



**Teenagers and  
Young  
Adults with  
Cancer**

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# **Physical activity in teenagers and young adults with cancer**

**TYAC best practice  
statement for health  
professionals**

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# PHYSICAL ACTIVITY IN TEENAGERS AND YOUNG ADULTS WITH CANCER

## BEST PRACTICE STATEMENT

### Aim

The aim of this document is to raise awareness amongst TYAC professionals of the importance of physical activity in teenagers and young adults (TYA) with cancer, and the need to provide advice and guidance regarding this. This document is not intended to provide prescriptive advice for individual centres or individual TYA cases, but rather to promote physical activity as an aspect of TYA cancer care that needs inclusion in service delivery. Possible ways that this could be achieved are included at the end of the document.

### Background

This document was felt necessary because of the proven health benefits related to exercise for cancer patients, together with the knowledge that physical activity and exercise is not included as part of routine cancer care for most TYA centres.

In addition, young people want advice on exercising with cancer, and to be given the opportunity to do so.

### Research findings

There is a large evidence base supporting physical activity and cancer in adults. The following examples summarise the current evidence base:

- Exercise during active cancer treatment improves physical functioning, role function, social functioning, fatigue and overall quality of life [Mishra et al 2012].
- Exercise is an effective way of reducing cancer-related fatigue during and after cancer treatment [Cramp and Byron-Daniel 2012].
- Exercise is safe and effective during and after cancer treatment in adults, resulting in improved physical ability and mood [Macmillan 2011].

The growing evidence base concerning TYAs with cancer demonstrates that they will engage in exercise during treatment and that it can have positive psychological effects [Adamsen et al 2009, Rospial et al 2013]. A systematic review into children and teenagers under 18 years of age concluded that exercise during chemotherapy treatment can improve fitness, flexibility and body composition [Braam et al 2013]. Due to the evidence for the benefits of physical activity during and after cancer, leading bodies support and promote it:

- UK Chief Medical Officers – “all children and young people should minimise the amount of time spent being sedentary.”
- British Association of Sports and Exercise Sciences – “... important to avoid total inactivity for all cancer patients. Aim to be as active as their abilities and conditions allow.”
- American College of Sports Medicine – “patients are advised to avoid inactivity and return to normal activities of daily living as soon as possible. The standard age appropriate guidelines are also appropriate for cancer patients.”





## There is inconsistent provision of physical activity advice / interventions across Britain

In 2013, TYAC members were asked about the exercise opportunities that are facilitated for young people, above and beyond treatment-related intervention. The main findings were:

- 11 out of 25 TYA centres offered no physical activity opportunities for their young people.
- Amongst those that did, there was a variety of forms this took, and at what stage during cancer treatment / survivorship it was delivered or offered.

## Young people want advice on exercise and to have the opportunity to exercise

Findings from the 2013 Teenage Cancer Trust Find Your Sense of Tumour conference, where over 220 TYAs with cancer were asked about exercise during treatment, were:

- 88% thought that their treating hospital should provide them with exercise advice during treatment.
- Those that had exercised during treatment listed benefits including improved energy levels, increased strength, faster physical recovery and feeling good.
- Only 28% had access to organised exercise, and 32% were given exercise advice.

## Best Practice Statement

Physical activity and exercise is an important aspect of routine TYA cancer care. All TYAs should be given information on the importance of physical activity, the benefits to them, what is reasonable for them to achieve given their diagnosis and treatment plan and advice on how to engage in physical activity. This should be delivered by individuals with the appropriate skills and knowledge to tailor their advice around the complex physical deficits and specific considerations that TYAs with cancer encounter.





## References

Mishra et al [2012] Exercise interventions on health-related quality of life for people with cancer during active treatment. Cochrane Database of Systematic Reviews 2012, issue 8.

Cramp and Byron-Daniel [2012] Exercise for the management of cancer-related fatigue in adults. Cochrane Database of Systematic Reviews 2012, issue 11.

Macmillan [2011] The importance of physical activity for people living with and beyond cancer: A concise evidence review.

Adamsen et al [2009] Struggling with cancer and treatment: young athletes recapture body control and identity through exercise: qualitative findings from a supervised group exercise program in cancer patients of mixed gender undergoing chemotherapy. Scandinavian Journal of Medicine and Science in Sports, 19, 55-66.

Rosipal et al [2013] Assessment of voluntary exercise behaviour and active video gaming among adolescent and young adult patients during hematopoietic stem cell transplantation. Journal of Paediatric Oncology Nursing, 30 [1], 24-33.

Braam et al [2013] Physical exercise training interventions for children and young adults during and after treatment for childhood cancer. Cochrane Database of Systematic Reviews, 2013, issue 4.



## Top Tips

- Physical activity should be covered in: Holistic Needs Assessments, End of Treatment Summaries and End of Treatment Care Plans [particularly with reference to any late effects that might impact on a young person's ability to participate in any physical activities].
- All TYA service professionals should promote the importance of physical activity to TYA patients, e.g. at clinic appointments.
- Identify a named person within the service that will be the lead for physical activity development for teenage and young adult services. This person will need to engage other team members as it is likely to be too big a job for one person. The lead can be any member of the TYA team. In teams where there is a TYA physiotherapist or occupational therapist this would seem to lie naturally within their role.
- Create a directory of local exercise providers, for example council run leisure centres, GP referral schemes, disability sport, private gyms, sports clubs.
- Young people should be actively encouraged to help in the creation of the directory by recommending services within their local area and services that they have accessed.
- Consider the establishment of exercise programmes in collaboration with outside agencies, these can be short or long term in nature.
- If concerned about nutritional status, advice should be sought from a dietitian prior to commencing exercise.
- Offer education about the impact of cancer in young people to outside agencies to increase their confidence to work with young people with cancer.
- Evaluate any programmes and schemes that are created so as to add to the body of evidence around exercise, young people and cancer.
- Young people need to be aware that a cancer diagnosis and treatment may impact on the rules and regulations linked to their gym or health club membership. It would be strongly advised that young people check any small print associated with membership.



## About TYAC

Teenagers and Young Adults with Cancer is a registered charity and the UK's only membership body open to all professionals involved in the care of teenagers and young adults with cancer. By providing information on best practice and new developments, training and support to our members, we aim to improve the quality of life and likelihood of survival for young people with cancer.

Our vision is that all teenagers and young adults with cancer in the UK receive the best possible treatment and support.

For more information on membership

**Visit:** [www.tyac.org.uk](http://www.tyac.org.uk)

**Email:** [info@tyac.org.uk](mailto:info@tyac.org.uk)

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