

# FEMALE HORMONE - Basic (blood spot)

*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. Serum testing has been considered as the gold standard or conventional method of measuring 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

## Blood Spot Testing

Blood spot is derived from capillary blood obtained by pricking the skin to draw drops of blood.

### ADVANTAGES OF BLOOD SPOT TESTING

No phlebotomist or visit to blood collection centre required

Collection times can be optimised, either at various times in a day or frequently

Safe and ease of collection

Finger prick and can be performed in the privacy of patient's home or in clinic

Measures the same hormone as standard blood test and results correlate with standard tests.

## FEMALE HORMONE - BASIC (blood spot) [Test Code: 1401]

❖ Estradiol (E2), Progesterone, Testosterone, SHBG, DHEAs, Cortisol

### Other female hormone tests available

- **Adrenals & Female Hormone (blood spot) [1414]:** DHEAs, 4 x Cortisol; E2, Progesterone, Testosterone, SHBG, FSH, LH
- **Female Cycle (28 Day) Hormone Profile (saliva) [1005]:** 11 x E2, 11 x Progesterone day 3, 5, 8, 11, 12, 14, 16, 18, 20, 23, 28 and Testosterone day 11
- **Female Hormone Profile - Basic (saliva) [1005]:** DHEAs, E1, E2, E3, Progesterone, Testosterone, ratios.
- **Female Hormone Profile - Extensive (saliva) [1006]:** DHEAs, E1, E2, E3, Progesterone, Testosterone, Androstenedione, ratios.
- **Female Hormone Profile (serum) [1104]:** E1, E2, E3, FSH, LH, Progesterone, Prolactin, SHBG, Testosterone, free Testosterone
- **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 metabolite, 2OHE1, 16 $\alpha$ OHE1, 2:16 ratio, 4OHE1, Melatonin, Growth hormone, Na, Ca, P, K, Mg, Cr
- **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)