

Your guide to physiotherapy based Pilates



**Musculoskeletal (MSK)
Physiotherapy
Loughborough Hospital
Epinal Way
Loughborough
Leicestershire LE11 5JY
Tel: 01509 564477**

**If you have any questions or queries, please talk to your
physiotherapist whilst you are under treatment**

Exercise

Exercise can reduce your risk of major illnesses, such as coronary heart disease, stroke, type 2 diabetes and cancer and lower your risk of early death by up to 30%. Research shows that physical activity can also boost self-esteem, mood, sleep quality and energy, as well as reducing your risk of stress, clinical depression, dementia and Alzheimer's disease. (www.nhs.uk/live-well/exercise/exercise-health-benefits/).

Whatever your age, there's strong scientific evidence that being physically active can help you lead a healthier and even happier life.

The Department of Health guidelines recommend that we participate in **150 minutes** of moderate activity per week or **75 minutes** of vigorous exercise.



Pilates is one type of exercise that helps to strengthen the body, however there is no strong evidence to suggest that Pilates is superior to any other exercise in reducing pain. It is essential that you choose something that you enjoy.

Five key Pilates elements

Pilates consists of 5 key elements. Each exercise in Pilates should include the following;

- Breathing
- Centering
- Ribcage placement
- Shoulder blade placement
- Head and neck placement

Breathing

Using the right breathing muscles in Pilates is essential to achieve benefits. When you inhale through the nose you should allow your ribs to expand and when you breath out through the mouth, you should allow your ribcage to sink inwards and downwards. In Pilates, we inhale during the relaxation part of the exercise and we exhale during the movement part of the exercise.

Centering (the ‘powerhouse’)

Pilates aims to develop the powerhouse muscles of the spine. The ‘powerhouse’ muscles aim to support the spine and the pelvis.

How to practice centering

Find your neutral position of the spine by making a diamond shape with your hands, for example place your thumbs on your belly button and fingers just below over the pubic bone. Imagine you have a marble in the centre of the diamond. Slide the marble down towards your finger tips, allowing the arch in your lower back to increase. Slide the marble towards your thumbs, allowing the arch in your back to flatten. You can practice this a few times. The aim is to centre the marble in the centre of the diamond. Make sure you are not pushing your back down towards the mat/floor.

Ribcage placement

During Pilates exercises, it is essential that you do not poke your ribs forward and out, for example standing in a military position. Avoiding this will help to prevent stiffness, tightness and pain. To prevent this, imagine you have a spring in between your ribs and the hips. You want to keep the springs constantly under tension.

Shoulder blade placement

Make sure you are not lifting your shoulders towards your ears. This will over work other muscles, causing tightness and pain. The shoulder blades should be relaxed in a neutral position. For example, resting in a ‘V shape position’

Slowly lower your shoulder blades downwards and inwards, creating the ‘V shape’

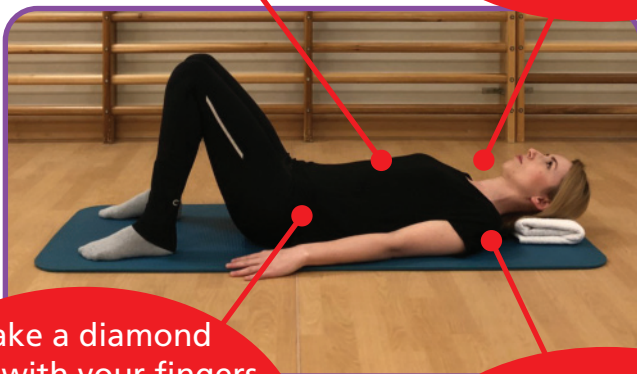
Stay open through the collar bones.

Head and Neck placement

Lengthening the back of the neck is important during Pilates. An example in standing is to imagine your head as a helium balloon, floating up.

Springs between the ribcage, keep the springs under tension.

Lengthen the back of the neck. Imagine that someone is pulling your hair to lengthen the neck.



Make a diamond shape with your fingers. Tilt the marble up and down. In standing, imagine your pelvis as a bucket, tilt backwards and forward.

Create a V shape with your shoulder blades, down and in. Stay open through the collar bone.

The next couple of exercises will challenge your mobility, strength, balance and endurance. Always work at a level that feels comfortable for you. Each of the exercises can be modified to suit your needs. Always ask your physiotherapist for advice if you are struggling. It is essential that you incorporate all the five key elements during each exercise. Try to repeat the exercises 8 - 12 times, 2 or 3 times a day.

Make sure you are not breath holding. It is important that you breathe throughout each exercise.

Pilates starting positions

Every Pilates exercise has a certain starting position that is important to follow prior to commencing the exercise. The main starting positions are the following:

Crook lying position

Start by lying down on your back, knees bent and feet hip width apart, with your arms by your side and palms facing down to the floor. Find your neutral position and set your centre (centering) with your abdominal muscles. (Refer back to the previous page for centering).



Prone position

Start by lying on your front with your forehead resting on a towel and arms by your side. Lengthen your neck by adding a slight chin nod and tuck your tail bone. Make sure your shoulder blades are resting in a neutral position by gliding your shoulder blades downwards and inwards in a shape of a V. Arms and legs are relaxed.



Side lying position

Start by lying on your side with the underneath arm straight and resting above your head with your head resting on this arm. Neck is relaxed by adding a slight chin nod.

Your legs are straight and stacked one on top of the other. You should be able to see your toes if you look to your feet.

Top hand can rest on the floor in front of you or on your hip. Pull the hip downwards away from your shoulder. This will create a small space in between your waist and the mat. Ribcage placement is important during side lying starting position.



