

What is Testosterone?

Testosterone is the sex hormone that helps boys become men. This hormone is key during puberty and the development of male physical features. Testosterone levels can affect men's sex drive, erections, mood, muscle mass and bone density. Testosterone is also needed for men to produce sperm.

What is Hypogonadism or "Low-T"?

Some men have low levels of testosterone. This is called hypogonadism, or low-T. Men with low-T may also have problems such as:

- reduced sex drive,
- less frequent sexual activities,
- fewer and weaker erections,
- less energy,
- depressed mood or irritability,
- less muscle mass and strength,
- more body fat,
- anemia (low iron), and
- loss of calcium from bone.

What is Testosterone Replacement Therapy (TRT)?

Testosterone replacement therapy (TRT) is approved by the FDA to treat men with hypogonadism (low-T). It most often comes in the form of gels, patches, injections (shots), and pellets placed under your skin.

What should you know about TRT?

Two recent studies have suggested that TRT raises the risk of heart attack in men. In February 2014, the FDA stated they would study the risk of heart attack, stroke and death in men taking TRT.

The American Urological Association (AUA) has followed these reports closely. The AUA notes that there are conflicting studies that suggest TRT may lower heart risk. More studies need to be done to be certain whether and how TRT changes men's risk of heart attack.

The AUA is also concerned about misuse of TRT. You should not take testosterone for non-medical reasons, such as body building, preventing aging changes or performance enhancement. Men should not take TRT if they have normal testosterone levels or if their testosterone levels have not been tested. If you have normal testosterone levels, using TRT will not help your health problems. Also, if you are trying to father a child, you should not be on TRT. TRT can decrease your sperm count and fertility.

Because of new, easier ways to take TRT, many men have become aware that low-T might be causing their problems. Before you take TRT, a doctor who is skilled in diagnosing low-T should examine you carefully. Your doctor should not prescribe TRT without taking an in-depth health history and giving you a physical exam and blood tests. Many of the symptoms for low-T can be the result of other health problems. Other causes of symptoms need to be ruled out before testosterone is prescribed.

Before you start TRT, your doctor should talk to you about possible bad side effects. Side effects can include:

- acne (pimples),
- breast swelling or soreness,
- a high red blood cell count,
- swelling of the feet or ankles,
- smaller testicles and
- infertility.

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If your doctor prescribes TRT, you should have regular check-ups. Your doctor should follow-up with blood tests for testosterone level, PSA and hematocrit. (PSA is a test for prostate issues including prostate cancer. Hematocrit tests your red blood cell count.) Based on your health history, your doctor may want to follow up with other tests.

The AUA encourages you and your doctor to discuss the benefits and risks of taking testosterone replacement therapy. You should not be taking TRT if you do not have low levels

of testosterone. You should understand the possible benefits, side effects and risks before you start taking TRT. You should also know that today's science does not offer final answers about whether taking TRT will increase your risk of prostate cancer or heart disease.

This update is based on the American Urological Association's Policy Statement on Testosterone Therapy, which is available online at www.AUAnet.org/about/testosterone-therapy.cfm

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