

# Information about Ante Natal Exercise (Pilates)



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# Local Maternity Physiotherapy Departments:

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# Disclaimer

If you experience any discomfort or pain during or after exercise and you are concerned regarding this please get further advice from your Physiotherapist. The exercises in this leaflet have been developed generally and you may need to pick and choose which exercises are suitable for you.

# Introduction

Being active and exercising during pregnancy is beneficial for you and your developing baby. The following diagram displays the current government recommendations for activity in pregnancy:



Every woman will have a different fitness level before they become pregnant so it is important to take this into consideration.

If you are new to exercise begin with low impact activities such as walking, swimming, static cycling or core stability exercises. You may wish to attend specific pregnancy exercise classes such as aqua natal, ante-natal Yoga or Pilates classes.

If you exercise regularly you can continue your normal routine if you are feeling well. You should avoid some activities and this includes all contact sports.

Moderate intensity exercise should increase your heart rate and make you breathe faster, however you should still be able to hold a conversation throughout.

As your pregnancy progresses it is natural to slow down. Listen to your body. Avoid any activity which causes pain and stop if you are uncomfortable, tired or feel unwell. You may need to adapt your exercise regime throughout your pregnancy as you feel necessary. If you have any concerns please discuss these with your Obstetrician, Midwife or Specialist Physiotherapist.

## Lying on your Back in Pregnancy

In the early weeks of a healthy pregnancy, women should be reassured that resting, sleeping and exercising in any position they find comfortable is safe for them and their baby.

From 19 to 32 weeks you should only lie on your back for a short time, therefore you can still do some exercises in this position. If you feel unwell at any stage then change position to lie on your left hand side and then choose another option for exercise. An alternative option would be to lie with a wedge cushion at your back which is also suitable to use from 32 weeks.

## Breathing during exercise

During exercise it is important to keep breathing to allow you to get the oxygen your body needs for exercise. As you breath in (inhale) through your nose, feel the tummy rise and the ribs expand to the side - imagine the east and west points of a compass; this will allow your diaphragm to lower. As you breathe out (exhale) through your mouth you should feel the tummy and ribs fall as the diaphragm relaxes and rises.

Try to exhale during the most difficult part of the exercise. For example, during a squat breathe in as you bend through your hips and knees then exhale as you straighten the hips and knees. If you find this difficult just breathe whenever it feels natural.

It is important not to hold your breath during exercise as this can create a downward pressure through your pelvic floor and prevent that muscle group from working efficiently. It can also increase your blood pressure which can make you feel dizzy or faint.

## **Pelvic Floor Muscle Relaxation**

All muscles in the body can become tight and sore, this includes pelvic floor muscles. This can happen if you constantly hold or grip your pelvic floor muscles and not let them fully relax. This can also be worsened by stress, fear, or trauma. If your pelvic floor muscles are really tight this can contribute to pelvic girdle pain, pain at the front of your pelvis, lower tummy or lower pack, pain during sex, or difficulty controlling your bladder or bowel.

Pelvic floor muscle relaxation can also be beneficial to incorporate into your preparation for birth. During birth the pelvic floor muscles will naturally stretch, so it's important to know how you can help with this process. Practising pelvic floor relaxation in the last 4-5 weeks leading up to your due date can be helpful.

## Technique

• It is important to find a comfortable position before you begin, either on your back propped up with pillows or on your side with a pillow between your thighs.



- Next, identify your 3 pelvic passages front, middle and back
- Make yourself aware of any feelings of tension or gripping in this area
- Take a deep breath in through your nose allowing your tummy to rise. Your pelvic floor muscles will naturally relax as you do this. Then breathe out slowly and gently through your mouth allowing your tummy to fall.

Aim to spend 5-10 minutes daily doing pelvic floor muscle relaxation. You can increase this if comfortable or as advised by your specialist physiotherapist.

#### Preparation for Exercise

Finding a good starting point is important, it is helpful to know where your pelvis is in space. You can do this in standing, lying down, half inclined position or four point kneeling, think about all these points prior to each exercise.



Place your hands on your hips. Tilt the pelvis forwards to exaggerate the arch in your lower back. Tilt the pelvis backwards to tuck your tail bone under and flatten your back. Repeat these gentle tilting movements a few more times and stop in a place that feels comfortable, you may feel your abdominal muscles tensing as you do this.

## Using your abdominal muscles

- **1.** Feel your deep abdominal corset by placing your fingertips on your bony pelvic bones and then sliding your fingertips in and down 4cm.
- **2.** Now imagine your deep abdominal muscles forming a natural corset, criss-crossing the torso in layers. There are 10 notches in this corset, below the belly button, just like a belt.
- **3.** Breathe in to prepare, breathe out all the way and before the next breath in slowly and gently draw in the muscular corset from below the belly button onto the third notch. You should feel the muscles under your fingertips subtly draw away.
- **4.** Hold your muscles and keep breathing normally. Less is better the contraction is very gentle so don't over do it.
- **5.** A nice way to think of this is to give your baby a hug.

