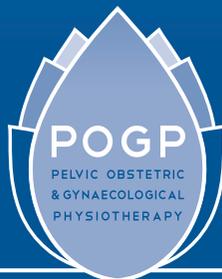


Pilates in Women's Health Physiotherapy



EXCELLENCE
MATTERS

GLOSSARY

Pregnancy-related pelvic girdle pain - Pelvic joint pain related to pregnancy.

Diastasis rectus abdominis - a separation of the rectus abdominis muscles in the abdomen.

Cervical insufficiency - inability of the cervix to retain a pregnancy in the second trimester.

Cerclage - the cervical opening is closed with stitches in order to prevent or delay preterm birth

Placenta previa - a condition in which the placenta lies very low in the uterus, so that the opening of the uterus is partially or completely covered.

Complications - conditions that occur as a result of another disease or condition. An example of a pregnancy complication is preterm labour.

Pre-eclampsia - a disorder that can occur during pregnancy or after childbirth, in which there is high blood pressure and other signs of organ injury.

Anaemia - low levels of blood or red blood cells in the bloodstream. Most cases are caused by iron deficiency.

Caesarean section - delivery of a baby through surgical incisions made in the mother's abdomen and uterus.

Transversus abdominis - the deepest layer of muscle of your abdomen.

REFERENCES

American College of Obstetricians and Gynecologists (ACOG) (2017) Exercise During Pregnancy. <https://www.acog.org/Patients/FAQs/Exercise-During-Pregnancy>

Australian Physiotherapy and Pilates Institute (APPI) (2013) Ante and Post-natal Pilates Course Handbook. APPI Health Group, London.

Getting help

If you have any difficulty following the advice or exercises in this booklet, or find that your symptoms are not improving, ask to be referred, or if available, refer yourself to a physiotherapist with experience in treating women with pelvic and pelvic floor muscle problems. She will be able to assess you and offer specific treatments/alternatives that are suitable for your needs.

To find your nearest specialist physiotherapist visit:
pogp.csp.org.uk

Further advice and information booklets are also available from
pogp.csp.org.uk

This booklet was compiled by members of Pelvic, Obstetric and Gynaecological Physiotherapy (POGP), formerly known as the Association of Chartered Physiotherapists in Women's Health (ACPWH).

POGP acknowledges that there are many different organisations/physiotherapists/exercise instructors using Pilates-based exercises as part of a rehabilitation programme, exercise class or fitness regime. All physiotherapists are regulated by the Health and Care Professions Council (HCPC), and have to attain and maintain a certain standard in order to practice. The Register of Exercise Professionals is an independent website for all qualified health instructors, and ensures a minimum standard of training before registration: www.exerciseregister.org

This booklet may be used by a physiotherapist as part of an exercise programme, or by a woman wanting to include Pilates-based exercises in her usual routine.

EXERCISE SAFETY

Done correctly, the following exercises are safe and suitable for all women; however, if you have had recent surgery, are pregnant or have recently had a baby, please read the following advice.

As with all exercise regimes, do not exercise when you feel unwell or very tired. If you experience any of the following, seek help from a physiotherapist:

- if you suffer pain during or after any of the exercises
- if you have pregnancy-related pelvic girdle pain
- if you have been diagnosed with diastasis rectus abdominis

Surgery: If you have had recent abdominal or vaginal surgery wait until you have had a post-operative check and have been told that it is safe to start exercising.

Antenatal/postnatal: If you have been used to exercising regularly, you may continue to do these exercises when pregnant as long as it is comfortable to do so, and you don't have any specific obstetric or medical conditions.

