

# **Prehab: Keep active**

Information for patients preparing for an operation or procedure

**Being active** is good for your mind and body. Every minute of activity counts – and the more you do, the more you'll benefit. Some is good, more is better.

## Physical activities can:

- Reduce your risk of surgery complications and make rehabilitation/recovery easier.
- Strengthen your muscles, bones and tendons, which can take off more pressure on your joints.
- Boost your energy.
- Reducing levels of depression and anxiety.
- Hormones released during physical activities can reduce pain and improve your sleep.

# In short, the stronger you can go into any surgeries or treatments, the better outcome you can get.

Apart from the benefits of physical activity on surgeries or other treatments, people who do regular physical activity lower their risk of:

- Coronary heart disease and stroke
- Type 2 diabetes
- Bowel cancer
- Breast cancer in women
- Early death
- Osteoarthritis
- Hip fracture
- Falls (among older adults)
- Depression
- Dementia, including Alzheimer's disease

# How much activity/exercise should I try to do?

At least **150 minutes** of **moderate activity** will help you become healthier. One way to do this is **30 minutes** of **moderate activity** at least **5 times a week**.



Remember to start exercising slowly and don't push yourself too far or too hard to begin with. For example, you can start with 10 minutes at a time and build up to at least 30 minutes as you feel more confident.

- Go at your own pace and find activities that suit you.
- PACE yourself by spreading out activities and avoiding the urge to overdo it on better days.
- Keep going gradually start to increase activity, working towards simple achievable goals as soon as possible.

## Prehab tips:

If you have flare ups or experience a setback, don't stop completely! Go back to the baseline and start gently again by adjusting the intensity or reducing the time of physical activity.

# What is moderate activity?

Moderate activity is different for everyone – it depends on how fit you are to begin with. Moderate activity means you should:

- Begin to breathe a bit quicker.
- Feel your heart beating a bit faster.
- Feel warmer.

## **Activity diary**

Use this table to record the exercises or activities you have been doing each day.

Fill in the number of minutes you do each day. Add them up at the end of the week to see how well you have done, like this:

	Date	Exercise/activity you did	Total mins
Monday	18/11/24	Walking, balance excise	20
Tuesday	19/11/24	Cycling, warm up, strengthening exercise	
Wednesday	20/11/24	Walking around the block	30
Thursday	21/11/24	Rest day	0
Friday	22/11/24	Cycling in the gym	30
Saturday	23/11/24	Rest day	0
Sunday	24/11/24	Walking, balance excise	30
The total minutes of activity/exercise I have done this week is			150

You might like to print out the next page (My activity diary) and put it somewhere you can see it every day, such as your kitchen wall.

# My activity diary

	Date	Exercise/activity you did	Total mins	
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				
The total minutes of activity/exercise I have done this week is				
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				
The total minutes of activity/exercise I have done this week is				

# **Exercising safely**

### Follow these simple rules:

- Always warm up and cool down before and after exercising.
- Wear loose, comfortable clothing and supportive shoes.
- · Wait at least an hour after a meal before exercising.
- Drink plenty of water.
- Avoid exercising in very hot weather.
- Exercise indoors in very cold weather.

## STOP exercising if you feel any of the following symptoms:

- Nausea or feeling sick.
- Dizziness or light headedness.
- Severe shortness of breath.
- Clamminess or sweating.
- · Chest tightness.
- Increased pain.



#### How hard should I exercise?

A Modified Borg scale measures rating of perceived exertion. It is a subjective scale used to gauge an individual's exercise intensity without relying on parameters like heart rate, respiratory rate or muscle fatigue. It enables you to monitor your individual progress and adapt exercise intensity accordingly. It can be different for different people and also different for each exercise, depending on your physical and mental limitations.

Use the Borg scale on the next page to monitor your breathlessness and fatigue during exercise. You should be aiming to work at a score of 3-5.