# Using your pelvic floor

- 1. Imagine that you are trying to stop yourself from passing wind and at the same time trying to stop your flow of urine. The feeling is one of 'squeeze and lift', closing and drawing up the front and back passages.
- **2.** It is important that you focus on the right group of muscles. You should not be working the muscles in your legs, clenching your buttocks or holding your breath when you do pelvic floor exercises. Feeling some slight tension in your lower

abdomen (bikini line) is normal.

All of the above can be found on video to help you at:

#### https://www.nhsggc.org.uk/your-health/health-services/obstetricsgynaecology-pelvic-floor-physiotherapy/obstetrics-physiotherapy/ante-natalinformation/key-exercises/

## Doming

Throughout the exercises take the time to notice how your abdomen is behaving as you do a movement. During your pregnancy it is natural for the connective tissue that runs down the centre of your abdomen to lengthen to create the space that your baby needs to grow. For some women this may mean that when you contract your abdominals they move into a dome like shape, e.g. when sitting up out of bed or getting out of a bath. You want to avoid this. Contracting your abdominals and pelvic floor before the hardest part of the exercise or when changing position will help. If this still doesn't reduce the dome shape then you should avoid this exercise and seek guidance from your Physiotherapist.

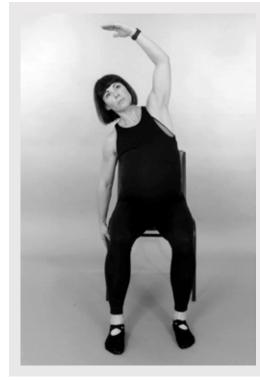


Thank you to the model, Claire Black and to Gráinne Donnelly (POGP Physiotherapist N. Ireland) for providing these pictures.

# Stretches

Stretches can be done as often as you find them relieving or comfortable, aim to hold for 20 - 30 seconds.

## Side Stretch



- **1.** Sitting up tall, reach your right hand up to the sky, imagine increasing the distance between the top of your pelvis and your lower ribs.
- **2.** Take that hand over head and reach over to the opposite side and feel the stretch down the right hand side.
- **3.** You can do this stretch while sitting on a gym ball. If you feel stable you can increase the stretch by rolling the ball to the left slightly.

## Adductor (Inner Thigh) stretch



- 1. Stand leaning over with support. Place your legs a comfortable distance apart ensuring you feel a stretch along the inside of your thigh. Lengthen through your spine and lean further forward. You should feel this stretch along the inside of your thigh. If you want to stretch one side more than the other rock your hips to opposite side.
- 2. If you want to increase this stretch further then lean on a lower surface.

## Hamstring (Back of the thigh) Stretch



- Sitting up tall. Extend your leg out in front of you and pull your toes up towards you. You should feel the stretch down the back of your leg.
- **2.** You can increase the stretch by leaning your trunk forward but try not to let your lower back bend.
- **3.** Alternatively if your growing bump restricts your movement you can hold a long scarf around your foot and pull it towards you.
- 4. Repeat on other side.

#### Child's pose



- **1.** This is a great all round stretch for the spine, shoulders and hips.
- **2.** Try and keep your buttocks in contact with your heels or as near to as you can whilst lengthening through the spine (If using the ball roll it forward).
- **3.** If it feels comfortable you can open your legs towards the edge of the mat to accommodate your bump and take the stretch into the inside of your legs.
- 4. Variation Roll the ball to either side to focus the stretch into sides.

## Thread needle



- **1.** Take your right arm and thread it through your arm and leg on the opposite side.
- **2.** Slide that arm along the floor away from your body and if it is comfortable to do so rest your shoulder onto the floor.
- **3.** You should feel this stretch along the back of your shoulder and into the upper back and rib area. Repeat on the other side.

#### Cat/Cow Stretch



- As you exhale contract your pelvic floor and draw your abdominals in towards your spine. Tuck your tailbone under as you create a curve throughout the rest of your spine and tuck your chin down towards your chest.
- 2. As you inhale look towards the front and let your back sink down into extension by letting your abdominals and pelvic floor relax and arching your back in the opposite direction.

