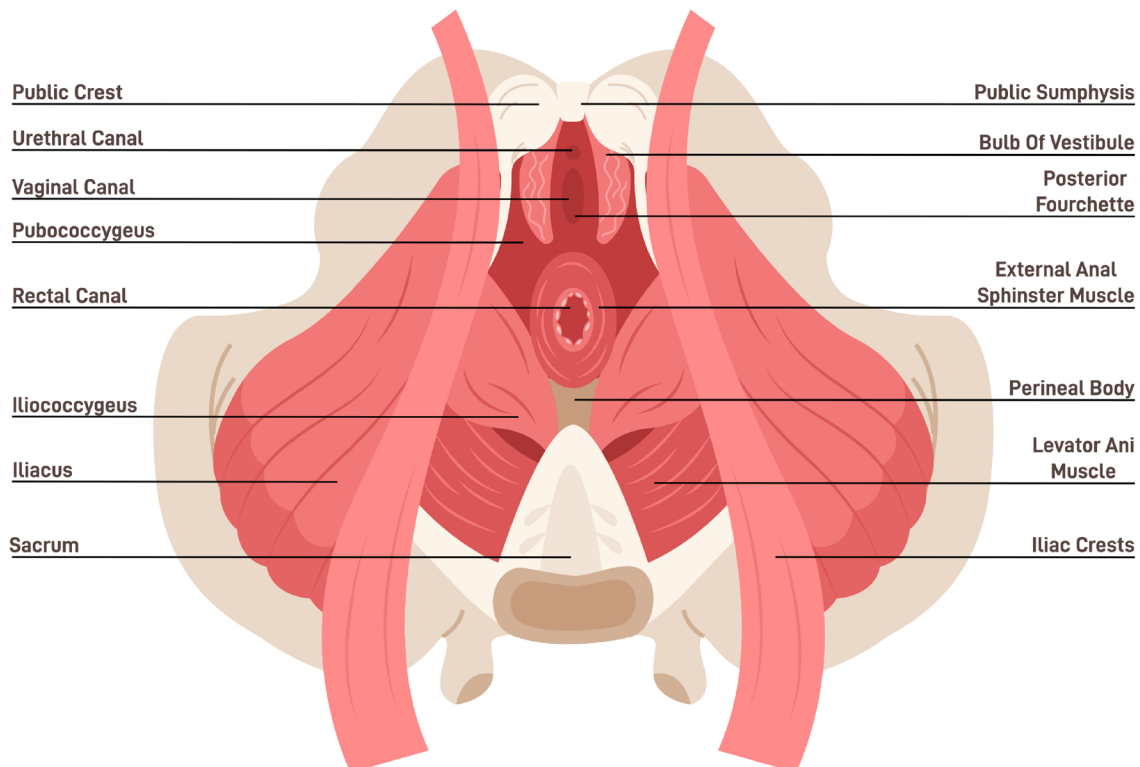


The Pelvic Floor

The Pelvic Floor

The pelvic floor consists of a “hammock” of muscles, ligaments, and fascia that covers the bottom of the pelvic cavity and assists in supporting the abdominal and pelvic organs.

Female Pelvic Floor Muscles



The pelvic floor maintains continence of bowel and bladder and plays an important role in sexual function. The pelvic floor muscle consists of 3 layers and has fast and slow twitch fibers to assist with supportive and sphincteric properties. The pelvic floor muscles are the same in women and in men, and both sexes benefit from maintaining good strength and tone of the pelvic floor muscle.

The Pelvic Floor

How to identify the pelvic floor muscles

Self Palpation: While sitting on a chair or toilet or alternatively while lying down, insert one or two fingers into the vagina, or place a finger into the rectal canal. Contract the pelvic floor muscles as though you are trying to prevent urination, holding back a bowel movement, or stopping the passing of gas. You should be able to feel the pelvic floor move with the muscle contractions.

Stop Urine Test: Sit on the toilet. Empty a small amount of urine, then try to stop the flow of urine for 1-2 seconds (do this **ONLY** once). Relax completely, allowing the bladder to empty fully. This is a test only, which allows you to “find” the muscle. This test should **NEVER** be used as a regular exercise as it can disrupt the bladder emptying mechanism and should only be used one to identify the contraction of your pelvic floor muscles.

Benefits of Pelvic Floor Exercises

Pelvic floor or Kegel exercises were originally developed by Dr. Arnold Kegel to help women with difficulty controlling urination. Positive effects of regular pelvic floor exercising include the following:

1. Helps improve or maintain control of the bowel and bladder.
2. Heightens sexual response in women and increases sexual control in men.
3. Maintenance of strength, tone, and elasticity of the pelvic floor muscles, which helps support the abdominal and pelvic contents against the effects of gravity.
- 4. Maintains core strength for a strong and healthy low back**

Like other muscles of the body, if the pelvic floor muscles are weak or tense, they are no longer efficient at their job. Some people have difficulty relaxing the pelvic floor and they hold it in a chronically tense state. This actually weakens the muscles. If this is a problem that you and your therapist have identified, it will be very important during your Kegel exercise sessions that you fully relax after each contraction. The pelvic floor muscles need to be able to perform a strong contraction and completely relax after a contraction in order to be healthy and efficient.