# **Modified Borg Dyspnea Scale**

0	Nothing at all
0.5	Very, Very Slight (Just Noticable)
1	Very Slight
2	Slight
3	Moderate
4	Somewhat Severe
5	Severe
6	
7	Very Severe
8	
9	Very, Very Severe (Almost Maximal)
10	Maximal

When exercising, try saying this sentence:

## "This exercise programme is going to do me good"

- If you can speak the whole sentence without stopping and are not feeling breathless, then you can exercise harder
- If you cannot speak at all, or can only say a word at a time and are severely breathless, then you are exercising too hard
- If you can speak the sentence, pausing once or twice to catch your breath, and are moderately to somewhat severely breathless, then you are exercising at the right level.



It is normal to feel breathless when you exercise. It is not harmful or dangerous. Gradually building your fitness can help you to become less breathless.

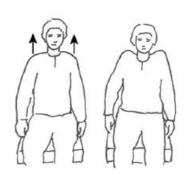
# Warm up exercises

Warming up prepares your body for exercise to prevent injury. Your warm up should last around 5 minutes. At the end of the warm up, you should feel slightly breathless. The exercises can be done while standing or sitting.

Repeat each movement 3-5 times.

#### 1. Shoulder elevation

- Raise your shoulders slowly up towards your ears, and down again.
- Breathe in as you raise your shoulders and breathe out as you let your shoulders down.



## 2. Shoulder circling

- With your arms at your side, slowly circle your shoulders backwards.
- Slowly circle your shoulders forward.

#### 3. Head rotations

- Slowly turn your head to look over one shoulder, while breathing in.
- Slowly bring your head back to centre, while breathing out.
- Repeat the exercise, turning your head to the opposite shoulder.

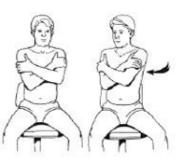
#### 4. Trunk rotations

- While sitting or standing, place your hands across your chest and keep your hips and knees facing forwards.
- Breathe out while twisting your shoulders around as far as possible to your right, to look over your right shoulder.
- Breathe in as you return to the centre.
- Repeat, twisting around to look over your left shoulder.

### 5. Side bends

- Stand with your feet hip width apart and your arms by your side.
- Slide your right hand down towards your knee until you feel a stretch on the opposite side.
- Do not lean forwards or backwards.
- Return to standing and repeat on the opposite side.





## 6. Heel digs

- While standing, tap one heel on the floor in front of you.
- Place your feet back together and repeat with the other leg.

#### Timed for 1 minute.

#### 7. Knee lifts

- While standing, slowly lift one knee up, to no higher than your hip, then slowly lower down.
- Repeat with the other leg.

#### Timed for 1 minute.

## 8. Toe taps to the side

- While standing, using a chair for balance if needed
- Tap your right foot out to the side.
- Bring it back to join the other leg.
- Repeat with left leg.

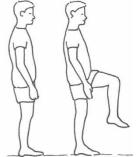
#### Timed for 1 minute.

### 9. Marching on the spot

- Stand up straight with feet hip width apart.
- Lift knees up and down at a gentle pace.
- Breathe rhythmically.

#### Timed for 1 minute.









#### **Aerobic exercises**

You should aim to do aerobic exercise for **30 minutes**, **5 days each week**. You should aim to feel moderately breathless.

Time your aerobic exercise and gradually build the amount of time you can manage. This may be in small increases such as an additional 30 seconds or 1 minute of activity.

## Marching on the spot

- Stand up straight with feet hip width apart.
- Lift knees up and down.
- Breathe rhythmically
- If you can do this easily, add arm swinging to the move.

Timed: Aim to build up to 5 minutes.

#### Step ups

- If you have stairs, use the bottom step.
- If you don't have stairs, use a very stable step.
- If you are unsteady, hold onto a rail.
- Step up with your right leg.
- Step up with your left leg to join the right.
- Step down off the step, one leg at a time.
- It is important to breathe rhythmically and to not hold your breath.

Timed: Aim to build up to 5 minutes.



## Walking

- Use a walking frame or stick if needed.
- Choose a route that is relatively flat.
- Start a walking programme. Your physiotherapist can advise you on the walking speed to gain best benefit.

Aim to build up to 30 minutes continuous walking.

To progress include walking uphill in your route.

# Cycling

Aim to build up to 10-30 minutes continuous cycling.

#### Star Jacks

- Stand with your feet hip width apart.
- Hold onto a wall for support if you need to.
- Slowly slide your right foot out to the side while lifting your right arm up to shoulder height.
- Bring your arm and leg back into the middle and repeat on the other side.

