

# Keeping Well Whilst Waiting

A guide on how to  
maintain Physical Activity and  
Health for and after surgery

# Our Mission

Increasing physical activity and making healthy lifestyle changes before an operation has the potential to improve your surgical outcome. Our intention is to help you achieve a stronger, fitter and healthier future and enhance your quality of life following your surgery.

# Content

- IPAQ – International Physical Activity Questionnaire
- Activity and Exercise
- Planning ahead
- Maintaining your Health
- Maintaining Physical Activity
- Exercises
- Physical activity diary
- Useful resources
- References
- Contact Details

## IPAQ – International Physical Activity Questionnaire

Establishing your starting point can help direct your preparation.

Complete the IPAQ Questionnaire on the next page to get your baseline measurements.

The questionnaire helps you find out what kind of Physical activity you do now as part of your day-to-day life.

The questions will ask you about the time you spent being physically active in the last 7 days.

Please answer each question even if you do not consider yourself to be an active person.

To describe the intensity of the physical activity, two terms (**Moderate** and **Vigorous**) are used:

**Moderate** activities refer to activities that take moderate physical effort and make you breathe somewhat harder than normal.

**Vigorous** physical activities refer to activities that take hard physical effort and make you breathe much harder than normal.

# International Physical Activity Questionnaire

**1.** The first question is about the time you spent sitting during the last 7 days. Include time spent sitting at a desk, work, visiting friends, reading, or sitting or lying down to watch television.

During the last 7 days, how much time did you spend sitting during a day?

\_\_\_ hours \_\_\_ minutes

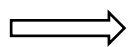
**2.** Think about the time you spent walking in the last 7 days. This includes at work and at home, walking to travel from place to place, and any other walking that you might do solely for recreation, sport, exercise, or leisure.

During the last 7 days, on how many days did you walk for at least 10 minutes at a time?

\_\_\_ Days

Or

No days



How much time did you usually spend walking on one of those days?

\_\_\_ hours \_\_\_ minutes

**3**

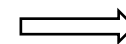
**3.** During the last 7 days, on how many days did you do moderate physical activities like gardening, cleaning, bicycling at a regular pace, swimming or other fitness activities.

Think only about those physical activities that you did for at least 10 minutes at a time. Do not include walking.

\_\_\_ Days

Or

No days



How much time did you usually spend doing vigorous physical activity on one of those days?

\_\_\_ hours \_\_\_ minutes

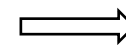
**4.** During the last 7 days, on how many days did you do vigorous physical activities like heavy lifting, heavier garden or construction work, chopping woods, aerobics, jogging/running or fast bicycling?

Think only about those physical activities that you did for at least 10 minutes at a time.

\_\_\_ Days

Or

No days



How much time did you usually spend doing moderate physical activity on one of those days?

\_\_\_ hours \_\_\_ minutes

**4**

# Activity and Exercise

## What is Physical Activity and Exercise?

“Physical Activity is any bodily movement produced by skeletal muscles that results in increased energy expenditure”

Exercise on the other hand, is planned, structured and repetitive bodily movements for the purpose of improving and or maintaining one or more components of physical fitness.

Sedentary behaviour is defined as any waking behaviour characterised by very low energy expenditure, normally characterised by a sitting, reclining or lying posture.

Public Health England report that many adults spend an excess of 7 hours per day sedentary and that this typically increases with age. Higher amounts of sedentary behaviour are associated with poorer health outcomes, causing mortality, cardiovascular problems, cancer and type-2 diabetes (World Health Organisation 2020).

### “An excess of 7 hours per day sedentary”

The World Health organisation (WHO) estimate that >¼ of worldwide population are physically inactive.

1 in 3 women and 1 in 4 men worldwide, do NOT do enough Physical Activity to remain healthy.

1 in 6 deaths in the UK are related to Physical inactivity. This is the same as smoking.

