

# FEMALE CYCLE (28 day) HORMONE PROFILE (saliva)

This test provides a detailed assessment of estradiol (E2) and progesterone throughout the follicular and luteal phases of a cycle. Particularly useful in conditions which depend on optimal FSH and LH secretion like infertility, amenorrhea, menorrhagia or ovulation problems.

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 is a hormonal test indicated for both premenopausal and perimenopausal women not currently supplementing with hormones. An analysis of estrogen, progesterone and testosterone can reveal ovulatory function and trends in hormone production. Hormonal imbalances such as unopposed estrogen, high follicular progesterone, anovulation and luteal phase defects are easily identified.

SIGNS & SYMPTOMS THAT MAY SUGGEST USING THIS TEST	
PMS	Anovulation
Infertility	Amenorrhea
Endometriosis	PCOS
Irregular cycles	Menstrual headaches/migraines

Saliva hormone testing provides a thorough analysis of estradiol and progesterone over a full 28 day cycle. Testosterone is measured once from the 11th day specimen. By utilising 11 saliva samples for analysis, the relationship and balance of these essential hormones are analysed more precisely through time. The levels of estradiol and progesterone, as well as the ratio between the two, are clearly graphed for easy reference and patient education.

## **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.

Unlike serum measurements that typically reflect both bound and unbound fractions of hormones, salivary samples represent only the free (unbound) bioavailable fraction of hormone. Factors that affect binding globulin such as obesity and thyroid function do not influence test results with false high or low test levels.

Salivary testing 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, painless 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.

#### 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 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)

## FEMALE CYCLE (28 Day) HORMONE PROFILE (saliva) [Test code: 1004]

E2 (x 11), Progesterone (x 11) on day 3, 5, 8, 11, 12, 14, 16, 18, 20, 23, 28; Testosterone day (x1) on day 11 of menstrual cycle

#### Other female hormone tests available

• Female Hormone Profile – Basic (saliva) [1005]: DHEAs, E1, E2, E3, Progesterone, Testo., ratios

• Female Hormone Profile- Extensive (saliva) [1006]: DHEAs, E1, E2, E3, Progesterone, Testosterone; Androstenedione, ratios

- 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): 20HE1, 16αOHE1, 2:16 ratio
- Estrogen Metabolites Level 2 (spot or 24 hour urine): 20HE1, 16α0HE1, 2:16 ratio; 40HE1
- Estrogen Metabolites Level 3 (24 hour urine) [1209]: 20HE1, 16αOHE1, 2:16 ratio, 40HE1; 20MeE1, 4MeOE1, 20HE1:20MeE1, 40HE1:40MeE1 ratios
- Estrogens Profile (spot or 24 hour urine): E1, E2, E3, 20HE1, 16αOHE1, 2:16 ratio; 40HE1
- 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, Allotetrahydrocortisol, Tetrahydrocortisol, Tetrahydrocortisone, Tetrahydrodeoxycortisol, Aldosterone, Androsterone, Etiocholanolone, 11OH-androsterone, 11OH-etiocholanolone, 11ketoetiocholanone, 11-ketoandrosterone, Pregnanetriol (Pregnenolone), DHT, 20HE1, 16αOHE1, 2:16 ratio, 40HE1, Melatonin, Growth hormone, Na, Ca, P, K, Mg, Cr
- Female Hormone Blood Spot Basic [1401]: E2, Progesterone, Testo., 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, 16αOHE1, 2MeOE2, 2MeOE1, 4MeOE2, 4MeOE1; Pregnanediol, Allopregnanolone, Allopregnanediol, 3α–Dihydroprogesterone, 20α-Dihydroprogesterone, Dexocycorticosterone, Corticosterone; Testosterone, Epi-Testosterone, 5α-DHT, Androstenedione, DHEA, 5α,3α-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, 16αOH E1, 2MeOE1, 4MeOE2; Pregnanediol, Allopregnanolone; Testosterone, Epi-Testosterone, 5α-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, 5α-DHT, DHEA; Total Cortisol
- Estrogen Elite Dried Urine [1505]: Estradiol, Estrone, Estriol, 2OHE2, 2OHE1, 4OHE2, 4OHE1, 16αOHE1, 2MeOE2, 2MeOE1, 4MeOE2, 4MeOE1; Pregnanediol, Allopregnanolone; Testosterone, 5α-DHT, Androstenedione, DHEA, 5α,3α-Androstanediol
- Estrogen Essential Dried Urine [1506]: Estradiol, Estrone, Estriol, 2OHE2, 2OHE1, 4OHE2, 4OHE1, 16αOH 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