

## Yes! Men Can Be Estrogen Dominant

Like women, men also suffer health concerns associated with estrogen dominance. Much like uterine and breast tissue, the prostate is subject to the proliferative effects of estrogen and prolonged states of estrogen dominance can increase a man's risk of prostate cancer. Just as progesterone promotes differentiation and stimulates apoptosis in endometrial and breast cells, it works to balance the proliferation of prostate cells. In men the primary source of estradiol is in peripheral conversion of testosterone via the aromatase enzyme. As men age and their body composition shifts, they are prone to climbing estrogen levels and as a result, the incidence of prostate related disease increases with age.

Just as it is in your female patients, estrogen dominance is assessed by calculating the ratio between estradiol and progesterone. According to the research of the late Dr. John Lee, the optimal Pg/E2 ratio for men is approximately 200-300. In his booklet titled 'Hormone Balance For Men: What Your Doctor May Not Tell You About Prostate health and Natural Hormone Supplementation' Dr. Lee stated that "Optimal protection against estradiol-induced cancer occurs when the saliva progesterone level is 200-300 times that of saliva estradiol level." One of the common questions that comes up for many of our providers is why the Pg/E2 ratio is low, when the patient's estradiol and progesterone levels are within the given reference ranges. To answer to this inquiry we must first cover the way in which laboratory reference ranges are established: by measuring a population of people, finding the mean value, and then extending two standard deviations above and below that mean thereby eliminating the outliers. This is the standard in establishing reference ranges in laboratories of all sizes and types from the large hospital serum labs to the less-large specialized saliva labs and does not take into account any clinical data or assessment of optimal levels.

One of the principles of functional medicine is looking at the patient, their symptoms and lab values with the goal of achieving optimal health rather than avoidance of frank disease. In Dr. Lee's clinical research, it was in the ratio of 200-300 that he found men to have the most protection to their prostates. This value was established with clinical data, and therefore doesn't always correlate directly to the reference ranges established with a general population. There may be several reasons for this including the fact that the populaces from which we pull data aren't typically in an optimal state of health. Another contributing factor is the influence of xenoestrogens and hormones found in the diet. We mentioned last week that these compounds differ molecularly from the estradiol we measure with our assay, however they do contribute to an overall estrogen dominant state and therefore would be taken into account in a clinical picture.

Progesterone has many benefits in the male body beyond prostate protection including defense against cardiovascular disease and many neurodegenerative diseases such as Alzheimer's.

### References

Lee, MD. Hormone Balance For Men; What Your Doctor May Not Tell You About Prostate Health and Natural Hormone Supplementation. 2003