

## Kegel Exercises:

### Strengthening Your Pelvic Muscles for Better Bladder Control

Pelvic floor muscle exercises were originally described by the Obstetrician Dr. Arnold Kegel in 1950. The purpose of these "Kegel" exercises are to strengthen the muscles which surround the urethra, vagina and rectum, thereby enabling you to prevent the accidental loss of urine during physical exertion (i.e. coughing, laughing, sneezing, or exercising), or during an uninhibited bladder contraction (Over Active Bladder- OAB). The lack of urinary control has a significant impact on your overall quality of life and sense of wellbeing.

The group of muscles which form the pelvic floor are named the levators, which support the urethra, vagina and rectum. A specific muscle in this group- the pubococcygeus (or PC muscle), when contracted, will stop the flow of urine. The other muscles of the levator group also contribute to preventing the unwanted passage of gas or stool, and can also be contracted to tighten the vagina during intercourse. These muscle groups are composed to two muscle fiber types: "slow twitch" (70%) for a constant contracted muscle tone, and "fast twitch" (30%), which reflexively contract prior to a sudden stress, such as a cough or sneeze. Because of the two fiber types, different exercises are required to improve their individual performance.

The levator group of muscles can be identified by placing one or two fingers inside the vagina, and attempting to squeeze around them. You should **NOT** use your abdominal, thigh or buttock muscles to help you with this contraction. You should attempt to isolate the muscles for the urethra, vagina and anus. If you can slow or stop your flow of urine while voiding, you are contracting your levator muscles.

### Strong pelvic floor muscles improve your bladder function in two important ways:

1. Decreases Stress associated Urinary Incontinence. During a sudden cough or sneeze, the pelvic floor muscles reflexively contract, thereby supporting the bladder and urethra and preventing the accidental loss of urine. The stronger these muscles become, the more control you will have.
2. Suppresses the sudden urge to urinate, which is a result of an Overactive Bladder. A sudden strong urge to urinate is caused by an involuntary bladder contraction. These contractions may become so strong that it results in an accidental loss of urine. By contracting your pelvic floor muscles with the slow twitch exercises (see below), you can override these spasms, and gain more control. Again, the stronger your levator muscles become, the greater capability you will have to inhibit these urge sensations.
3. As with any exercise program, it will require **6 to 8 weeks** for a noticeable improvement, so don't become discouraged and quit too early.

**Technique for performing Kegel Exercises:**

**Slow Twitch Exercise (10 seconds x 10 contractions x 10 times a day)**

Squeeze your levator muscles, and hold it for a slow count for **5 to 10 seconds**. This should be repeated for a total of **5 to 10 contractions**. (Remember- do **NOT** tighten your abdominal, thigh or buttock muscles to help you with your squeeze). Gradually work your way up to thirty contractions **10 times per day**.

**Fast Twitch Exercise ("Quick flicks") (20 contractions x 4 sets x 4 times a day)**

Quickly contract and relax your levator muscles **20** times, relax for ten to fifteen seconds, and then repeat again for a total of 2 to **4** "sets" of contractions. You may only be able to start out with a total of 40 "quick flicks"; However, over a period of a few weeks, you should be able to increase the number of sets to **4** times a day.

As an extra part of your "workout", every time that you go to the bathroom, remain seated for a few extra moments after you have finished voiding. Perform one of the levator exercises (slow twitch or quick flicks) and alternate each time you go to the restroom.

Remember, this should now be a part of your "normal" voiding routine. It is what you should do every time that you go to the bathroom- for the rest of your life! If you do not continue to exercise these muscles, they will become weak again, and your symptoms will return. Many patients with Stress Urinary Incontinence or Urge incontinence have been able to avoid or significantly delay surgery or medications by diligently performing these exercises- you can do it too!