



*MALE SEXUAL DECLINE
& DIETARY SUPPLEMENT
INTERVENTION*
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As men age, there is often a decline in libido and sexual function. This decline frequently interferes in intimacy within romantic relationships, and has emotional ramifications as well as erodes self-confidence and quality of life.

This decline has set the groundwork for the popularity of nitric oxide enhancing drugs such as Viagra® and Cialis®, and consumer awareness of prescription testosterone availability, courtesy of the low ‘T’ commercials. This article will discuss the etiology of sexual decline in men and the potential benefits offered by non-prescription alternatives to the aforementioned drugs.

Sexual Decline

Healthy sexual function is a multi-factoral process requiring, (at least), healthy circulation, healthy hormone production, adequate energy levels and proper mental/emotional well-being. Unfortunately, aging and unhealthy lifestyle practices can negatively influence one or more of these processes.

Consider the well-established effect of poor diet and lack of exercise on circulation. In addition to the negative ramifications on cardiovascular and cerebrovascular health, poor circulation may also translate into an inadequate blood supply to the genital region making it difficult to achieve and maintain an erection. Furthermore, inadequate endogenous production of the biochemical, nitric oxide (NO), can exacerbate this problem. Adequate NO is necessary for vasodilatation of blood vessels and, consequently, erectile function.

Reduced production of the hormones testosterone (T) and dehydroepiandrosterone (DHEA) are common, and are also implicated in reduced libido and sexual function. Starting at about age 30, men experience a decrease in T levels of about 1% per year. Although this is not significant when a man is in his 30s, by the time he reaches his late 40s or early 50s, the level of T may be reduced enough that he may feel a profound difference. This is particularly true if the man is carrying a significant amount of body fat, the site at which T can be converted to estradiol, (one of the estrogen hormones), through the process of aromatization, (i.e., the transformation of T to estradiol via aromatase enzymes found in fat cells). Likewise, T can be converted into dehydrotestosterone (DHT) via the enzyme, 5-alpha reductase. Both of these conversions result in lowered T levels.

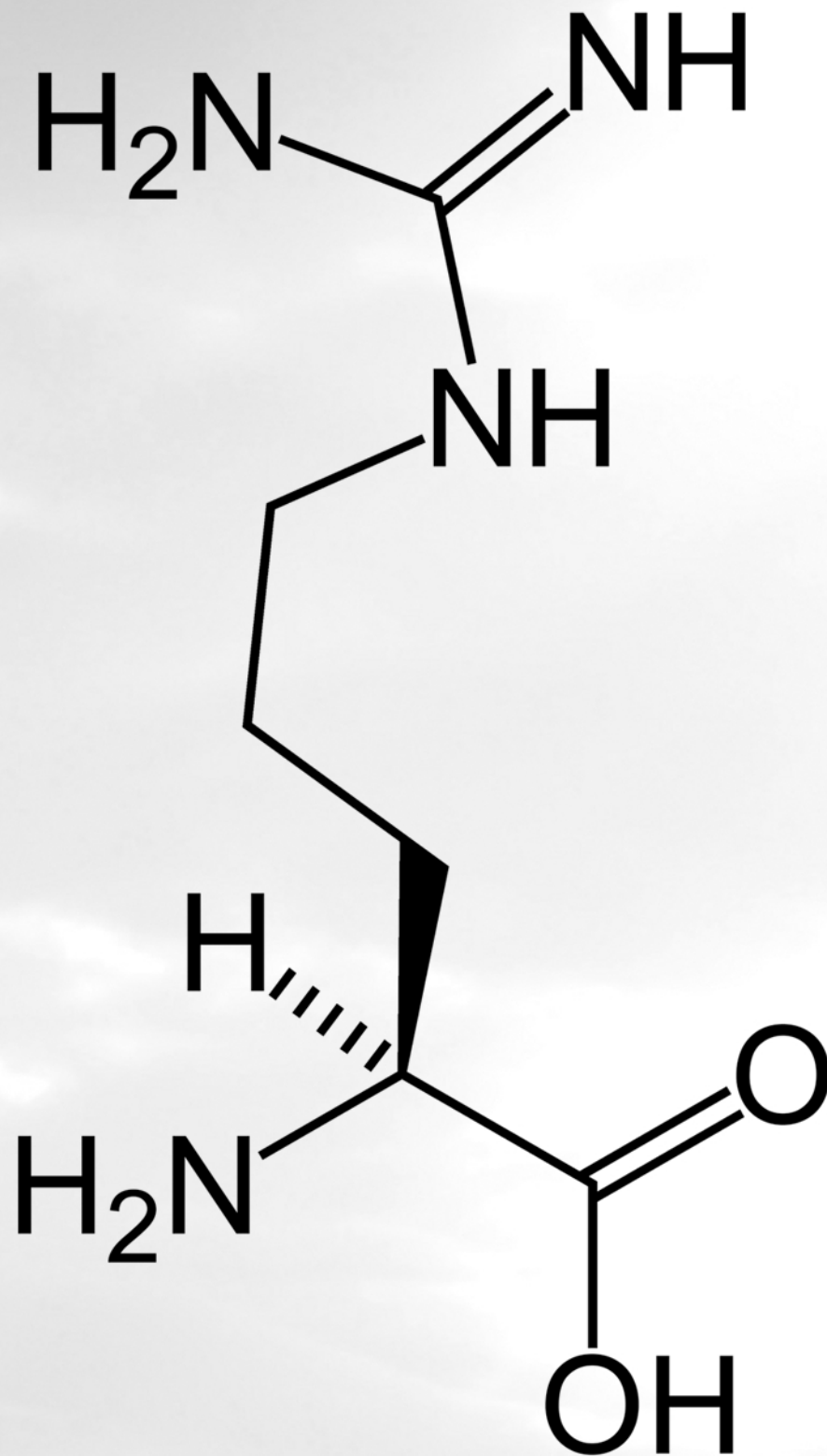
DHEA can also be converted into T and other hormones. The body's level of DHEA increases until about age 20, then begins a slow decline until its levels may decrease by as much as 90% with older age. Furthermore, a decline in libido and erectile function often accompanies a DHEA decline in men.