## World Health Organisation Activity Recommendations

Strength exercises 2 or more days a week

2.5-5 hours of moderate activity weekly

1.25-2.5 hours of vigorous activity weekly



3 or more days a week balance and co-ordination activities for those at risk of falls

10 minutes of brisk walking a day has proven benefits in mood, weight, fitness and functional activities



It can be challenging to be physically active with Arthritis, but making sure we follow or exceed the World Health Organisation Activity Recommendations each week will:

- Reduce the detrimental effects of high levels of sedentary behaviour on health
- Improve muscle **strength** = keeps joints strong and well-supported
- Improve **flexibility** = reduces joint stiffness
- Improve **balance** = decreases risk of falls and possible fractures
- Improve **aerobic fitness** = Releases Endorphins, boosting mood and sleep
- Reduces pain, maintaining independence
- Helps manage your weight

The better your movement pre-operatively, the better your recovery

4-8 weeks of exercise, completed 2-3 times a week has shown to be effective at increasing strength and function even with severe Osteoarthritis (Swank et al 2011).

Exercise significantly shows improvements in function, pain and length of stay for both Total Knee and Hip replacements (Moyer et al 2017).

# Planning Ahead

You have decided to go ahead with surgery  
What happens next?

Clear Communication

Personalised Self-Management Support

Physical Activity Programmes

Mental Health Support

Financial Support

Supporting People On Longer Waiting List Following The Covid-19 Pandemic

This follows Versus Arthritis UK 6-part package in supporting people with Arthritis waiting for surgery

## Clear Communication

You will be assessed by a Nurse and Healthcare assistant before your operation in a 'pre-assessment clinic'. Here your health will be discussed in depth and blood tests, MRSA swabs a Urine sample and an ECG will be performed to make sure you are well for the operation and anaesthetic.

You will attend a 'Joint School' where a member of the therapy team will review your mobility and advise you on how to further prepare for your operation.

You will be provided with a detailed information booklet titled 'a patient's guide to a Total Hip/Total Knee Replacement'. Inside further describes what to expect and gives you a detailed account of your recovery journey.

## Recovery

Most people are discharged from Hospital between 1-2 days after a Hip Replacement or 1-3 days following a Knee Replacement.

Wound checks take place at 2 weeks after you operation, usually back at your local Doctors surgery.

## Personalised Self-Management and Support

Your individual needs will be identified alongside you.

Think about making changes to your home to reduce unnecessary risk – using a handrail when completing the stairs.

Using an elbow crutch or walking stick can help offload the painful joint and prevent you from limping.

Start planning for your recovery and return home. This might be support from family or friends. Alternatively, a short-term private package of care to help get you back on your feet will ensure you are well supported when discharged home after your operation. If this is not applicable, staff can help liaise with social services.

Physiotherapists can help guide you through your recovery, both before and after your surgery, to build your confidence to exercise and help you get back to what **YOU** enjoy doing.

You will continue to see improvements in your new joint for up to 2 years following your surgery.

## Physical Activity Programmes

Whether you would like to complete exercises independently at home or seek a 1:1 Physiotherapy assessment we can help you at Horder Healthcare. If you prefer to exercise regularly in a group or even just as a one off, consider our 'Pre-hab' Class. Contact details and how to book are on the back of this booklet.

## Mental Health Support

We appreciate that with arthritic pain, anxiety and depression can sometimes be experienced or heightened. Speak to your GP as they can recommend resources or services that are right for **YOU**. If you are worried about your operation or stay in Hospital, please talk to your Nurse, Physiotherapist or member of the therapy team.

## Financial Support

If your pain is preventing you from being able to work, you can get assistance from the Citizens advice Bureau. If you are struggling at home local authorities can help provide additional mobility aids or home adaptations.

# Maintaining Your Health

## What can I do to make sure I am 'keeping well'?

### Managing existing health conditions

Continue to attend any relevant reviews and monitoring of conditions such as Asthma, high blood pressure, diabetes, heart or kidney conditions. Failure to do so could result in delayed or cancelled surgery.

### Smoking

Smoking affects all bodily functions:

- Heart/lungs
- Immune system and vascular system
- Healing times

Quitting smoking more than 4 weeks before surgery decreases risks of complications and leads to better results at 6 months post-surgery (WHO).

