

Diastasis Rectus Abdominus (DRAM)

Information for Patients

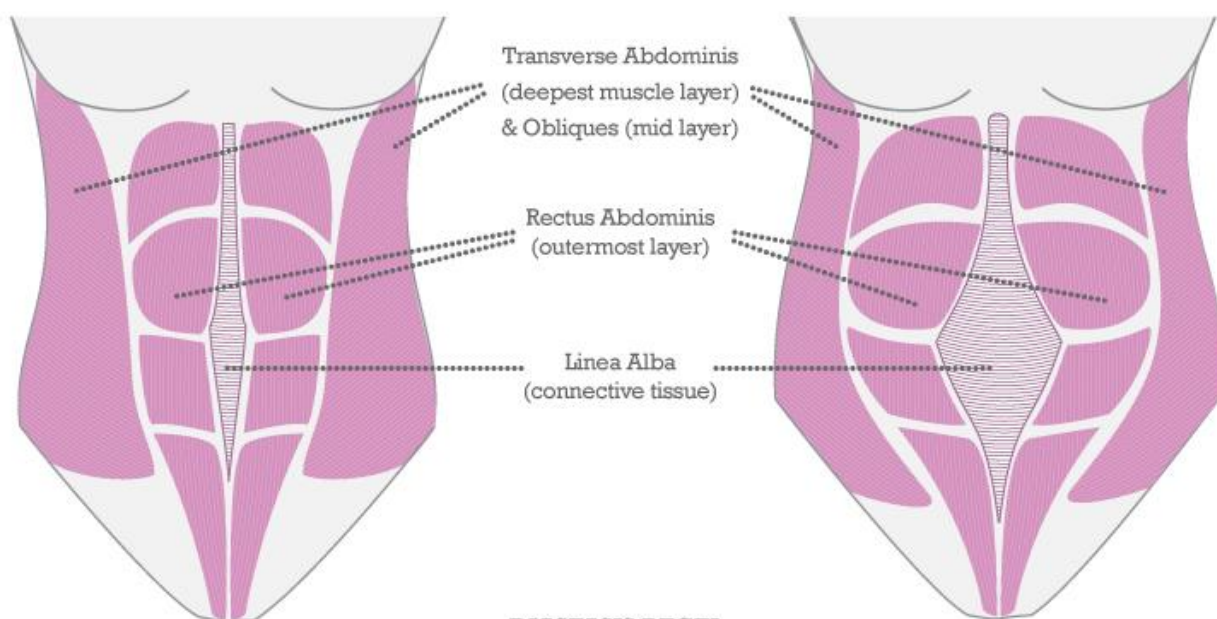
If you have any queries about this leaflet or any problems doing the exercises please contact the Physiotherapy Department on: **0131 536 1060 (option 1)**

Gapping of the Abdominal Muscles (Diastasis Rectus)

A tough strip of tissue goes down the middle of your stomach (the linea alba) holding the two sides of your abdominal muscles together. During pregnancy, this strip softens and stretches resulting in the two sides of the muscle becoming wider apart as the abdomen grows. It is usually painless.

Your midwife has examined your stomach muscles and found the gap between the 2 sides of your muscles to be greater than usual. This is called diastasis rectus (or a split rectus sheath).

This gapping is quite common. Research has shown that 60% of women have it 6 weeks after giving birth and 45% of women still have it 6 months after birth. It is not unusual to still have a gap a year after birth. This usually causes no pain or problems in everyday life.



DIASTASIS RECTI
Separation of the Rectus Abdominis muscles

The Importance of Abdominal Muscles

The abdominal (stomach) muscles are like a corset. Your lower abdominal muscles (below the belly button) wrap around your pelvis and into your lower back. These muscles are very useful for supporting your spine. During pregnancy your abdominal muscles stretch and weaken so strengthening these muscles after you give birth is important to get back to full activity.

