What is Testosterone?
Testosterone is the male sex hormone made in the testicles. Testosterone hormone levels are important to normal male sexual development and functions. This hormone helps boys develop male features like body and facial hair, deeper voice and muscle strength. Also, men need testosterone to make sperm.

What is Low Testosterone?
Some men have low testosterone levels. This is called Testosterone Deficiency Syndrome (TD) or Low Testosterone (Low-T).

What are the Symptoms of TD?
Some signs and symptoms of TD are:
• Low sex drive
• Feeling very tired all the time (Fatigue)
• Loss of lean muscle mass
• Irritability
• Erectile dysfunction
• Depression

What Causes TD?
Some causes of TD are:
• Medical conditions diagnosed at birth
• Autoimmune diseases
• Injury to the testicles by accident
• Removal of testicles (because of disease)
• Chemotherapy or radiation
• Opioid use
• Obesity (being overweight)
• High blood pressure or high blood sugar
• Infection
• Aging

How will my doctor know for sure that I have TD?
If you are worried, you should see your doctor to talk about your symptoms. Your doctor may:
• Perform a physical exam and complete a medical history to include any related diseases and medications you take
• Order blood tests to check your testosterone level
• Order other tests such as hormone tests

What is the Treatment for TD?
If you have TD, your doctor may offer you testosterone therapy (TT). There are usually five different ways to take testosterone.
Testosterone Therapy

What You Should Know

• Transdermal (through the skin)
• Injection
• Oral/buccal (by mouth)
• Intranasal (through the nose)
• Pellets under the skin

Frequently Asked Questions About Testosterone Therapy

1. Are there any harmful effects of TT?
   Yes, TT may have some harmful effects. Testosterone Therapy may interrupt normal sperm production. You should not have TT if you plan on having children soon.
   You may get a rash or itching from gels and liquids. Gels and creams may transfer easily to others. Follow prescription directions and avoid skin contact with women and children immediately after skin applications. Make sure you cover the area and wash your hands well after touching the medication. Clothing should be washed separately.
   You may have an allergic reaction after some injections.
   Possible side effects of testosterone pellets include swelling, pain, bruising.

2. I think I may have TD. Is TT the answer for me?
   You may need TT, but it may or may not be the best treatment for you. TD comes naturally as you grow older, and there may be other reasons for TD levels. You should not be taking TT if you do not have low testosterone levels. If your blood testosterone is low then your doctor will give you a full exam and help you get TT or the best treatment for you.

3. Is it true that TT may cause prostate cancer?
   There is no evidence linking TT to prostate cancer.

4. Does TT cause vein clots or heart disease?
   At present, there is no reason to believe that TT causes vein clots. Also, there is no strong evidence that TT either increases or lessens the risk of cardiovascular events. But, while you are on TT, you should call your doctor right away if you have signs or symptoms of stroke or heart attack.

5. Is TD a common medical condition?
   It is hard to know how many men have TD. Overall, about 2.1% (about 2 men in every 100) may have TD. As few as 1% of younger men may have TD, while as many as half of all men over 80 years old may have TD. TD is more common in men who have diabetes or who are overweight. If you are overweight, try to work on keeping your weight within recommended ranges. Getting more exercise may help you lose weight and also may help your testosterone levels.

6. How will I know the testosterone therapy is working?
   During treatment, you will need routine checkups to see that your testosterone level stays normal. When you are stable on TT, total testosterone and certain other lab tests should be checked every 6-12 months, as prescribed by your doctor.

About the Urology Care Foundation

The Urology Care Foundation is the world’s leading urologic foundation – and the official foundation of the American Urological Association. We provide information for those actively managing their urologic health and those ready to make health changes. Our information is based on the American Urological Association resources and is reviewed by medical experts.

To learn more, visit the Urology Care Foundation’s website, UrologyHealth.org/UrologicConditions or go to UrologyHealth.org/FindAUrologist to find a doctor near you.

Disclaimer

This information is not a tool for self-diagnosis or a substitute for professional medical advice. It is not to be used or relied on for that purpose. Please talk to your urologist or health care provider about your health concerns. Always consult a health care provider before you start or stop any treatments, including medications.

For more information about urologic conditions, visit UrologyHealth.org/Download or call 800-828-7866.