Contraindications to exercise in pregnancy

- Certain types of heart and lung diseases
- Cervical insufficiency or cerclage
- Being pregnant with twins or triplets (or more) with risk factors for preterm labour. If you are expecting twins/triplets or more, we advise you seek clearance from your consultant/midwife to exercise as it may be safe if you don't have any obstetric or medical complications.
- Placenta previa after 26 weeks of pregnancy
- Preterm labour or ruptured membranes (your water has broken) during this pregnancy
- Pre-eclampsia or pregnancy-induced high blood pressure
- Severe anaemia (ACOG 2017)

Precautions to take when pregnant

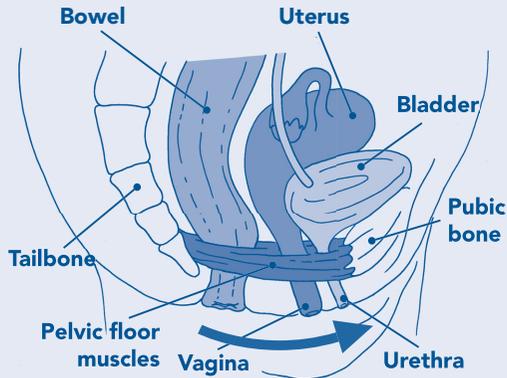
- Avoid lying on your back after 16 weeks because of the pressure of the baby on a large vein called the vena cava that returns blood to your heart. Exercises 3, 4 and 5 of this booklet are not suitable after 16 weeks. Propping yourself by putting pillows under your upper body can help you to safely continue with exercises 1,2 and 8.

- Lying on the abdomen can be uncomfortable, even quite early in pregnancy. In the early stages of pregnancy, you can use pillows to support yourself without putting pressure on your chest or bump. Otherwise, just continue with the exercise on all fours.
- If you have pregnancy-related pelvic girdle pain, lying on your side may be the most comfortable position when exercising.
- The American College of Sports Medicine recommends drinking 2 glasses of water 2 hours before exercising, a small cup every 15 minutes during exercise and drinking 2 more glasses after exercising.

Postnatal advice

Your exercise regime can be gradually resumed as soon as it is medically safe to do so. If you have had a Caesarean, seek advice on the most suitable exercises at your postnatal check. If you have diastasis rectus abdominis seek help from a physiotherapist, who will teach you the most suitable exercises.

Pilates-based exercises in women's health encourage the pelvic floor muscles to work with the deep tummy muscles to build up the stability and strength of your trunk. A well-supported trunk will help to protect your spine and may lessen low back pain. The pelvic floor muscles should not be held tight all the time, but be encouraged to work normally as part of good postural control.



It is important to get the pelvic floor muscles working correctly. Imagine that you are trying to stop yourself from passing urine at the same time as trying not to pass wind, by drawing the muscles around the back passage and vagina upwards and forwards. You may feel a lifting and tightening sensation as the muscles squeeze up. Watch that you do not hold your breath, and that your legs and buttocks do not tighten. Your lower tummy may draw in, which is the transversus abdominis muscle (see below) joining in. Let the pelvic floor muscles relax fully after each contraction.

If you find it very difficult to feel the pelvic floor muscles working, or you feel a bulging below when you try, you may need to ask a specialist physiotherapist to help you learn how to get your pelvic floor muscles working correctly (see inside front cover).

BASIC CONTRACTION

Transversus Abdominis

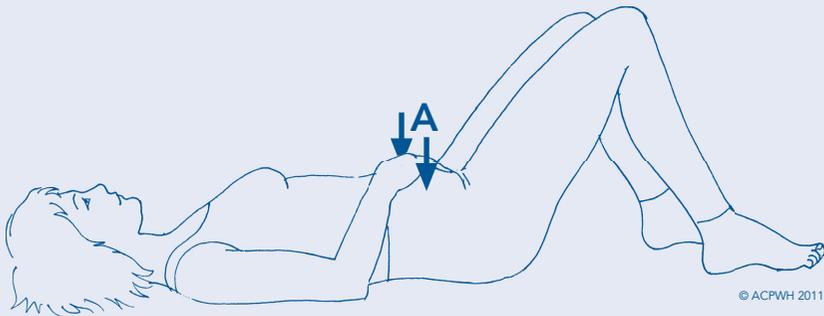
(also called: powerhouse, core, centre or cylinder of stability)

All the following exercises build on this basic contraction. Although it is basic, it isn't always easy to master.