To measure the gap in your abdominal muscles:

(This is **not** an exercise)

- Begin in crook lying position as shown
- Spread your fingertips across your stomach just above your belly button with your fingers pointing down
- Lift your head off the bed/floor and tense your stomach muscles
- Gently press down to check for a gap between the two sides of your stomach muscles
- Measure how many fingers span the width of the gap e.g 1,2 or more.



Try not to reassess your muscles too often – once a week at the most. If the gap measures more than 3 finger breadths then continue to follow the advice below:

- Avoid sit-up movements. Always turn onto your side and push up with your arms, especially when getting in/out of bed or a bath
- Avoid abdominal exercises that may increase the gap between the abdominal muscles until at least 6 months after the birth (e.g. sit-ups, crunches, aggressive abdominal stretches and rotational trunk exercises)
- Avoid lifting heavy weights and breathe out when you do lift something
- Avoid carrying babies/children on one side (e.g. on your hip). Hold them close in front of you as much as possible. Use a well fitting sling to carry your baby for longer periods
- Try massaging your abdominal muscles firmly with a moisturiser or oil, sweeping from each side to your belly button. This can help to improve muscle tone
- If it is uncomfortable when you cough, sneeze or laugh, use your hands or a pillow to support your stomach muscles
- Tubi-grip or supportive clothing (eg with lycra) such as maternity tights, leggings or a swimming costume can help with support and comfort
- When sitting make sure your back is well supported and that your baby is well supported for feeding to reduce strain on your stomach muscles
- When changing/washing your baby, ensure you do not stoop. Have your baby on a higher surface (e.g. a changing table or kneel by the side of a bed). Take care that your baby is safe and won't fall off a raised surface. Do not leave your baby unattended.

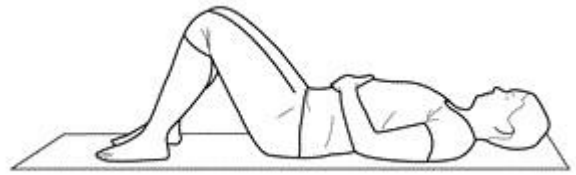
Exercises if the gap is more than 3 finger breadths

You should continue with these exercises until the gap is less than 3 finger breadths.

For all exercises, start with 5 repetitions and progress to 10 over a few weeks, repeating 1-2 times daily. Keep exercises slow and controlled, making sure your lower back does not arch away from the floor. Never do an exercise if it hurts you- stop and get advice from a physiotherapist.

Exercise: Lower Abdominal Muscles

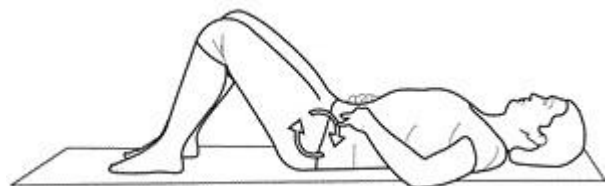
- Initially do this exercise in the crook lying position as shown
- Tighten your pelvic floor muscles (see 'pelvic floor exercises' section)
- As you breathe out, gently draw in the muscle below your belly button towards your spine
- Try to hold the contraction for 5 seconds then gently let go
- You should not hold your breath while tightening this muscle, try to breathe normally
- Progress to doing this exercise in any position. Tightening your pelvic floor while sitting upright or on an exercise ball is particularly good as it leads to tightening of the lower abdominal muscles.



Once you know how to tighten your pelvic floor and lower abdominal muscles, try to use them functionally (e.g. tighten them when lifting everyday objects or if coughing, sneezing or laughing).