Timed: Build up to 5 minutes.



# **HIIT training (high intensity interval training)**

HIIT training alternates intense workout periods with recovery periods. It's a great way of getting towards your weekly cardio goals. You can do HIIT training using both strength and cardiovascular exercises.



This table gives you an example of HIIT training and some of the exercise options available to you.

Set up / Times	Exercises	
<ol> <li>60 seconds intense exercise</li> <li>60 seconds low intensity exercise</li> <li>60 seconds intense exercise</li> <li>60 seconds low intensity exercise</li> <li>Repeat this process for 2 minutes to begin with, then progress to 5 minutes.</li> <li>As your fitness improves, you can increase the duration of time you are exercising.</li> </ol>	Cardio options  Stationary bike  High knees  Star jumps  Fast walking  Fast marching on the spot  (Try out the cardio exercise that you enjoy)	

# Strengthening exercises

These exercises strengthen muscles, bones and joints. Good muscle strength makes it easier to do everyday things for yourself. Aim to do **three** sessions of strengthening exercises each week.

You should aim to complete 3 sets of 10 repetitions of each **exercise.** Your physiotherapist will guide you to the correct starting weight. Take a short rest in between each set. Once you can easily complete 3 sets of 10, then use heavier weights to make your muscles work harder. The last two repetitions of each set should be hard.

Breathe out on the hardest part of the exercise.

### Bicep curls

- Sitting with your elbows by your side and keeping your back straight.
- Hold a weight in each hand.
- Bend one arm towards your shoulder while breathing out.
- While breathing in, slowly lower your arm until the elbow is straight.
- Repeat with the opposite arm.

Progress to doing the exercise while standing and by increasing the weight.

#### Wall push off / Press up

- Stand facing a wall, about 15-20cm away.
- Place your hands flat on the wall at chest level.
- Keeping your body straight at all times, slowly lower your face and chest towards the wall, by bending your elbows.

Breathe out and push back to standing position. You can easily progress this exercise by standing further away from the wall or by doing kneeling or full press ups.





## **Shoulder press**

- Sit with your arms by your side.
- Hold a weight in each hand.
- Bring the weights up to your chest.
- Now push your arms out straight to the ceiling.
- Bring your hands back to your chest.
- Finally, bring your hands back to your sides.
- Breathe OUT as you extend your arms up.
- Breathe IN as you return your arms back to your chest.

## Progress to doing this exercise by standing up.

#### Sit to stand

- Sit slightly forward on a firm chair.
- Make sure your feet are under your knees.
- Fold your arms.
- Whilst breathing out, lean forwards and stand up. Stand up straight and take a breath in.
- Slowly sit down again whilst breathing out.

#### **Knee extension**

- Sitting on a chair with your feet side by side.
- Straighten one leg out in front of you and hold for 3-5 seconds.
- Slowly lower your foot back to its starting position.
- Repeat on the other leg.

Progress to using ankle weights or holding your leg out in front of you for a longer duration.







#### **Squats**

Stand with your back against a wall, with your feet approximately shoulder width apart. You can also hold onto a stable surface.

 Keeping your back against the wall, or holding onto a chair, slowly bend your knees a short distance. If against the wall your back will slide down the wall

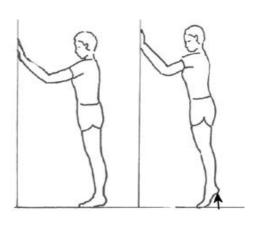
- Bend your knees as far as feels comfortable. Stopping before you go past 90 degrees.
- Pause for a moment at the bottom.
- Breathe out whilst slowly straightening your knees.

To progress the exercise, increase the distance you bend your knees or increase the time you pause before straightening your knees.



#### **Heel raises**

- Stand up straight, with your feet hip width apart and your weight balanced evenly.
- Rest your hands on a firm surface for support.
- Lift up onto the balls of your feet.
- Gently lower down until your feet are flat on the floor once more.



Progress to single leg heel raises.

# **Bending**

- In a sitting position, bend forward slowly, breathing out as you stretch down.
- Breathe in as you come back up to the sitting position.
- Walk your hands back up your legs to prevent extra strain on your back.