1. Lie on your back with your knees bent at a comfortable angle, and your hips, knees and feet aligned. Your back and ribs should be gently resting on the floor. You may need a small pillow under your head.
2. Find the neutral spine position - neither too tucked nor too arched.
3. Find the bony prominences at the front of the pelvis (arrows A) above the hip, and feel each side firmly with the tips of your middle and index fingers, then move the fingers 2-3 cm downwards and inwards. Your fingers are now on your deep abdominal muscles.
4. Gently breathe in to expand your tummy (sometimes called diaphragmatic, abdominal or belly breathing). As you breathe out, imagine a wire between the pelvis bones tightening. You should feel the muscles under your fingertips tense. Keep your spine in a neutral position. Take one or two more breaths, then gently relax the tension in these muscles. You can also try this exercise in other positions, such as sitting or standing.

Take one or two normal breaths, then gently relax the tension in these muscles.

You can also try this exercise in other positions, such as sitting or standing. Lying on your side with your hips and knees bent can be the easiest position to start with; think about drawing your lower tummy in and away from the floor.





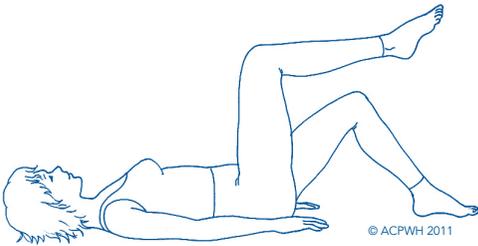
1.

Breathe in, breathe out, and engage your deep abdominal muscles and pelvic floor. Gently slide one heel away from you, keeping the heel in contact with the floor.

Breathe in, and on your next out-breath gently draw your heel back to the starting position.

Keep your pelvis perfectly level and stable throughout the movement.

Repeat times each leg. (Alternate legs.)

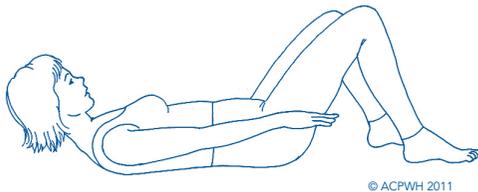


2.

Breathe in, breathe out, and engage your deep abdominal muscles and pelvic floor. Lift one leg so the hip and knee rest at 90 degrees. Breathe in, breathe out, and gently lower your leg to the start position.

Keep your pelvis perfectly level and stable throughout the movement. Your tummy should not bulge upwards or dome; if it does, try this with your fingers on your pelvis, as before, and concentrate on drawing your lower tummy in and wide. Release the pelvic floor and abdominal muscles before repeating the exercise.

Repeat times for each leg. (Alternate legs.)



3.

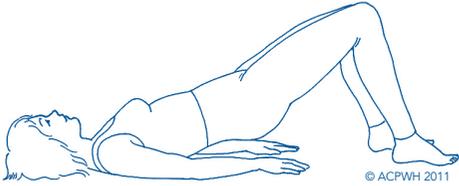
Breathe in, breathe out and engage your deep abdominal muscles and pelvic floor.

Gently lift your head and look through your knees; stretch fingertips towards heels.

Breathe in, breathe out and slowly lower to start position.

Be careful not to strain around the neck or bear down on the pelvic floor. Release the pelvic floor and abdominal muscles before repeating the exercise. Don't let your tummy bulge upwards (see exercise 2).

Repeat times.

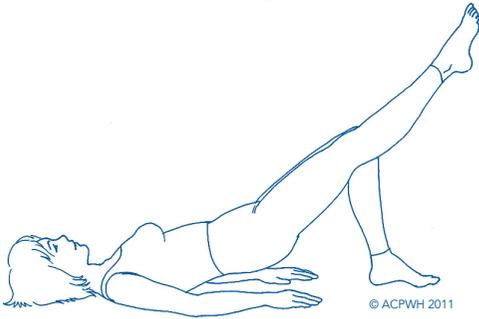


4.

Breathe in, breathe out, and engage your deep abdominal muscles and pelvic floor. Very gently curl your pelvis inwards, starting from the tailbone.

Imagine that you are lying on a strip of Velcro, peeling yourself away from bottom to top, bit by bit. Breathe in, breathe out and gently roll back to the starting position.

This may be a very small movement at first. Repeat times.



5.

Do the pelvic curl (exercise 4), keeping your pelvis level and steady, and gently straighten one leg.

Do not squeeze your knees together; a small, rolled-up towel might help to keep the distance.