## Spinal twist



- **1.** Inhale to prepare. Exhale and draw in your abdominals and rotate your shoulders around.
- **2.** Try and keep your hips still and your knees even. Inhale to return to neutral and let your abdominals relax.
- 3. Repeat to the opposite side

# Strengthening

Strengthening can be done to suit each individual, you may choose to do these twice a week or more or less depending on how you feel and what your normal exercise levels are. If unsure you can discuss this further with your Physiotherapist. Aim for 8-10 repetitions of each exercise initially, although you may choose to do some exercises more or less than that if it feels beneficial. If you want to increase the effort you could always add some hand or ankle weights.

## Adductor ball squeeze in sitting



- **1.** Lengthen through your spine. Inhale to prepare, as you exhale draw in your abdominals and then squeeze the ball, inhale to relax.
- **2.** To add in another challenge lift the arms as you squeeze the ball, you can pulse for 5 10 counts and then relax them down as you inhale.
- 3. You can also do this exercise sitting on a gym ball.

#### Toe lifts or Leg extensions



- **1.** Lengthen through your spine. Inhale to prepare. As you exhale draw in your abdominals and lift your leg. Inhale to lower the leg.
- **2.** Be careful of tight hamstrings, try not to bend into your lower back just to get your leg straight.
- **3.** If this is too difficult you can start by raising your heels and building to lifting the foot before extending the leg.
- **4.** To make it more difficult you can lift your arms over head as you extend your leg. **OR** you can sit on a gym ball.



## Standing squat



- **1.** Stand with your feet around hip distance apart.
- **2.** As you inhale bed down into the squat, try and bend at the hip, lead with your buttock, squat as far as feels comfortable.
- **3.** As you exhale draw in the abdominals and straighten back to standing.
- **4.** You can also squat at the same time as squeezing a ball between your knees.

## **Chair Squat**



- **1.** Stand tall in front of a chair.
- **2.** Squat down as if you were sitting down (push pelvis back). Briefly touch the chair with your bottom and stand back up.

#### **Step Lunging**



- **1.** Standing with one leg in front of the other at a distance that feels comfortable and balanced.
- **2.** Lengthen through the spine and be careful not to over arch your lower back.
- 3. Bend into the knees as low as you feel balanced and then straighten again.
- **4.** Try and keep your weight central and not lean forward onto the front leg.
- 5. Repeat on the other side.
- 6. To make the exercise more challenging take your legs wider apart.
- **7.** If this increases any pain in your pelvis then stop and consult your Physiotherapist.

#### **Hip Hike**



- **1.** Lie on your side as above with a small ball under your top leg.
- **2.** Aim to roll the ball away from your body and lengthen the area between your pelvis and ribs
- **3.** Roll the ball back by shortening the area between your pelvic and ribs.
- **4.** Repeat on the other side.



- **1.** Stand tall at the edge of a step, one leg off the edge.
- **2.** Elevate the hip of the leg on the outer side.
- 3. Then let the hip drop while keeping the knee of the supporting leg straight.

# Standing knee lifts



- **1.** Standing tall. Transfer your weight to one side. Once you feel balance lift the opposite leg as high as feels comfortable.
- **2.** If you feel unbalanced try with support, e.g. the kitchen counter or a wall.
- **3.** Repeat on the other side..

# Lying on your back (Supine)

From 19 weeks onwards, if you feel dizzy or lightheaded when doing exercises in supine, then use pillows or a wedge to lie with an incline. From 35 weeks everyone should lie in this position.

#### Scissors



- **1.** Inhale to prepare
- **2.** Draw in your abdominals as you exhale and float one leg up to tabletop position, as shown in the picture.
- 3. Inhale to hold this position
- 4. Exhale as you lower the leg down
- 5. Repeat on the opposite side

# Hundreds





- **1.** Inhale to prepare and exhale as you engage your abdominals
- 2. Raise your arms about 2-3 inches from the ground pulse arms up and down
- **3.** Try breathing in for a count of 5 and out for a count of 5
- 4. Aim to build up to 10 breaths
- **5.** To increase pelvic support you could try adding a small ball between your knees
- **6.** To make things more challenging you can combine with the scissor exercise as shown above

#### One leg slide



- 1. Inhale to prepare
- **2.** Exhale as you slide one leg out keeping your foot in contact with the ground
- 3. Inhale to hold this position
- 4. Exhale as you slide your leg back in
- 5. Repeat on the opposite leg
- **6.** To increase the effort lower both arms over your head whilst simultaneously sliding one heel forwards along the floor
- Circle both arms outwards and down whilst simultaneously sliding the heel back along the floor towards your body
- 8. Repeat opposite

#### Hip twist



- 1. Inhale to prepare
- 2. Exhale as you let one knee open
- 3. Inhale to hold this position
- 4. Exhale as you return your knee back in
- 5. Repeat opposite

## Side Lying Clam Level 1



- **1.** Lie on your side with your underneath arm outstretched. Bend your hips to stack them one above the other.
- **2.** Inhale to prepare. Exhale as you lift the top knee upwards keeping your feet together. Try not to rotate at your lower back.
- **3.** Inhale as you lower the top leg down.

