PELVIC FLOOR MUSCLE EXERCISES
FOR WOMEN

This leaflet explains what pelvic floor muscle exercises are and how to do these correctly. You may need to see a Women's Health Physiotherapist if you find it difficult to do or are not confident that you are doing them correctly.

PELVIC FLOOR ANATOMY AND FUNCTION

The pelvic floor is a complex structure of muscles, nerves and connective tissue that weave together and stretches between the pubic bone in the front and the tailbone at the back, but also extending sideways to span the outlet of the pelvic cavity. It forms a 3-dimensional bowl-like floor (although it is often described as a hammock or sling) that is about the same shape and size of cupping your two hands together. A woman’s pelvic floor has three outlets: the urethra (the tube from your bladder) in the front, the vagina in the middle and the anus (bowel outlet) at the back.

The pelvic floor muscles can be divided in a superficial and deep layer of muscles, and ring-like muscles that surrounds the bladder and bowel outlets. Seventy percent of the pelvic floor muscles is ‘slow twitch’ type fibres that are fatigue resistant and allow these muscles to work constantly at a low level. This is important for antigravity support and continuous control of the bladder and bowel outlets. The remaining thirty percent are ‘fast twitch’ type fibres that can act quickly and effectively under stress, such as when coughing, sneezing, lifting or jumping.

The pelvic floor has four main functions:

1. Pelvic organ support
   The pelvic floor forms a platform of support for the pelvic organs, i.e. the bladder, uterus (womb) and bowel (rectum). It provides antigravity support in upright positions and counteracts intra-abdominal forces pushing down on the pelvic organs, such as with coughing, sneezing, laughing, lifting, etc.

2. Bladder control

3. Bowel control
   The pelvic floor muscles ensure closure of the bladder and bowel outlets to prevent involuntary leakage of urine or faeces at rest and under pressure. These muscles also act to defer the urge to void or open your bowels until a convenient time to do so. When on the loo, the pelvic floor muscles relax to open the outlets and allow passage or urine or faeces, after which they will again squeeze and restore control.

4. Sexual function
   It is well known that good pelvic floor muscles contribute to sexual function and satisfaction of both yourself and your partner.
WHEN THINGS GO WRONG

Ageing, poor bladder and bowel habits, constipation, pelvic floor disuse and misuse, pregnancy and childbirth can cause your pelvic floor muscles to become weak and unresponsive resulting in symptoms of pelvic floor dysfunction. These include:

- Leakage of urine when you cough, sneeze, jump or exercise (stress incontinence)
- An urgent desire to void with little warning that may or may not result in leakage (urge incontinence)
- Difficulty to control wind (flatus incontinence)
- Soiling, difficulty wiping clean, or leakage of faeces without prior warning (faecal incontinence)
- A dragging or heavy feeling in the vagina, or a visible or palpable bulge in the vagina related to pelvic organ prolapse (when one of your pelvic organs has dropped down into the vaginal space).
- Pelvic pain, painful intercourse, vaginismus and other pelvic pain disorders

PELVIC FLOOR MUSCLE EXERCISES

Regular pelvic floor muscle exercises (better known by many as ‘Kegel exercises’) can help to keep these muscles fit and reduce the risk of problems in the future. There is good research evidence to show that pelvic floor exercises can significantly improve or even cure incontinence and/or pelvic organ prolapse.

Doing these exercises, however, may be easier said than done. Studies have shown that 30%-50% of women are unable to contract their pelvic floor muscles on verbal instruction alone, and 1 in 4 of these women will do a straining manoeuvre instead that can potentially weaken their pelvic floor.

It may be a good idea to use a handheld mirror and look at what happens when you do your pelvic floor exercises. You should see a ‘drawing in’ movement, and not any bulging or downward movement of your perineum. If you are not sure or confident in your technique, please make an appointment with a Women’s Health Physiotherapist for help.

