

# Testosterone

## Description

Testosterone important to both men and women is a hormone secreted by the ovaries, adrenal glands and testes. While women need a much smaller amount it helps control a woman's libido and also appears to enhance the functions of estrogen. In both males and females it also helps to strengthen bones in preventing osteoporosis. Testosterone is the primary male sex hormone, responsible for male sexual development and critical in maintaining erectile function, libido, normal energy levels, and mood. It also controls a while range of other physical functions throughout the body. As with other hormones, testosterone declines with age and at the age of 80 is only one fifth of what it was in youth. Testosterone levels begin declining when a man is in his thirties, although the total testosterone does not drop drastically the free testosterone, which is the biologically active testosterone, declines dramatically with age. Because the drop in testosterone is more gradual, the symptoms of andropause appear over a longer period of time as compared to female menopause. Symptoms appear as a gradual decrease in energy, thinning bones and muscles, increased visceral fat, depression, and impaired sexual function. Testosterone deficiency has also been linked to hypertension, obesity and increased risk of heart disease. Stress level may also play a role in declining testosterone levels.

## Benefits of Testosterone Replacement

- ✓ Increase in bone density, bone formation and bone minerals
- ✓ Increase in energy
- ✓ Improvement in sexual function
- ✓ Decrease in body fat
- ✓ Increase in HDL and decrease in LDL levels
- ✓ Decrease in heart disease
- ✓ Improved brain function, learning and memory
- ✓ Improved blood glucose levels
- ✓ Decreased blood pressure
- ✓ Increase in sexual desire
- ✓ Increase in both muscle strength and in the diameter of muscle fibers
- ✓ Enhancement of skin and hair texture

## Side Effects

Increase in aggressive behavior if dose is too high. Testosterone should not be prescribed if prostate cancer is present. Testosterone has not been shown to cause prostate cancer, however, it may accelerate the growth of a tumor. PSA levels should be monitored yearly or every 6 months.

## Administration

Testosterone can be administered orally, by injection, patches, pellet implants or in a cream/gel form. The safest most natural way to take testosterone is in the cream or gel form. It is quickly absorbed, short acting and least liver toxic. Dosing is usually done twice daily and the strength varies from 50mg to 100mg administered in the morning and evening.

## Frequently Asked Questions

- 1) Will women taking testosterone get an increase in hair growth? No, they would have to take a man's dose to experience any hair growth. While men take 100mg to 200mg daily women only take 4mg to 8mg.
- 2) How often can I get my prescription refilled? Testosterone is a controlled substance and cannot under any circumstances be refilled before your dose is due to run out. Take your medication exactly as prescribed by your doctor.
- 3) Will taking testosterone cause my bodies own production to decrease? Yes it can in some cases and some men may experience a small decrease in testicular size, although unsettling, this does not impact sexuality or well being.