### Weight loss

In 2017, 57% of women and 68% of men were classified as overweight or obese. Reviewing your weight can help with your recovery:

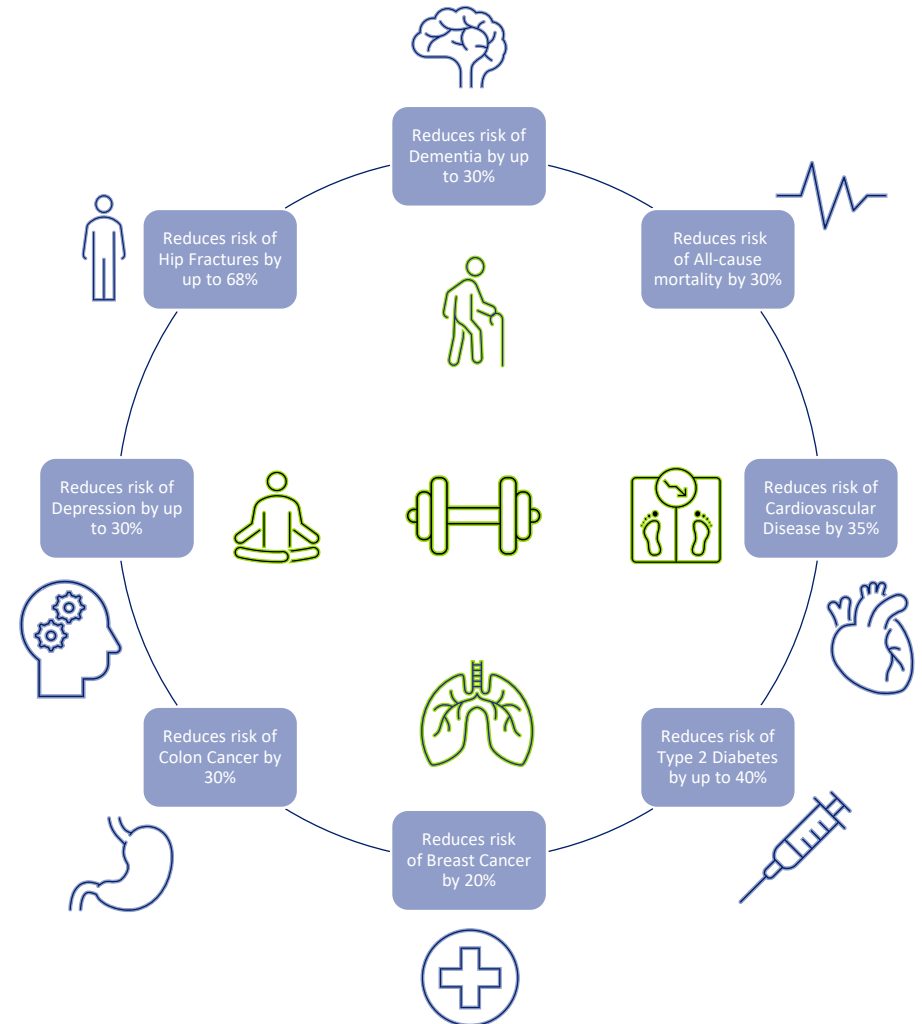
- Reduces pain
- Improves circulation
- Increases strength and mobility
- Reduces the risk of Diabetes, high blood pressure and high cholesterol

All the above can make you stronger and fitter for surgery.

For every pound in weight you lose, this is equivalent to 4 pounds LESS load through your knee joint.

Following a healthy balanced diet and reducing alcohol and or sugary drinks, alongside regular exercise is a great place to start.

## Positive effects of maintaining your health and physical activity levels



If you would like more information or guidance with moving more, eating well, weight loss or smoking cessation, please refer to ONE YOU East Sussex – contact details are located towards the back of this booklet

# Maintaining Physical Activity

Flare ups are common in arthritis and can feel frustrating. People also worry that exercise might cause damage to the joint but be reassured that exercise is good for you and your joints.

