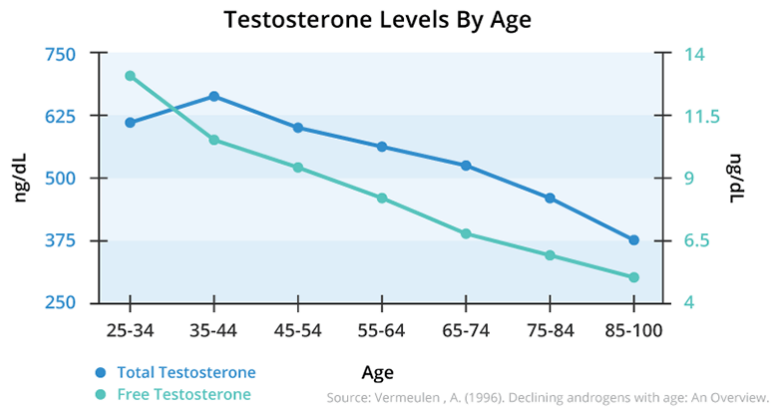


**Erectile dysfunction (ED)** is defined as trouble getting or keeping an erection that's firm enough for sexual intercourse. Patients with ED may also experience other symptoms including premature or delayed ejaculation, low energy, being easily fatigued, and passiveness. According to the Urology Care Foundation, ED is the most common sex problem affecting as many as 30 million American men, about 50% of men over the age of 40. ED can occur from health problems such as physical conditions, emotional issues, or both.

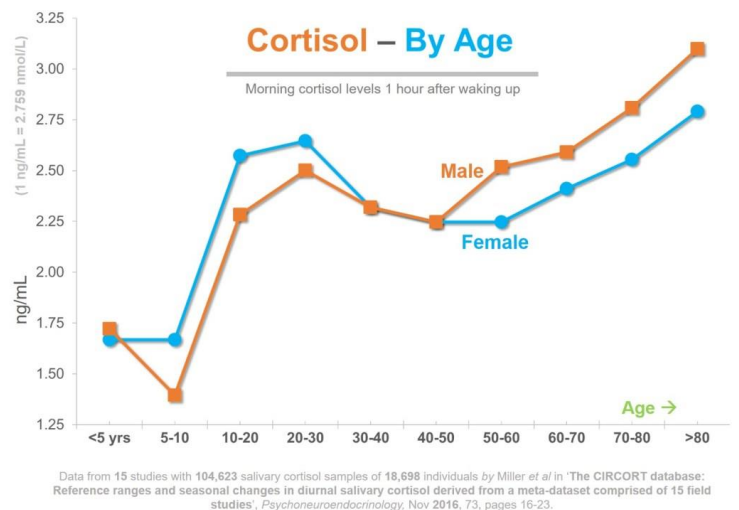
A physical cause of ED can occur when there is not enough blood flow into the penis or when the parasympathetic and somatotrophic nervous function is disturbed. This can occur due to many different health issues including the heart, hormones and the kidneys. Atherosclerosis, hardening of the arteries, can cause a lack of blood to the male sex organs through the narrowing of the arteries. The arteries that branch from the abdomen to the penis can be affected therefore causing the lack of blood flow. Vascular disease can cause ED in as many as 50% to 70% of men who have it.

Testosterone is the key male sex hormone that regulates a number of processes in the male body including fertility, muscle mass, fat distribution and the development of male sexual characteristics. Testosterone levels decline with age and it has been viewed as the cause of ED. It is believed that ED can occur when testosterone levels drop below a certain threshold. When this threshold is reached, additional amounts do not further increase the frequency, amplitude, or rigidity of an erection.<sup>1</sup>



Testosterone has been widely used as an important therapy for ED. However, Testosterone therapy has various risks such as worsening sleep apnea, acne, stimulating noncancerous growth of the prostate, limiting sperm production, and stimulating too much red blood cell production, a condition called erythrocytosis. Erythrocytosis can cause symptoms of fatigue, headaches, light-headedness, nosebleeds, breathing problems and many other issues. Having too many red blood cells can make the blood thicker and lead to blood clots and other complications such as a heart attack or stroke. Erythrocytosis also increases the risk of leukemia and other types of blood cancers.

Cortisol is a steroid hormone that regulates a wide range of vital processes throughout the body, including metabolism and the immune response. It also has a very important role in helping the body respond to stress. Cortisol levels rise with age after 40 years old. Research studies have shown that cortisol levels negatively correlate with erectile function. High cortisol levels can disrupt not only the male libido but can also cause erectile dysfunction. The negative effect of cortisol on erectile function occurs because cortisol narrows the arteries and causes blood flow restriction.<sup>5</sup>



The initiation, maintenance, and rigidity of a penile erection are under parasympathetic and somatotrophic control. High cortisol levels activate the sympathetic nervous system which interrupts the parasympathetic and somatotrophic activity. Sympathetic pathways are anti-erectile because the sympathetic nervous activity has a restraining effect on erections. Switching off the activity of the sympathetic nervous system enhances erections.<sup>2</sup>

Kidney diseases and adrenal deficiency can cause ED. ED is a common condition among male chronic kidney disease patients. Its prevalence is estimated to be approximately 80%. It is caused by the reduction of sex hormones in these patients.