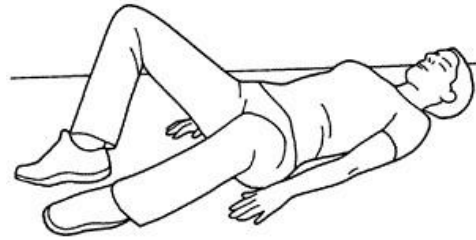
Exercise: Pelvic Tilts

- Begin in a crook lying position as shown
- As you breathe out, tighten your stomach muscles as in exercise 1
- Flatten your lower back onto the bed/floor by tilting your pelvis backwards as shown (as if tucking your 'tail' between your legs)
- Breathe normally while holding this position for 5 seconds, then gently let go
- This exercise can also be done on an exercise ball, on a chair or standing by pressing your lower back against a wall.



Exercise: Bent knee Fall Out/Hip Twists

- Begin in crook lying position
- Breathe in to prepare
- As you breathe out tighten your muscles as in exercise 1, then slowly drop one knee out to the side as far as it is comfortable – the tightening of your stomach muscles should be maintained while doing this
- Keep your pelvis as still as possible and do not force the knee too far
- Breathe in and as you breathe out, slowly return the knee to the starting position
- Relax your stomach muscles
- Repeat with the other leg.



Will my muscles return to normal?

The gap between the abdominal muscles tends to improve most in the first 8 weeks following the birth, by which time it is often down to 2 finger breadths or less. However, by following appropriate advice and exercises, improvement can continue over 6 months to a year. The tissue joining the 2 sides of the muscle never tightens back fully and separation is likely to occur with further pregnancies.

Returning to Exercise

Gradual return to exercise after your baby is born can be of great benefit to your physical and mental health and wellbeing. Whether you have had a vaginal delivery or a caesarean section, becoming active again as soon as possible is encouraged. Some deliveries can take longer to recover from so please talk to your midwife, health visitor, physiotherapist or GP for advice before starting your return to exercise.

Advice for returning to exercise:

- Exercise should always be undertaken gradually. Listen to your body, pace yourself and get plenty of rest
- Progress at a gradual pace that feels comfortable for you
- Your ligaments and joints are more supple and flexible for up to 6 months after birth, so it is best to take it easy and do not over-stretch
- High impact exercises (such as jogging) should be avoided for the first 12 weeks
- Wear a supportive bra
- Ensure you have supportive footwear
- Ensure you stay hydrated, especially if breastfeeding (a good indication of this is that your urine should be a pale straw colour after your first pee in the day)
- If your post-natal bleeding (lochia) becomes heavier or changes colour (eg. becomes more red/pink) after exercise then it may be a sign you are overdoing it. Discuss the change with your midwife or GP
- With any exercise, if you experience a heaviness or dragging feeling in your pelvic area, bladder or bowel incontinence or experience any pain (e.g. back or pelvic pain) which doesn't settle quickly on stopping and lasts into the following day- then you should stop. It may be that you are doing too much too soon, but if it does not improve then you should seek help from a health professional
- If you experience leakage from your bladder or bowel, please seek help from a health care professional.

Exercises to try when returning to exercise

You should not do specific abdominal exercises (e.g. crunches or sit-ups) until at least 6 months after delivery. Then, they should only be started if there is no bulging of the abdominal muscles (doming) or pain when exercising.

Many of the everyday activities you are doing are the best early exercises for your abdominal muscles:

- Pelvic floor exercises (see later section)
- Gentle abdominal exercises (see earlier section)
- Walking – try to get out every day. Try to do some brisk walking to help improve your cardiovascular fitness and general conditioning. Pushing the pram/buggy is great for increasing use of your abdominal muscles. Make sure the height of your pram is comfortable, your back is in a good posture and your elbows are bent
- Build activity into your day (e.g. take the stairs instead of a lift or walk short journeys rather than use the car)
- Swimming is a great exercise for your abdominal muscles but should not be started until 7 days after your post-natal bleeding has stopped
- Join a post-natal exercise class such as yoga. If going to a class that is not specifically a post-natal class, make sure you tell your instructor that you have recently had a baby.

Returning to Running

To return to running, your body needs time to heal and regain its strength after having a baby. Therefore, it is advised to start with low-impact exercise until 12 weeks after delivery.

