

Testosterone Therapy Patient Guide



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Introduction

Men with a low sex drive, fading energy, mood changes and erectile dysfunction may have low testosterone levels. However, these symptoms can be caused by other reasons. So while there are a variety of medications to treat low testosterone, not everyone is a candidate.

Having testosterone therapy may sound like a great plan. But is this the right treatment for you? We have some possible answers in this guide. Read it and then talk to your doctor about what is going on with you. Together, you can decide on the next step.

What Is Testosterone?

Testosterone is a male sex hormone. It is made in the testicles. Hormones are important for physical and mental health. Testosterone is needed for:

- Normal male sexual development and functions
- Growing boys to develop facial hair and deeper voice
- Muscle strength
- Men to make sperm
- Male sex drive

What Are the Symptoms of Low Testosterone?

Symptoms more likely to be or directly linked to **testosterone deficiency** (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

Other Symptoms

Some symptoms that may or may not be linked to TD are:

- Lower energy, endurance, and physical strength
- Poor memory
- Trouble with finding words to say
- Poor focus
- Not doing well at work

What Causes Low Testosterone?

Sometimes testosterone blood levels are low. When men have both low testosterone levels and symptoms of low testosterone, this is called testosterone deficiency or TD. Some studies suggest that testosterone gets lower with age and those with increasing health problems.

Basically, if your testicles make less testosterone than normal, your testosterone level will fall. Your TD may be linked to:

- 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)

GET DIAGNOSED

How Does My Doctor Diagnose Testosterone Deficiency (TD)?

The most important test for TD is your total blood testosterone level.

If you are worried, see your doctor to talk about your symptoms and find out if you have TD. During your physical exam, your doctor may check:

- Blood tests for testosterone level, other hormone levels, and red blood cell level (blood tests may be taken more than once to confirm the findings)
- Your full medical history, including diseases and medications
- **BMI** or waist circumference for obesity
- **Metabolic syndrome** (high blood pressure, high blood sugar, too much body fat around the waist, and high cholesterol levels)
- Hair pattern, amount, and location
- Gynecomastia (enlarged breasts)
- Whether testicles are present and their size
- **Prostate** size and any abnormalities

GET TREATED

Do I Need Testosterone Therapy (TT)?

You may need TT if you have TD. Know that, like all medication therapy, TT has side effects. You should not take testosterone without seeing your doctor.

Treatment is recommended for:

- Persons born with TD due to diseases such as Klinefelter syndrome
- Persons with sex organs that do not develop as usual
- Damaged testicles
- Blood testosterone level less than 300 ng/dl in combination with symptoms of TD

How Will My Doctor Treat My Testosterone Deficiency (TD)?

Health changes such as losing weight and exercising more may raise your testosterone levels. You may also need to take the testosterone hormone. There are five different ways to take testosterone:

- **Transdermal** (liquid, gel or patch to the skin)
- Injection (short or long-acting)
- Intranasal (through your nose)
- Pellets under your skin
- Oral/buccal (by mouth)

You may want to choose how you take your testosterone based on what is best or most useful for you. In many cases, your insurance provider will cover only certain types of testosterone therapy. Talk about the choices with your doctor.

During treatment, watch for side effects of TT. Ask your doctor or pharmacist what signs to look for.

** All words that appear in blue Italics are explained in the glossary.*

OTHER CONSIDERATIONS

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.

Questions to Ask Your Doctor

- ☐ Are the symptoms I am having related to TD?
- ☐ How common is TD for men of my age?
- ☐ What tests will I need to see if I have TD?
- ☐ How safe is testosterone therapy (TT)?
- ☐ Is TT the best choice for me? Which method of treatment would you suggest for me? Why?
- ☐ What side effects should I look for when I am on TT?
- ☐ I have trouble getting an erection. Will TT help with sexual function?

GLOSSARY

BMI

Body mass index (BMI) is how we measure body fat based on height and weight.

Lean Muscle Mass

Lean muscle mass relates to the amount of muscle in the body as compared to fat.

Metabolic Syndrome

Metabolic syndrome means a group of symptoms seen together (high blood pressure, high blood sugar, high cholesterol and triglyceride levels, and belly fat around the waist).

Obesity

Obesity is having too much body fat.

Pituitary Gland

The pituitary is an important gland in the body. It is often called the “master gland” because it controls many of the other hormone glands. It is located in the head, at the base of the brain.

Prostate

The prostate is the male gland that sits between the bladder and the penis.

Testosterone Deficiency (TD)

TD means the body is not making enough of the testosterone hormone.

Testosterone Therapy (TT)

Testosterone therapy is treatment where medication is given for a low testosterone blood level (usually if TD is combined with other symptoms). The medication is given by injection, by mouth, by gel through the nose, by pellets under the skin or directly on the skin by cream, patch, or gel.

Transdermal Medication

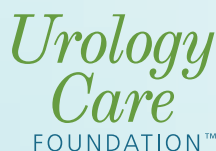
Transdermal medication is medication that is put on the skin. Testosterone therapy can be given through the skin by gel, cream or patch.

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 healthcare provider about your health concerns. Always consult a health care provider before you start or stop any treatments, including medications. For more information, visit **UrologyHealth.org/Download** or call 800-828-7866.



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