



## **TESTOSTERONE DEFICIENCY**

Testosterone is the hormone primarily responsible for the growth and development of male sex and reproductive organs as well as secondary characteristics, such as musculature, bone mass, fat distribution, hair patterns, laryngeal enlargement and vocal chord thickening. Normal levels of testosterone also help to maintain energy levels, a healthy mood, fertility and sexual desire.

### **CAUSES**

Natural testosterone production declines with age, but a testosterone deficiency – also known as hypogonadism – can be the result of disease or other factors. These include damage to the hypothalamus, pituitary gland or testicles that can inhibit hormone secretion and testosterone production. Studies show that men with obesity, diabetes or hypertension may be twice as likely to suffer from low levels of testosterone. It is believed that approximately 13 million men in the United States experience testosterone deficiency, with less than 10 percent seeking treatment.

### **DIAGNOSIS**

Congenital testosterone deficiency is often characterized by underdeveloped or undeterminable genitalia. Adult men may experience diminished libido, erectile dysfunction, weak muscles, loss of body hair, depression and other mood disorders.

### **TREATMENT**

The most common treatment involves hormone replacement therapy. This can be delivered through the skin – as a patch or a gel – or injected. The goal is to maintain secondary sex characteristics, improve energy, strength and feelings of wellness and prevent bone degeneration.”