

101 Healthy Prostate

Is there a male menopause? Research suggests there might be -- *Andropause* – caused by changes in male hormones (androgens). One of these changes involves a small, walnut-sized male gland called the prostate which can affect libido, sexual performance and even the ability to urinate. **The good news is that knowledge is power -- you can positively influence how and what happens by lifestyle choices and nutrition.**

The prostate gland is located at the base of the outer bladder which surrounds the urethra, a tube that carries urine from the bladder through the penis for elimination. The walls of the prostate are elastic type contractile tissue that also helps push seminal fluid out the urethra. The prostate produces about 25-30% of seminal fluid, containing prostate specific antigen, proteolytic enzymes, fibrinolysin, acid phosphatase, zinc and citric acid. This fluid helps propel and protect sperm in an acidic vaginal environment.

The prostate depends on hormones, mainly testosterone, to work properly. Testosterone is produced by the testicles and small amounts by the adrenals. Age changes hormone levels.

An estimated 50% of men have prostate problems in their lifetime; 95% at age 80 or older. Around age 40-45, the prostate gland starts to enlarge and puts pressure inward on the urethra, restricting the flow of fluids. Symptoms are frequent trips to the bathroom, hesitancy, and night time waking to void. Men may have trouble getting or maintaining an erection. The typical man may wait until symptoms severely limit function. This is unfortunate if the condition is due to benign (non-cancerous) prostatic hypertrophy or hyperplasia (BPH) BPH is treatable.

Caution: Do not try to self diagnose. A prostate enlargement may be due to prostatitis, an inflammatory condition which may be caused by infection or cancer, both of which require immediate medical attention.

BPH: The Cause

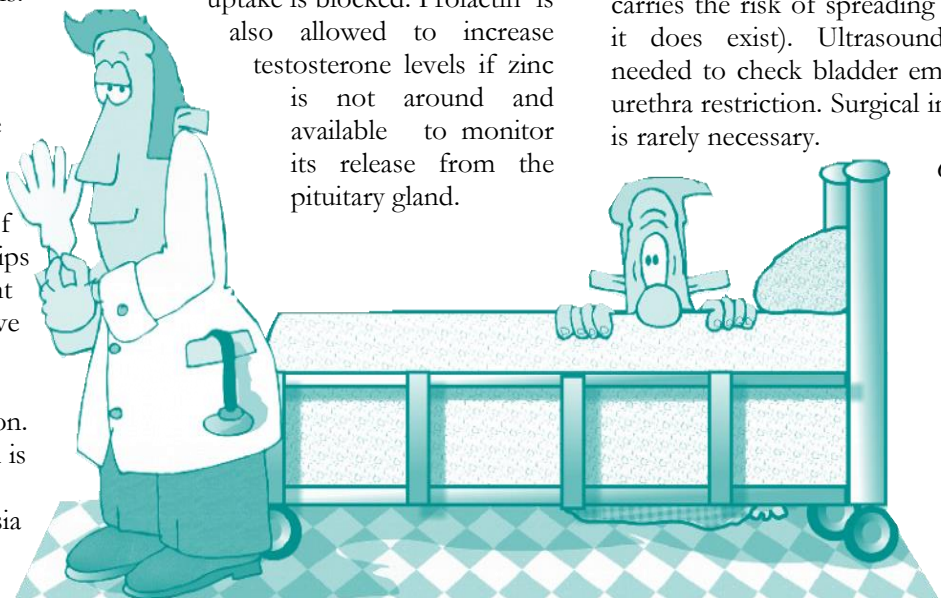
Age and a disruption in the balance of male to female hormones (testosterone to estrogen, prolactin and FSH) are suspected in BPH. As men age, their testosterone levels will decrease but amounts in the gland itself increase. The enzyme 5-alpha-reductase (5-AR) converts the excess testosterone to dihydrotestosterone (DHT). If there is any unregulated estrogen, it will hinder the removal of DHT. Zinc helps control 5-AR but when estrogen is dominant, zinc uptake is blocked. Prolactin is also allowed to increase testosterone levels if zinc is not around and available to monitor its release from the pituitary gland.

The enzyme aromatase may also alter the estrogen pathways to play a part in stimulating cells to proliferate, which enlarges the size of the prostate, too.

Prostate Testing

If you have prostate issues, diagnostic testing is simple and noninvasive via a blood test and manual exam. As only small amounts of prostate specific antigen (PSA) are found in the blood, a test level of 4 ng/ml or lower is considered normal. On manual exam, the doctor checks glandular size and how firm or soft the gland feels. PSA testing is recommended at age 45-50 unless there is a known family history of prostate cancer. A biopsy may be done if cancer is suspected (note: some doctors may feel this carries the risk of spreading a cancer if it does exist). Ultrasound may be needed to check bladder emptying and urethra restriction. Surgical intervention is rarely necessary.

