

Salivary Hormones

Hormone imbalances are associated with numerous symptoms and health conditions. Assessing and diagnosing these changes are important to decrease unnecessary suffering and prevent degenerative diseases. Salivary hormone testing has been used in research for over 50 years and is a highly sensitive validated technique. It has the benefit over serum testing that it detects predominantly unbound, active hormones, which are biologically available to their receptors in target tissues. It has a convenient, pain-less and stress-free collection procedure, that can be performed in the privacy of the home. In addition, salivary hormones are stable at room temperature and samples can be collected at any time of the day and at multiple time-points; a benefit especially important for hormones that have circadian or monthly rhythms.

Table 1: Symptoms and Conditions Associated with an Hormone Imbalances

Low sex drive	Insomnia & sleep disturbances
Depression & Irritability	Cancer
Fatigue	Hair thinning and loss
Weight gain and decreased muscle tone	Osteoporosis
Memory loss, foggy thinking & Alzheimer's disease	Cardiovascular disease

Hormones and Aging:

Everyone knows that hormones are powerful molecules that are essential for life. What many people fail to recognise however, is that partial deficiencies also have a wide reaching negative effect on the human body. This is understandable however, when a hormone's mechanism of action is understood.

Aging is one process which is associated with hormone decline. In the past it was thought that this reduction was a normal consequence of the aging process. However, more recently an alternative theory has been proposed; that hormones do not decrease because we age, but rather we age because our hormones decrease i.e. that a reduction in hormonal cellular, genetic and protein control, is the physiological cause of the deterioration of the body which leads to the aging process. It therefore follows that treating hormonal deficiencies (overt, moderate or mild) will prevent or ameliorate disorders associated with the aging process. The treatment of osteoporosis with testosterone and estrogen in men and women is just one example of this. In addition, ensuring that hormone levels are optimal will enhance quality of life in the aging population by improving mood, memory, assertiveness, sexual function and muscle mass. Assessing and diagnosing these changes are important to decrease unnecessary suffering and prevent degenerative diseases.

Salivary Hormone Testing:

Salivary hormone testing has been used in research for over 50 years and is a highly sensitive technique. It has the benefit over serum testing that it detects predominantly unbound, active hormones (see Table 2). This has been validated in numerous studies and results have shown that salivary hormone levels highly correlate with the unbound fraction of hormones in serum and plasma. In addition to its superiority for detecting bioavailable hormones, salivary hormone testing has many other advantages over serum testing.

Table 2: Advantages of Salivary Hormone Testing

Detects unbound, free, active hormone levels
Convenient, painless, and non-invasive collection procedure
Samples can be collected in the privacy of the home
Hormones in saliva are stable in room temperature
No special specimen handling required
Specimen collection can occur at any time of the day
Specimens can be collected at multiple time-points over a day or month
Unaffected by changes in binding proteins which can occur during pregnancy, with aging and with some medication
Hormone supplementation (oral & topical) can be monitored
Specific reference ranges are available for hormone therapy delivered by different routes of administration (e.g. Cream, oral, patch)

Salivary Hormones Tested:

- Androstenedione
- Estriol (E3)
- Cortisol
- Estrone (E1)
- DHEA
- Melatonin
- Dihydrotestosterone (DHT)
- Progesterone
- Estradiol
- Testosterone

Related Tests

- Adrenal Function Tests
- 28 Day Female Cycle Hormone Profile (Salivary)
- Female or Male Hormone Profiles
- Sleep Profile (Salivary)