Men's Health Concerns

SUPPORT YOUR PROSTATE AND SEXUAL PERFORMANCE

by Frank Sabatino, DC, PhD

here are several health issues unique to men including prostate enlargement, prostate cancer, and erectile dysfunction that strike fear, frustration, shame, and relationship distress in a large portion of the male population. Unfortunately, while billions of dollars are spent on expensive medical and surgical treatments and on a unique supplement industry that has expanded beyond comprehension specifically to treat these problems, the basic nutrition and lifestyle choices that can truly provide hope for the suffering male population are largely overlooked.

BPH and Prostate Cancer

The prostate is a walnut-sized gland under the bladder that produces seminal fluid, which nourishes and transports sperm in the process of ejaculation during sex. It also surrounds and houses the top portion of the urethra, the tube that drains urine from the bladder. Diets high in animal products; saturated, trans, and oxidized fats and oils; refined sugar; and salt provide acidosis, irritation, and a variety of additional excesses including glycated proteins (AGEs), heme iron, oxidized cholesterol, and arachidonic acid that increase chronic inflammation and damage the glands and organs of the body.

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As the prostate is inflamed and potentially damaged over time, its cells can multiply and increase the size of the prostate. This enlargement is called benign prostatic hypertrophy (BPH) and causes a swelling of the prostate that squeezes the urethra and blocks the flow of urine. As a result, typical symptoms of an enlarged prostate include incontinence, sudden urges to urinate, straining to urinate, and the need to urinate many times during the night (nocturia), which can create the debilitating problems of sleep deprivation.

If the cells of the prostate continue to be chronically inflamed and damaged over time, they can develop into prostate cancer, which is the second leading cause of cancer death in American men (behind lung cancer). Approximately 1 in 8 men, at an average age of 66, are diagnosed annually with prostate cancer, accounting for 270,000 new cases in the last year alone. Monitoring of the progression of cellular change from the benign to the cancerous state is often done with blood tests for a particular protein in prostate cells called prostate specific antigen (PSA). It is important to note that as PSA increases, the chance and risk of having prostate cancer goes up, but there is no set cutoff point or number that can tell for sure if you have cancer. Follow-up procedures including scans and biopsies are necessary to make a clear distinction and diagnosis. If cancer is present, a grading system consisting of the Gleason score (6-10) and Gleason group rating system

(1-5) is used to evaluate how much the cancer has deviated from the appearance of normal cells and how likely it is for the cancer to grow and spread slowly or quickly. Monitoring of active prostate cancer is important because advanced cancers of the prostate can spread (metastasize) to bones in the spine and pelvis.

Fortunately, while prostate cancer is not something to be taken lightly, treatment programs have been remarkably successful. More than three million men in the U.S. who have been diagnosed with prostate cancer at some point are still alive today.

It is important to realize that nutrition and lifestyle factors have a huge impact on prevention and reversal of prostate problems. Diets high in protein and saturated fat derived from milk, fish, poultry, and eggs promote insulin resistance that eventually increases both insulin and body fat. Such diets also contain an excessive concentration of insulin-like growth factor 1 (IGF-1), which has been associated with a higher risk of prostate, breast, and colorectal cancer. Milk is the biggest culprit and greatest source of this growth factor; even small increases of daily cow's-milk consumption cause dangerous dose-related increases in IGF-1.1 This alone emphatically reinforces that these foods are not fit for human consumption and that milk and dairy products have no place in the diets of children or adults-especially in men trying to prevent or reverse prostate cancer.

Water-only fasting provides a unique opportunity to remedy this situation. The detoxification and autophagy of water-only fasting significantly reduces inflammation and the exaggerated growth and spread of cells while significantly reducing IGF-1. In addition, water-only fasting also increases IGF-binding protein 1, which binds IGF-1, making the free, active form less available and blocking its destructive action.

Increased body fat and weight gain are major factors for increasing inflammation and cancer risk. Visceral fat releases a unique group of chemicals that promote inflammation (adipokines), including adiponectin, resistin, and TNF-alpha, that promote dangerous chronic inflammation and potential cellular damage of the prostate.^{2,3} Eating a low-calorie-dense,

high-nutrient-dense, plant-exclusive diet without added salt, oil, and sugar is the most efficient and healthy way to lower body fat and weight gain and reduce the potential hypertrophy and risk of prostate cancer. Three major studies from 1993 to the present of over 160,000 people in the U.S., U.K., and Taiwan (Adventist Health Study-2, EPIC-Oxford, and Tzu Chi Health Study, respectively) have shown that plant-exclusive diets significantly decrease cancer risk while reducing inflammation by as much as 50% compared to standard animal-based refined diets.4.5 A diet loaded with a diversity of vitamins and minerals, antioxidants, essential fatty acids (from flax, chia, and hemp seeds), and polyphenols and other phytonutrients from a diversity of raw and cooked greens, cruciferous veggies, berries (especially blueberries), mushrooms, nuts, and other seeds is ideal for prostate health. Preliminary studies presented at the March 2021 meeting of the Endocrine Society have suggested that the liberal use of white button mushrooms can decrease the production of PSA and slow down the progression of prostate cancer.6

