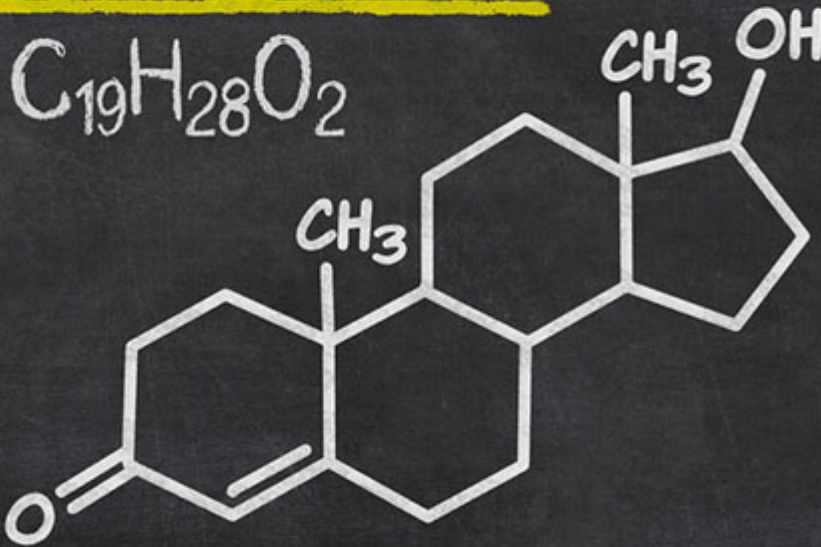


# Testosterone



## Natural Testosterone Boosters

[Anastrozole](#) (Arimidex) is a prescription aromatase inhibitor and testosterone booster which requires a doctor's prescription; getting a prescription can be inconvenient, especially considering most doctors won't prescribe it. Also, not every man is a candidate for it, for instance if your estradiol level is in the normal range. However, there are a number of natural aromatase inhibitors and therefore natural testosterone boosters.

Recall that aromatase is an enzyme in the testosterone synthesis pathway. It converts testosterone into estradiol, the most potent estrogen, and androstenedione into estrone, another potent estrogen. Estrogens exert negative feedback on luteinizing hormone (LH), which signals the gonads to make testosterone. Hence when estrogen is high, less LH is made, and testosterone decreases.

By inhibiting aromatase, less testosterone is converted to estrogens, so there's less negative feedback on LH, which rises, then more testosterone is made. [Aromatase inhibitors can boost testosterone while leaving estrogens in the normal male range.](#)

## **Natural aromatase inhibitors**

A number of natural products can inhibit aromatase.

One of them is [red wine](#). While alcohol itself has a weak inductive effect on aromatase, i.e. it increases it, the chemicals in red wine overcome this effect, and in fact are powerful inhibitors of aromatase. This may be the

mechanism of action, at least in part, on [the potent inhibitory action of red wine on breast cancer cells](#). The chemical in red wine doing much of the inhibiting of aromatase may be [resveratrol](#).

Since red wine has this effect, it's not surprising that [grape seed extract also inhibits aromatase](#), and also suppresses aromatase expression. The authors of this study described the effects of [grape seed extract](#) as "potent".

[Over 300 natural products have been tested for aromatase inhibition activity](#).

Among the most active products included green tea, cocoa, coffee, and collard greens.

## **Being lean and muscular is the best testosterone booster**

TRT (testosterone replacement therapy) has become a hot topic among men in general and readers on this site, understandably given [the secular decline in testosterone levels](#). The causes of this secular decline are unknown, but speculation centers on obesity and [xenoestrogens in water, personal care products, and plastics](#).

[Obesity is certainly a cause of low testosterone](#). In turn, low T can cause obesity by lowering muscle mass. It's a vicious cycle.

Fat tissue generates aromatase, so being overweight or obese lowers T and increases estrogens. More precisely, body composition, the proportion of fat vs muscle mass, matters a lot.

If you're concerned about your testosterone level, lose fat and gain muscle. Do this by lifting weights and cutting out refined carbohydrates and sugar. That's the best natural testosterone booster.

## **Vitamin D raises testosterone**

Vitamin D deficiency is rampant in the U.S. and Europe. Among healthy adolescents in a northern city (Boston), 42% were vitamin D insufficient. Vitamin D insufficiency is more common in northern latitudes, in winter, and in people with dark skin.

If 42% of healthy teenagers were vitamin D insufficient, then the figure among adults who may be less healthy, don't get outside in the sun as much, and are overweight may be much higher.

[Men who took ~3000 IU of vitamin D for a year had a significant and substantial increase in testosterone, from 20 to 30%.](#)

## Summary

To increase testosterone, the following steps are suggested.

- Get lean and muscular if you're not already
- Consider vitamin D. The gold standard is getting a blood test for it, then supplementing as/if appropriate.
- Consider natural aromatase inhibitors. These include red wine, grape seed extract, resveratrol, DIM, cocoa, coffee, and black or green tea.

PS: Learn how to get lean and muscular with my book, [Muscle Up](#).

PPS: [You can support this site by purchasing through my Supplements Buying Guide for Men](#). No extra cost to you. It lists most of the supplements discussed above.