Men Have Hormones Too

By Dr. Sean A. Castellucci, Urology Partners

aintaining adequate hormone levels is vital to keeping the male body strong, muscular, youthful and vibrant. When hormone levels drop, the aging process escalates and men may experience a decrease in strength and stamina. Hormones affect the male body and there is a lot a person can do to maintain proper levels.

Testosterone is one of the most important hormones in a man's body. It helps the body regulate cholesterol, maintain a strong immune system, improve mood, and protect the brain from cognitive disorders. It is no secret that as men get older, testosterone levels decrease. From about age 40, testosterone levels decrease about 0.3% - 1% per year. Younger men under stress from school, jobs and family often have suppressed testosterone levels, as well. Research has shown that men with CAD had significantly lower total testosterone, free testosterone, and bioavailable testosterone. Low testosterone levels result in reduced muscle mass, strength, sexual desire and mental capacity, while also increasing the risk of obesity, brittle bones and heart attack.

Sex Hormone Binding Globulin (SHBG) is a protein made mostly by the liver, but it is also made by the testes and brain. SHBG serves as a transport center to move testosterone and estrogen. Therefore, it regulates hormone levels throughout the body.

In men, low SHBG and low total testosterone levels are associated with an increased risk of metabolic syndrome, which is a name for a group of risk factors that occur together and increase the risk for coronary artery disease, stroke and type 2 diabetes. Low levels of SHBG and testosterone are associated with severe sleep apnea. SHBG can also be a useful marker in predicting osteoporosis and bone disease.



Dehydroepiandrosterone (DHEA) is an important endogenous steroid hormone. It is the most abundant circulating steroid in humans, where it is produced predominantly in the adrenal glands, the gonads and the brain. DHEA has a variety of potential biological effects in its own right. It helps protect against heart disease, osteoporosis, diabetes, cancer, memory loss, lupus and rheumatoid arthritis. It can increase and enhance energy levels, libido, memory and immunity, while protecting against the effects of stress. It also aids in weight loss and healing of burns, and helps to prevent wrinkles and dry eyes.

DHEA supports natural testosterone production because it is a precursor to testosterone, which the body can convert into testosterone through several steps. Your body produces DHEA naturally, but it declines with age. Supplemental DHEA can often help bring low testosterone levels into the normal range.

Cortisol aids the body when responding to and coping with stress, trauma, and infection. It also helps increase energy and metabolism, and is used to regulate blood pressure. The inability of the adrenal glands to produce adequate amounts of stress hormones in response to stress ultimately results in decreased cortisol production and, therefore, decreased ability to cope with the above. It will also ultimately result in the body's inability to defend against pathogens.

All of our hormones are designed to work together. If one is altered, or deficient, it will affect the actions of all of the other hormones. Unfortunately, there is no "one size fits all" approach to maintaining proper hormone levels. Internally, our bodies are all made equal, but the way in which we have cared for them and the things we have put in them are all different; no two men have the exact same hormone makeup. This is why, it is very important to have customized hormone replacement therapy designed to help each patient on an individual basis.

For more information on the importance of maintaining proper hormone levels or to have your levels tested please contact 941-792-0340 today. The doctors and staff of Urology Partners can help ensure your body is functioning at optimal levels, helping you be the best man that you can be!



Dr. Sean A. Castellucci



Dr. Sean Castellucci earned his medical degree from the Philadelphia College of Osteopathic Medicine in Philadelphia, Pennsylvania. He completed his clinical internship at Mercy Catholic Medical Center in General Surgery followed by a general surgery and urologic surgical residency at Albert Einstein Medical Center, and Hahnemann University Hospital, where he was chief resident. Dr. Castellucci has also completed a clinical externship at Memorial Sloane Kettering Oncology Center during his residency. His most recent position was at the Urology Center of Columbus in Columbus, Georgia where he served as Medical Director.

Dr. Castellucci is interested in all aspects of Urology services and research. His specialties are in: Erectile Dysfunction, Bladder Cancer, Prostate Cancer, Kidney Stones, Female Pelvic Organ Prolapse Repair, Kidney Cancer, Low Testosterone, Urinary Incontinence, and minimally invasive therapies including laparoscopic surgery and the utilization of DaVinci Robotics.

Dr. Castellucci is very involved in research which has earned him both national and international recognition, including many publications in peer reviewed journals. His investigations focused on new innovations in urologic, oncologic surgery including the first single port access laparoscopic adrenalectomy performed; as well as research in other fields of urology including prostate cancer.

He has presented at numerous, internationally recognized meetings including the American Urologic Association, the European Association of Urology, and the World Congress of Endourology. His research

has also earned him various distinguishing awards including the Robert C. Erwin literary award, as well as the Leonard Finkelstein award in Urology.

Dr. Castellucci's diverse professional interests and responsibilities have enhanced and complimented his role as both husband and father. He is happily married to his wife Dania and has two children Madison and Hailey.



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