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Nutrition and lifestyle factors also have a direct epigenetic effect on genes that affect prostate cancer. Cancer gene expression was evaluated in the biopsies of men with prostate cancer who participated in a threemonth lifestyle program including low-fat, whole-plant foods (<10% fat), walking 30 minutes six times per week, routine yoga, and psychosocial support group counseling. Remarkably, this lifestyle support program suppressed 453 genes that promote prostate cancer.⁷ In a one-year follow-up of men who maintained these constructive lifestyle choices, there was an additional

decrease in PSA levels and cancer growth was eight times less than controls.

Testosterone and Cancer

As men age there is a natural and protective decline in the reproductive hormone testosterone (T). Reproductive hormones like estrogen and testosterone are growth hormones that peak during the time of puberty, growth, and development. Even though it can promote decreased body fat, higher energy, and increased muscle mass at any age, testosterone is less necessary when men are no longer actively growing. So, at that stage, the body naturally lowers T to prevent the abnormal growth of cells and a potential increase in the risk of cancer growth. Therefore, raising T levels, as is often done in typical medical anti-aging programs, may not be in your best interest. For men who have low (but normal) levels of testosterone, higher T levels may enlarge the prostate. And while there is no concrete evidence that testosterone causes prostate cancer directly, there are data that suggest it may provoke the growth and spread of already existing cancer.

Erectile Dysfunction and Sexual Performance

Shockingly, data from the Massachusetts Male Aging Study has shown that the incidence of erectile dysfunction (ED) is 40% in 40-year-old men and 70% in 70-yearolds.⁸ The frustration, shame, and distress associated with this remarkable loss of function has driven millions of men to buy hope wherever they can find it. This has spawned an array of drug, hormonal, and surgical interventions with potential adverse effects in addition to a plethora of greedy entrepreneurs touting expensive supplements with questionable, if any, benefits.

It is an unconscionable, sad commentary on the poor eating and lifestyle habits of our population that so many men, at such early ages (and frankly, any age), have lost the ability to experience sexual pleasure and the quality of life that it affords. And I can tell you from personal and professional experience that eating plant-exclusive, along with consistent exercise and stressresponse management, can restore and enhance remarkable sexual performance even in your sixties, seventies, and eighties without drugs like Cialis and Viagra. Three major studies from 1993 to the present of over 160,000 people in the U.S., U.K., and Taiwan (Adventist Health Study-2, EPIC-Oxford, and Tzu Chi Health Study, respectively) have shown that plant-exclusive diets significantly decrease cancer risk while reducing inflammation by as much as 50%.

Creating and maintaining an erection involves several neurovascular, hormonal, and psychological factors. The neurovascular component is the most important part of the ED story. All romance starts in the brain. Sexual arousal activates cells in the brain that signal nerve cells in your pelvis and genitals. Ultimately, nitric oxide is released from nerves and cells of the penis, activating a specific enzyme to relax and dilate the smooth muscle of blood vessels (arteries) that engorge the penis with blood while occluding the veins of the penis that take blood away. As a result, a firm erection that is necessary for sex can be created and maintained.

This strongly suggests that nutrition and lifestyle factors affecting blood and oxygen supply throughout the body can affect the function of the penis. Low-fiber diets that are high in animal fat, protein, and processed foods and low in whole plant foods provide excesses of oxidized cholesterol, trans/oxidized fat, heme iron, TMAO, AGEs, and salt. These increase inflammation, damage, and plaque blockage of blood vessels that reduce blood and oxygen to all the vital organs of body, including the heart, brain, and penis. Consistent with this idea, recognized risk factors for ED include heart disease, high blood pressure, atherosclerosis, diabetes, and excess circulating fat in the bloodstream (hyperlipidemia). Approximately 50% of men with coronary artery disease report significant ED.⁹ A high-fiber, low-fat, antiinflammatory, plantexclusive diet loaded with antioxidants and phytonutrients has been shown to reverse vascular blockage and is ideal for enhanced sexual performance at any age, even in your fifties and beyond.

There is also a strong correlation between smoking and alcohol consumption and ED. The incidence of ED increases significantly as the quantity and frequency of smoking increases, highlighting the impact of nicotine on impaired circulation.⁸ And in men that stop smoking, within one year there is a significant 25% increase in the quality and frequency of erections. While both high blood pressure and depression are significant risk factors for ED, medications typically used to treat these problems can also reduce libido and increase ED. In spite of the significant increase in medical testosterone replacement therapy and testosterone-enhancing supplements to increase energy, libido, and sexual performance for men of all ages, testosterone plays a controversial role in the outcome of ED.