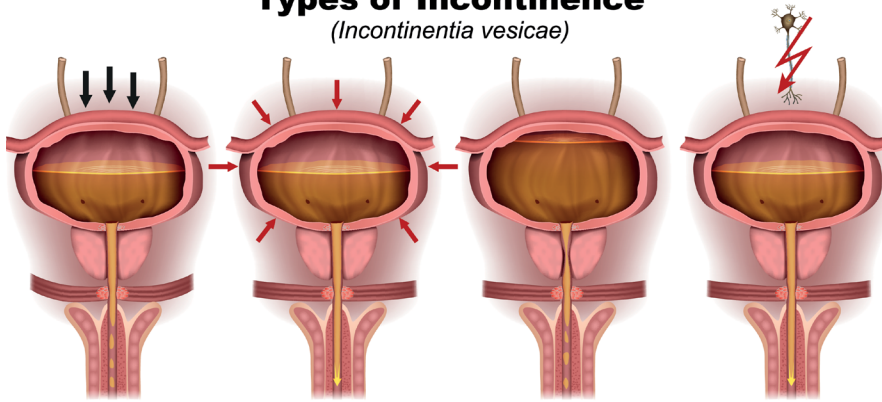
The Pelvic Floor

Bladder Fitness

Ideally, we should empty our bladder every 3-4 hours during the day. An average adult bladder can hold about 300-400 ml (10-13.5 oz). We usually feel the need to empty the bladder when it is filled with about 150-250 ml (5-8.5 oz) of urine. With a steady, strong stream of urine it should take you between 8-22 seconds to empty.

With urgency or an overactive bladder there is a sensation of needing to urinate when there is actually very little urine to empty. This sensation can also be felt immediately after having voided. Urgency can also result in the loss of bladder control, leading to leakage, either a few drops or a significant volume.

Types of Incontinence (Incontinentia vesicae)



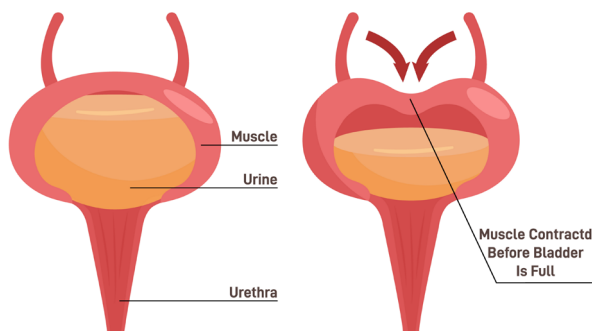
Stress Incontinence
due to increased
abdominal pressure
under stress (weak pelvic
floor muscles)

Urge Incontinence
due to involuntary
contraction of the
bladder muscles

Overflow Incontinence
due to blockage
of the urethra

**Neurogenic
Incontinence**
due to disturbed
function of the nervous
system

Overactive Bladder Syndrome



Normal Bladder

Overactive Bladder

The Pelvic Floor

Good Bladder Habits

- Sit on the toilet rather than hovering or squatting.
- Relax and breathe when emptying your bladder. Avoid straining, as it puts excessive stress on your pelvic floor.
- Avoid making connections to emptying your bladder with other stimuli.
 - Avoid urinating in the shower. Making a connection with running water and emptying your bladder may lead to feeling like you need to urinate every time you hear running water, i.e., turning on the tap.
 - Using the bathroom “just in case” can, over time, lead to urinary frequency. Emptying the bladder before long car rides and after intercourse are exceptions. If trying to conceive, you may wish to look at supporting your urinary tract health with other hygiene or supplement practices.
 - Avoid emptying your bladder as soon as you get home, i.e., “key in the lock” syndrome. Doing so strengthens the body/brain connection that stepping through the threshold must mean you need to void and can lead to urinary urge incontinence.
- Ensure you drink enough water/fluid per day. Concentrated urine can lead to irritation of the bladder and, in turn, may lead to increased urinary frequency. Research suggests drinking about half your body weight in fluid ounces per day. Improved hydration also helps constipation.
- Address constipation. Ensure you are not straining to empty your bowels. The first two points are as valid for bowel movements as they are for emptying the bladder.
- Remove bladder irritants from your diet. Possible irritants may include caffeine, alcohol, sugar, carbonated drinks, chocolate, acidic, and spicy foods.
- Other causes may include neurological conditions, urinary tract infection, or a prolapse. If significant changes are noted, please ensure you speak to your physician.

Nighttime voiding (Nocturia)

Avoid going to the bathroom just because you woke up. There may be many causes why someone is frequently emptying their bladder at night, including:

- Drinking too much before bedtime.
- Medications such as diuretics.
- Reduced bladder capacity.
- Some medical conditions, including diabetes, high blood pressure or heart disease.
- Sleep disorders.

The Pelvic Floor

Urgency symptoms

Retraining your brain and bladder connection to increase the time in between voiding. This can take a while so be kind with yourself and work with slow increments.

