

Many conditions are unique to women, which are related to the female body's reproductive capacity and biology. These women's health issues can occur at any age.

PELVIC FLOOR AND MORE

Women's Bodies Are Different From Men's!

Women are more likely to injure themselves at specific times in their menstrual cycle. It is important to be aware that the risk of injury has been linked to fluctuating hormone levels which affect the muscle and ligaments (Hewett et. al., 2007). Ligaments and muscles are more vulnerable midway through the menstrual cycle, which occurs between your monthly bleeds, or your periods. During this time, a hormone, Estrogen drops dramatically which can result in a feeling of sudden weakness. At the end of your cycle, another hormone, Relaxin, increases which can soften ligaments. Ligaments are at greater risk of injury at end of the cycle.

Many athletic women take Oral Contraceptives (OC) or Birth Control Pills to help manage these hormonal changes. OCs are not just for birth control. There are many benefits which include:

- Decreased risk of hormone-related joint injury (as described above)
- Ease painful periods (dysmenorrhea)
- Decreased iron-deficiency anemia
- Decreased acne
- Increased bone density
- Decreased risk of ovarian/endometrial cancer
- Decreased severity of endometriosis (a medical condition related to severe dysmenorrhea and infertility)



There are many OCs from which to choose and it can be difficult to determine which type is the best for you. As with any medication, OCs may cause side effects and can increase your risk of blood clots. They are not suitable for every woman. You need a prescription for an OC, so talk to your private physician about the potential risks and benefits and the best options for you.

All medicine you take must comply with the Tennis Anti-Doping Program. Check with IDTM BEFORE you take ANY medications.

**"URINARY INCONTINENCE HAPPENS TO LARGE NUMBERS OF WOMEN BUT MOST ARE TOO EMBARRASSED TO TALK ABOUT IT."
-UNKNOWN**

Pelvic Floor Dysfunction

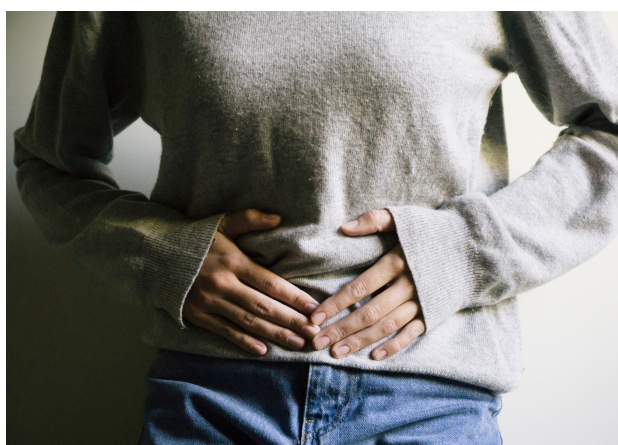
Your pelvic floor muscles are an important group of small muscles in your internal pelvic area. They are located and attached to the pubic bones at the front, the coccyx (tail) bone at the back, and the lower internal rim of the pelvic bones. When working properly, they provide support against gravity for your pelvic organs (bladder, uterus, and bowel). There are openings in the pelvic floor through which the urethra, vagina, and anus pass.

The pelvic floor assists with:

- Movement and stability. They are a part of the 'core' muscles, which also include the abdominals and small muscles in the lower back.
 - Improving awareness and control of your pelvic floor muscles can help to increase core stability and improve your athletic performance.
 - It is important to consider your pelvic floor function when addressing your back, sacrum, hip, knee, and even ankle problems.
- Protection and support of your pelvic organs.
- Sexual/Reproductive activities.

Pelvic pain and urinary leakage can negatively affect your tennis performance and can be embarrassing.

- Do you leak urine when you run, jump, sneeze, cough, or laugh?
- Is sexual intercourse uncomfortable or painful?
- Is a gynecological examination (such as a 'Pap' smear or manual vaginal exam) painful?
- Is inserting a tampon difficult?
- Do you suffer with chronic constipation?



You are not alone. Consumer research reveals that one in four women over the age of 18 experience episodes of involuntary leaking of urine (Urinary Incontinence). There are two main types:



- Stress incontinence: Occurs with effort or physical exertion, such as exercise or laughing, or heavy lifting.
- Urge incontinence: A frequent, sudden urge to urinate along with involuntary leakage.

