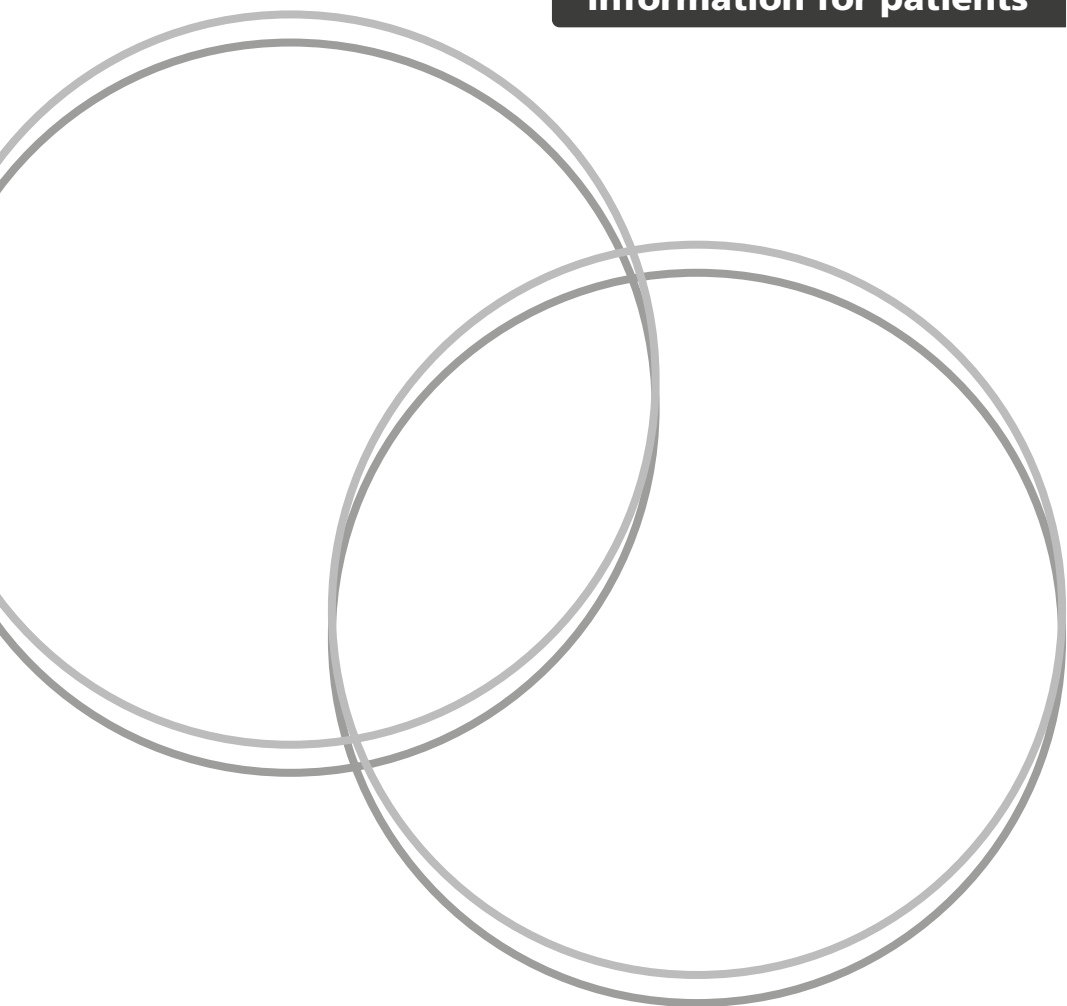


Exercises to help prepare you for hip and knee replacement surgery

Information for patients



Introduction

This leaflet will give you information on what exercises you can do to help prepare for your surgery.

Steps towards a successful recovery from any joint replacement starts before your operation.

Having hip or knee replacement surgery is a major event in your life.

What you do now can have a big impact on your recovery.

It may help you get home and return to normal activities sooner and help you to feel more in control. Our aim is for you to go home as soon as you are well enough. This could be the same day as your surgery.

