

What does testosterone do?

Testosterone is the main sex hormone that men have. It controls male physical features. The testes (testicles) make testosterone.

Women have testosterone too, but in much smaller amounts than in men.

WHY IS TESTOSTERONE IMPORTANT FOR BOYS AND MEN?

Testosterone helps bring on the physical changes that turn a boy into a man. This time of life is called puberty. Changes include:

- Growth of the penis and testes**
- Growth of facial, pubic, and body hair**
- Deepening of the voice**
- Building muscles and strong bones**
- Getting taller**

Men also need normal amounts of this hormone to make sperm and be able to have children.

HOW DOES TESTOSTERONE WORK?

The brain and pituitary gland, a small gland at the base of the brain, control production of testosterone by the testes. From there, testosterone moves through your blood to do its work.

Your testosterone levels change from hour to hour. They tend to be highest in the morning and lowest at night.

Testosterone levels are highest by age 20 to 30 and slowly go down after age 30 to 35.

WHAT CAN GO WRONG WITH TESTOSTERONE LEVELS?

For many reasons, testosterone can become—and stay—too low. Less often, testosterone levels can become too high. When this hormone is not in balance, health problems can result. Ask your doctor if you should get your testosterone level checked if you have any of the problems mentioned here. You can get treatment to fix hormone problems.

Low testosterone

Early symptoms (changes you feel) and signs (abnormalities that your doctor finds) of low testosterone in men include:

- A drop in sex drive**
- Poor erections**
- Low sperm count**
- Enlarged or tender breasts**

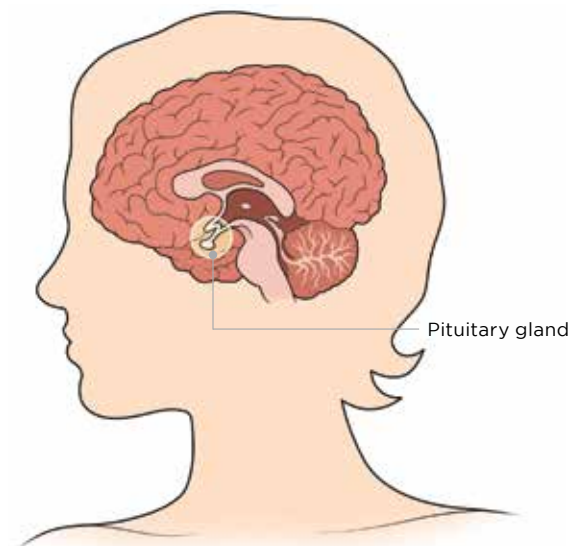
Later, low testosterone can lead to decreased muscle and bone strength, less energy, and lower fertility.

Some things can temporarily lower testosterone, for instance, too much exercise, poor nutrition, or serious illness. Living a healthy lifestyle with regular exercise and a good diet helps maintain normal testosterone levels.

High testosterone

When young boys have too much testosterone, they can start puberty too early (before age 9). Some rare conditions, such as certain types of tumors, cause boys to make testosterone earlier than normal.

Young boys also can have too much testosterone if they touch testosterone gel that an adult man is using for treatment.



HOW DO YOU KNOW WHAT YOUR TESTOSTERONE LEVEL IS?

To measure your testosterone level, your doctor can order a blood test. The test should be done in the morning between 7:00 and 10:00. If the result is not normal, you should repeat the test to make sure of the result. In healthy men, testosterone levels can change a lot from day to day, so a second test could be normal.

Where to Learn More

[Hormone Health Network testosterone information](#)

Low testosterone and men's health

hormone.org/questions-and-answers/2010/low-testosterone-and-mens-health

Testosterone therapy in men

hormone.org/patient-guides/2010/testosterone-therapy-in-men

Hypogonadism

hormone.org/diseases-and-conditions/mens-health/hypogonadism

Precocious (early) puberty

hormone.org/questions-and-answers/2010/precocious-puberty

[National Institutes of Health information](#)

Testosterone (MedlinePlus)

nlm.nih.gov/medlineplus/ency/article/003707.htm

Low testosterone (interactive tutorial)

nlm.nih.gov/medlineplus/tutorials/lowtestosterone/htm/index.htm

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Questions to Ask Your Doctor

Is my testosterone level normal?

Do I need more tests?

Do I need treatment?

How long will I need treatment?

Does the treatment have side effects?

How often should I have check-ups?

Should I see an endocrinologist for my care?

Words to Know

androgen (AN-druh-jenn)

A male sex hormone, such as testosterone

endocrinologist (EN-doh-krih-NOLL-uh-jist)

A doctor who treats people who have hormone problems.

hormone (HOR-mohn)

A chemical made in a gland in one part of the body. The hormone travels through the blood to another part of the body, where it helps other cells do their job.

hypogonadism (HI-po-GO-nad-iz-um)

A low testosterone level or sperm count, or both.

sex hormone

A hormone that affects and is made by the reproductive (sex) organs. It is responsible for secondary sex traits, such as facial hair in men.

To find an endocrinologist near you

Visit hormone.org or call 1-800-HORMONE (1-800-467-6663)