



Exercise: Cancer fatigue

Intervention

Aerobic exercise (eg walking, cycling) during and/or after cancer therapy.

Indication

Cancer-related fatigue is a complex and common experience, affecting 70–100% of the cancer patient population.

Fatigue associated with cancer (specifically solid tumours) and its treatment.

Cancer-related fatigue can have a profound physical, emotional, mental and social effect. It may also negatively affect a patient's chance of remission or even cure, as it can reduce the desire to continue with treatment such as chemotherapy.

Exercise during (and after) cancer treatment has been shown to safely reduce fatigue, increase physical fitness and enhance the health-related quality of life.

Aerobic exercise significantly reduces fatigue; however, the role of resistance training and alternative forms of exercise are less clear.

Precautions

The beneficial effects of aerobic exercise on cancer-related fatigue are not as clear for fatigue related to haematological cancers.

Availability

Supervision by an exercise physiologist or physiotherapist may be particularly beneficial for people who are new to exercise or who have become deconditioned (see Consumer resources.)

Description

Exercise regimens used in trials consisted of five sessions per week and included both supervised and unsupervised (home) exercise sessions.

Supervised sessions with a physiotherapist were conducted twice each week for 12 weeks. In these sessions, patients completed:

- six resistance exercises targeting large muscle groups (with two sets of 10 repetitions for each exercise)
- two types of endurance interval exercises, aiming to improve cardiorespiratory fitness. In the first four weeks, patients cycled two lots of eight minutes, with alternating workloads.

Home sessions involved physical activity at moderate intensity for at least 30 minutes, three times per week.

The combination of supervised exercise, twice a week, and home-based exercises, three times a week, meets the recommendations of the evidence-based physical activity guidelines for cancer survivors. However, any exercise schedule that produces equivalent activity may be effective. For example, 30 minutes of walking five days per week.



Tips and challenges

In the past, people with cancer were encouraged to rest if they felt fatigued. However, this can lead to further deconditioning. Aerobic exercise should be considered as one component of a management strategy for fatigue that may include a range of other interventions and education.

Grading

NHMRC Level 1 evidence.

Training

The Cancer Council of Western Australia has produced [guidelines for implementing exercise programs for cancer patients](http://stg10.racgp.org.au/download/Documents/HANDI/exercise-guidelines-manual.pdf).
<http://stg10.racgp.org.au/download/Documents/HANDI/exercise-guidelines-manual.pdf>

References

Cramp F, Byron-Daniel J. [Exercise for the management of cancer-related fatigue in adults](http://www.ncbi.nlm.nih.gov/pubmed/18425939). *Cochrane Database Syst Rev* 2012; 11:CD006145.
www.ncbi.nlm.nih.gov/pubmed/18425939

Kampshoff CS, Chinapaw MJ, Brug J, et al. [Randomised controlled trial of the effects of high intensity and low-to-moderate intensity exercise on physical fitness and fatigue in cancer survivors: Results of the Resistance and Endurance exercise After ChemoTherapy \(REACT\) study](http://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-015-0513-2). *BMC Med* 2015;13:275.
<http://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-015-0513-2>

Consumer resources

To find an accredited exercise physiologist, visit the [Exercise and Sports Science Australia \(ESSA\)](http://www.essa.org.au/find-aep/) website and search by state, postcode and speciality.
www.essa.org.au/find-aep/

To find a physiotherapist, visit the [Australian Physiotherapy Association's](http://www.physiotherapy.asn.au/APAWCM/Controls/FindAPhysio.aspx) website and search by state, postcode and treatment area.
www.physiotherapy.asn.au/APAWCM/Controls/FindAPhysio.aspx

Cancer Council Victoria has produced [Exercise for people living with cancer, a guide for people with cancer, their friends and families](http://www.cancervic.org.au/downloads/resources/booklets/exercise-and-cancer.pdf).
www.cancervic.org.au/downloads/resources/booklets/exercise-and-cancer.pdf

The Victorian Government's Better Health Channel provides some simple information on cancer and exercise.
www.betterhealth.vic.gov.au/health/conditionsandtreatments/cancer-exercise-to-help-you-cope

The American Cancer Society provides a number of tips for reducing fatigue and sticking to an exercise program.
www.cancer.org/treatment/survivorshipduringandaftertreatment/stayingactive/physical-activity-and-the-cancer-patient

This education TV program www.abc.net.au/catalyst/stories/4459555.htm shows how a group of cancer patients is experiencing benefits from targeted exercise programs.