#### Clam level 2



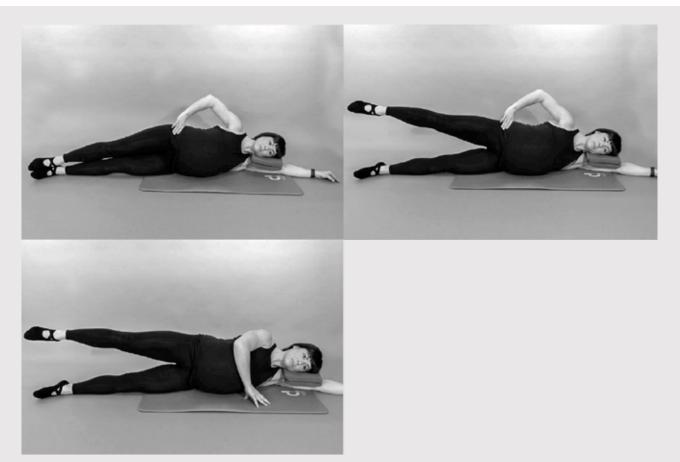
As above, however raise both feet off the floor about 6 inches.

## Side bend



- **1.** Lie on your side with your hips slightly bent. Support your upper body on your underneath forearm. Lift your underneath waist and ribcage away from your mat. Top arm resting long on top of the legs.
- **2.** Inhale to prepare
- **3.** Exhale, gently engage your gluteal muscles to lift your pelvis off the mat. Simultaneously, if you feel balanced and comfortable take your arm overhead.
- **4.** Inhale to hold this position
- 5. Exhale, lower your pelvis and arm to the floor

# Side leg lifts



- **1.** Inhale to prepare and exhale to lift your top leg up to hip height
- 2. Exhale to lower your leg down
- **3.** If you feel unbalanced you can always bend the underneath leg for added support.

# **Four Point Kneeling**

Place your knees underneath your hips and your hands underneath your shoulders. Lengthen your spine, drawing your tailbone away from the crown of your head. Slide your shoulders down away from your ears. Press your hands away from the floor, lifting your breastbone away from the floor. Gently engage your abdominals.

#### Scapula (Shoulder blade) mobility



- 1. Inhale to prepare
- 2. Exhale as you slowly lower your breastbone towards the floor
- 3. Inhale to hold
- 4. Exhale as you gently draw your breastbone away from the floor

#### Swimming level 1



Swimming level 2

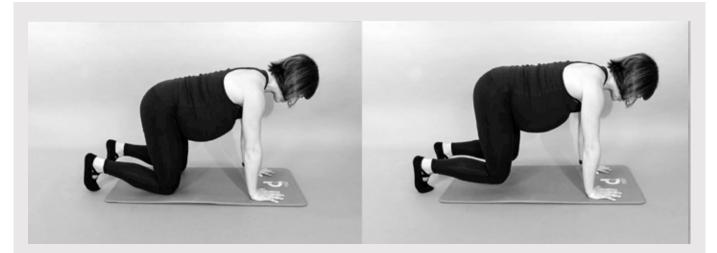


- 1. Inhale to prepare
- **2.** Exhale as reach your arm in front of your body
- **3.** Avoid drawing your shoulder to your ear
- **4.** Inhale to lower
- **5.** Repeat with the opposite arm
- **1.** Inhale to prepare
- Exhale slide one leg behind your trunk, keeping your foot in contact with the ground. Gently engage your buttock muscles
- **3.** Inhale to hold
- **4.** Exhale as you slide your leg back



- **1.** Inhale to prepare
- Exhale as you slide your arm and opposite leg away simultaneously away from your trunk
- 3. Inhale to hold
- 4. Exhale to return

## Baby plank



- **1.** Inhale to prepare
- 2. Exhale as you hover your knees just off the ground
- 3. Inhale to hold the position
- 4. Exhale as you return your knees to the floor

# **Useful Resources**



#### Try the NHS Squeezy APP for women

It is helpful in reminding you to do your pelvic floor exercises

#### www.ntw.nhs.uk/resource-library/relaxation-techniques/

This website contains audio files of relaxation techniques that can help relieve stress and gain a sense of well-being. Available in both male and female voices.

#### **https://pogp.csp.org.uk/publications/mitchell-method-simple-relaxation** Headspace and Calms can also be useful relaxation resources.

The following link takes you to **NHS GGC Obstetric Physiotherapy** page, there are a number of useful videos and leaflets available here.

#### https://www.nhsggc.org.uk/obstetricsphysiotherapy