Chronic stress, sleep deprivation/fatigue, and psycho-emotional factors have a huge impact on arousal, sexual intimacy, and performance with your partners. These factors create a relentless activation of your fight-or-flight response that can decrease libido and sexual performance. Chronically triggering the fight-or-flight response with sustained worries, fears, and anxieties exaggerates the release of the hormone cortisol and the neurotransmitter norepinephrine, which can increase abdominal and visceral belly fat, cause high blood pressure, and constrict blood vessels that decrease the vital blood and oxygen supply to the penis, promoting ED. Mindfully addressing the financial and relationship issues of your life and participating in stressresponse management techniques (including meditation, slow/deep breathing, yoga, tai chi, etc.) can be valuable in reducing tension, increasing oxygen and blood supplies, and dissolving your overactive, exhausting fightor-flight response to dramatically improve sexual performance.

Testosterone and Erectile Dysfunction

While the neurovascular function of the body has the greatest impact on ED and sexual performance, the impact of sex hormones and their function in the communication between the brain and your genitals are of utmost importance. However, in spite of the significant increase in medical testosterone replacement therapy and testosteroneenhancing supplements to increase energy, libido, and sexual performance for men of all ages, testosterone plays a controversial role in the outcome of ED.

Luteinizing hormone from the pituitary gland in the brain stimulates the testicles to produce testosterone. Men typically experience a decrease in testosterone with age that appears to coincide with the time frame when ED is most prevalent. This increase in ED also coincides with the increase in the aging male of a binding hormone that basically locks testosterone up and prevents its action. However, while abnormally low T levels can compromise libido, arousal, and performance, the decline in T levels that most men experience with age is not low enough to induce ED. And for men with low-normal T, raising their T levels does not have any major impact on erectile function.

When men with abnormally low and with normal testosterone were injected with super-high doses of testosterone, only the abnormally low-T group showed an increase in libido, potency, energy, and sexual function.^{10,11} Also, when castrated men are treated with testosterone, there is a recovery of sexual function.¹² So there is some rationale for treating men with an abnormal deficiency of testosterone, but for the majority of men with low-normal or normal levels of T, there is no real benefit of hormone enhancement. In fact, there may be significant risk. A major concern with all treatment approaches that provide outside sources of testosterone relates to important negative feedback inhibition between the body and brain: long-term treatment with testosterone replacement or T-enhancing supplements can eventually suppress the body's natural production of testosterone from the testicles and can even result in atrophy of the testes. And as discussed previously, testosterone treatment can increase the growth and spread of already existing prostate cancer.

All men must realize that regardless of their age and the prevalence of prostate problems and erectile dysfunction in our culture, hope and health are within their reach.

Obesity is a major risk factor for ED that may relate to its important impact on the metabolism of testosterone. Fat cells have two enzymes: aromatase that converts T into estrogen and a specific reductase enzyme that inactivates the most powerful active form of T (DHT).13,14 These fat cellinduced alterations of testosterone may abnormally lower the levels circulating in the bloodstream and diminish erectile function and sexual performance. This is supported by the strong correlation between increasing body mass index (a ratio of height and weight used to define obesity) and a decreased concentration of testosterone in the blood.15

Anecdotally, my personal and professional experience has shown that men beyond the age of sixty who maintain lower body weight and fat with a diverse, low-caloriedense, plant-exclusive diet have less ED and extraordinary sexual performance, suggesting that their testosterone levels are being maintained in a normal range. Routine exercise programs including endurance activities (walking, running, biking, etc.) and resistance weight training can improve circulation, promote fat loss, and even stimulate increased levels of testosterone that can also reduce ED and enhance sexual performance.

All men must realize that regardless of their age and the prevalence of prostate problems and erectile dysfunction in our culture, hope and health are within their reach. Fundamentally, these problems are rooted in food and lifestyle choices that provoke systemic inflammation, neurovascular damage/disruption, and a compromise of specific sex hormones. However, by eliminating alcohol, caffeine, and nicotine and embracing a diverse, low-fat, plant-exclusive diet without added salt, oil, and sugar while cultivating stressresponse management techniques and consistent activity, you can promote the integration, balance, and healthy function of your nervous, circulatory, and hormonal systems that dramatically improve prostate health and sexual performance at any age.

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Dr. Sabatino is the research director for the global Complementary Medical Association in the UK and is a fasting research consultant for the TrueNorth Health Foundation. Dr. Sabatino is especially excited about his new role as the Director of Health Education for the NHA and happy to have the opportunity to promote the ever-growing evidence base for the science of hygiene and hygienic living.