

June 2014 • Members

Low Testosterone in Men

What is testosterone?

Testosterone is a hormone made by your body. Both men and women have testosterone. But men have a lot more of it. It is the reason men have a deep voice, more body hair, stronger muscles, and less fat.

Why is testosterone important?

Men need testosterone to:

- Keep their muscles and bones strong
- Maintain normal mood and energy level
- Maintain interest in sex
- Produce sperm cells
- Have an erection

Men cannot father children unless they have enough of it.

What is low testosterone?

Low testosterone (low T) is a condition in which the amount of testosterone is lower than normal. It's so low that the man might have symptoms.

What are the symptoms of low T?

Symptoms include:

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| • Decreased or no sex drive | • Depression: feeling sad or blue |
| • Weaker and fewer erections (erectile dysfunction [ED]) | • Irritability |
| • Loss of male sex characteristics | • Hot flashes |
| - Loss of body hair | • Poor concentration and memory |
| - Small or shrinking testes | • Sleep disturbances |
| - Decreased muscle mass and strength | • Breast discomfort and/or increased size |
| • Low sperm count/infertility | • Osteoporosis (low bone density) |
| • Increased body fat (BMI) | • Decreased hemoglobin, mild anemia |
| • Decreased energy and interest in doing things | |



What causes low testosterone?

These things can cause low T:

- Injury to the testes, hypothalamus, or pituitary glands
 - Accident
 - Autoimmune disease
 - Cancer
 - Inflammation
- Certain drugs
 - Anabolic steroids
 - Glucocorticoids
 - Hormone therapy used to treat prostate cancer
 - Opioid pain killers
- Radiation and chemotherapy
- Genetic disorders such as Klinefelter syndrome

How do I know if I have low testosterone?

Symptoms alone don't tell you if you have low T. Other things may cause these symptoms too. So the only way to know for sure is to get a testosterone test. Experts recommend testing for men with symptoms and men who are at high risk.¹

If you think you might have low T, talk with your doctor. If your doctor agrees, he/she will order the test. A sample of your blood will be collected and sent to the laboratory for testing. If your result is low or borderline, your doctor might order a second testosterone test. Low levels should be confirmed before low T is diagnosed.¹

Are all testosterone tests the same?

No. Some commonly used tests are not always accurate.² This is because they skip 2 important steps. The LC/MS/MS is an accurate test that includes these 2 steps. That's why experts at the Endocrine Society recommend it.² If your doctor thinks you need a testosterone test, ask him/her to consider ordering an LC/MS/MS testosterone test.

How is low T treated?

Doctors treat low T with testosterone. There are testosterone creams, gels, patches, and injections. It may take several months of therapy before a man's symptoms improve.

Testosterone therapy is not for everyone though. Men who are being treated with it may have to be treated for life. And there may be side effects. If you have low T, talk with your doctor about all the risks and benefits.

I'm being treated for low T. What testing do I need?

Men being treated might need the following tests¹:

- Total testosterone 3 to 6 months after starting therapy
- Hematocrit 3 to 6 months after starting therapy and annually thereafter (to detect possible increases in the number of red blood cells)
- Bone density after 1 to 2 years of therapy; this test is just for men with osteoporosis or low-trauma fracture
- Prostate cancer screening tests (DRE and PSA) 3 to 6 months after starting therapy and then per screening guidelines; doctors should do these tests before starting treatment too

References

1. Bhasin S, Cunningham GR, Hayes FJ, et al. Testosterone therapy in adult men with androgen deficiency syndromes: an Endocrine Society Clinical Practice Guideline. *J Clin Endocrinol Metab.* 2010;95:2536-2559.
2. Rosner W, Auchus RJ, Azziz, R. Position statement: Utility, limitations, and pitfalls in measuring testosterone: an Endocrine Society Position Statement. *J Clin Endocrinol Metab.* 2007;92:405-413.