Nitric Oxide Enhancers

The amino acid L-arginine is a precursor (building material) for the synthesis of NO. Supplemental sources of L-arginine appear to augment NO production, with the result being a measurable increase in blood flow (i.e., vasodilatation). Since penile erection requires the relaxation of the cavernous smooth muscle, which is triggered by NO, it might be expected that supplementation with L-arginine would help promote erectile function. In fact, this is the case.

Studies have shown that when supplemented with L-arginine in doses of 5 grams or 2.8 grams daily, men with erectile dysfunction or impotence experienced significant improvements in erectile function. These studies found that subjects were either responders or non-responders, (presumably based upon their levels of nitric oxide, i.e.; those with low nitric oxide would be responders). The responders experienced significant improvements in sexual function. Other research has shown that lower doses of 1.5 g daily did not result in statistically significant differences compared to placebo groups. However, other research has demonstrated that 1700 mg of L-arginine daily is effective for erectile dysfunction when supplemented concurrently with Pycnogenol® pine bark extract.

In a 3-month trial, 40 men with erectile dysfunction were treated with 1700 mg of L-arginine, (as L-arginine aspartate), and 120 mg of Pycnogenol® daily. After 3 months, 92.5% of the men experienced a normal erection without any side effects. In another study, a combination of 1700 mg L-arginine (aspartate form) and 80 mg pine bark extract daily restored erectile function to normal in 5 days. Cholesterol levels and blood pressure were lowered. Other research has shown similar results with improved erectile function.



NOTE:

Theoretically, concomitant use of L-arginine with hypotensive drugs, (i.e. blood pressure lowering medication), or nitrates, (used to treat angina-related chest pain), might cause additive hypotensive or vasodilation and hypotensive effects, respectively. L-arginine may also exacerbate airway inflammation in asthmatics.

Re-Settin® is a proprietary raw material that may be found in some dietary supplement brands in the marketplace. It consists of a special lipid extract of the Saw Palmetto berry, and the carotenoid antioxidant, Astaxanthin. What makes Re-Settin® so interesting is its mechanism of action. What it does is reduce the conversion of T to DHT, and reduce the conversion of T to estradiol. This is important since it is not particularly desirable for men to experience increased levels of DHT and estradiol. DHT can contribute to enlarged prostate and other problems. Estradiol is the predominant sex hormone present in females, and while much lower levels are also present in men, higher levels can contribute to low sperm count and some feminizing aspects of male sexual characteristics.

By decreasing the conversion of T to DHT and estradiol, this results in maintaining higher levels of T. This was demonstrated in a 14-day, open-label clinical study published in the Journal of the International Society of Sports Nutrition, on 42 healthy males ages 37 to 70 years. The men were divided into two groups of twenty-one, and dosed with either 800 mg/day or 2000 mg/day of Re-Settin® (Note: Alphastat® was the original name of the raw material used in the study, but the raw material subsequently renamed the raw material as Re-Settin®. To avoid any confusion, therefore, I'll just refer to the raw material by its current name, Re-Settin®. In any case Alphastat® and Re-Settin® are exactly the same raw materials.). Blood samples were collected on days 0, 3, 7 and 14 and assayed for T, DHT and estradiol. The results were phenomenal. In the group taking 800 mg/day, total T concentrations increased 61% and DHT levels decreased by 16% in 14 days. There were no changes in estradiol. The group taking 2000 mg/day experienced a 38% increase in total T concentrations, a 27% decrease in DHT, and a 9% decrease in estradiol in 14 days. With the exception of no changes in estradiol in the 800 mg/day group, all of the changes were statistically significant.

An important point here is that Re-Settin® doesn't appear to actually stimulate new production of total T, but rather by reducing conversion of T to DHT and estradiol, the net results showed that Re-Settin® maintained higher levels of T than would have otherwise been the case.

In my opinion, this makes Re-Settin® a particularly safe and effective nutraceutical for naturally increasing total T. Although this study did not examine measures of sexual function, extensive feedback from users of this product indicate that improvements in sexual function is commonplace.

On a personal note, I used a product containing Re-Settin®, (Ageless Male™ by New Vitality), and experienced significant improvements in libido and sexual functioning.

DHEA Promotes Healthy Sexual Function

Although it is a hormone, DHEA is available as a dietary supplement due to its safety profile; (supplementation with DHEA, 50 mg, daily for a year demonstrated the safety of DHEA).

Research on DHEA supplementation has demonstrated improvements in sexual function. In one study, subjects with erectile dysfunction (ED) from different organic etiologies were treated with 50 mg DHEA for 6 months. The result was that DHEA treatment was associated with statistically significant improvements in ED and sexual function. Other research has shown similar results. Furthermore, DHEA supplementation (50 mg daily) also resulted in a significant increase in most libido parameters in women >70 years old, and in younger women with adrenal insufficiency.

Conclusion

Although the use of prescription Viagra®, Cialis® and testosterone may offer a viable treatment for erectile dysfunction, there are dietary supplement alternatives with a high safety profile that may also offer an effective solution. It may make sense to experiment with the dietary supplements first to see if you get the results you want, before turning to medications which are not without their own adverse effects.