What is Testosterone?
Testosterone is a 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:
- Lower sex drive
- Loss of body hair
- Reduced erectile function
- Loss of lean muscle mass
- Feeling very tired all the time (fatigue)
- Obesity (being overweight)
- Symptoms of depression
- Erectile dysfunction

What Causes TD?
Some causes of TD are:
- Aging
- Autoimmune disease (when your body attacks its own cells)
- Chemotherapy
- Diabetes
- Drug use (such as corticosteroids, narcotics, opiates, psychotropics, and others)
- HIV/AIDS
- Infection
- Medical conditions you may be born with
- Obesity (overweight)
- Pituitary gland disease leading to low hormone production
- Radiation
- Testicles being harmed or injured
- Testicles being removed (because of cancer or other reasons)

How Does My Doctor Diagnose Testosterone Deficiency (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.
- Transdermal (through the skin)
- Injection
- Oral/buccal (by mouth)
• Intranasal (through the nose)
• Pellets under the skin

What Should I Expect After Treatment?
You will need routine health exams to see that your testosterone level has changed and stays normal. If you are stable on TT, total testosterone and certain other lab tests should be checked every 6-12 months.

You may notice that testosterone drug labels warn there is risk of heart disease and stroke. There is no strong evidence that TT either increases or decreases your risk of these events. Out of caution, your doctor will check for heart disease and stroke before and sometimes while on TT.

TT may help some symptoms such as erectile dysfunction, low sex drive, anemia, bone mineral density, lean body mass, diabetes, and depressive symptoms. But it is currently not clear if it will help other symptoms such as memory, energy, fatigue, cholesterol levels, and other improvements in quality of life.

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.