Women’s Health Physiotherapists have specialist knowledge and skills to help you identify your pelvic floor muscles and ensure you do the exercises correctly. You may need specific training to increase your pelvic floor awareness, coordination, timing and muscle activation patterns in addition to building strength, endurance, muscle bulk and tone. They can help you formulate a personalised exercise regime and support you in your quest to rebuild your pelvic floor strength and maximise these muscle’s potential.

It is important to recognise that change does not happen overnight and to have realistic expectations. As with any other muscle training it can take 6-8 weeks to see results following a dedicated exercise regime, after which exercises should be progressed and continued long-term (really for the rest of your life) to maintain optimum pelvic floor muscle function.
HOW TO DO IT, HOW OFTEN, HOW LONG?

Training your pelvic floor muscles to its maximum potential involves 4 stages:

- **Stage 1 – FIND IT**
- **Stage 2 – TRAIN IT**
- **Stage 3 – CHALLENGE IT**
- **Stage 4 – MAINTAIN IT**

FIND IT (Stage 1)

It is not always easy to find your pelvic floor muscles as they are pretty much ‘hidden’ inside. Exercising the pelvic floor muscles correctly should not show at all on the outside. You should not pull in your tummy muscles excessively, squeeze your legs together, tighten you buttocks, tilt your pelvis or hold your breath when contracting your pelvic floor muscles.

Here are some tips on how to find and contract your pelvic floor muscles:

Lie down or sit comfortably with your legs uncrossed, resting your elbows on your knees or a desk in front of you. Close your eyes to avoid distraction and increase the brain’s ability to detect and connect with your pelvic floor.

- Imagine closing your back passage with a gentle squeeze (as if holding wind), and then draw these muscles up and into your body (as if pulling away from a needle).
- Imagine stopping yourself from passing urine. Gently tighten the muscles around the bladder outlet in the front to close, and then draw up and into your body (as if pulling away from a needle).
- Imagine you have a tampon in your vagina that is slowly slipping down. Try to stop it from falling out by gently squeezing to hold it, then draw the muscles up and in as if to move the tampon back into the vagina.
- If you are comfortable with the above, try to squeeze all three openings together starting from the back, adding the middle (vagina) and the front (urethra), then relax.

A correct contraction involves as ‘squeeze’ action and ‘lift/drawing up and in’ action.

**WARNING:** Do not stop-start your flow when passing urine as a way of exercising your pelvic floor muscles. Being able to stop your flow is not a reliable test of your pelvic floor strength even if you were able to do this before. More importantly, regularly stop-starting your flow can interfere with bladder emptying and ultimately confuse your bladder, leading to incomplete emptying and an increased risk of bladder infections.

A gentle squeeze and drawing in action is enough to start with, about the same strength as when ‘blinking or squeezing shut both eyes together’. Remember: stage 1 is all about FINDING IT.

Try to do 20x ‘squeeze and lift’ contractions 2-3x per day, in lying or sitting still and with concentration.
TRAIN IT (Stage 2)

Once you are able to identify and contract your pelvic floor muscles, you should repeat the exercise several times to train and stimulate the nerve pathways connecting your brain and pelvic floor. Repetition will help to establish good pelvic floor awareness, ensure correct technique of contraction every time and increase these muscles’ alertness and response to everyday stresses and demands.

Your exercise regime should also include exercises for the ‘fast twitch’ fibres and ‘slow twitch’ fibres of the pelvic floor:

**Exercise for the fast twitch fibres**

Squeeze and lift you pelvic floor muscles firmly, hold for one second, and then relax. Allow your muscles to relax fully and rest a second or two before repeating. **Contract and relax 10 times.**

**Exercise for the slow twitch fibres**

Squeeze and lift your pelvic floor muscles (about 50%-80% strength is enough), hold for 5 seconds (or less if you find it too difficult at first), and then relax. Allow your muscles to relax fully and rest at least 5-8 seconds before repeating. **Contract, hold and relax 5 – 10 times.** You can gradually increase the hold to 10 seconds.

