



## MALE HORMONE PROFILE

*There is growing awareness that hormone function plays a vital role in a man's health over the course of his lifetime. In particular, changes in the production of the sex hormone testosterone can exert a profound influence on sexual function, bone density, fat metabolism, mood states, energy levels, and even physical appearance (skin and muscle tone).*

The Male Hormone Profile is an accurate, convenient, non-invasive saliva assay that evaluates testosterone activity in men. This profile also includes measurements of stress hormones (cortisol and DHEA) and melatonin, thereby providing a more complete picture of the role played by adrenal hormones and melatonin in the production of testosterone.

### What is testosterone?

Testosterone is a sex hormone found in both men and women, produced by the testes, and adrenal (stress) glands. The testes produce large amounts of testosterone and consequently testosterone is more dominant in men than women. Testosterone is responsible for the distinguishing characteristic of the masculine body. Testosterone is also important for energy production, the prevention of mental and physical fatigue, the maintenance of cardiac health and sex drive as well as the building and maintenance of healthy skin, bone and muscles.

### Signs and symptoms of low testosterone

- Lowered libido
- Fatigue and irritability
- Night sweats and mental burnout
- Weight gain
- Diminished facial/ body hair
- Decreased muscle mass
- Erectile dysfunction
- Loss of bone density
- Cardiovascular disease
- Gynaecomastia (enlargement of breast tissue in men)

When SHBG is low, high amounts of free testosterone are available to bind to other receptors and this causes problems. SHBG is produced by the liver, and is greatly influenced by insulin resistance. Low levels of testosterone can also occur usually due to adrenal hypofunction and hypothyroidism and elevated SHBG.

### What is melatonin?

Melatonin is a natural hormone produced by the pineal gland, which plays a vital role in the regulation of various hormones according to the natural daily cycles. It helps to regulate body temperature, influences sexual hormones, supports cardiovascular function, is a potent antioxidant and enhances the immune system. Melatonin harmonises brain function throughout the day/night cycle, through the pineal gland's sensitivity to changes in light levels. The release of melatonin from the pineal gland is, effectively, stimulated by dark and suppressed by light. It is produced in abundance before puberty, but declines steadily after then until old age, when virtually none is produced.



### Conditions associated with a melatonin imbalance

- Abnormal sexual development
- Cardiovascular disease
- Cancer
- Delayed sleep phase syndrome
- Depression
- Headaches (tension and cluster)
- Immune disorders
- Infertility
- Insomnia
- Jet lag
- Premature ageing
- Multiple Sclerosis
- Seasonal Affective Disorder (S.A.D)
- Stress

### Adrenal Stress Index

Stress can have a profound effect on emotional and physical well-being, affecting everyone at some point and causing symptoms ranging from weight gain and depression to digestive problems and many more. Continued imbalances of stress hormones can wear the body down, triggering chronic fatigue. The adrenals are responsible for the secretion of the body's major stress hormones, cortisol and DHEA. These hormones are not released constantly throughout the day, but are secreted in a cycle called the circadian rhythm, with the highest values being in the morning and the lowest at night.

### What causes stress

Factors that may contribute to stress include: negative dietary and lifestyle habits, (including over-consumption of stimulants such as sugar and caffeine), excessive exercise, injury, bereavement, marriage, divorce, debt, attitudes such as perfectionism, obsessive - compulsive behaviours, shyness, insecurity and also, perhaps, isolation and loneliness.

### The importance of balanced stress hormones

- Supports emotional and physical energy
- Strengthens the immune system against colds, coughs, flu and possibly more serious illness
- Improves metabolism, help reduce fat storage, and controls appetite
- Balancing stress hormones slows the ageing process, balances sex hormones
- Aids dietary protein synthesis, thereby helping mood
- Prevents osteoporosis
- Maintains healthy blood pressure levels and lowers LDL 'bad' cholesterol levels

### Signs and symptoms of imbalanced stress hormones

- Weight gain, inexplicable hunger
- Increased number of minor infections and viruses (e.g. thrush, cystitis, colds, flu)
- Poor concentration and memory, low energy, insomnia, depression, loss of libido
- Headaches, mood swings, anxiety, panic attacks, nervousness and/or irritability
- Digestive disturbances (diarrhoea, constipation, bloating, stomach aches/pains)
- Increased sensitivities to food, alcohol intolerance
- Skin problems (eczema, psoriasis)
- Erectile dysfunction / impotence

### What does the test involve?

The test is carried out using 4 saliva samples. This can give valuable information about the free bio-available fraction (active) levels of these hormones.

### Nationwide Test Kit Service

Most of the tests involve simple kits that can be used in your own home. Some may require the help of a nurse or GP. If you cannot visit the laboratory, you can phone and arrange for your kit to be sent in the post. Once samples have been taken, you simply post the test kit back to the laboratory. We would encourage you to use guaranteed delivery and not to send kits over the weekend.

**For further information consult your practitioner, or call us today on 020 8336 7750**