Finding the right balance between physical activity/exercise and rest can initially be challenging. Too much can increase pain, whereas not enough can cause weakness, stiffness and increase your fatigue.

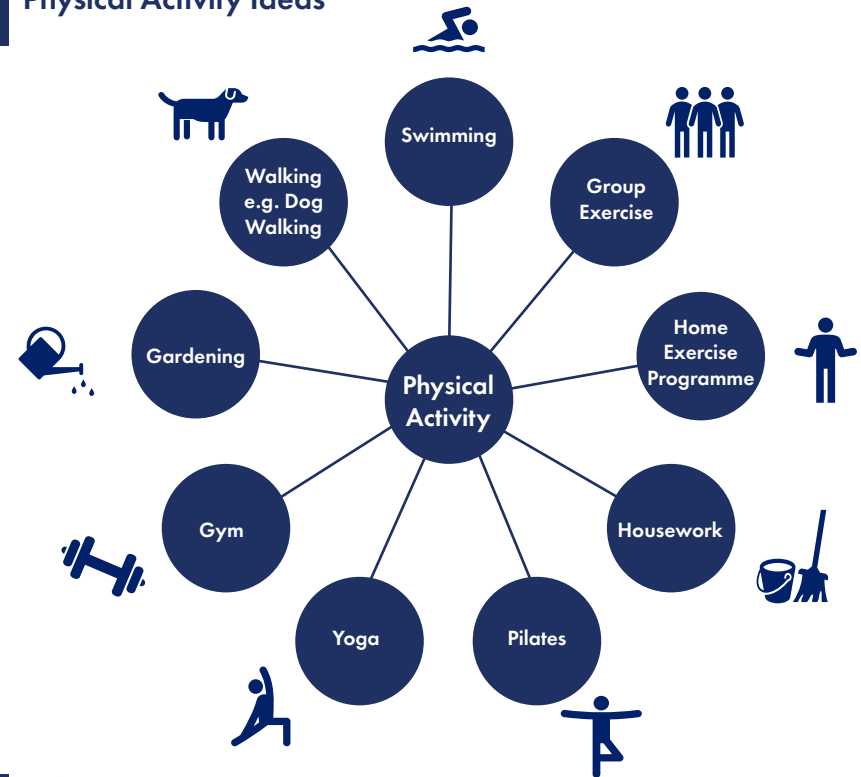
## Pacing

- Start slowly and gradually to allow you to adapt
- Break up those bigger jobs into smaller more achievable tasks
- Find something you enjoy doing
- Go with a friend or family member
- Setting goals can help
- Try the exercises in this booklet
- Keep up with exercises or activity even if your hip or knee is a little uncomfortable, but rest if it becomes too challenging
- Try and do the exercise or activity regularly – make it part of your routine
- Use a diary to log your successes – see back of booklet
- Supervised exercise can ensure regular activity and adherence, whilst providing you with extra motivation through to your surgery

Not only will this help increase your overall movement, strength and fitness, but exercises can be progressed or regressed specific to YOUR needs – see a Physiotherapist for more guidance.

Remember, doing something is better than doing nothing at all. Every minute counts; even housework, mowing the lawn or going up the stairs!

## Physical Activity Ideas



## Pain Management

Your local GP practice can help you optimise your pain levels. Well controlled pain will help you maintain your mobility and independence whilst waiting for your surgery.

Familiarise yourself with the pain scale below. This will be used by the Doctors, Nurses, Healthcare Assistants and Physiotherapists to help understand how your pain levels are affecting **YOU**.

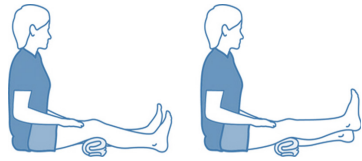
0/10 would be no pain at all, 10/10 would be 'unbearable' or the 'worst pain imaginable'. Painkillers, ice, moving and rest can all help manage your symptoms.



