

# FEMALE HORMONE PROFILE – Extensive (saliva)

*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. Female hormones fluctuate through a menstrual cycle and at various times of a woman's life. Imbalances in hormones are associated with PMS, menopause and more complex conditions like PCOS and endometriosis. This test provides a focused overview of the hormonal cascade of both male hormones and female hormones.*

## Hormones and Aging

Hormones are powerful molecules that are essential for life. Imbalances of hormones affects other organ systems like the adrenals, thyroid and nervous system. 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.

### SYMPTOMS AND CONDITIONS ASSOCIATED WITH HORMONE IMBALANCES

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

## 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. 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.

It has a convenient, painless and stress-free collection procedure, 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.

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 during pregnancy, with aging and with some medication
Hormone supplementation (oral and topical) can be monitored
Specific reference ranges are available for hormone therapy delivered by different routes of administration (e.g. cream, oral, patch)

## FEMALE HORMONE PROFILE – EXTENSIVE (saliva) [Test Code: 1006]

- ❖ DHEAs, E1, E2, E3, Progesterone, Testosterone, Androstenedione, ratios.

### Other female hormone tests available

- **Female Hormone Profile - Basic (saliva) [1005]:** DHEAs, E1, E2, E3, Progesterone, Testosterone, ratios.
- **Female Cycle (28 Day) Hormone Profile (saliva) [1004]:** 11 x E2, 11 x Progesterone day 3, 5, 8, 11, 12, 14, 16, 18, 20, 23, 28 and Testosterone day 11
- **Adrenocortex Stress & Female Basic (saliva) [1010]:** DHEAs (6-8am), Cortisol (6-8am, noon, 4pm, 8pm); E1, E2, E3, Progesterone, Testosterone, ratios
- **Female Hormone Profile (serum) [1104]:** E1, E2, E3, FSH, LH, Progesterone, Prolactin, SHBG, Testosterone, free Testosterone
- **Estrogen Metabolites - Level 1 (spot or 24 hour urine):** 2OHE1, 16 $\alpha$ OHE1, 2:16 ratio
- **Estrogen Metabolites - Level 2 (spot or 24 hour urine):** 2OHE1, 16 $\alpha$ OHE1, 2:16 ratio; 4OHE1
- **Estrogen Metabolites - Level 3 (24 hour urine) [1209]:** 2OHE1, 16 $\alpha$ OHE1, 2:16 ratio, 4OHE1; 2OMeE1, 4MeOE1, 2OHE1:2OMeE1, 4OHE1:4OMeE1 ratios
- **Estrogens Profile (spot or 24 hour urine):** E1, E2, E3, 2OHE1, 16 $\alpha$ OHE1, 2:16 ratio; 4OHE1
- **Female Hormone Profile – Basic (spot or 24 hour urine):** T4, T3, T4/T3 ratios, Cortisol, DHEA, Testosterone, Progesterone, E1, E2, E3

- **Female Hormone Profile - Extensive (24 hour urine) [1213]:** T4, T3, T4/T3 ratios, Cortisol, DHEA, Testosterone, Progesterone, E1, E2, E3; 17-ketosteroids, Total OH corticoids, ratios, Allo-tetrahydrocortisol, Tetrahydrocortisol, Tetrahydrocortisone, Tetrahydrodeoxycortisol, Aldosterone, Androsterone, Etiocholanolone, 11OH-androsterone, 11OH-etiocholanolone, 11-ketoetiocholanone, 11-ketoandrosterone, Pregnanetriol (Pregnenolone), DHT, 2OHE1, 16 $\alpha$ OHE1, 2:16 ratio, 4OHE1, Melatonin, Growth hormone, Na, Ca, P, K, Mg, Cr
- **Female Hormone Blood Spot – Basic [1401]:** Estradiol (E2), Progesterone, Testosterone, SHBG, DHEAs, Cortisol
- **Female Hormone Blood Spot – Extensive [1402]:** Estradiol (E2), Progesterone, Testosterone, SHBG, DHEAs, Cortisol; TSH, free T4, free T3, Thyroid peroxidase antibodies
- **Adrenals & Female Hormones (saliva & blood spot) [1414]:** DHEAs, 4 x Cortisol; E2, Progesterone, Testosterone, SHBG, FSH, LH
- **Advanced Hormones Dried Urine [1501]:** Estradiol, Estrone, Estriol, 2OHE2, 2OHE1, 4OHE2, 4OHE1, 16 $\alpha$ OHE1, 2MeOE2, 2MeOE1, 4MeOE2, 4MeOE1; Pregnanediol, Allopregnanolone, Allopregnanediol, 3 $\alpha$ -Dihydroprogesterone, 20 $\alpha$ -Dihydroprogesterone, Dexocorticosterone, Corticosterone; Testosterone, Epi-Testosterone, 5 $\alpha$ -DHT, Androstenedione, DHEA, 5 $\alpha$ ,3 $\alpha$ -Androstanediol; Total Cortisol, Free Cortisol (x4), Total Cortisone, Free Cortisone (x4), Tetrahydrocortisol, Tetrahydrocortisone; Melatonin (x4)
- **Intermediate Hormones Dried Urine [1502]:** Estradiol, Estrone, Estriol, 2OHE1, 4OHE2, 4OHE1, 16 $\alpha$ OH E1, 2MeOE1, 4MeOE2; Pregnanediol, Allopregnanolone; Testosterone, Epi-Testosterone, 5 $\alpha$ -DHT, Androstenedione, DHEA; Total Cortisol, Free Cortisol (x4), Total Cortisone, Free Cortisone (x4), Tetrahydrocortisol, Tetrahydrocortisone; Melatonin
- **Basic Hormones Dried Urine [1503]:** Estradiol, Estrone, Estriol; Pregnanediol, Allopregnanolone; Testosterone, 5 $\alpha$ -DHT, DHEA; Total Cortisol
- **Estrogen Elite Dried Urine [1505]:** Estradiol, Estrone, Estriol, 2OHE2, 2OHE1, 4OHE2, 4OHE1, 16 $\alpha$ OHE1, 2MeOE2, 2MeOE1, 4MeOE2, 4MeOE1; Pregnanediol, Allopregnanolone; Testosterone, 5 $\alpha$ -DHT, Androstenedione, DHEA, 5 $\alpha$ ,3 $\alpha$ -Androstanediol
- **Estrogen Essential Dried Urine [1506]:** Estradiol, Estrone, Estriol, 2OHE2, 2OHE1, 4OHE2, 4OHE1, 16 $\alpha$ OH E1, 2MeOE2, 2MeOE1, 4MeOE2, 4MeOE1

### How to order a test kit:

To order a test kit simply request the test name and/or test code on a NutriPATH request form and have the patient phone NutriPATH Customer Service on 1300 688 522.



Phone **1300 688 522** for further details  
[www.nutripath.com.au](http://www.nutripath.com.au)