

Physical Activity After Acquired Brain Injury (ABI)

Physical activity is important for everyone. After an ABI, it is even more important to be physically active. Your health care team will work with you to plan a program that meets your needs and interests. Some benefits of physical activity include:

- › better muscle strength and endurance
- › better mood and self-confidence
- › more independence in daily living
- › less risk of falls
- › improved balance
- › improved coordination

How is physical activity affected by an ABI?

Early in your recovery you may have limits on the types of activity you can do safely. Your movements may be weak and you may need to concentrate to control them. Feeling tired can also limit your activities, as it will take more effort for your brain to control your movements than it used to. As your brain starts to heal, you will be able to move more and do more activities.

How can I increase my physical activity?

When doing physical activity, it is important to know your limits. **Talk with your doctor before starting a new physical activity.**

Types of physical activity

Aerobic exercise

- Aerobic exercise is any activity that gets your heart pumping. This is an important part of building up how much you're able to do.
- It is important to warm up before and cool down after exercise (about 3-5 minutes each).
- Start with 10-minute sessions. As you feel more comfortable, gradually increase your time to 20-60 minutes of activity.
- You should aim for 2 ½ hours of moderate to vigorous intensity aerobic exercise per week (for example, 30 minutes 5 times per week).
- You can use the "talk test" to measure the intensity you are exercising at. At first you should be able to carry on a conversation during your session. If you're doing moderate intensity activity, you should be able to talk, but not sing. If you're doing vigorous intensity activity, you will not be able to say more than a few words without pausing for a breath.

Examples of aerobic activities include:

- › leg or arm movements while sitting
- › walking/running
- › stationary cycling
- › swimming
- › dancing

Strength training

- Strength training is very important. It helps with your walking ability and speed.
- Strength training for each major muscle group should be done 2-3 days a week. Do 1-2 sets of 10-15 repeats each.
- **Strength training does not increase pain or spasticity (stiff muscles) when done correctly.**

Examples of strength training activities include:

- › step-ups
- › squats
- › moving from sitting to standing
- › leg lifts
- › lifting groceries

Balance training

- **It is important to stay safe and know your limits.**
- After an ABI, you may feel less steady. It is important to do activities that challenge your balance, and to do them safely. Have someone else or a sturdy object nearby to limit your chance of falling.
- If your balance is severely affected, you may work on balance while sitting down. You may be able to progress to balance activities while standing with someone nearby for support.
- Balance activities should be done for 10-15 minutes, 2-3 days a week.

Examples of balance activities include:

- › reaching
- › walking and turning your head or body
- › standing with feet together, in tandem (one foot in front of the other), on one leg

How do I know my limits?

If you are not sure how to start your program, talk with your doctor.

If you have any of the following symptoms during physical activity, stop exercising right away and contact your doctor or call 911:

- › chest pain
- › severe shortness of breath
- › dizziness
- › lightheadedness

Resources

Canadian 24-Hour Movement Guidelines (from the Canadian Society for Exercise Physiology)

- › www.csep.ca/guidelines

Brain Injury Canada

- › www.braininjurycanada.ca

Heart & Stroke Foundation of Canada

- › www.heartandstroke.ca