To assess if you are ready to try start running again, a useful test is to see if you can do the following without any heaviness/dragging sensation, pain or incontinence:

- walk for 30 minutes
- balance on one leg for 10 seconds each side
- single leg squat 10 times each leg
- jog on the spot for 1 minute
- hop on the spot 10 times each leg.

Advice for when you start running again:

- Always warm up before starting
- Start with 1 to 2 minutes of running at an easy pace (still able to hold a conversation) and gradually build up your pace
- Include walking breaks to start with and gradually remove them
- Following a graduated training programme can be useful (eg. 'couch to 5km')
- Stop if you experience any problems either during or following a run and seek help from your GP or physiotherapist
- If running with a buggy, it is advised by the manufacturers that this should not start until your baby is 6-9 months old to protect their neck and spine. The buggy should be designed for running and two hands should be used to push it at all times.

Pelvic Floor Exercises

Following delivery of your baby, you will have been advised to start doing pelvic floor exercises. Your pelvic floor works together with your abdominal muscles so exercising it will help with your abdominal muscles as well as help returning its normal function following pregnancy and birth.

What is the pelvic floor?

The pelvic floor consists of layers of muscle and ligaments that stretch from the pubic bone at the front of your pelvis to the end of the backbone (coccyx) and from side to side.

Firm, supportive pelvic floor muscles help support the bladder, womb and bowel, and to close the bladder outlet and back passage.

How does the pelvic floor work?

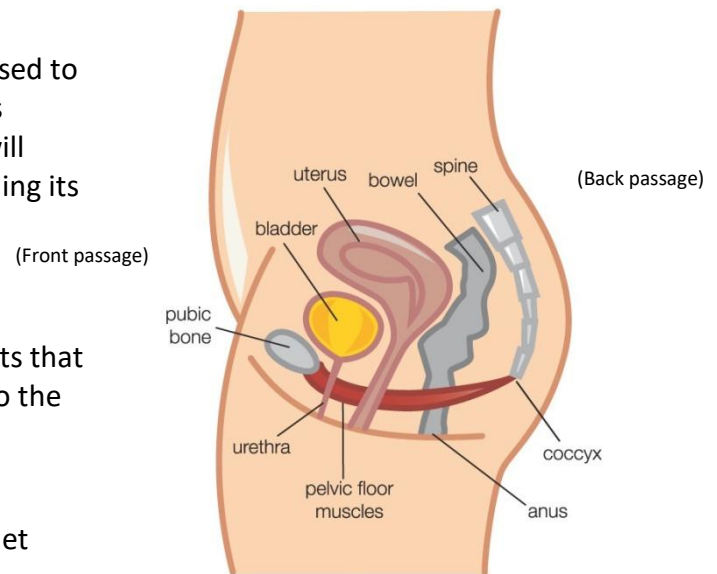
The muscles of the pelvic floor support the pelvic organs and stop leakage of urine from the bladder and wind or faeces from the bowel. When you pass water or have a bowel motion the pelvic floor muscles relax. The muscles actively squeeze when you laugh, cough, lift or sneeze to help prevent any leakage.

Like any other muscles in the body, the more you use and exercise them, the stronger the pelvic floor muscles will be.

Finding your pelvic floor muscles:

It is not always easy to find your pelvic floor muscles. Exercising them should not show at all 'on the outside'. You should not pull in your tummy excessively, squeeze your legs together, tighten your buttocks or hold your breath.