It is very important to work on improving your health and activity levels prior to surgery in whatever way you can.

Exercising before surgery

Exercising may be difficult for you due to the pain and stiffness in your joint. However, trying to increase the strength in your muscles and increasing your activity levels will help with your recovery. It is also helpful to work on your balance.

Activities such as swimming, cycling including on a static bike and walking can help improve your muscle strength and general fitness. Try to do an activity that you enjoy and makes you increase your breathing but still allows you to talk. The Department of Health recommends 150 minutes (about 20 minutes a day) of moderate intensity exercise each week. This may sound like a lot, but it can be broken up into smaller chunks spread over the day and week.

It is recommended that you do some balance exercises twice a week and strengthening exercises twice a week.

You will find examples of these later in this booklet.

Information about hip and knee replacement surgery

Further useful information regarding hip and knee replacement surgery can be found on the Arthritis UK website. We recommend you spend some time reading this information.

www.arthritis-uk.org/information-and-support/understanding-arthritis/arthritis-treatments/surgery/knee-replacement-surgery

www.arthritis-uk.org/information-and-support/understanding-arthritis/arthritis-treatments/surgery/hip-replacement-surgery

Recommended exercises

It is best if you do your exercises little and often, and the responsibility for doing them is with you. They will help to prepare you for surgery and your recovery. Please pick a few exercises from each group that are most relevant to your condition. You do not need to do all of them.

GROUP 1:

Range of movement exercises

It is important to maintain your hip and knee range of movement, within comfort, before surgery. The following exercises are designed to help you do this.

You should do these exercises for both your right and left legs.

Knee straightening in lying

- Sit or lie with your leg stretched out in front of you.
- Tighten your thigh muscles by pulling your toes up towards you and pushing the back of your knee down into the bed.
- Hold for 5-10 seconds.
- Relax completely and repeat 10 times.



Knee and hip bending in lying

- Sit or lie with your leg stretched straight out in front of you.
- Slide your heel towards your bottom, allowing your hip and knee to bend gently. Increase the amount of bend as comfort allows.
- Slide your heel back down again so your leg is completely straight.
- Relax completely and repeat 10 times.



GROUP 2:

Strengthening exercises

These exercises will help to increase your muscle strength around your hip and knee. You should try to gradually build up the number of repetitions that you can manage but work within your own ability. Start with a set of 10 repetitions. If possible, slowly build up to 2-3 sets of 10.

Sit to stand

- Sit on a firm chair with arm rests.
- Bend both knees keeping your feet flat on the floor.
- Stand up and then slowly sit down.
- You can use your arms to help push up if it is necessary.
- Repeat 10 times.



Sit to stand

- If this is too challenging, you can make it easier by using a higher chair or a chair with a pillow on it.



Progressions

1. Do not use your hands to push up into standing.
2. Stagger your foot position. Slide one foot slightly closer to the chair. This leg will then work harder (the left leg in this photograph).



Step ups

- Stand at the bottom of the stairs and hold onto the banister for support and balance.
- Place one foot onto the bottom step.
- Step the other foot up beside it.
- Step the second leg down first followed by the other leg.
- Repeat 10 times.



Calf raises

This exercise will help to increase the strength in your calf muscles.

Seated calf raises

- Sit on a firm chair with arm rests.
- Bend both knees keeping your feet flat on the floor.
- Slowly push up onto your toes and lower yourself back down.
- Repeat 10 times.



Standing calf raises

- Stand holding onto a stable surface.
- Balance your weight evenly through both legs.
- Rise up onto your toes, lifting your heels off the ground. Hold for 3 seconds and then lower your heels to the floor.
- Repeat 10 times.



Progression

Build up to being able to do this on one leg.



Gluteal (bottom) strengthening

The following exercises help to build the strength in your gluteal muscles.

