

The Role of Hormones in **Genitourinary Health**



THE ROLE OF HORMONES IN VAGINAL & URINARY HEALTH

Hormones play a key role in maintaining the health of the vagina, vulva, bladder, and urinary tract. Estrogen and androgens such as testosterone both contribute to tissue strength, lubrication, and sexual function.

HOW ESTROGEN SUPPORTS A HEALTHY VAGINAL MICROBIOME

Estrogen stimulates the production of glycogen in the vaginal lining. This glycogen acts as fuel for healthy bacteria that live in the genitourinary tract.

These bacteria produce lactic acid, which helps maintain a low (acidic) vaginal pH. This acidic environment supports balance and helps protect against irritation and infection.

WHAT HAPPENS WHEN ESTROGEN LEVELS DECLINE

As estrogen levels fall (during perimenopause, menopause, or other hormone changes):

- Glycogen levels decrease
- Healthy bacteria reduce
- Lactic acid production drops
- Vaginal pH becomes less acidic

This shift can contribute to:

- Vaginal dryness
- Irritation and discomfort
- Increased risk of urinary tract infections (UTIs)



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EFFECTS ON VAGINAL TISSUE HEALTH

Estrogen is essential for maintaining healthy vaginal tissue. It supports:

- Collagen and elastin production
- Tissue thickness and elasticity
- Natural lubrication

When estrogen is low, tissues may become:

- Thinner
- Drier
- More fragile and prone to micro-tears

This can contribute to discomfort, especially during sexual activity or physical activity.

EFFECTS ON BLADDER AND URINARY FUNCTION

Estrogen also plays an important role in bladder health. It helps maintain:

- Bladder lining thickness
- Blood supply to tissues
- Sensitivity of bladder receptors

When estrogen declines, it can contribute to:

- Urinary urgency
- Increased frequency of urination
- Bladder discomfort
- Higher risk of recurrent UTIs



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PELVIC FLOOR SUPPORT AND PROLAPSE RISK

Estrogen supports connective tissue integrity and neuromuscular function in the pelvic floor.

With reduced estrogen, pelvic support structures may weaken, which can increase the risk of:

- Pelvic organ prolapse
- Urinary leakage
- Reduced pelvic floor resilience

THE ROLE OF ANDROGENS (INCLUDING TESTOSTERONE)

The genitourinary system is also influenced by androgens such as testosterone. Testosterone supports:

- Vaginal and vulvar tissue health
- Blood flow to genital tissues
- Nerve density and function
- Sexual response and arousal

Androgen receptors are particularly concentrated around the clitoris, vaginal opening, and lower vagina, highlighting their role in sexual function.

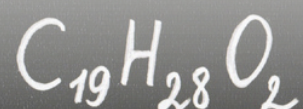
SUPPORTING SEXUAL FUNCTION AND PLEASURE

Testosterone contributes to:

- Increased nerve sensitivity
- Enhanced arousal response
- Improved blood flow
- Support for lubrication and tissue integrity



testosterone



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These effects play an important role in sexual wellbeing and comfort. If you are experiencing symptoms such as dryness, discomfort, urinary changes or pain with sex, the first step is an open and honest discussion with a women's healthcare provider.

Simple treatment with vaginal estrogens, along with appropriate lubricants, moisturisers and adjustments to your personal care routine can make a life-changing difference to comfort and function.

For more information about how menopause and perimenopause might impact you, take [WellFemme's free online Menopausal Health Assessment.](#)

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