Breathe in, bend the leg back down, breathe out, and slowly roll your spine and pelvis back to the starting position.

Repeat times for each leg. (Alternate legs.)



6.

Perform this in side-lying with neutral spine.

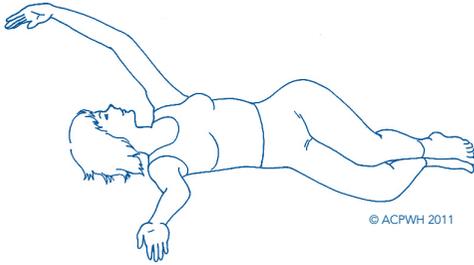
Breathe in, breathe out, and engage your abdominal muscles and pelvic floor.

Without allowing the pelvis to roll back at all (imagine you are balancing a full glass of water on your uppermost hip), gently open your legs at the knees, allowing the ankles to stay together.

This may only be a very small movement at first.

Breathe in to hold, and breathe out to gently lower and release your abdominal muscles and pelvic floor.

Repeat times for each side.



7.

Perform this in side-lying with neutral spine. Start with your arms together, resting on the floor on the same side as your thighs.

Engage your abdominal muscles and pelvic floor. Breathe out and lift the upper arm to open your chest and rotate your spine. Keep your eyes on the moving hand and keep the elbow soft.

Aim your moving arm towards the floor behind your body, but only take it as far as is comfortable.

Breathe out to return the arm to the starting position with the same arc movement.

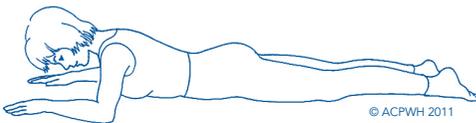
Repeat times for each side.



8.

Breathe in, breathe out, engage your abdominal muscles and pelvic floor, and allow one knee to gently move away from your midline. Be careful not to use the still leg to brace your pelvis. As soon as you feel any movement in the pelvis, hold that position as you breathe in, breathe out and return to neutral, releasing your abdominals and pelvic floor.

Repeat times each leg.



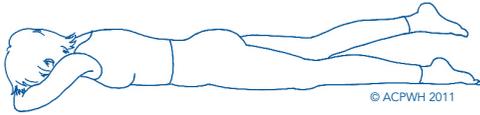
9.

Breathe in, breathe out, and engage your abdominal muscles and pelvic floor.

Slide your shoulder blades gently down towards your waist and lift your head away from the floor (keep your eyes looking down towards the floor).

Breathe in to hold, and breathe out to return to the starting position.

Repeat times.

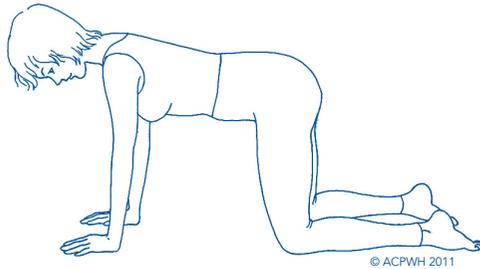


10.

Breathe in, breathe out, and engage your abdominal muscles and pelvic floor. Slowly lift one leg WITHOUT further arching your lower back.

Breathe in to hold and slowly lower the leg on your next out-breath.

Repeat times for each leg. (Alternating right and left.)



11.

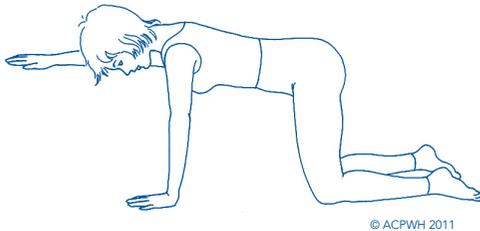
Perform this on your hands and knees, with wrists positioned below shoulders and knees below hips, spine neutral.

Allow your tummy to relax (without sagging your lower back).

Breathe in to prepare, then breathe out and gently draw navel to spine (as for basic contraction) and engage your pelvic floor.

Breathe in to hold, then breathe out and slowly release.

