

## Bladder Health

### NORMAL FUNCTION OF THE BLADDER

Emptying the bladder (peeing/voiding) occurs through a complex system of reflexes. As the bladder fills, pressure inside of the bladder increases and signals are sent to your brain to let you know that it is time to pee. Once you sit on the toilet and allow your pelvic floor muscles to relax, a signal is sent to the bladder muscle (the detrusor) that lets it know to begin contracting (to push pee out). In a normal functioning bladder, this should occur **4-8x/day or every 2-5 hours**, except for at night. At night, the production of urine slows down, allowing you to get adequate sleep.

### NORMAL VALUES

- Average bladder capacity is 400-600 mL (14-20 oz.) Some people may think they have a “small bladder”, but it is more likely that over time they have accidentally trained their bladder to think it needs to empty before it is full.
- Normal frequency at night is 0-1 time for people under 65; 1-2 times for those over 65.
- Post void residual (amount remaining in the bladder after you pee) is 30-100 mL. This is important to understand why restricting fluids is not helpful for people with stress urinary incontinence (leaking with coughing, sneezing, jumping, lifting, etc.) and why they may continue to leak even right after they pee.

### PRACTICE GOOD BLADDER HABITS

- Avoid delaying using the bathroom for more than 5 hours.
- Sit on the toilet. DO NOT hover. Hovering prevents your pelvic floor muscles from relaxing and can interfere with the reflex system that keeps your bladder functioning properly.
- DO NOT push out your pee. The bladder is a muscle and does this for you. All you need to do is sit down and relax.
- Take your time. Do not try to rush to get off the toilet before your bladder fully empties.
- Do not go to the bathroom “just in case”. Over time, the bladder may begin to signal a need to urinate before it reaches its full capacity.
- Drink plenty of water. Restricting fluid intake does not help with incontinence! If urine becomes too concentrated, it can irritate the bladder and lead to increased urge or frequency. As a general rule of thumb, try to consume half your body weight in ounces. For example, if you weigh 140 lbs. this would be 70 ounces a day. Pregnant and breastfeeding women need more than this.
- If you wake up often to pee in the middle of the night, try restricting fluid intake 2-3 hours before bedtime.
- If you pee more frequently than what is considered normal, try limiting the consumption of bladder irritating foods and beverages such as caffeine, alcohol, carbonated beverages, processed foods, acidic foods, and artificial sweeteners.

## REFERENCES

- Burgio K, Pearce K, Lucco A. Staying Dry, A Practical Guide to Bladder Control. Johns Hopkins University Press. Baltimore. 1989.
- Carriere B, Markel Feldt C. Storage and Emptying Disorders of the bladder. In: The Pelvic Floor. Stuttgart Germany: Georg Thieme Verlag. 2006.
- Creighton SM, Stanton SL. Caffeine: does it affect your bladder?" *Br J Urol*. 1990; 66:613-614.
- Gleason JL, Richter HE, Redeen DT, et al. Caffeine and urinary incontinence in US women. *Int Urogynecol J*. 2013 Feb;24(2):295-302.
- Griffiths DJ, Mccracken PN, Harrison GM, Gormley EA. Relationship of fluid intake to voluntary micturition and urinary incontinence in geriatric patients. *Neurology and Urodynamics*. 1993;12(1):1-7.
- Meinders AJ, Meinders AE. How much water do we really need to drink? *Ned Tijdschr Geneesk* (Dutch). 2010; 154:A1757.
- Milne JL. Behavioral therapies for overactive bladder: making sense of the evidence. *J Wound Ostomy Continence Nurs*. 2008; 35(1): 93-101.
- Newman DK. Lifestyle Interventions. In: Bourcier AP, McGuire EJ, Abrams P, Eds, *Pelvic Floor Disorders*. Philadelphia: Elsevier Saunders; 2004;269–276.
- Petterborg, LJ. Clinical anatomy of the pelvis and perineum. In: Irion J, Irion M, Eds. *Women's Health in Physical Therapy*. Lippincott Williams and Wilkins. 2010; 111.
- Siracusa C, Mize L, Giglio S, Austin M, Miracle Em Strauhal MJ, Ziemba K. Pelvic Health Physical Therapy Level 1 Lecture Manual. Academy of Pelvic Health Physical Therapy of the American Physical Therapy Association. 2015.
- Tomlinson BU, Dougherty MC, Perdergast JF, et al. Dietary caffeine, fluid intake and urinary incontinence in older rural women. *Int Urogynecol J Pelvic Floor Dysfunct*. 1999; 10:22-28.
- Wyman JF, Burgio KL, Newman DK. Practical aspects of lifestyle modifications and behavioral interventions in the treatment of overactive bladder and urgency urinary incontinence. *Int J Clin Pract*. 2009. Aug 63(8):1177-1191.