

# What is Men's Endocrine Health?



Men's endocrine health incorporates physical activity and sound nutrition to maintain a strong body; however, a major emphasis includes male sexuality and erectile dysfunction. The "Power of Prevention" can be applied to any man's life in order to live a healthy lifestyle.

## Signs & Symptoms

Signs and symptoms of male sexual and erectile dysfunction include: difficulty having an erection, difficulty maintaining an erection, loss of sexual desire, and low blood testosterone levels.

## Conditions

In order to help you better understand male endocrine disorders, the following are male endocrine disorder condition scenarios presented in the form of questions from patients with answers from our experts.

### Loss of sexual desire

*My husband, now 60, seems to have lost interest in sex. We were having sex once a week or at least once every other week until about six months ago. Now whenever I want to have sex he says he is too tired or not interested. Is there something wrong with him or me? Does he need Viagra or do I?*

Interest in sex-libido is governed by a man's mood, his ability to concentrate his mind on sex-sensate focus as well as the free flow of blood into the erectile chambers of his penis so that when sexually aroused, he responds with a fully rigid erection. An adequate quotient of testosterone ensures that the system runs smoothly.

When a man is young his testicles spew out generous supplies of testosterone; and, as sexual thoughts surface, he is easily aroused responding with an erection to almost any sexual cue. As he matures, erections continue in sexual situations but not always with the same spontaneity and vigor of his youth. When sexual desire diminishes it may be due either to illness, depression, or a declining i.e., low serum testosterone. A visit to the doctor will help sort out the problem and help implement a treatment plan such as therapy and/or anti-depressant medication to ameliorate depression and testosterone supplements to normalize serum testosterone levels.

A medical history is the first step to clarify the nature of the problem. A detailed inventory of medication, both prescription and over the counter, currently in use is critical for medications are often the culprit when libido wanes and erectile vigor can no longer be sustained.

Not all doctors are comfortable discussing sexual problems and betray their own anxiety by responding to the word "sex" or "ED" by writing a prescription for Viagra, Levitra or Cialis to dispose of the problem and the patient as quickly as possible.

Insist on a full evaluation, which should consist of history, including a detailed inventory of current medications of tobacco and alcohol use, and physical exam as well as blood tests for hormone levels. Effective treatment follows proper diagnosis.

### Low Testosterone and ED

*My doctor said I have a very low testosterone level and that could cause ED. He recommended that I have testosterone injections every two weeks. I am squeamish about injections. Is there any other way I can raise my testosterone level?*

Yes, a low serum testosterone level may be responsible for ED and therapy designed to increase serum testosterone levels can be helpful in restoring a man's sexual vigor. Several treatment options exist to help normalize serum testosterone, including testosterone injections into a man's buttocks or shoulder muscles, as well as skin surface treatment involving the application of a testosterone impregnated patch on the back or shoulders, or one of two testosterone gels rubbed onto the shoulders or abdomen will raise a man's serum testosterone level.

## Treatment

### Testosterone Options

Testosterone administered by injection maintains normal blood testosterone levels only for a fortnight. Testosterone levels then decline and another injection is required. In contrast, daily appreciation of the testosterone patch (Androderm) or either of the two testosterone gels (AndroGel and Testim) results in stable normal testosterone levels day after day.

Some men experience a rash at the side of Androderm patch application, a problem that can be fended off by pretreatment of the application site with cortisone-like cream. Both gels, AndroGel and Testim, once applied to the skin are rapidly absorbed into the blood stream, and when applied daily are equally effective in maintaining normal testosterone levels in the testosterone deficient man.

Baseline and periodic prostate specific antigen (PSA) and lipid profile measurements are routinely performed during any testosterone supplement therapy.

