

ANDROPAUSE

Andropause is the result of low testosterone and a natural part of male aging, due to a decline in testicular function. Andropause (or the "male menopause") is the counterpart to the female menopause.

Testosterone levels in men remain relatively constant until about the age 50, at which time they begin to fall slowly. However, the decline in male hormone production is much more gradual than the decline in female hormone production. Symptoms of andropause include a decrease in libido & erectile dysfunction, decreased energy and strength, increase in body fat, loss of muscle mass, enlargement of prostate, osteoporosis, depression, inability to concentrate, loss of enthusiasm and reduced mental agility.

Research studies have directly linked depression in elderly men with low levels of testosterone. Results found men with lowest levels of testosterone were three times for likely to suffer depression than those with the highest levels. These results were independent of a man's health & this is significant because poor health is known to increase the risk of depression.

Men with low testosterone (hypogonadism) are given testosterone replacement therapy for a variety of reasons; It may enhance libido, decrease heart disease risk, increase in lean body mass and prevent osteoporosis. Testosterone may also lower total cholesterol and LDL, and decrease insulin resistance.

As men age, the balance between testosterone and oestradiol changes, tilting towards more oestradiol production. The pituitary hormone responsible for stimulating testosterone is LH (luteinizing hormone). Excess oestradiol may decrease the level of LH and, therefore, the level of testosterone.

It is surprising to learn that the average 60-year-old male has more circulating oestrogen in his bloodstream than the average 60-year-old female.

The conversion of testosterone to oestradiol takes place under the influence of the enzyme aromatase. Testosterone and androstenedione are both "aromatizable" to oestradiol.

In many cases, levels of oestrogen are found to be elevated. If this happens, it is possible to block aromatase activity, so the chances that the testosterone given will be converted to even more oestrogen may be reduced.

Currently there are several aromatase inhibitors on the market for prescription use as treatments for breast cancer. These aromatase inhibitors might block the conversion of testosterone to oestrogen in men as well. There is also a natural aromatase inhibitor called **chrysin**.