Balance activity with rest that does not interfere with night time sleep.
- Ask for help when you need it.



When to exercise:

In patients receiving high-dosage cytostatic treatment there was no physical discomfort from the exercise when training the day before or on the day of treatment (*Supportive Care in Cancer, 2003*). When to train seems to be based on how the individual is feeling at the time.

By exercising during and after treatment you will be abtrfter treatmobi(e)-274.0(i)2.1 78 748.4 Tenryscar



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