### ED Treatment Options

*I see all these ads on television saying that having diabetes can cause erectile dysfunction (ED) and I should speak to my doctor. I did. My doctor gave me a prescription for Levitra just like the ad said, but I still have problems getting or holding on to an erection. Why, and what can I do about it?*

You made the right first steps by seeking out advice from your physician but if all he did was hear the word "ED" and write out a prescription, he may not have done all he could do to help you. For example, after the initial enthusiasm following the introduction of Viagra, we learned that not all men responded equally well to Viagra and were deemed "Viagra failures". When these "Viagra failures" were studied in more detail many were found to have low testosterone levels. After treatment normalized serum testosterone levels and Viagra use resumed, "Viagra failures" became "Viagra responders" experiencing markedly improved erections.

Although the company that makes Levitra has an aggressive ad campaign to tout their medication as THE treatment for men and diabetes mellitus ED or high blood pressure and ED, Viagra and Cialis are equally effective in treating the ED that accompanies these conditions.

*Is there any real difference between – the three ED drugs Viagra (sildenafil), Levitra (vardenafil) and Cialis (tadalafil)?*

All medications in this class are referred to as phosphodiesterase 5 (PDE-5) inhibitors and all work to enhance the vigor of a man's erection. Differences exist in chemical structure, onset of action, duration of action and side effect profile. Viagra (sildenafil) and Levitra (vardenafil) have a similar chemical structure, onset of activity (30 minutes to one hour) and duration of effectiveness (4 hours) whereas Cialis (tadalafil) has a different chemical structure, similarly rapid onset of action but a more extended duration of effectiveness (36 hours).

The term "duration of effectiveness" is often misconstrued leading some men to believe that after taking any of these PDE-5 inhibitors they will experience an erection that may persist from 4 to 36 hours.

This is inaccurate. The PDE-5 inhibitors do not cause an erection. They make it possible for a man to have an erection only in the setting of sexual stimulation. The term "duration of effectiveness" refers to the time frame after taking one of these pills during which sexual stimulation will allow a man to have an erection-up to 4 hours after taking Viagra and Levitra and up to 36 hours after taking a Cialis tablet.

Side effect profiles differ to some degree among the three medications with facial flushing and headache reported by about 5% of all men taking these medications and a handful, perhaps 1%, describing a bluish tint to vision in those taking Viagra and Levitra but not Cialis. Even rarer is a condition referred to as NAJON, a condition causing loss of vision has been reported in a handful of men who have taken PDE-5 inhibitors.

Men who take nitrates should not take any of the PDE-5 inhibitors. When used as directed, Viagra, Levitra and Cialis have all proven to be safe and effective treatments for the vast majority of men with ED.

*I have ED and tried all three ED medications but none worked. Is there any hope for me?*

Three options, vacuum devices, intrapenile injections, and penile prostheses exist to restore erectile function in ED patients who have failed to benefit from Viagra, Levitra or Cialis.

Vacuum devices such as the Osbon-ErecAid consist of a cylinder attached to a manually operated vacuum pump. The cylinder is designed to fit over the limp penis and the negative pressure created by the vacuum encourages blood flow into a progressively swelling penis. A band like structure is affixed to the base of the penis to maintain the erection which is then sufficiently effect and engorged to allow a man to have sexual intercourse.

Medicine injected directly into the penis makes it possible for a man to have an erection without sexual stimulation. The medication injected is called alprostadil and can be instilled into the penis by means of an injection with a syringe pre-filled with alprostadil (Caverject) or an alprostadil permeated pellet (MUSE) released into the urethra-the opening in the penis through which men urinate. The penis swells and becomes rigid shortly after the alprostadil is released into the spongy erectile tissue of the penis. Men may experience a burning pain as the penis becomes erect.

Penile prostheses are still implanted within the penis every year to help men who have not responded to other therapy. Some penile prostheses are designed so that the penis is in a permanently erect state whereas other newer models are set-up so that a reservoir of fluid flows directly into the penile tissue to create their erection. Then at the conclusion of intercourse fluid is redirected from the penis back to the scrotal reservoir to deactivate the erection allowing the penis to return to its normal flaccid state. Penile prosthesis implantation is usually done in the hospital under anesthesia.

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