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Testosterone is the sex hormone that turns a boy into a man. But did you know that women also produce testosterone, and that it affects everything from your heart to your hair?

It turns a foetus into a boy

Around the seventh week of embryonic development, the genetic male (having the Y chromosome) starts to produce testosterone which promotes development of the male sex organs.

Testosterone also acts on the developing brain. According to Consultant endocrinologist William Jeffcoate, “exposure of the foetal brain to testosterone determines male-type sexual behaviour in later life”, though he acknowledges that social and psychological factors are also involved in determining [sexual behaviour](#) [5].

Testosterone also acts on the developing brain.

It's also thanks to testosterone that men don't experience monthly reproductive cycles, the bane of many women's lives. Testosterone switches off such cyclical patterns in men just before their birth.

Women also produce testosterone

Testosterone is made from cholesterol. It's made in the testes in men, but women's ovaries also produce small amounts. The adrenal glands (above the kidneys) also secrete testosterone in men and women.

Signs of excessive testosterone production in women include acne, irregular periods and infertility: one common cause is [polycystic ovary syndrome](#) [6].

It reduces anxiety

Scientists report that testosterone may act as an anxiolytic (reducing anxiety), an antidepressant and an aid to memory. Studies are quoted in which testosterone acts to [reduce fear \[7\]](#) in women, and to [improve memory \[8\]](#) in patients with Alzheimer's.

Scientists report that testosterone may act as an anxiolytic (reducing anxiety), an antidepressant and an aid to memory.

The studies are, however, small and short-term. Experts at [Harvard \[9\]](#) suggest that tests on testosterone and the brain need to continue.

It reduces your risk of stroke

In one Australian study, men with higher testosterone levels had a 44% lower risk of stroke than those with lower testosterone levels. Elsewhere, testosterone supplements reduced the frequency of angina in older men with diabetes.

Before thinking about spreading testosterone on your toast, however, it's worth waiting for scientists to understand [TOM \[10\]](#). TOM is the "Testosterone in Older Men with mobility limitations trial", and it was terminated early because testosterone seemed to be harmful to the heart.

Too much can be dangerous

In doping, excessive levels of testosterone are used by the athlete to improve performance and [the Finnish \[11\] Antidoping \[11\] Agency \[11\]](#) recognise that this can lead to heart trouble, cancer and mood disorders. (Conversely, [testosterone reduction \[12\]](#) can be used to shrink prostate tumours).

One way in which excessive testosterone is known to be harmful is by acting on the liver to increase [cholesterol \[13\]](#) production (working in the opposite way to statins, which are prescribed to reduce cholesterol). This can increase the risk of heart attacks and strokes.

It affects hair growth

Castrated males do not become bald: an extreme way to prove that testosterone is necessary for baldness, perhaps, but true nonetheless. Meanwhile, testosterone seems to promote hair growth elsewhere on the body.

In the medical literature, a 57 year old woman with elevated testosterone is described. She presents with hair growth on her face and abdomen, hair loss on her head, deepening of her voice and increased libido. Thankfully, removal of her ovaries reversed most of these symptoms.

There's no such thing as the male menopause

Probably. Although symptoms such as reduced libido, depressed mood and erectile dysfunction are commonly blamed on the 'male menopause', doctors are quick to point out that testosterone levels fall only very slowly with age. Women, meanwhile, experience a hormone plunge during the menopause.



Source URL: <https://helencowan.co.uk/7-things-you-didnt-know-about-testosterone>

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