Only do this exercise 3-5 times.

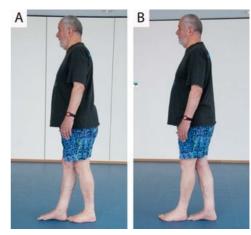


# Stability exercises

Simple balance exercises can be done at home to help improve your health and mobility. Try to do these exercises at least twice a week and combine them with the other routines.

#### Heel-to-toe walk

- Standing upright, place your right heel on the floor directly in front of your left toe (figure A).
- Then do the same with your left heel (figure B).
- Make sure you keep looking forward at all times.
- Use a wall for stability if you need to.
- Try to perform at least 5 steps.



As you progress, move away from the wall.

#### One-leg stand

- Start by standing facing the wall with your fingertips touching the wall (figure A).
- Lift your left leg, keep your hips level and keep a slight bend in the opposite leg (figure B).
- Gently place your foot back on the floor.
- Hold the lift for 5 to 10 seconds and perform 3 on each side.

#### **Core exercises**

#### Pelvic tilt

- Lie on your back with your knees bent and your feet flat on the floor about hip width apart.
- Flatten your back by tightening the muscles in your abdomen and buttocks. This will tilt your pelvis up slightly. Hold for three seconds.



- Fully relax the muscles and rest for a few seconds.
- Repeat for 10 repetitions.

You can make this exercise harder be holding the flexed position for a longer period of time.

#### Bird dog exercise

- Start on all fours, with legs hip width apart, knees directly under hips, hands directly under shoulders, and back and head in a straight line.
- Gently lift your pelvic floor and lower abdomen to support your lower back.
- Keeping your back straight, slowly extend one leg while supporting yourself with both hands on the floor.
- Once balanced, slowly extend the opposite arm.
- Hold for 5–10 seconds.
- Slowly return to all fours.
- Repeat on the other side.



#### Cool down exercises

Cool down exercises allow your body to return to normal before stopping exercise. Your cool down should last approximately 5 minutes, and your breathing should be back to normal by the end.

#### Walk at a slower pace for 2 minutes

Stretching your muscles can help to reduce any soreness you may feel over the next few days following exercise. Each stretch should be performed gently, and you should hold it for 15-20 seconds.

#### Shoulder / back stretch

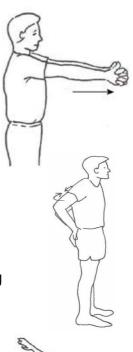
- Stand upright.
- Clasp your hands together in front of you with your knuckles outwards.
- Stretch your arms out in front.
- Feel the stretch around your shoulders and back.

#### **Chest stretch**

- Stand upright.
- Place your hands on your lower back.
- Squeeze your shoulder blades together, keeping your elbows bent.

#### Side stretch

- Stand with your feet hip-width apart and your arms by your sides.
- Slide your right hand down towards your knee until you feel a stretch on the opposite side.
- Do not lean forwards or backwards.
- Return to standing and repeat on the opposite side.



#### **Quadriceps stretch**

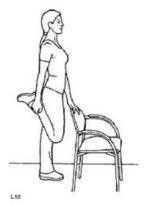
- Holding a chair / wall for support.
- Bend your right leg up behind you and hold onto either your ankle or back of your trousers.
- Try to take your foot towards your bottom and keep your knees together.
- You should feel a stretch at the front of the thigh.
- Return to normal position and relax.
- Repeat with the other leg.

#### **Calf stretch**

- Sit forward in a chair with your back straight.
- Stretch one leg up straight in front of you (keeping foot on floor).
- Keep your other leg bent.
- Stretch the toes of your straightened leg towards you.
- Return leg to floor and repeat with other leg.

# Hamstring stretch

- Sit forward in a chair with your back straight.
- Stretch one leg up straight in front of you with the foot on the floor and relaxed.
- Put both your hands on your other leg, which should be still bent.
- Lean forwards from the hip, supporting your weight on your hands.
- You should feel a stretch at the back of the thigh of the straightened leg.
- Return to normal position and relax
- Repeat with other leg.







