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Exercise & Osteoporosis in Liver Patients

Liver NORTH
LIVER PATIENT SUPPORT

information leaflet 21
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Getting your bones into shape!

Osteoporosis is a condition where the bones lose their strength and are more likely to break. This is often the cause of the broken bones that many older people suffer after only a slight fall.

Between 12 and 55% of people with Liver disease are believed to have osteoporosis. These numbers increase to between 24 and 65% following liver transplant with fractures (broken bones) occurring more commonly within the first year after transplant.

Bone can grow stronger in response to weight bearing exercise (exercise where your body weight is supported through your arms or legs e.g. jogging). Resistance exercise, involving pushing or lifting objects, can also help bones to grow stronger.

It is important to perform exercises that help to improve your bone strength, fitness, coordination and balance as these exercises can help to strengthen the bones, making them more resistant to everyday stresses and strains and reduce the chances of falling.

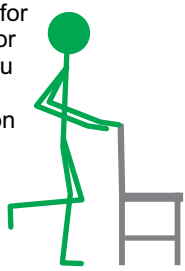
Improvements are only gained if the body is exposed to activities that are greater than what it is used to doing.

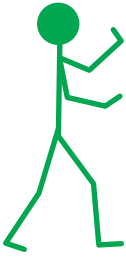
For further information on Osteoporosis and exercise, please contact the National Osteoporosis Society on 01761 471771.

Acknowledgement:
Some of the information contained in this leaflet may also appear elsewhere. We are very grateful to Dr Kate Hallsworth (BSc (Hons), PhD, MCSP, ACSM Certified Clinical Exercise Specialist) Senior Research Physiotherapist/NIHR Clinical Lecturer and Mrs Donna Leiserach (BSc (Hons), MSc, MCSP) Spinal Clinical Specialist Physiotherapist in Neurosurgery both at The Newcastle upon Tyne Hospitals NHS Foundation Trust for writing this LIVErNORTH publication for the benefit of liver patients.

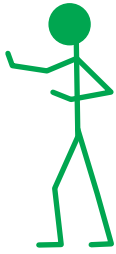
Here are some examples of exercises you can try at home

Balance:
Hold on to a solid chair or a doorframe for support. Practice standing on one leg for 10 seconds. As this becomes easier you can take some support away by taking one or both hands off the wall (repeat on the other leg).

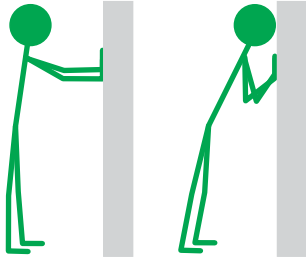




Activities such as tai chi or dancing can also be useful for improving your balance and coordination.



Strength:
Place your hands on the wall in front of you. Slowly lower your upper body to the wall then use your arms to push you back into an upright position. (Repeat 5 times)

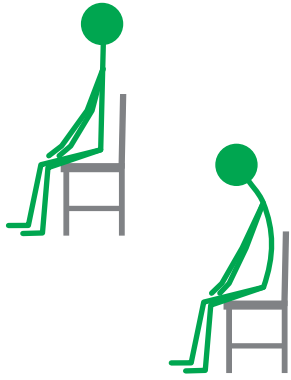


Stand up and sit down from a chair. Try not to use your hands to help you up and down. (Repeat 5 times)

Here are some examples of exercises you can try at home

Posture:
Whilst sitting on a firm chair, practice straightening your back by sitting up tall then curling your back by slouching down. Move as far as you can comfortably. Think about how it feels to be upright and how it feels to be slouched. Try to practice the upright position for a few seconds little and often throughout the day.

There is no perfect posture! Our bodies like to move and don't like staying in the same position for too long. Conditions such as osteoporosis encourage us to slouch. Practicing sitting or standing up tall helps to relieve tired muscles and joints by changing their position.



Fitness:
Lots of different activities can help improve your fitness. This could include going for a walk, dancing or playing a sport. It is important to exercise your body so you feel you are pushing yourself a little more than you do in your normal day to day activities. You may notice your breathing and your heart beat quickening or you may start to sweat. These are all good signs that you are working your body at the correct level, providing you feel comfortable throughout the activity.

Starting with a few minutes of a new activity and gradually increasing it helps to improve your fitness without causing other problems such as muscle strains or feeling unwell.

Exercising safely:

- Before trying the exercises it is important to remember that the number and types of exercises you can do depend upon the severity of your existing osteoporosis and how much pain you experience.
- Consider the activity and environment before exercising to help prevent falls. Make sure you have good lighting and no loose rugs at home.
- Exercise must be performed regularly to have any benefit. Try exercising little and often. You could aim to gradually increase your exercise levels until you are able to exercise for 30 minutes a day on 5 days each week.
- In the beginning, choose exercises you feel you can manage and don't over exert yourself – start with just 5 or 10 repetitions of your chosen exercises.

Feeling a little sore after exercising is normal and this feeling can persist for a couple of days. This usually indicates you have done more than usual and is likely to lead to improvements in your bone strength.

- Pain that continues beyond a couple of days without improvement could be a sign of injury. Arrange to discuss your symptoms with your doctor if you are concerned that you may have injured yourself whilst exercising.
- Stop if the exercise becomes painful.

Exercises to avoid:

- If you have been told you are at high risk of breaking a bone you may be advised to avoid high impact exercise such as running, jumping or skipping.
- Exercises involving bending forwards (touching your toes or sit ups) may also carry an additional risk.
- Exercises or activities with an increased risk of falling should also be considered as having a higher risk of breaking a bone e.g. skiing, horse riding or contact sports.

The benefits of these activities must be considered along with the risks. Whether to perform these activities or not is your decision. It may be possible to modify these activities to reduce the risks of injury.

If you are in any doubt about your ability to exercise safely, please discuss this with your doctor prior to undertaking any new exercise or activity.

Yes I donate
ORGAN DONATION

Take time to talk about organ donation

Many people don't realise that their family's support is needed for organ donation to go ahead.

Information Service provided by:
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