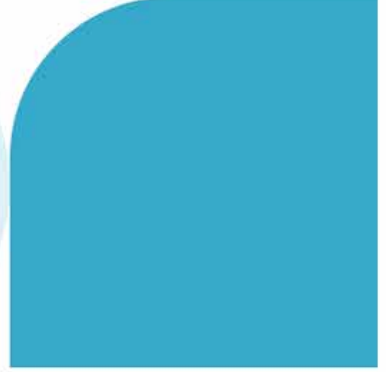
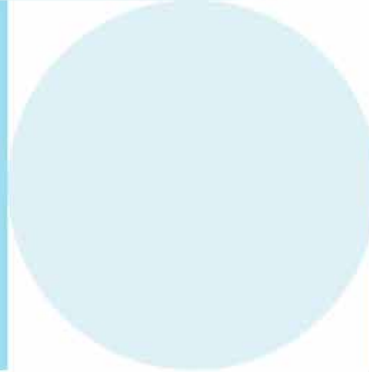
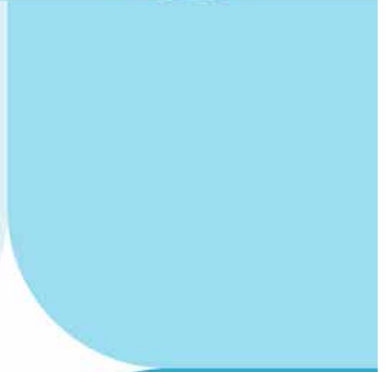
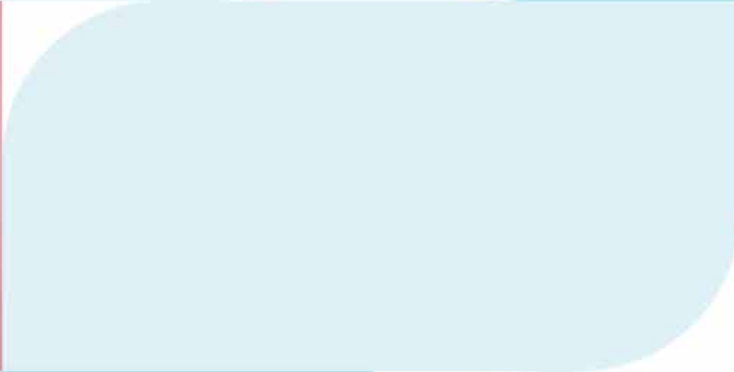




Test report



At-home test



# Testosterone Test

Lab test

Saliva

Name: **Sample Report**    Date of test: **07/10/2023**    Analysis-ID: **DUMMY-33**

# Testosterone

Testosterone is a sex hormone that is found in both men and women, but is found in significantly higher concentration in men. During fetal development, testosterone plays a central role in the development of the male genitalia and during puberty the hormone is released in large quantities which then affects male sexual maturity and is responsible for the development of male characteristic traits, such as increased body fat, deepened voice, beard growth and greater muscle mass. The hormone is also important for sex drive, muscle function and the skeletal system (in both men and women). Testosterone also plays a significant role in fat metabolism and helps men burn fat more efficiently. Declining testosterone levels therefore typically lead to increased body fat. As you get older, the production of testosterone decreases, which can lead to fatigue and poor general health.

Testosterone is a steroid hormone and in men, testosterone is formed mainly in the testicles and in women in the ovaries. The enzyme building block for testosterone is cholesterol and the hormone can be gradually converted to other hormones, such as estrogen. The production of testosterone is stimulated by luteinizing hormone (LH), which is secreted from the pituitary gland in the brain. The interaction between the pituitary gland and the hypothalamus controls then the body maintains the right levels of hormones by stimulating or slowing down the synthesis in the gonads.

Our lab has tested the concentration of free testosterone in your saliva. Your results can be found below.

## Your test results

Hormone	Your value	Reference value
Testosterone	39.59 pg/ml	Men: 10 - 230,9 pg/ml Women: 10 - 50,2 pg/ml

### Normal values Men

- Men 21-30 years 47,2-136,2 pg/ml
- Men 31-40 years 46,8-106,8 pg/ml
- Men 41-50 years 36,5-82,7 pg/ml
- Men 51-60 years 19,1-89,0 pg/ml
- Men 61-75 years 12,2-68,6 pg/ml

### Normal values Women

- Women 21-30 years 7,9-50,4 pg/ml
- Women 31-40 years 7,0-44,8 pg/ml
- Women 41-50 years 7,0-39,4 pg/ml
- Women 51-60 years 7,0-29,8 pg/ml
- Women 61-75 years 7,0-29,3 pg/ml

## Do you have low values?

There are a number of natural reasons why a person may have low values. A male's testosterone is at its highest at the age of 20 and then gradually decreases from the age of 30. If you do not exercise regularly, you often have lower levels than normal.

If your values are outside the reference range, you should consult a doctor or qualified therapist for how to proceed. If you suffer from any disease that causes your testosterone levels to be low, you should consult a doctor.

## Natural ways to increase testosterone

While strength training and high intensity interval training have been shown to increase the natural production of testosterone, resistance training appears to have a lower testosterone. Sleep quality is another important factor for testosterone production. It has been seen in studies that the amount of testosterone is highest at night and especially during REM sleep (dream sleep) in both men and women and then decreases during the day.

Stress can also affect testosterone levels. During stress, more cortisol is produced, which can lower testosterone.

Vitamin D and the minerals calcium, magnesium, selenium, and zinc can also help raise testosterone.

Furthermore, the hormone/estrogen as a whole should be taken into account. If you are a man with high estrogen, it may be relevant to lower your estrogen in order to raise your testosterone.

## Things to avoid at low testosterone levels

The following can adversely affect testosterone production: alcohol, smoking, sugar, and refined carbohydrates, as well as obesity.

## Lowering too high testosterone?

If you are a woman with too high levels of testosterone, you should also measure estrogen and progesterone to see how the hormones are balanced.

Some foods that have been seen in studies can lower high testosterone:

- Green tea was tested among all women with excessive hair growth associated with high testosterone. For 20 days, they drank 2 cups of green tea or placebo tea. Those who drank green tea after the test period had significant reductions in both total and free testosterone compared to the women in the placebo group.
- Omega-3 has been shown to reduce testosterone in women. Omega-3 is found in fatty fish such as salmon, mackerel, herring, sea bream and anchovies.
- Flavonoids can help lower high testosterone by blocking and removing it from the body. In a case study, it was seen that 20 grams of flavonoid daily for four months significantly reduced both free and total testosterone.

This test does not replace medical consultation. Always seek medical attention if you experience severe symptoms.

## References

1. Smith RJ, Altshuler E. Testosterone replacement therapy: testosterone levels and improvement of mood and well-being in healthy men and women.
2. Brown F, Basson R, Barlow C. Testosterone effects in polycystic ovary syndrome: A randomized controlled trial. *Phys Ther* Nov 2019;99(11):188-195.
3. Kasperkiewicz A, Bigham-Fraserford R, Watt R, et al. The effect of omega-3 supplementation on androgen profile and menstrual status in women with polycystic ovary syndrome: A randomized clinical trial. *J Reprod Med* 2019;11(10):443-470.
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