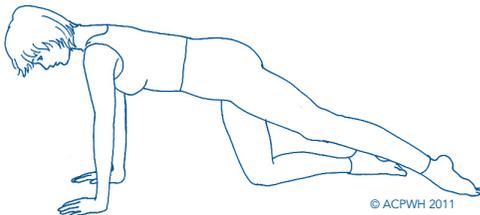
Repeat times.



12.

Maintain navel to spine, as in exercise 11, and on out-breath gently raise one arm. Keep your spine straight but soft. Breathe in to hold, then breathe out and lower the arm, and release your abdominal muscles and pelvic floor.

Repeat times for alternate arms.



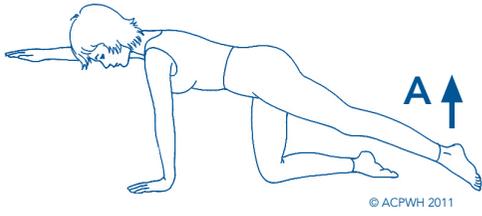
13.

Maintain navel to spine, as before.

On out-breath gently stretch one leg behind, keeping your toes in contact with the floor.

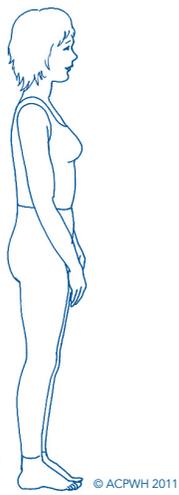
Breathe in to hold, then breathe out and return to the starting position, releasing the abdominal muscles and pelvic floor.

Repeat times for alternate legs.



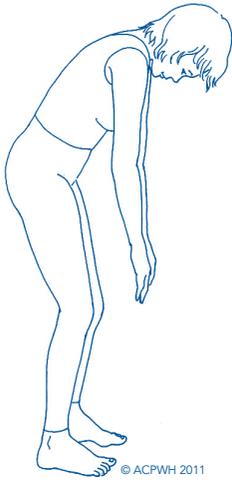
14.

Maintain navel to spine, as before. On out-breath, combine an arm and opposite leg stretch. Breathe in. Breathe out and return to the starting position, and release your abdominal muscles and pelvic floor. A further progression would be to raise the leg in line with the spine (arrow A). Repeat times for each side.



15.

Standing posture.
Check that your weight is evenly distributed over both feet, and that they are comfortably parallel, one hip-width apart. Soften (gently unlock) the knees. Check your pelvis and lumbar spine are neutral. Keep your trunk soft by gently lengthening in the spine. Keep your chest nicely open by ensuring that your shoulder blades remain down. Allow your neck to lengthen.



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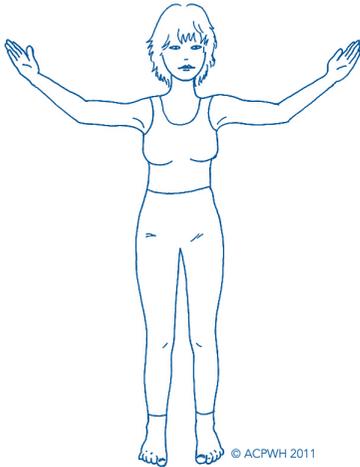
16.

Start in the standing posture, as in exercise 15, or lean against a wall with your spine in contact, but do not force your head back to the wall if this is uncomfortable.

Breathe in, breathe out and allow your chin to lower towards your chest. With loose arms, slowly curl over, imagining that you are rolling down your spine, bone by bone. Roll down as far as is comfortable without causing discomfort in your back.

At the bottom of the roll down, breathe in, gently unroll and return to the starting position as you breathe out.

Repeat times.



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17.

Start in the standing posture, as above.

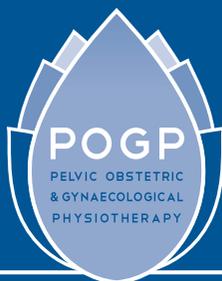
Breathe in, and avoid being tense in your shoulders or neck.

Breathe out and slowly raise your arms, reaching in front and then open wide to the sides, and let your palms turn to the ceiling.

Keep the bottom of your shoulder blades down, and be careful not to hunch your shoulders as your arms are raised.

Breathe in as you lower your arms to the starting position.

Repeat times.



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