Try to get in a routine of doing at least 2 – 3 sets of pelvic floor exercises every day.

**IMPORTANT:** Make sure to put time aside to do these exercises and avoid ‘multi-tasking’ when doing your pelvic floor muscle exercises. Your brain will prioritise its energy and focus for the most important or familiar task at hand, resulting in sub-maximum pelvic floor activation and stimulation when multitasking and sub-optimal training results. Also, do not leave it to the end of the day when your pelvic floor is most tired. Try to do one set in the morning, one set in the early afternoon, and one set in the early evening.

CHALLENGE IT (Stage 3)

Once you are confident in your technique of contraction and able to do several repetitions of contractions, you can take it to the next level:

- Increase the number of repetitions
- Increase the duration of holding a contraction (to a maximum of 10sec)
- Reduce the rest time
- Progress to exercising in different positions.

Exercise positions may include: lying (i.e. on your back or sides, legs straight or one/both legs bent), sitting (i.e. legs uncrossed, leaning forward or sitting upright), four point kneeling or prayer position, and standing (at first with some support such as leaning against a wall or forward leaning on a table/desk/backrest of a chair, and later move away to a freestanding position).
NOTE: Lying is the least functional position for exercise, but may be easier to start with for many women. Once you are able to do the exercises in sitting or standing you are working against gravity, which is important for optimum pelvic floor function.

You can also add variation to standing with having your toes turned inwards or outwards or straight ahead (feel the difference in your pelvic floor response in these positions), stand with one leg on a step, try relaxed stance with your weight more on one leg (change legs), etc. Be creative, but always connected (feel what you are doing!) and concentrate to ensure maximum muscle stimulation.

Keeping up a regular daily routine of pelvic floor exercises will increase your muscle strength, endurance and overall muscle tone and volume, even at ‘rest’ (your pelvic floor is never completely ‘switched off’, because it is an antigravity support muscle and constantly has low level activity). Your muscles will become more responsive with stresses and provocations to react quickly and effectively and reinforce closure of the bladder and bowel outlets. It is all worth it!

The next step is to practice using it at the right time and in the right circumstances. Under ‘normal circumstances’ your pelvic floor muscles should ‘switch on’ seconds before coughing, sneezing or clearing your throat, and also in preparation for lifting, pushing or pulling objects, jumping and landing, stepping down a curb or step, etc. to give support and ensure control. However, this does not always happen and you may need to retrain your pelvic floor muscles to learn this pattern / timing.

If you know that you are about to cough, sneeze or load your pelvic floor, gently contract your pelvic floor muscles (20-30% strength is enough) beforehand (this technique is also known as ‘the KNACK’). With practice and regular use it should become second nature (almost like putting your hand in front of your mouth when coughing or sneezing).

MAINTAIN IT (Stage 4)

Remember: If you don’t use it, you will lose it. It is important to recognise that pelvic floor muscle exercises should become a lifelong commitment. Evidence has shown that you can maintain the benefit of training with doing your exercises as little as 3x a week.

The ‘Squeezy App’ is an application for smart phones and tablets that can be used to remind you of your exercises and help track your progress. It can be programmed with your own personalised regime of exercises, and is highly recommended. [http://www.squeezyapp.co.uk/](http://www.squeezyapp.co.uk/)

WHAT ABOUT GADGETS?

There are many gadgets out there that claim to ‘increase pelvic floor function’ or ‘cure incontinence’, with no shortage of variation, shape and size; but be careful what you buy. It is important that you get advice from a Women’s Health Physiotherapist before purchasing any device as these really needs to be selected based on individual assessment and with specific training needs in mind. No gadget should ever ‘replace’ voluntary pelvic floor exercises, but should merely be used to support your training and enhance your own efforts or motivation with the pelvic floor exercises.