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**HOME-BASED EXERCISE AND MOTIVATIONAL PROGRAMME
BEFORE AND AFTER
LIVER TRANSPLANTATION: ExaLT Trial**

IMPROVING YOUR FITNESS **BEFORE A
LIVER TRANSPLANT: PHYSIOTHERAPY
ADVICE AND EXERCISE GUIDANCE.**

Pre-LT exercise Leaflet_ v1.0 16th December 2021
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Physical Activity

You may need to wait several months to a year for your liver transplant. During this time many patients find that their physical fitness declines, but you can improve this by being physically active. There is evidence that fitter patients cope better with complications after surgery and experience a better recovery. You should continue to maintain an active lifestyle after your transplant, as this can help you to avoid long term complications and keep you healthy for years to come.

Daily activities

You can improve your fitness by making simple changes like walking instead of using a bus or car, or taking the stairs instead of a lift. Continue with your normal daily activities and minimise the time that you are inactive. Additionally, you can participate in moderate aerobic exercise and complete strengthening exercises. Details of these are described in the following sections.



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Moderate Aerobic Exercise

We recommend two walks of at least 15 minutes each day. Walk at a moderate pace that causes you to feel warmer and breathe harder. You should be able to carry on a conversation while you walk.

If you prefer a different form of activity such as cycling or swimming, you can do this instead. Again, do two sessions of at least 15 minutes each day and use a moderate pace that causes you to breathe harder, but allows you to carry on a conversation or are unable to maintain a steady state of breathing in the case of swimming.

Always consider safety when choosing what type of exercise to do. If you have trouble with your balance, it may be safer to use a stationary bicycle. If you have pain in your knees or hips, you may find it better to carry out a low impact form of exercise such as swimming or cycling.

Each week, gradually increase the time you spend exercising. Even exercising just a few minutes more each week will help over time. Increase the pace you walk, swim or cycle as you feel able.

If you are already active, you might prefer to start with three sessions of 25 minutes per week of vigorous exercise. Vigorous exercise causes you to feel warmer and breathe much harder, making it difficult to carry on a conversation. This includes running or singles tennis. Again, gradually increase the amount of vigorous exercise you do each week.



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Strengthening exercises

It is important to do strengthening exercises two to three times per week, with at least two days between sessions.

At the back of this leaflet there are some strengthening exercises which you can try. Aim to complete 2 sets of each exercise per session.

During each session, work through all of the exercises twice. The exercises should feel difficult, but not impossible for you to complete.

If you feel that you are recovering well from the exercises, you can work through them three times each session.

An example of how you might incorporate aerobic and resistance exercise into your week is provided at the end of this leaflet.

Healthy eating

Eating a balanced meal is advisable to all patients. You should follow the guidance given to you by your dietitian.

Virtually no food actually damages the liver or is prohibited for patients with chronic liver disease. Alcohol must be avoided.

In most patients with chronic liver disease, eating an adequate amount of calories and protein is much more important than avoiding specific types of food, so it is important that you have a good, varied diet that you enjoy.



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Example Strengthening Exercises



Wall Squat

Positioned back against the wall, feet hip width apart. Keeping the knees in line with the toes, slowly bend the knees and slide the back down the wall towards a chair position. Hold for 3 seconds and return to stand.

Repeat 8-12 times, 2-3 sets.



Wall Press

Positioned approx. one foot away from the wall. Place hands on the wall, shoulder width apart. Slowly bend and straighten the arms.

Repeat 8-12 times, 2-3 sets.



Step-ups

Step up and down a step (e.g. first step of stairs) changing the leading foot each time.

Repeat 8-12 times, 2-3 sets.



Bridges

Positioned lying on your back, knees bent and feet flat to the floor hip width apart. Press down with the feet and raise the buttocks off the floor. Hold for 3 seconds and return to starting position.

Repeat 8-12 times, 2-3 sets.



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Example of a weekly plan of exercise

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Walking (15mins)	√√	√√	√√	√√	√√	√√	√√
Strengthening exercises	√			√			

PLEASE NOTE:

- You are completing these exercises at your own risk.
- Please do not complete the exercises if you feel unwell or have a new injury.
- Please ensure you are wearing loose, comfortable clothing and supportive, non-slip shoes.
- Please ensure you have a drink of water nearby – take small sips while exercising and keep hydrated throughout the day.
- Wait an hour after a meal before you start exercising.
- Please check your environment – ensure you have enough space, nothing on the floor you could trip on and have a chair nearby to rest if you need.
- It is important for you to re-fuel after your work out. This may include a high protein supplement.

Please inform your research physiotherapist if:

- Your medical status has changed since your last therapy contact session.



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Please remember it is normal to get out of breath when you exert yourself. However, it is important you STOP exercise if you get any sudden symptoms including:

- Chest pain or tightness
- Feeling dizzy, nauseous, clammy or cold
- Feeling increasingly wheezy
- Develop pain

In an emergency please call 999.

Contact Information

If you have any queries relating to this exercise leaflet, please contact the ExaLT clinical trial team using the contact details below.

Alice Freer – Senior Physiotherapist

Ashlea Hargreaves – Senior Physiotherapist

Email: Exalt-trial@uhb.nhs.uk