# Exercises

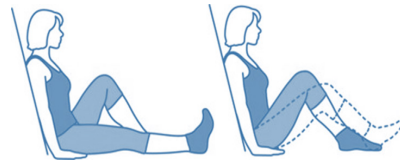
## Lower Body

It is important to pace yourself when taking up new activity or completing your pre-op exercises. When completing exercises, focus on the quality as opposed to quantity. Avoid increasing pain past moderate levels.



### Quads

Either lying down on your back, or sitting, place a rolled-up towel or cushion under the knee. Push the knee down into the bed. Hold this position for 5 seconds, then return to the starting position. Repeat 8-10 times.



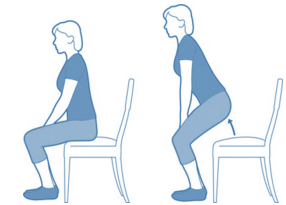
### Knee Flexion

Sit on your bed with your legs stretched out straight in front of you. Slowly bend one knee up towards your chest, as far as feels comfortable. Then gently lower to the starting position. Repeat 10 times with each leg.



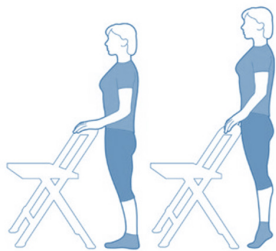
### Straight-Leg Raise

Lying on your bed. Bend one leg at the knee. Hold your other leg straight and lift your foot just off the bed. Hold for 3-5 seconds, then gently lower. Repeat 5-10 times.



### Sit To Stands

Use your arms if required. Sitting in the chair lean forwards and stand. Then slowly lower yourself back to sitting. Repeat 8-10 times or continue as able.



### Standing Heel Raisers

Stand, hold onto a secure surface. Gently raise up onto your tip toes as far as feels comfortable, then gently lower your feet down to the starting position. Repeat 10-15 times. To progress, try completing without any hand support.



### Marching

In standing, hold onto a surface if required. Gently march on the spot bringing your knees up as high as feels comfortable. Repeat 8-10 times or try and complete consistently for 10+ seconds.



### Hip Abduction

Stand, hold onto a surface if required. Gently take the one leg out to the side as far as feels comfortable, then return to the starting position. Repeat 8-10 times.



### Step Ups

Practice stepping up and down onto a step, or the bottom of your staircase. Repeat 10-20 times with each leg leading. To progress, increase the height of the step.

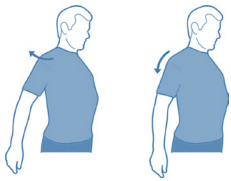
Osteoarthritis guidelines recommend that healthcare professionals “advise people with osteoarthritis to exercise as a core treatment... irrespective of age, comorbidity, pain severity or disability... including local muscle strengthening and general aerobic fitness.” (NICE Guideline 2020)



# Exercises

## Upper Body

It is important to make sure your upper body is also strong ahead of surgery. This will make getting in and out of bed, sitting and standing and using crutches or walking sticks easier. Additionally, these will help increase your heart and lung function.



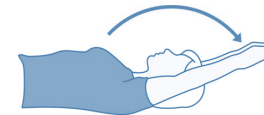
### Shoulder Blade Squeezes

In standing or sitting, gently squeeze your shoulder blades together. Hold this position for 5 seconds, then return to the starting position. Repeat 8-10 times.



### Shoulders Rolls

In sitting or standing, gently roll your shoulders up, back, down and round in a gentle manner. Repeat 10 times.



### Shoulder Flexion

Lying on your bed, gently lift your arms up over your head as far as feels comfortable, then lower to the starting position. If this is too challenging, hold a stick in both hands whilst completing the movement. Repeat 10-12 times.



### Arm Raisers

Stand, gently lift your arms up over your head as far as feels comfortable, then lower to the starting position. If this is too challenging, hold a stick in both hands whilst completing the movement. Repeat 10-12 times.



### Bicep Curls

Hold a small weight/household object in your hand. Bend your elbow, taking your hand up towards your shoulder, then gently and in a controlled manner, lower the arm to the starting position. Repeat 8-10 times on each arm.



### Chair Push Up

In sitting, use mainly your arms to push yourself up, lifting your bottom off the chair. Then slowly lower yourself back to sitting. Repeat 8-10 times or continue as able.