Standing exercises

Knee bends

Stand upright with your feet and legs parallel. The legs are straight and not locked. Bend your knees into a ½ squat position.

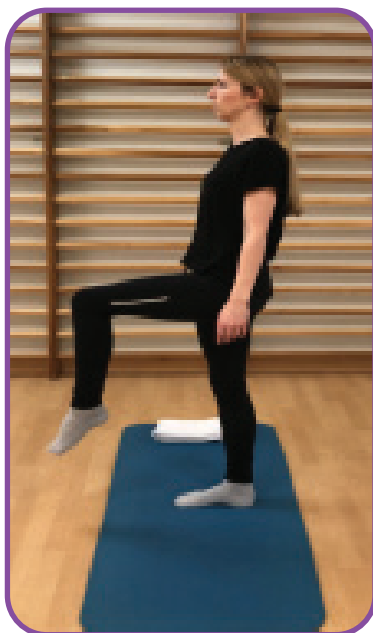
At the same time, lift your arms forwards to shoulder height position.



Single leg bends

Stand on one leg, keep the pelvis at neutral position, and simultaneously bend the opposite knee, lifting the knee to hip height.

Lower the leg down and repeat the same onto the other leg.



Heel raises

Stand upright with your feet parallel. Lift your heels off the floor, pushing yourself up onto your tiptoes.

Simultaneously, lift your arms forward to shoulder height. Remember to maintain your pelvis neutral and still.



Roll down

Stand upright with your feet parallel. Start by curling your spine forward, starting from the head, and working down into the upper spine, middle spine and lower back.

Allow the pelvis to come forward and reach down as far as you feel comfortable. Keep your knees soft as you bend forward. Once you have reached your comfortable position, begin to roll back up to starting position.



Supine exercises

Table top/heel taps

Start in crook lying position. Slide the right foot towards your sitting bones and then float this leg into the table top position, then slowly lower the right leg back to the mat. Continue alternating your leg.

You can progress this by resting both legs in a table top position and repeat the same as above. Try to repeat the exercise.



Leg slides

Start in crook lying position. Slide one leg forward, away from your hips, keeping the heel in contact with the floor. Gently slide the leg back to starting position.

You can progress this exercise onto the next level if you feel ready by floating your leg up into a table top position (same as exercise above) and straightening the same leg forwards.



Bridge

Begin with crook lying position

Lift your spine off the floor, peeling each segment off the mat until you are resting on your shoulder blades.

You can progress this exercise by adding another movement. Simultaneously raise the arms up or raise the heels off the floor.



Side lying exercises

Lift and lowers

Start with side lying position. In a controlled manner lift your leg hip height, maintaining the knee in a straight position. Slowly lower your leg back down.

You can progress this exercise to the next level.

Make a circle with your leg before you lower the leg back down to resting position.



Clam

Start with side lying position but this time bend your knees approximately 90 degrees.

Lift the top leg, maintaining the feet together.

This exercise can be progressed to level 2 by lifting the feet off the floor and completing the same movement as above.



Prone lying exercises

Swan dive

Start with prone position.

Bend your arms into an L shape by your side, with elbows slightly lower than your shoulders.

Lift the breast bone away from the floor; allow the neck and the head to follow. Hold for approximately 2 seconds and slowly lower your breastbone back down followed by the neck and the head.

Progression

Repeat the same as above but at the same time lift your arms off the floor simultaneously.



Swimming

Start with prone starting position. Place your arms over your head, slightly wider than shoulder width apart and palms facing downwards. Reach the right arm forwards and away from your body, hovering the arm off the floor. Slowly lower the arm back down onto the floor and alternate your arm.

Progression:

Reach the right arm forwards and left leg away from the body at the same time, alternating the opposite leg and arm.



Stretches

Cat and camel stretch

Kneeling on your hands and knees, hands under your shoulders and knees under hips.

Arch your upper back up towards the ceiling (like a camel hump), tuck your tail bone and head. Sink your back down towards the floor, sticking your tail bone out and lift your head up like in the picture.



Full body stretch

In a lying position, gently straighten both legs flat to the floor and take the arms up and over your head. Hold this position, then bring the arms back, then the legs, one at a time.

Hold for approximately 15 - 30 seconds with all the following stretches.



Hamstring Stretch

In a sitting position like in the picture lean forwards and down and reach with your arms towards your toes. You should feel the stretch at the back of your thighs and into the calves.



Knee Hugs

Lying on your back, bend your knees towards your chest. Hug your knees and pull your knees towards you. You should feel the stretch in your back and around the buttock area.



Knee Rolls

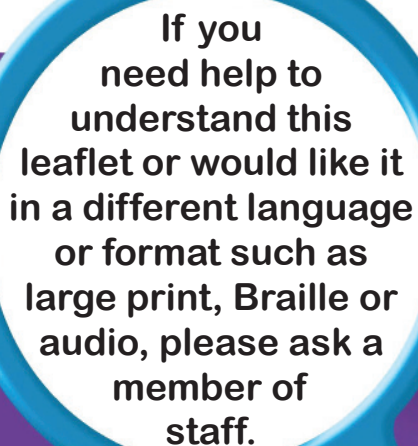
Lying on your back, bend your knees and place your arms out to the side. Keep your knees together and roll over to one side, keeping your shoulders on the floor. Move your head the opposite way and hold the position. Repeat the same on the other side.



Gluteal Stretch

Lying on your side, straighten the same leg that you are lying on and bend the other leg, bringing the leg towards your chest. Hold the position. Repeat the same on the other side.





**If you
need help to
understand this
leaflet or would like it
in a different language
or format such as
large print, Braille or
audio, please ask a
member of
staff.**

Date implemented: April 2022
Review date: April 2024
Leaflet No. 608 Edition 1