Six Steps to Suppress Urge

1. Remain still. Sit down or stand quietly.
2. Squeeze your pelvic floor muscles strongly several times. Do not relax fully in between. The harder you squeeze the more the bladder will relax.
3. Relax the rest of your body. Take a few deep breaths.
4. Continue to suppress the urge with contractions of the pelvic floor muscle.
5. Wait until the urge subsides.
6. Walk slowly to the bathroom at a normal pace. Do not rush and continue to squeeze pelvic floor muscles quickly while you walk.

Rushing

- Jostles the bladder increasing your awareness of how full it “feels”.
- May stimulate the bladder to contract and empty.
- Puts extra abdominal pressure on the bladder and tends to “push” the urine out.
- Interferes with your ability to contract the pelvic floor to inhibit your bladder.

What else can you do?

- Self-treatment techniques as demonstrated by your therapist can be used to reduce restrictions around your bladder.
- Abdominal strengthening exercises.
- Pelvic floor exercises. This may include strengthening as well as relaxation techniques. Your therapist may have suggested specific approaches, so please work with their suggestions.

The Pelvic Floor

Kegels: Contraction of the Pelvic Floor

Remember to relax the body before and after the exercises.

1. Tighten only the muscles of the pelvic floor unless otherwise instructed.
2. Breathe during the exercises. Holding your breath makes it more difficult for the muscles to work.
3. When you start, you will probably notice that the muscles do not want to stay contracted or tightened for very long. If you feel the muscle letting go, attempt to tighten again, several times if necessary. In a week or two, you will notice the control improving.
4. For those who need to concentrate on relaxation, be sure to let the pelvic floor relax, completely letting go after each contraction.

Common mistakes when exercising the pelvic floor muscles

- Holding your breath and attempting to bear down. This strains the pelvic floor and pushes down instead of drawing it upward.
- Contracting the abdominals, buttocks, and inner thigh muscles. It is important to be able to localize the pelvic floor muscle and be able to contract it independently of other muscles. Putting a hand on your stomach and buttocks to tell if you are using these muscles when attempting to do a Kegel exercise will help you know if you are substituting with these muscles.

The Pelvic Floor

Exercise A: Quick Contraction and Release

Position: Lie on your back or side. Progress to sitting and then standing.

Action: Contract and draw the pelvic floor up, as if in preventing the flow of urine, or preventing expelling gas. You should feel the vagina and anal sphincter contracting. Think about drawing the pelvic floor “up and in”. Hold for 1-2 seconds and then relax completely for 1-2 seconds. Repeat 10 times. Do this 3 times a day for a total of 30 contractions.

Exercise B: Long Holds of the Pelvic Floor

Position: Lie on your back or side. Progress to sitting and then standing.

Action: Contract and draw the pelvic floor up as in Exercise A. Think about drawing the pelvic floor “up and in”. Hold for 8-10 seconds and relax completely. Relax for 10 seconds trying to slacken and relax as much as possible. Repeat 10 times. Do this 3 times a day for a total of 30 contractions.

- This exercise can be enhanced by squeezing a ball between your knees or pushing your knees apart against the resistance of a TheraBand.
- When you progress to performing the exercises in sitting or standing, they can be done throughout the day while you are performing other activities such as driving, during commercials, or standing in lines. You can place visual cues (sticky dots) around your house, or on the rear vision mirror of your car to remind you to perform these exercises.
- Always contract your pelvic floor muscle before you sneeze, cough or lift. During intercourse contract your pelvic floor around the penis. This will not only increase the strength but also increase the pleasure for you and your partner. Don't forget to teach your partner the same exercises so he can return the favor.

The Pelvic Floor

Advanced Floor Muscle Strengthening

These exercises will give you additional ways to challenge the pelvic floor muscles to gain the needed strength and endurance

The Elevator Exercises

Exercise A

- Imagine the pelvic floor contraction is an elevator which goes from the ground floor to the 10th floor.
- Contract and tighten the pelvic floor muscles as if you were going to raise the elevator to the 8th floor and hold for 5 seconds.
- Then quickly increase the contraction to raise the elevator to the 10th floor, lowering to the 8th floor and back up to the 10th floor for 5 repetitions. Relax completely for 10 seconds.
- Repeat this exercise _____ times.

Exercise B

- Contract and tighten the pelvic floor muscles to raise the elevator to the 10th floor and hold for 5 seconds.
- Slowly release the contraction and lower the elevator to the 7th floor for 3 seconds.
- Now further lower the elevator to the 3rd floor for another 3 seconds.
- Release and relax for 10 seconds.
- Repeat this exercise _____ times.

Using Accessory Muscles

- Position yourself in a seated, or semi-reclined position.
- Bend your knees and place your heels together.
- Contract your pelvic floor muscles and then hold hard as you tighten your lower abdominal muscles.
- Holding the pelvic floor muscles and a lower abdominal contraction, push your heels together and hold hard.
- Finally, contract your buttock muscles and hold all the above muscles for 10-20 seconds.
- Repeat this exercise 10 times.