Physical activity guidelines

for adults with major lower limb amputation



These guidelines, based on the best available scientific evidence, were developed by a Canadian group of scientists, clinicians, people living with a lower limb amputation, and representatives of limb loss organizations.

These guidelines outline the minimum amount of activity needed to obtain health benefits for balance and mobility.

WHO are these guidelines for?

- Adults with **one-sided major amputation at the ankle and above**.
- People **living in an environment other than a hospital setting**, such as at home or in a community setting.

WHY should I use these guidelines?

To improve balance and overall daily mobility, including:

- **Walking endurance.**
- **Walking on uneven surfaces.**
- **Performing transfers and functional tasks,** such as:
  - Getting up from a chair or sofa
  - Picking up an object from the floor
  - Going up and down the stairs

Guidelines

For benefits in balance and mobility outcomes, adults with a major lower limb amputation should engage in:

Moderate to vigorous intensity aerobic exercises

60 minutes/ week

Aerobic

+

Strengthening exercises of the lower limbs

At least
3 sets of **10** repetitions
2 times per week

or

Balance exercises

At least
20 minutes
3 times per week

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WHAT are moderate to vigorous intensity AEROBIC activities?

MODERATE intensity activities require you to work somewhat hard

You will breathe harder and may sweat a little, but you should feel like you can go on for a long time.

VIGOROUS intensity activities require you to work really hard

You may only be able to continue the activity for a short time before you get tired.

Use the Talk Test to determine your intensity



If you **can talk but not sing** while doing the activity, you are doing a moderate intensity aerobic activity.



If you **cannot say more than a few words** without pausing during the activity, you are doing vigorous intensity aerobic activities.

HOW should I do moderate or vigorous intensity AEROBIC activities?

Examples of everyday activities

MODERATE
- vacuuming
- washing windows
- mowing the lawn
- sweeping the floor

VIGOROUS
- heavy yard work
- taking the stairs



Examples of sports

MODERATE
- brisk walking
- dancing
- light cycling
- badminton
- doubles tennis
- yoga

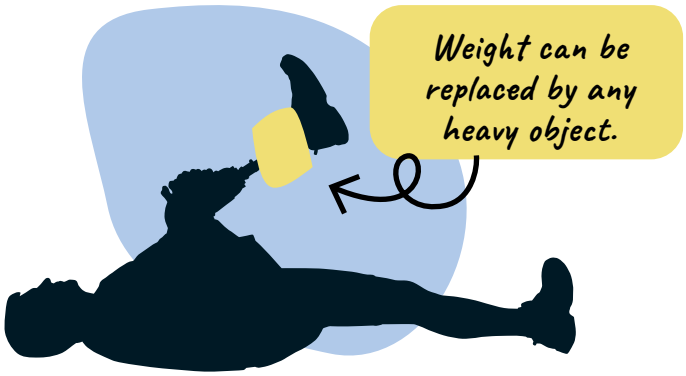


VIGOROUS
- soccer
- aerobics
- swimming
- basketball
- playing singles tennis
- fast or long-distance cycling



HOW should I do STRENGTHENING exercises?

- **Strengthening exercises can be performed with:**
  - Resistance bands
  - Weights or dumbbells
  - Body weight
- **Possible positions:**
  - Standing
  - Sitting
  - Lying down
- **Muscle groups to target:**
  - Buttocks
  - Front of thighs
  - Back of thighs
  - Calves



HOW should I do BALANCE exercises?

Examples of balance exercises:

- Standing on one leg
- Balancing on both legs on an unstable surface
- Weight shifting activities
- Standing reaching activities
- Throwing and catching activities (such as catching a ball)







HOW can I become more physically active?

- Make a physical activity plan that is **realistic** and **achievable** for you and **write it down**. Be sure to include details such as what activity you will do, when and where you will do it, for how long, and at what intensity.
- Set S.M.A.R.T. goals for short and long-term: **S**pecific, **M**easurable, **A**ttainable, **R**ealistic, **T**ime-bound. **Have a look at your goals often and revise them if needed.**
- Invite your family, friends, and peers and **encourage each other** to stick to the plan.
- Try a **variety** of activities.



HOW can I start exercising safely?

- If you are not currently physically active, consider speaking with a health-care provider before starting, if you need information or support.

  This may include:

  - A physician
  - A physiotherapist
  - A kinesiologist
  - A prosthetist
  - A qualified exercise professional

- Start with smaller amounts of physical activity.
- Gradually increase the duration, frequency, and intensity to meet the recommended guidelines.



Are there any risks I should be aware of while following these guidelines?

The potential health **benefits** of exercise **outweigh** the potential **risks** of not exercising at all.

Will I get other health benefits if I meet these guidelines?

- There is insufficient evidence to make recommendations on other fitness outcomes such as cardiorespiratory function, lower limb flexibility, and functional capacity in people with unilateral major (at the ankle and above) lower limb amputation.



Who else could use these guidelines?



- These guidelines are for people with one-sided lower limb amputation at the ankle and above.
- These recommendations are also addressed to:
  - Families
  - Caregivers
  - Healthcare professionals
  - Exercise professionals
  - Organizations that promote physical activity or provide services to adults with lower limb amputations
- These groups can use these guidelines to make recommendations regarding physical activity or develop physical activity programs.



For more scientific information

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