1. Sit comfortably with your knees slightly apart. Now imagine that you are trying to stop yourself passing wind from the bowel. To do this you must squeeze the muscles around the back passage. Try squeezing and lifting that muscle as if you have wind. You should be able to feel the muscle move. Your buttocks and legs should not move at all. You should be aware of the skin around the back passage tightening and being pulled up and away from your chair. Really try to feel this squeezing and lifting
2. Now imagine you are sitting on the toilet passing urine. Picture yourself trying to stop the stream of urine. You should be using the same group of muscles that you used before, but don't be surprised if you find this harder. (Do not try to stop the stream when you are actually passing water as this may, if repeated, cause problems with correct emptying or cause a urinary infection)
3. Now try to tighten the muscles around your back passage, vagina and front passage and lift up inside as if trying to stop passing wind and urine at the same time. It is very easy to bring other incorrect muscles into play, so try to isolate your pelvic floor as much as possible by not squeezing your legs together, not tightening your buttocks and not holding your breath. The lower tummy can very gently be drawn in (as if pulling away from the zip of tight trousers). In this way most of the effort should be coming from the pelvic floor muscles.



Practising your exercises

Exercise 1: Your pelvic floor muscles need to have stamina. So sit, stand or lie with your knees slightly apart

- Slowly tighten and pull up the pelvic floor muscles as hard as you can. Try lifting and squeezing them for as long as you can
- Rest for 4 seconds and then repeat the contraction
- Build up your strength until you can do 10 slow contractions at a time, holding them for 10 seconds each.

Exercise 2: Your pelvic floor muscles also need to react quickly to sudden stresses from coughing, laughing or exercise that puts pressure on the bladder.

- Practise some quick contractions, drawing in the pelvic floor and holding it for just one second before relaxing
- Try to achieve a strong muscle tightening with up to ten quick contractions in succession.

Aim to do a set of slow contractions (exercise 1) followed by a set of quick contractions (exercise 2) 3-6 times each day. It takes time for exercise to make muscles stronger. Please do not be discouraged as you are unlikely to notice any improvement for several weeks. You will need to exercise regularly for at least 3 months before the muscles gain their full strength. It is also important to continue them in the long term to maintain their strength.

Get into the habit of doing your exercises during normal day to day activities to remind you to do them. For example: whilst cleaning your teeth or whilst waiting for the kettle to boil.

Tighten your pelvic floor muscles when you feel you might be about to leak - pull up the muscles before you cough, laugh, sneeze or lift anything heavy. Your control will gradually improve.

The NHS 'Squeezy' App is a useful tool to help with your pelvic floor exercises. The App issues reminders to help you to remember to do your exercises.

Advanced post natal exercises

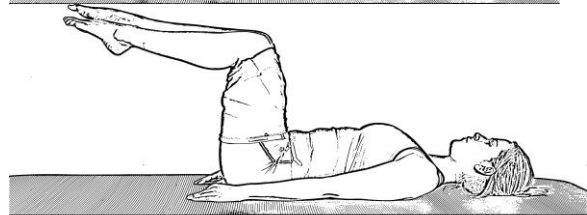
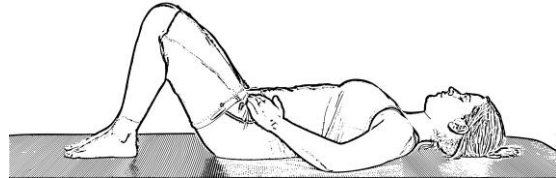
(Progression of exercises on pages 3 and 4 of this leaflet)

You can progress onto these exercises 6 weeks after birth if you have less than 3 finger-breadths gapping of your abdominal muscles and you remain pain-free. Ensure abdominal muscles do not bulge during exercises.

Note: Do not allow your back to arch when doing these exercises as this can lead to back strain. You should progress to advanced exercises only when you are able to control the movement.

Exercise: Pilates Hundreds

- Begin in crook lying position as shown
- Breathe in to prepare
- As you breathe out, tighten your muscles as in exercise 1 then lift one leg until your hip and knee are at 90°
- Hold as you breathe in, then as you breathe out lift up your other leg
- Hold this position for 5-10 seconds
- Slowly lower one leg while breathing out, then lower your other leg on the next breath out
- Progress on to holding the raised leg position while moving your arms up and down slightly. Try to pulse your arms up and down 5 times on an out breath and 5 times on an in breath as you are able
- 100 pulses of the arms is the target but you should only do what you feel able to do
- Keep your stomach muscles tightened throughout.