## Deep breathing

- Sit in a comfortable position.
- Try to count slowly from 1 to 5 as you breathe in.
- Then let it flow out, gently counting from 1 to 5 again.
- Repeat this for 5 breaths.
- If you'd like to spend more time doing this, then feel free to relax into it.

Adapted from the Royal Berkshire NHS Foundation Trust Pulmonary rehabilitation exercise booklet with permission and thanks.

## **Useful links:**

#### <u>Sitting Exercises – NHS</u>

This NHS page provides a range of simple, gentle exercises you can do while sitting. These exercises are designed to improve mobility and strength, especially useful for people with limited movement or those who spend a lot of time seated. <a href="https://www.nhs.uk/live-well/exercise/sitting-exercises/">www.nhs.uk/live-well/exercise/sitting-exercises/</a>

## NHS Active 10 - Walking Tracker

This app by the NHS encourages you to walk briskly for at least 10 minutes a day to boost your heart health. It tracks your walking activity and motivates you to build a healthy habit of daily exercise. <a href="https://apps.apple.com/gb/app/nhs-active-10-walking-tracker/id1204295312">https://apps.apple.com/gb/app/nhs-active-10-walking-tracker/id1204295312</a>

## Get Running with Couch to 5K - NHS

This NHS programme helps beginners gradually build up running ability over 9 weeks, starting from walking and short runs to reach a 5K run. It offers structured plans and advice to get you moving safely. <a href="https://www.nhs.uk/better-health/get-active/get-running-with-couch-to-5k/">www.nhs.uk/better-health/get-active/get-running-with-couch-to-5k/</a>

#### **Getting Active – Sheffield Aches and Pains**

Part of an active waiting program, this page focuses on encouraging people to gradually increase their physical activity. It offers tips and motivation for safely becoming more active to manage pain and improve overall wellbeing.

https://sheffieldachesandpains.com/conditions/active-wait/week-4-getting-active/

## **Healthwise Activities – Better**

Healthwise offers a variety of health and wellbeing activities aimed at helping people stay active and healthy. Their programs include tailored exercise classes and support to promote physical and mental health in the community. <a href="https://www.better.org.uk/what-we-offer/activities/healthwise">www.better.org.uk/what-we-offer/activities/healthwise</a>

#### **Ever Active Wellbeing Sessions**

These are Reading and West Berkshire community based physical activity sessions for older people. All these activities are led by a qualified instructor, pitched at a gentle intensity and are perfect for those who might not have been active for a while and are looking to rebuild your confidence about being active again. Each session also has some time allocated to socialise and connect with others taking part. <a href="https://getberkshireactive.org/ever-active">https://getberkshireactive.org/ever-active</a>

If you are waiting for hip/knee replacement, please check below:

### Let's Move for Surgery Toolkit - Versus Arthritis

This toolkit provides practical exercises and advice designed to help people with arthritis prepare physically for surgery. It aims to improve strength and mobility to support better recovery outcomes. <a href="https://www.versusarthritis.org/about-arthritis/exercising-with-arthritis/lets-move-for-surgery-toolkit/">www.versusarthritis.org/about-arthritis/exercising-with-arthritis/lets-move-for-surgery-toolkit/</a>

#### **Exercising with Arthritis - Versus Arthritis**

This page offers guidance and tips on how people with arthritis can safely stay active. It covers the benefits of exercise, types of suitable activities, and advice to manage arthritis symptoms through movement. <a href="www.versusarthritis.org/about-arthritis/exercising-with-arthritis/">www.versusarthritis.org/about-arthritis/exercising-with-arthritis/</a>

## Joint Pain Programme - Nuffield Health

Nuffield Health's Joint Pain Programme is a structured initiative to help individuals manage joint pain through tailored exercise, education, and support, promoting better joint health and improved quality of life. <a href="https://www.nuffieldhealth.com/about-us/our-impact/healthy-life/joint-pain-programme">www.nuffieldhealth.com/about-us/our-impact/healthy-life/joint-pain-programme</a>

#### **Contact information**

Royal Berkshire NHS Foundation Trust Prehab Team Tel: 07796 632731 or Email: Prehab@royalberkshire.nhs.uk

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

RBFT Prehab Team, October 2025 Next review due: October 2027