

## **Keep Dry and Run On! By Meagan Peeters-Gebler, DPT, CSCS, CMTPT**

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Women in their 20s, 30s and 40s find themselves among the fastest growing age-groups of marathon and half-marathon races. Whether taking on distance running is to stay in good health or get back to pre-baby shape, women face unique bladder challenges when running. Your bladder should not slow you down and you should not be afraid to hydrate safely.

It is a common misconception that only older women or women that have had children experience urine leakage. Stress urinary incontinence (SUI) is leaking urine associated with physical activities that increase intra-abdominal pressure. Studies have shown that exercises which demand a lot of physical effort and high impact may cause excessive increase in intra-abdominal pressure, which in turn may overload the pelvic organs, pushing them down and straining the muscles responsible for the support. SUI has been shown to be greatest in women ages 25 to 49.

A study done by Nygaard found that urinary incontinence is common in women who regularly exercised (age 20-65, average age 38.5). Of these active women, 47% noticed urinary incontinence at some point in their lives. Approximately 33% reported leaking urine during exercise (average 3 times per week of 30-60 minute duration). The activity that caused the most urine loss was running in 38% of the women.

When taught how to correctly contract and coordinate the pelvic floor muscles, 70% of women experience reduction or resolution of leaking during jumping and running activities. Female runners should be instructed how to perform contractions of pelvic floor muscles during exercise. It has been studied that about 1/3 of women are not able to contract their pelvic floor muscles correctly. This supports education regarding proper instruction in performing pelvic floor exercises; which can be done by a women's health physical therapist.

Including pelvic floor muscle activation during your core strengthening and running is a great start, but it is a far more complicated undertaking than first appears. The pelvic floor muscles do not exist or operate in isolation. Many female runners have tight hamstrings, tight hip flexors, a tight respiratory diaphragm and weak buttocks muscles. These muscular imbalances put the pelvic floor muscles at a significant mechanical disadvantage. Assessing body mechanics, core stabilization, flexibility and strength is the best approach to ensure coordination of all components and instill continence.

Two additional bladder challenges include urge incontinence and poor hydration. Urge incontinence is involuntary leakage of urine associated with a strong urge to urinate. Triggers such as seeing a port-a-potty, running by a stream or cold temperatures can falsely make us feel we need to urinate. In times when we know that our bladder is not appropriately full this confused message makes us urinate or leak just a little. It is important to learn to recognize what messages from our bladder are appropriate and what messages are derived from a completely

unrelated trigger. Beginning this awareness of triggers, hydration and time between trips to the bathroom can help you determine which urges are accurate messages to empty your bladder and which urges are not.

Hydration is strongly related to urgency and can also even cause abdominal pain when not done correctly. When exercising, one must make sure to replenish fluid loss. Restricting liquids when running in efforts to avoid needing to urinate is completely counterproductive and dangerous. Having less liquid in your bladder can actually increase the concentration of the urine that is being stored. Concentrated (very yellow) urine is more irritating to the delicate bladder lining than more dilute urine (light yellow to clear). It is important to note that certain medications can interfere with the color of your urine and urine color cannot be used alone as an accurate gauge for hydration level.

Hydration is effectively done before, after and during your runs. A general guideline is 3 to 6 ounces of water every 15-20 minutes. For runs greater than 30 minutes or higher intensity, replenishing sodium, electrolytes and nutrition also becomes important. Post-run hydration can usually be accomplished with an additional 8 to 24 ounces of water or sports drink. With good hydration, strong and coordinated pelvic floor muscles and good bladder habits, you should be able to run 2+ hours without needing to squat roadside or change your shorts.

Do not stop running because or your bladder! Female runners greatly benefit from working with a women's health physical therapist to optimize pelvic floor muscle function and treat or prevent incontinence with running.

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