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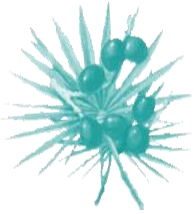


Healthy Prostate 101

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Treatment

Proscar® is a drug that blocks 5-AR. Lower DHT levels cause the prostate to shrink but the potential side effects include impotency, loss of libido and breast enlargement, not exactly what a normal man wants. Of note, the drug may also lower PSA results up to 41%, which can interfere with using PSA as a cancer screening tool. Luckily, only about 10% of men require drug therapy. Natural therapies with supportive herbs and nutrients have a great track record of reducing symptoms without affecting sexual function.



Saw Palmetto. In multiple studies involving more than 7000 men with BPH, saw palmetto (*Serenoa repens*) improved BPH symptoms in 90% of men in as little as 4-6 weeks. It has a 200 year safety history and is the treatment of choice in Germany (90%) and Italy (50%). Active plant sterols are

anti-inflammatory, believed to reduce enlargement by inhibiting 5-AR, and blocking DHT binding to reduce estrogen activity. Most impressive, in a comparative study by the makers of Proscar®, this herb performed better in reducing symptoms and increasing urine flow in a shorter period of time (3 months compared to 9 months for Proscar®). And sexual function was left intact with saw palmetto. The successful research dose was 320 mg daily at 85-95% standardization of fatty acids (sterols).

Zinc. The prostate contains 10 times more zinc than any other gland so no wonder that this essential trace element is an important nutrient for prostate health. As previously mentioned and demonstrated in multiple studies, zinc helps regulate hormonal balance by controlling estrogen. Its antioxidant properties also help fight bacterial infections. A suggested total daily dose is 30 mg.

B6. B₆ (pyridoxine) is a water soluble vitamin and coenzyme to more than 100 enzymes, including protein synthesis and indirectly aids hormone regulation. By enhancing the absorption of zinc, B₆ support zinc's role in 5-AR and prolactin control. No suggested dose is given but this B vitamin is included in most multi-vitamin formulas.



Stinging Nettle. The root extract (*Urtica dioica*, 5:1 concentration), is often combined with saw palmetto to improve BPH symptoms. It has also been used safely and successfully by itself in Germany for decades, with 80% of men finding relief. An 18-month double-blind, crossover, placebo-controlled study of 600 men confirmed this statistic of efficacy.

Part of stinging nettle's bioactivity may involve inhibiting the two enzymes 5-AR and aromatase. This herb also helps reduce swelling. A suggested dose is 150-300 mg daily.

Pumpkin Seed Oil. The nutrients in pumpkin seeds support prostate health as a rich source of vitamins A, B and E, omega-3 and omega-6, zinc, selenium, carbohydrates and phytosterols. Another isolated component is delta-7 sterine, which competes with DHT for receptors in the prostate. In one clinical trial of 2000 men suffering from BPH, significant improvement in urinary function was noted. Research doses were 600-1000 mg daily.



Lycopene. A carotenoid found abundantly in tomatoes, lycopene has already gained fame for prostate health as men are encouraged to eat lots of tomato sauce. Besides being taken for BPH, antioxidant lycopene may retard cell progression to cancer by reducing oxidative damage to prostate cell DNA. A suggested dose is 10-30 mg daily.

Lifestyle

Start testing your PSA at age 40 to obtain a baseline (normal level to monitor changes and be "prostate proactive". Eat a diet high in fiber to excrete estrogen. Get enough amino acid protein to help inhibit 5-AR. Vitamin D (800-2000 IU), flaxseeds with lignans and omega-3 oils support hormonal balance. Take a daily multiple containing zinc (15 mg), vitamin E (400- 800 IU mixed) and selenium (200-400 mcg) as men with lower levels have increased risk of cancer. If you smoke, stop. There's a high correlation between smoking and cancer. Lower your cholesterol if elevated. Some cancer cells can migrate and grow from certain cholesterol components per research on cancer pathways.

Start testing your PSA at age 40 to obtain a baseline (normal) level. That way you'll note any changes earlier enough to be "prostate proactive".

Finally, given the evidence, consider taking a product specific to the prostate such as Prosta-Care Complex™. It may be just what your prostate needs to be well and stay well, support prostate health, and keep your prostate functioning.

Medical Resources

1. American Urological Association
2. National Kidney & Urologic Diseases Information Clearinghouse
3. www.cancer.gov (Fact Sheet)

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