Hormone profiles

Adrenal hormone profile

Used to assess

Adrenal function in patients presenting with symptoms such as anxiety, depression, mood swings, insomnia, headaches, low energy, stress, hormonal imbalance and poor immune function. The levels of the stress hormones, Cortisol and DHEA-S are monitored over the course of a day.

Clinical relevance

Altered levels of Cortisol and DHEA-S are indicative of acute and/or chronic mental and/or physical stress. Prolonged stress causes increased secretion of Cortisol and can eventually lead to hypertrophy of the adrenal cortex, adrenal exhaustion and immune suppression.

Specimen requirements

Four saliva specimens collected over the course of a day

Specimen collection method

Self-collection test kit

Baseline hormone profile (female & male)

Used to assess

Individual hormone status.

Female:

- Oestrone (E1)
- Oestradiol (E2)
- Oestriol (E3)
- Progesterone
- Testosterone
- DHEA-S

Male:

- Oestradiol (E2)
- Testosterone
- DHEA-S
- Cortisol

Clinical relevance

Provides valuable information on an individual's hormonal status and the potential impact this may have on physical and emotional health. Hormonal imbalance may result in weight gain, mood swings, night sweats, disturbed sleep patterns, loss of libido and hot flushes.

Specimen requirements

One saliva specimen, from which multiple hormones are tested. The specimen is collected on day 21 for menstruating women and any day for post-menopausal women and men.

Specimen collection method

Self-collection test kit

Baseline + adrenal hormone profile (female & male)

Used to assess

A combined test designed to measure an individual's hormone status as well as their adrenal function and the potential impact this may have on physical and emotional health.

Male:

- Oestradiol (E2)
- Testosterone
- DHEA-S
- Cortisol

Female:

- Oestrone (E1)
- Oestradiol (E2)
- Oestriol (E3)
- Progesterone
- Testosterone
- DHEA-S
- Cortisol

Clinical relevance

Hormonal imbalance may result in a symptom picture which includes weight gain, mood swings, night sweats, disturbed sleep pattern, loss of libido and hot flushes. Where patients also present with symptoms such as anxiety, depression, headaches, low energy, stress, and poor immune function it is important to also assess adrenal function. Altered levels of Cortisol and DHEA-S are indicative of acute and/or chronic mental and/or physical stress.

Specimen requirements

One saliva specimen, from which multiple hormones are tested. The specimen is collected on day 21 for menstruating women and any day for post-menopausal women and men.

Specimen collection method

Self-collection test kit

Female hormone profiles - full cycle/luteal phase

Used to assess

Changes in hormonal status over the course of part of the menstrual cycle by measuring the sex hormones on specified days of the month.

Clinical relevance

The Full Cycle Hormone Profile and the Luteal Phase Hormone Profile are recommended for pre-menopausal and peri-menopausal women presenting with infertility, dysmenorrhoea, endometriosis, PCOS, oestrogen dominance, menorrhagia, weight gain, amenorrhoea/irregular periods, PMS, fibroids and history of miscarriage.

Specimen requirements

Three or five saliva specimens are collected on the specified days of the month

Specimen collection method

Self-collection test kit

Melatonin hormone profile

Used to assess

The levels of melatonin in the body are measured at midnight and 6:00am.

Clinical relevance

The levels of melatonin in the body tend to decrease with age. Low levels may result in sleep disturbances such as insomnia, poor immune function, depression and other mood disorders.

Specimen requirements

Two specimens of saliva are required

Specimen collection method
Self-collection test kit

2 & 16 oestrogen metabolites

Used to assess
Monitors the metabolism of oestrogens: 2-hydroxyoestrone and 16α-hydroxyoestrone.

Clinical relevance
High levels of circulating oestrogens are proliferative and potentially dangerous, so it is important to ensure that they are broken down efficiently and effectively removed from the body. Oestrogens are metabolized in two ways: the first pathway (2-hydroxyoestrone) is protective while the second pathway (16α-hydroxyoestrone) is more potent. The ratio between the 2:16 pathways needs to be maintained at the ideal ratio of 2.0.

A low ratio (reduced 2-hydroxyoestrone production) indicates a state of oestrogen excess which may be a contributing factor to oestrogen-dependent cancers, such as those of the breast, head/neck and the prostate. A high ratio indicates an oestrogen deficient state which may indicate an increased risk of osteoporosis.

Specimen requirements
A urine specimen collected from the first morning void

Specimen collection method
Self-collection test kit

Thyroid hormone profile

Used to assess
Measures the levels of unbound free thyroid hormones TSH, fT4 and fT3, which are available to the tissues, reflecting a true measure of the body's metabolic rate.

Clinical relevance
Thyroid function decreases with age and an underactive thyroid is most common in menopausal and post-menopausal women. Symptoms of underactive thyroid include dry and coarse skin, weakness and lethargy, constipation, weight gain, slow pulse, heavy and irregular periods and depression.

Specimen requirements
A blood specimen is required which can be collected at any time of day.

Specimen collection method
Healthscope Pathology collection centre

Reverse T3

Used to assess
Reverse T3 (rT3) is an inactive form of T3 that is produced in the body particularly during periods of stress.

Clinical relevance
Under normal conditions, T4 will convert to both T3 and rT3 continually and the body eliminates rT3 quickly. Under certain conditions, more rT3 is produced and the desirable conversion of T4 to T3 decreases. This occurs during fasting, starvation, illnesses such as liver disease and during times of increased stress.

An increased production of rT3 is often seen in patients with disorders such as fibromyalgia, chronic fatigue syndrome, Wilson's Thyroid syndrome and stress. Measurement of rT3 is also valuable in identifying sick euthyroid syndrome where active T3 is within normal range and rT3 is elevated.

Specimen requirements

A blood specimen is required which can be collected at any time of day.

Specimen collection method

Healthscope Pathology collection centre