# Patient & Family Guide

# Liver Transplant Physiotherapy Program



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- It is very important to stay active while you wait for your liver transplant.
- People who are in better physical condition before their surgery are more likely to get better faster and have fewer complications.
- Your physiotherapist will check your level of frailty. This is to make sure you will be healthy during and after your transplant.
- Frailty is an age-related condition that can make it harder for you to get better from illness. Getting frail may mean that you have:
  - › Less muscle strength
  - > Slow walking speed
  - > Poor balance
  - More admissions to the hospital
- Your physiotherapist will support you while you wait for your transplant. They may also refer you to community programs or services to help you achieve your goals.
- It is important to exercise while you wait for your transplant. It is safe for you to exercise if you have liver disease.

- Exercise can:
  - help you get ready for a transplant.
  - improve your strength.
  - improve your endurance (ability to exercise longer).
  - help control your blood pressure.
  - help you reach a healthy body weight.
  - improve your mental health.
  - help you be more able to do activities that you want and need to do.
- Your exercise program should include strengthening exercises (like lifting light weights or soup cans) and cardiovascular (cardio) exercise (like walking).

#### **Exercise safety precautions**

- Do not hold your breath while you exercise. This will lower your risk of bleeding from varices (veins that are bigger than normal).
- If you have a hernia, keep your core strong while you exercise. Ask your physiotherapist for ways to improve your core strength.

### Strengthening exercises

- Muscle loss is very common in people with liver disease. As you lose muscle, daily tasks can get harder.
- Do these exercises at least 3 days a week.
- Do each exercise 12 times in a row. This is called a set. When it gets too easy to do an exercise 12 times:
  - Add another set of 12 (up to 3 sets).
- When it gets easy to lift a weight:
  - Add more weight and go back to doing
     1 set until it is easier to lift the new amount of weight. Then add more sets.

#### **Arm exercises**

You can do these exercises while sitting or standing. You can do 1 arm at a time, or both arms at the same time.

#### **Biceps curls**

- Keep your elbow tucked into your side.
- Bend your arm up until your hand touches your shoulder, then slowly lower it.
- Repeat 12 times. You can do 1 arm at a time, or both arms at the same time.





## **Shoulder press**

- Push the weight up over your head, then slowly lower it.
- Repeat 12 times. You can do 1 arm at a time, or both arms at the same time.





#### Shoulder abduction

- Lift your arm out to the side to shoulder height, then slowly lower it.
- Repeat 12 times. You can do 1 arm at a time, or both arms at the same time.





## **Triceps extension**

- Extend your elbow and raise your arm behind you.
- Repeat 12 times. You can do 1 arm at a time, or both arms at the same time.

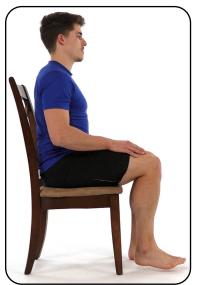




# Leg exercises

#### **Knee extension**

- Sit on a chair with both of your feet on the floor.
- Slowly straighten your leg while keeping your other foot on the floor.
- Hold for 3 seconds, then slowly lower your leg.
- Repeat 12 times for each leg.





#### Hip flexion

- Sit on a chair with both of your feet on the floor.
- Slowly raise your knee a few inches above your other knee while keeping your other foot flat on the floor.
- Hold for 3 seconds, then slowly lower it.
- Repeat 12 times for each leg.





#### Sit to stand

- Sit on a chair with both of your feet on the floor.
- Stand up. Then, slowly sit down. Use your arms, if needed.
- Repeat 12 times.





#### Glute bridge

- Lie on the floor on your back with your knees bent.
- Gently flatten your back against the floor.
   Imagine you are trying to pull your 2 pelvic bones together. Try to hold this position while you do the exercise. This will keep your core strong.
- Then, squeeze your glutes (bum) to lift your hips off the ground until your legs and back form a straight line.
- Hold for 3 seconds. Then, slowly lower yourself to the starting position.
- Repeat 12 times.





#### Cardio exercises

 Cardio exercises are important to make your heart, lungs, and muscles stronger. They include activities like walking and stationary biking.

#### How often should I do cardio exercise?

- You should try to do cardio exercise at least 5
  days a week, once a day, for 30 minutes at a
  time.
  - If 30 minutes is easy, add 5 minutes each time.
  - If you are only able to exercise for a short time (less than 30 minutes), try to do
     2 or 3 shorter sessions a day that add up to
     30 minutes.
- You should not have trouble breathing while exercising. If you cannot comfortably talk while walking, slow down or stop to rest.

#### Remember:

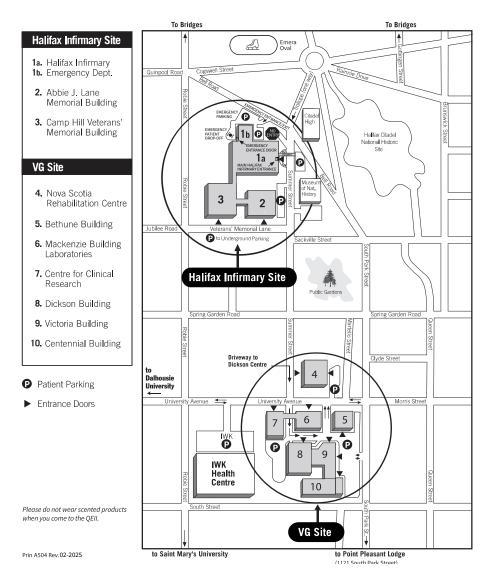
- Warm up and cool down when you exercise.
   This means to start and end your exercise with slower, more gentle activity. This lets your body get ready to exercise and recover from exercise. For example:
  - If you walk for 30 minutes, the first
     5 minutes and the last 5 minutes should be at a slower pace.

- Moving throughout the day is also very important. Exercise alone will not improve your strength if you are resting for most of the day. It is important to take part in daily activities as you can (like self-care, housework, errands). Self-care includes bathing, grooming, dressing, and going to the bathroom.
- Save your energy. It is important to balance rest and activity to keep from feeling too tired after exercising. Plan your day so that you are able to do your most important tasks first.
- If you find it is getting hard to walk, you may want to think about using a walking aid (like a walker or a cane). Please talk with your physiotherapist about this.
- Be sure to find an activity that you enjoy. You will be more likely to stick to it.

What are your questions? Please ask. We are here to help you.

# **QEII Health Sciences Centre**

#### is made up of 10 buildings located on two sites



#### **Contact:**

If you have any questions or concerns about your exercise program, please call the Physiotherapy Department:

- Dickson building, 4<sup>th</sup> floor (4E)
- > Phone: 902-473-2151

This pamphlet is for educational purposes only. It is not intended to replace the advice or professional judgment of a health care provider. The information may not apply to all situations. If you have any questions, please ask your health care provider.

Find all patient education resources here: www.nshealth.ca/patient-education-resources

Connect with a registered nurse in Nova Scotia any time: Call 811 or visit: https://811.novascotia.ca

Prepared by: Physiotherapy
Illustration by: Physiotec, 2022
https://physiotec.ca/ca/en/
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