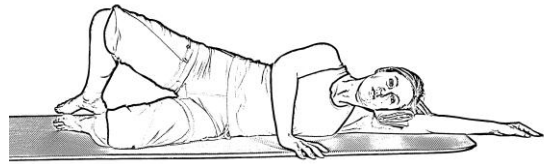
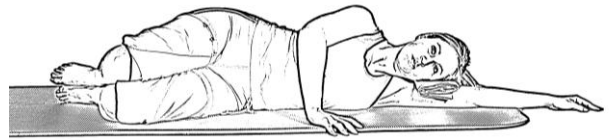
Exercise: Single Leg Lift/Swimming

- Lie face down as shown with a folded towel or cushion under your forehead
- Breathe in to prepare
- As you breathe out, tighten your buttock muscle and lift one leg off the floor slightly as shown
- Breathe in to hold then breathe out to lower the leg
- Repeat 5-10 times for each side.



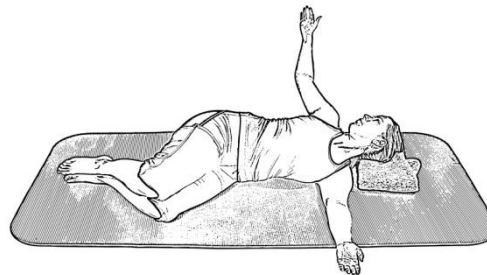
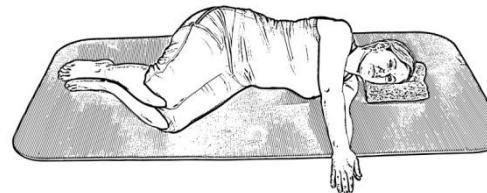
Exercise: Hip Openings/The Clam

- Lie on your side with hips and knees bent as shown, keeping heels together throughout the exercise. Support your head on a folded towel or a cushion
- Breathe in to prepare
- Without allowing your pelvis/upper hip to roll backwards, breathe out and lift your upper knee slightly, like a clam shell opening up
- Breathe in to hold the position
- Breathe out and lower your leg
- Repeat 5-10 times for each side.



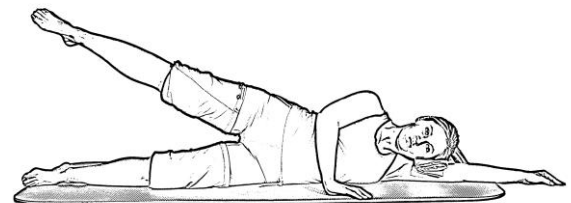
Exercise: Arm Openings

- Lie on your side with hips and knees bent as shown and arms together in front of you. Support your head on a folded towel or a cushion
- Breathe in to prepare
- Tighten your abdominal and pelvic floor muscles as you breathe out and lift your arm upwards and then backwards towards the floor
- Follow the arm movement with your head but do not allow your upper hip to roll backwards
- Breathe out to return your arm to the start position
- Repeat 5-10 times for each side.



Exercise: Side Star

- Lie on your side and stretch your legs out straight. Support your head on a folded towel or a cushion
- Breathe in to prepare
- Tighten your abdominal and pelvic floor muscles as you breathe out and lift your upper leg
- Breathe in to hold the position
- Breathe out and lower your leg
- Repeat 5-10 times for each side
- Progress on to placing your hand on your upper hip throughout the movement to challenge your balance.



Reference/Source Material

NHS Inform: www.nhsinform.co.uk

NHS: www.nhs.uk

Pelvic, Obstetric and Gynaecological Physiotherapy Patient Information leaflets, Chartered Society of Physiotherapy special Interest Group: <https://pogp.csp.org.uk/>