At any age, incontinence is not normal. Pelvic floor weakness causes loss of muscular support for the bladder, uterus, and/or rectum and is a common cause of these treatable conditions. Doing pelvic floor or ‘Kegel’ exercises can help improve your pelvic floor function.

Pelvic floor tension or pain in the muscles that support the bladder, uterus, and rectum may be caused by muscle, joint, or nerve problems. Symptoms may include:

- Discomfort when sitting
- Pain in the hips or lower abdominals
- Pain during sexual intercourse
- Constipation
- Dyspareunia or painful penetration of the vagina during sexual activity may be caused by many factors: scar adhesions (from pelvic or hip surgeries); pelvic floor muscle tightness; prolapse (pelvic organs drop-down within the pelvis); and/or decreased vaginal lubrication.
- Vaginismus is an involuntary tightening of the vagina to stop vaginal penetration. This “closing up” may result from fear of sexuality or intimacy; religious beliefs, relationship conflicts, or even life stress. It may be a “protective” response triggered by the body’s memory of painful medical treatments, childbirth, physical, sexual or other trauma or violence. The tightness causes pain, which causes more tightness and creates a vicious cycle.
- Vulvar vestibulitis is pain or sensitivity caused by pressure on the vulvar vestibule (the area around the vaginal opening). Intercourse is painful, even sitting, walking, or wearing jeans or underwear can be irritating. The pain can be described as burning or stabbing and is often accompanied by pain in the abdomen, buttocks, or thighs. Musculoskeletal problems, especially in the hips and back may cause or contribute to these symptoms.
- Dysmenorrhea or painful menstruation is often associated with bloating or pain during intercourse and may be relieved with postural and therapeutic exercises, including pelvic floor exercises.

Pelvic floor problems may also contribute to hip and back pain. Pelvic floor strengthening or relaxation training and manual therapy by a Physical Therapist can help improve your symptoms.

**“RESEARCH SHOWS THAT PELVIC FLOOR EXERCISES ARE THE MOST EFFECTIVE WAY TO REDUCE STRESS INCONTINENCE PROBLEMS IN WOMEN”
-(BO AND HERBERT, 2013)**

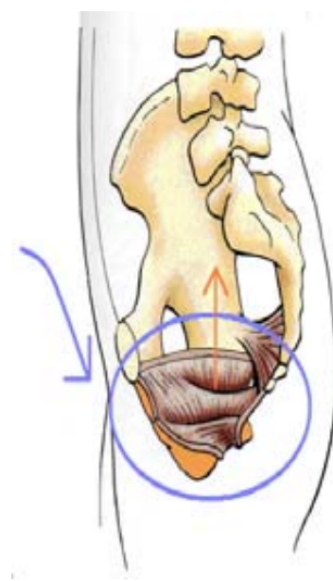
Activating Your Pelvic Floor Muscles (Kegels)

The pelvic floor consists of several layers of muscles that cover the bottom of the pelvic cavity making a “funnel” shape. These muscles support the pelvic organs and help to stop and start the flow of urine, the passage of gas, or a bowel motion, and they enhance sexual pleasure. With regular exercise of these muscles, you can build muscle strength, endurance, and coordination.

Please keep in mind that Kegels are not appropriate for all conditions. Be sure to talk with your doctor or a trained Physical Therapist before attempting these exercises.

How to Do a Kegal:

- Start lying down with your knees bent and supported with pillows. Once you’ve gained awareness and can feel the contractions you may perform the exercises either sitting or standing.
- Place your hand on top of your pubic bone. Tighten and draw in the muscles around the anus and the vagina. You will feel the muscles lift up towards your pubic bone and squeeze the openings shut.
- Think about trying to stop the flow of urine, but do not actually do these when going to the toilet.
- Try to lift UP and IN, (not pushing down and out). Keep your legs, buttocks, and abdominal wall relaxed. Breathe normally.
- You can feel the action of these muscles if you insert a finger in your vagina when you perform a contraction. You should feel a tightening around your finger and the muscular vaginal walls squeezing up and in.



There are two types of exercises, quick contractions and endurance contractions generally held for 3-10 seconds and completed 30-80 times per day. It is also helpful to perform Kegels when lifting, coughing, and sneezing. They can also be performed during sexual activities to enhance enjoyment. And the best thing about Kegels? Once you know how to do them properly, you can do them privately anywhere, and anytime.



So, what are you waiting for? Improved pelvic floor function can change your life. Get started TODAY! Speak with a health care provider about a specific exercise program to fit your needs.