



# 12-17 YEARS

This leaflet is for teens affected by blood cancer and their families. It promotes an active, safe and adapted lifestyle during treatment

## Perspective

Being active is essential for the proper development of physical and cognitive capacities in growing teenagers. During cancer treatment, physical activity can be integrated into daily life in a safe manner.

Between the ages of 12 and 17, physical activity will maintain strength, physical endurance, and body weight. All of this will help you get back into an active life after treatment and facilitate your re-integration to school.

Being active will help reduce your fatigue, improve your quality of life, maintain heart health, improve functional abilities, maintain or improve flexibility, and help maintain the health of your bones.

You can do low-impact sports like dancing, biking, walking, light jogging, and individual or group fitness activities. You get to pick! Your focus should be on learning what you can do, customizing the activity to you, and building towards a routine





## Recommendations

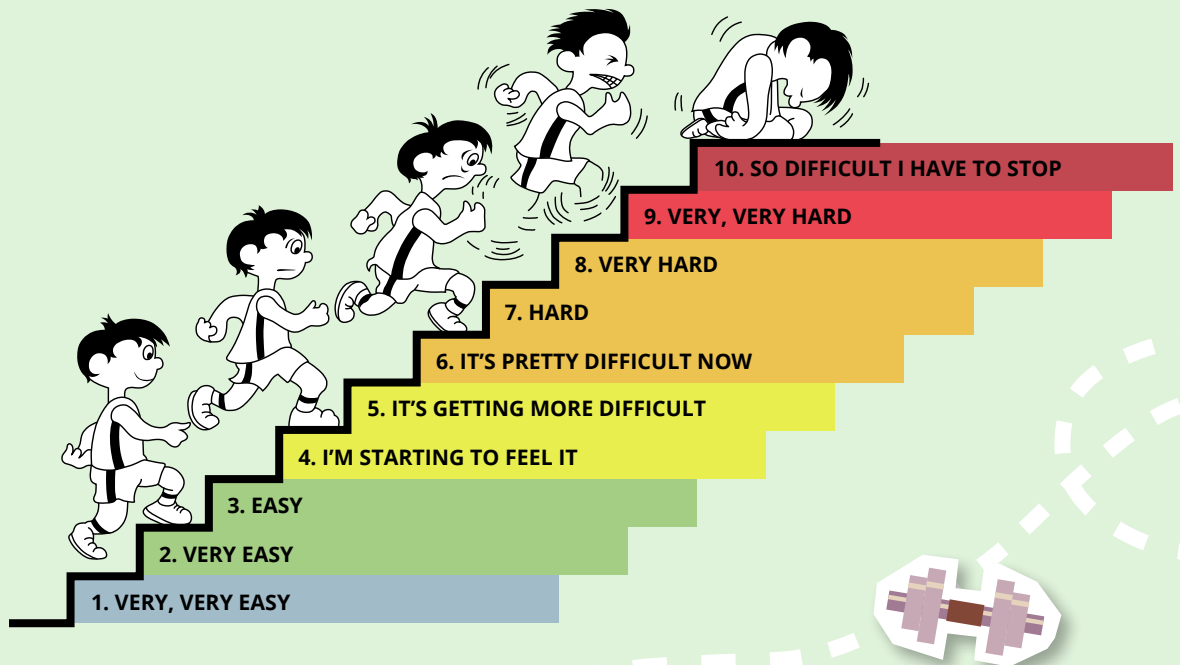
Experts say you should be active at least 60 minutes a day if possible. This can be divided into several short periods throughout the day.

It's recommended that you set aside 2 times a week for strengthening (i.e., weights, yoga, Pilates, etc.).

The intensity of the activity can vary from moderate to vigorous. Use the following scale to help you measure fatigue.

## Borg Rating of Perceived Exertion Scale (0-10)<sup>3</sup>

10	<i>exhaustion</i>
9	<i>very, very hard</i>
8	<i>very hard</i>
7	<i>hard</i>
6	<i>somewhat hard</i>
5	<i>moderate</i>
4	<i>fairly light</i>
3	<i>light</i>
2	<i>very light</i>
1	<i>very, very light</i>
0	<i>at rest</i>



Another easy way to assess intensity is by paying attention to breathing and ability to speak during exercise:

- Is it easy to speak during the activity? That means the intensity level is moderate.
- Is it hard to hold a conversation? That means the intensity level is high.

High-intensity exercise is important, but it should be briefer and less frequent. Moderate-intensity exercise can be done every day.



## Safety

Physical activity is safe during treatment if you watch out for specific signs. It is best to stop and postpone physical activity if you feel:

- Nauseous
- Onset or increase in pain
- Vertigo or dizziness
- Palpitations or chest pain

### Be careful if:

#### **Your platelet level is low:**

Avoid activities where falling is a risk, or you must catch things. Instead:

- Focus on no-impact activities

#### **Your neutrophil level is low:**

Avoid fabric items, wash them before use, and wash your hands after the activity. Instead:

- Choose plastic items

**Your hemoglobin level is low:** Avoid activities that are high-intensity or where you must bend over or hold your breath (especially during weight training). Instead:

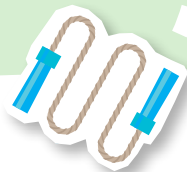
- Watch for signs of fatigue and allow for rest periods

**Your blood sugar is low and** it is not possible for you to eat (because of blood tests, for example):

- Focus on activities with very low-intensity
- Postpone the activity until after eating

## Make every step count

Adding brisk movement is one way of increasing your daily amount of physical activity (walking, climbing stairs, cycling, etc.)



## Drinking water is important!

You should always have a water bottle with you. It is important to stay hydrated when you're active, especially during treatment.



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## Minimize sedentary activities

Seated activities should be limited at 2 hours a day when possible. For example: games on tablets or cell phones, TV shows and movies, reading, etc.

## Sleep

Especially during growth periods, it is normal to need a lot of sleep, even during the day. Take the time to sleep as needed.



## Doctor's guidance

It is important to discuss other recommendations with your attending physician and adapt the level and type of physical activity you will be able to do.

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**Sources:** **1.** Canadian 24-Hour Movement Guidelines for Children and Youth. Guideline Development Report 2016: An Integration of Physical Activity, Sedentary Behavior, and Sleep. Canadian Society for Exercise Physiology. **2.** Duhamel, G. *et al.* 2020. Systematic Review of Physical Activity Prescription with Pediatric Oncology Patients Towards Recommendations. Accepted before publication. **3.** Lazaar, N. *et al.* 2004. Modalities of Submaximal Exercises on Ratings of Perceived Exertion by Young Girls: A Pilot Study. *Perceptual and Motor Skills*, 99 (3\_suppl), 1091–1096. <https://doi.org/10.2466/pms.99.3f.1091-1096>