1. Lie flat on your back with your knees bent and your feet flat on your bed.
2. Your heels should be close to your bottom. Your knees and feet are shoulder-width apart.
3. Place your hands by your sides for support.
4. Tighten your stomach muscles and flatten your lower back into the bed.
5. Squeeze your bottom muscles and lift your hips off the bed.
6. Do not lift your hips so high that you arch your lower back.
7. Hold for 5 seconds then lower your bottom to the bed.
8. Repeat 10 times.



Progression

Staggered bridge

Repeat as per the previous exercise but put one foot slightly in front of the other. The side with the foot that is closer to your bottom will be working harder.



GROUP 3:

Balance exercises

These exercises will help to improve your balance. They are ordered from the easiest (1) to the most difficult (4). Please choose the exercise that is most suitable for you and stand near a stable surface for support to begin with.

1. Feet together

- Stand near a stable surface or back of a chair.
- Bring your feet close together.
- Try to keep your balance for 10-30 seconds.
- Return to a normal standing position.



2. One foot forward

- Stand, near a stable surface or back of a chair.
- Step forward with one foot.
- Keep your front knee slightly bent.
- Keep your weight equally on both legs.
- Try to keep your balance for 10-30 seconds.
- Return to a normal standing position.



3. One foot in front of the other

- Stand, near a stable surface or back of a chair.
- Step one foot directly in front of the other, feet touching.
- Try to keep your balance for 10-30 seconds.
- Return to a normal standing position.



4. One leg balance

- Stand, holding onto a stable surface e.g. the kitchen worktop or back of a chair.
- Try to balance on one leg and take your hands off the surface if you are able.
- Aim to stand on one leg for 10-30 seconds.



GROUP 4:

Stretching exercises

It is important to maintain the flexibility in the muscles around your hip and knee before your surgery.

Hip stretch

This stretch will help to lengthen the muscles at the front of your hip.

- Lie as flat as you can to stretch the front of your hip.
- Try to do this stretch for 30 minutes twice a day.



Inside thigh stretch

This stretch helps lengthen the muscles on the inside of your thigh.

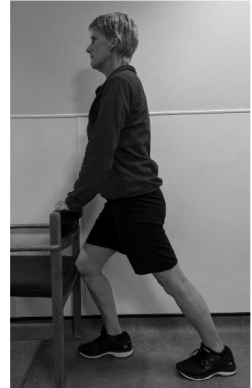
- Lie on your back with your knees bent up, feet flat on the floor and your hands by your side.
- Gently let one knee fall out to the side until you feel a stretch.
- You should feel the stretch on the inner thigh that is falling out to the side.
- Hold for 30 seconds.
- Return to the start position and repeat twice.



Calf stretch

This stretch will help to lengthen the muscles at the back of your leg.

- Stand holding onto a stable surface e.g. kitchen worktop or a chair.
- Step one leg in front of the other with your feet pointing forwards.
- Keeping your back leg straight, your bottom tucked in and your heels on the floor. Bend the front knee until you feel a stretch in the calf of the back leg.
- Hold for 20-30 seconds.
- Relax and repeat twice.



Back of thigh stretch

1. Sit on a chair.
2. Straighten one leg, keep the other leg bent.
3. Bring your ankle/toes up towards you on the straight leg.
4. Keep the leg straight.
5. Gently lean forward until you feel a stretch at the back of the leg.
6. Hold for 30 seconds.
7. Repeat twice.



How to contact us

Nuffield Orthopaedic Centre Hip and Knee Team

Telephone: **01865 737 876**

Oxford University Hospitals NHS Foundation Trust

Headley Way, Headington, Oxford OX3 9DU

www.ouh.nhs.uk/patient-guide/leaflets

Disclaimer

You should consult your GP or other healthcare professional before starting this or any other fitness programme to determine if it is right for your needs.

You should not rely on this information as a substitute for, nor does it replace, professional medical advice, diagnosis, or treatment. If you have any concerns or questions about your health, you should always consult your GP or other healthcare professional. The use of any information provided in this booklet is solely at your own risk.

No assurance can be given that the advice contained in this booklet will always include the most recent findings or developments with respect to the particular material.

Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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charity@ouh.nhs.uk | 01865 743 444 | hospitalcharity.co.uk

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