### Wall Push Up

Stand, place both hands on the wall. Gently lower yourself towards the wall, bending your elbows. Then push yourself back up into the starting position. Repeat 8-10 times.



### Wrist Lift

Bend your elbow at a right angle. Hold a light weight (for example a tin of beans), palm down. Bend your wrist slowly towards you, and then slowly release. Repeat 10-15 times.

Remember to pace yourself when completing these exercises. Try and complete the upper and lower body exercises daily leading up to your surgery. After your operation you will be instructed on your new 'post-operative' exercises which will be detailed in your Horder Healthcare guides.

# Physical Activity Diary

You may find this Physical Activity diary useful to help track your activity levels. If you have not done so already, complete the IPAQ questionnaire from page 3 to help map your progress.

	Goal	Activity Log	Duration	Step Count
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				

# Useful Resources



Arthritis Action  
[www.arthritisaction.org.uk](http://www.arthritisaction.org.uk)



Chartered Society of Physiotherapy – CSP  
[www.csp.org.uk](http://www.csp.org.uk)



ESCAPE Pain  
[www.escape-pain.org](http://www.escape-pain.org)



ONE YOU East Sussex  
[www.oneyoueastsussex.org.uk](http://www.oneyoueastsussex.org.uk)



Versus Arthritis  
[www.versusarthritis.org](http://www.versusarthritis.org)

# Apps

If you use a smart phone there are applications or ‘apps’ available that you can download for free or for a charge, to help you track your progress and maintain your health and Physical activity levels.

On your phone locate either the Play Store (Android phones) or App Store (iPhones). Launch the store and search for what you are looking for. Once you have chosen which App is right for you, download it to your device. This may involve approving some requested permissions or entering your phone number or email.

## References

Swank AM, Kachelman JB, Bibeau W, Quesada PM, Nyland J, Malkani A, Topp RV. Prehabilitation before total knee arthroplasty increases strength and function in older adults with severe osteoarthritis. *J Strength Cond Res.* 2011 Feb;25(2):318-25. doi: 10.1519/JSC.0b013e318202e431. PMID: 21217530.

Moyer R, Ikert K, Long K, Marsh J. The Value of Preoperative Exercise and Education for Patients Undergoing Total Hip and Knee Arthroplasty: A Systematic Review and Meta-Analysis. *JBJS Rev.* 2017 Dec;5(12):e2. doi: 10.2106/JBJS.RVW.17.00015. PMID: 29232265.

[www.who.int/news-room/fact-sheets/detail/physical-activity](http://www.who.int/news-room/fact-sheets/detail/physical-activity). Accessed 21.06.2022

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NICE Clinical guideline [CG177] 2014, (last updated: December 2020) Osteoarthritis Care and Management. Accessed here: <https://www.nice.org.uk/guidance/cg177/resources/osteoarthritis-careandmanagementpdf-35109757272517>. Accessed 21.06.2022

Why is exercise important for people with arthritis?  
[www.versusarthritis.org/about-arthritis/exercising-with-arthritis/why-is-exercise-important/](http://www.versusarthritis.org/about-arthritis/exercising-with-arthritis/why-is-exercise-important/) Accessed 21.06.2022

Getting started with exercise [www.versusarthritis.org/about-arthritis/exercising-with-arthritis/getting-started-with-exercise/](http://www.versusarthritis.org/about-arthritis/exercising-with-arthritis/getting-started-with-exercise/) accessed 21.06.2022

Keep moving information booklet (versusarthritis.org) [www.versusarthritis.org/media/23930/keep-moving](http://www.versusarthritis.org/media/23930/keep-moving) Accessed 05.07.2022

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# **HORDER**HEALTHCARE

If you would like to book a  
Physiotherapy or Personal Trainer  
1:1 assessment or join in one of  
our exercise classes, please ring or  
book online

Physiotherapy Bookings  
**01892 601466** or  
email **hhbookings@nhs.net**

For more information visit  
**[www.hordercentre.co.uk](http://www.hordercentre.co.uk)**

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