



## Testosterone deficiency

- Diagnosed by a fasting blood test

- Treated with replacement using capsules, skin patches, creams and gels and injections

- Symptoms that are likely to develop from a low hormone level

- Necessary to have a prostate check to exclude possible prostate cancer

As women grow older they reach a point in their lives called menopause when their hormone production decreases rapidly leading to a number of symptoms and consideration of hormone replacement.

Men also have a decrease in their hormone levels which is more gradual from their peak in their 20's and 30's. The male hormone testosterone is mainly produced in the testicles and is carried through the circulation to have its effect. Testosterone levels may decrease by 1-2% per year. Approximately 10% of men aged 40-60 and 30% of men aged 60-80 have significantly decreased hormone levels.

This is often accompanied by an increase in weight particularly fat around the abdomen. It is rather like the chicken and the egg as to which comes first. Decreased hormone levels can lead to an increase in weight. The increase in weight can also lead to hormones being taken up in the fat and therefore being less effective.

The symptoms that are likely to develop from a low hormone level may be decreased libido (desire) and a reduced ability to achieve and maintain an erection.

Physical symptoms consist of weakness, muscle and joint pains, thinning of bones (osteoporosis), sweating and hot flushes, dryness of the skin, reduced muscle mass and strength, abdominal obesity, breast enlargement and reduced body and facial hair.

Psychological symptoms may consist of tiredness, depressed mood, irritability, poor concentration and reduce short term memory. The ability to do crossword puzzles and carry out mathematical calculations may be reduced as well as an ability to follow directions on a map.

Testosterone deficiency is diagnosed by a fasting blood test measured on two separate days in the morning when the level is at its highest. It is also necessary to have a prostate check to exclude possible prostate cancer as hormone replacement may worsen the situation. In fact, reducing testosterone levels is one method of treatment for prostate cancer.

While a number of men may show "normal" hormone levels it is impossible to know what the level used to be at its peak and therefore what the relative reduction might now be.

Testosterone deficiency can be treated with replacement using capsules, skin patches, creams and gels and injections. If treatment is given then the man will require regular blood test follow-ups including prostate specific androgen (PSA). It is important to note that replacement of deficient levels is personalised and monitored. It will not have similar effects to massive doses of testosterone sometimes taken by some body builders. So called "testosterone rage" appears to only occur in men in whom extreme doses have been taken. Testosterone replacement may turn "grumpy old men" into "nice guys".



**Dr Neil Gordon**  
Urologist  
Urological Surgeon at Cairns Urology  
M.B.B.S (Melb)  
F.R.C.S (Glasg)F.R.C.S Ed  
F.R.A.C.S., F.I.C.S



98 Spence Street  
Cairns, QLD 4870, Australia

PO Box 7787  
Cairns, QLD 4870, Australia

P (07) 4041 0700  
F (07) 4041 4007

[www.cryotherapy.com.au](http://www.cryotherapy.com.au)  
[www.cairns-urology.com.au](http://www.cairns-urology.com.au)  
[reception@cairns-urology.com.au](mailto:reception@cairns-urology.com.au)



[Cairns-Urology.com.au](http://Cairns-Urology.com.au)



[facebook.com/Cairns.Urology](http://facebook.com/Cairns.Urology)



[twitter.com/CairnsUrology](http://twitter.com/CairnsUrology)