



Cancer-Related Fatigue - The Benefits of Exercise

Fatigue is a persistent, overwhelming exhaustion not proportional to activity and not relieved by rest. It is one of the most common and distressing symptoms for cancer patients, impacting daily life, work, and emotional well-being. Unlike normal fatigue, cancer-related fatigue (CRF) is more intense, long-lasting, and can persist even after cancer is

in remission. Research shows that physical exercise is safe and well-tolerated for cancer patients at all stages of care, and can significantly help reduce CRF.

Causes of Cancer-Related Fatigue

- **Cancer itself:** The disease process can lead to systemic inflammation and metabolic changes that increase fatigue.
- **Cancer treatments:** Targeted therapy, chemotherapy, radiation, surgery, immunotherapy, and hormone therapy can cause fatigue due to their impact on normal cell function and the immune system.
- **Anemia:** Many cancer patients develop anemia, leading to reduced oxygen delivery to tissues, which can worsen fatigue.
- **Emotional stress and depression:** Psychological distress, including anxiety and depression, often exacerbates CRF.
- **Nutritional deficiencies:** Poor appetite and side effects from treatment can result in inadequate nutrition and energy levels.
- **Lack of physical activity:** Inactivity can lead to muscle weakness and decreased endurance, increasing feelings of fatigue

Exercise and Rehabilitation

- **Aerobic Exercise:** Activities such as walking, cycling, and swimming improve cardiovascular fitness and reduce fatigue.
- **Strength Training:** Light resistance exercises with weights or resistance bands help maintain muscle mass and function.
- **Flexibility and Balance Training:** Yoga, stretching, and tai chi enhance mobility and reduce stiffness.
- **Supervised Rehabilitation Programs:** Oncology rehabilitation programs, often led

by physical or occupational therapists, provide individualized exercise plans to support recovery.

Benefits of Exercise

- **Reduction in Fatigue:** Exercise has been shown to counteract CRF by improving energy levels and reducing inflammation.
- **Improved Physical Function:** Helps maintain muscle strength, mobility, and endurance.
- **Enhanced Mental Well-being:** Reduces stress, anxiety, and depression, leading to a better quality of life.
- **Boosted Immune Function:** Moderate exercise supports immune health, which is vital for cancer patients.
- **Better Sleep Patterns:** Regular movement helps regulate sleep cycles, improving restfulness.
- **Reduced Risk of Recurrence:** Some studies suggest that consistent exercise may lower the risk of cancer recurrence in certain types of cancer

Remember!

If you are experiencing persistent fatigue during or after cancer treatment, know that you're not alone, talk to your healthcare team and remember that regular exercise and rehabilitation can make a real difference in your energy, well-being, and recovery.



International Cancer
Rehabilitation Foundation®

References: Mustian KM, Peppone LJ, Palesh OG, Janelsins MC, Mohile SG, Purnell JQ, Darling TV. Exercise and Cancer-related Fatigue. *US Oncol*. 2009;5(2):20-23. PMID: 21853012; PMCID: PMC3156559. Mustian KM, Sprod LK, Janelsins M, Peppone LJ, Mohile S. Exercise Recommendations for Cancer-Related Fatigue, Cognitive Impairment, Sleep problems, Depression, Pain, Anxiety, and Physical Dysfunction: A Review. *Oncol Hematol Rev*. 2012;8(2):81-88. doi: 10.17925/ohr.2012.08.2.81. PMID: 23667857; PMCID: PMC3647480.

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