Psychological factors are responsible for about 10%-20% of ED cases. The most common psychological causes of ED include stress, anxiety, and depression. Depression affects a person physically and psychologically. Depression can cause ED even when a man is completely comfortable in sexual situations.

Cortisol is a stress hormone released by the adrenal glands. Our brain triggers cortisol release in response to many different kinds of stress through the activation of the hypothalamic-pituitary-adrenal axis. When cortisol levels are too high for too long, it can cause ED. People with depression tend to have reduced levels of serotonin in the brain and elevated levels of cortisol in their bloodstream. Besides emotional stress, the stress from chronic diseases such as diabetes, high blood pressure, Parkinson's, cancer, injury or surgery can also cause elevated cortisol levels. Smoking, alcohol, drugs, and many prescription medications can also cause a cortisol level increase and heighten the risk of ED.

Stress and anxiety can also interrupt how the brain sends messages to the penis and interrupts blood flow. Experiencing ED can cause further stress and lead to behavioral changes that can further aggravate ED. Post-traumatic stress disorder (PTSD) has shown to cause hypersensitivity of cortisol receptors which augment the effect of cortisol. A study with veterans who suffered from post-traumatic stress disorder (PTSD) showed that PTSD increased the risk of sexual dysfunction by more than three times.<sup>4</sup>

### **Wellness Recommendation**

The wellness recommendation for ED includes M-Strong. M-Strong nurtures Kidney Yang and helps to promote blood flow to the male sex organs as well as resolve poor blood flow issues due to various causes in patients with ED. M-Strong also helps enhance testosterone production and reverse degeneration. The herbal ingredients in M-Strong also helps calm down the sympathetic nervous system and relieve anxiety to support erectile function. The ingredient, Sea-Horse, in M-strong promotes Kidney Yang and enhances sexual activity. It is one of the safe herbal tonics being used to assist the aging male through improving their sex drive and ability to perform penetrative sex by increasing sexual stimulation, erectile, ejaculatory, orgasmic and other responses for sexual function and satisfaction.<sup>4</sup> Patients can experience an increase in energy in 3 days; an increase in sex drive and a better sex life with normal erectile function and ejaculation in 2-3 weeks; youthful energy, feel more invigorated, and illustrate less passiveness in 6 weeks.

LC Balancer and Xcel are also recommended at half dose (LC Balancer: 2 capsules, 2 times a day; Xcel: 1 Capsules, 3 times a day) together with M-Strong for patients over 40. Xcel with LC Balancer improves kidney and adrenal function. If the patient is exhibiting kidney heat symptoms such as chills, hot flashes, excessive sweating, pain or tightness under the skull, KS is also required. KS helps clear kidney heat to reduce kidney inflammation and kidney stone formation.

If the patient has diagnosed stress, or anxiety, then Hepavin, Levera, Brown and LC Balancer are recommended at ½ to 2/3 dose. The liver can affect the levels of anxiety and stress. The liver can overreact to the stress hormones such as cortisol and epinephrine secreted by the adrenal gland with the production of inflammatory chemokines, a Liver Heat condition in TCM. Such overreaction amplifies stress levels, causing anxiety and affects the brain which leads to depression. Brown with LC Balancer nurtures Liver Yin to improve liver health and increase stress tolerance to reduce the physiological impact of stress. Hepavin quenches Liver Yang Rising and reduces Liver Heat to reduce the livers overreaction to stress hormones. Levera helps clear Liver Heat and reduce liver inflammation to calm down the liver.

For patients with depression, Resurgen is also recommended to clear heat from the brain blood vessel and resume blood flow to the brain. For patients with chronic depression, Surgenin is also recommended to remove blood clots formed inside the brain blood vessel. Chronic depression can also cause Liver Qi deficiency. Their brain may not be

supported with sufficient blood pumped from their heart. Lifegen and Blood Tonic are required. Lifegen helps to strengthen Liver Qi and resolve Liver Qi stagnation. It helps improve blood flow to the limbic system and nurture the brain center which is responsible for motivation, emotions, learning, and memory. Blood tonic nurtures blood and removes blood stagnation to enhance blood circulation. Patients should notice symptom improvement in 1-2 weeks. 2-3 weeks of treatment is required for significant improvement.

### **Selected Case Study**

#### Case 1: Successful Resolution of Erectile Dysfunction (ED)

*Michael Biamonte, ND, Nutritionist, CCN*

A 40+ year-old male suffered from erectile dysfunction for many years. The patient also had premature ejaculation, a decrease in his sex drive, lack of nocturnal penile tumescence, chronic fatigue, and passiveness. Dr. Biamonte recommended a Kidney Yang treatment consisting of M-Strong and Xcel from Wei Laboratories to promote more blood flow to the kidney and male sex organ as well as boost adrenal function.

After the 3rd day of treatment, he noticed an increase in his energy level, and he was motivated to work out. After 2 weeks of treatment, the patient saw an increase in his sex drive, and he had normal erectile function and ejaculation. In the 6th week of treatment, he had experienced wet dreams and the return of nocturnal penile tumescence. He also had youthful energy to enjoy playing with his children and had been able to work a 16-hour shift without becoming tired. His passiveness had completely gone.

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