

Other Available Test Panels



Male Hormone Panel™

Number of Samples: 1 saliva

Hormones Tested: DHEA, androstenedione, testosterone, DHT, progesterone, estradiol and estrone

Indications

- Andropause
- Low vitality and libido
- Hair thinning

Perimenopause Panel™

Number of Samples: 2 saliva collected on separate days; panel may be expanded by adding FSH and LH assays

Hormones Tested Twice:

Estrone, estradiol, estriol, DHEA, testosterone and progesterone

Indications

- Perimenopause
- Irregular cycles
- Pre- and post-therapy testing

Postmenopause Panel™

Number of Samples: 1 saliva

Hormones Tested: Estrone, estradiol, estriol, progesterone, testosterone and DHEA

Indications

- Menopause
- Hot flashes and mood swings
- Insomnia

About Diagnos-Techs

Background

Established in 1987, Diagnos-Techs, Inc.™ Laboratory in Kent, Washington, is considered the leading salivary-based testing and research laboratory in the United States. In 1989 Diagnos-Techs was the first laboratory to introduce salivary-based hormone testing into routine clinical practice — creating a powerful tool for evaluating stress- and hormone-related disease and illness in both genders and all age groups.

Quality Control

Diagnos-Techs maintains superior test quality by using a daily program of comprehensive quality assurance. All quantitative results are obtained from test runs which are in compliance with industry-standard testing protocols from the Clinical Laboratory Standards Institute (CLSI), World Health Organization (WHO)* and similar organizations. At least two control materials are included with each run. In addition, each and every result is reviewed by supervisory personnel to provide accurate results for initial tests as well as highly precise results in follow-up tests, ensuring the highest standard of clinical management.

Licensure and Accreditation

Diagnos-Techs laboratory is licensed by the State of Washington (License No. MTS-0327), subject to the Clinical Laboratory Improvement Act of 2003 (CLIA-2003) certification (Number 50D0630141). Diagnos-Techs Laboratory has also been awarded accreditation by The Joint Commission** for applying rigorous standards of quality in day-to-day operations, and for adopting ongoing performance improvement activities.

Specialties/Subspecialties

The laboratory is licensed in the specialties of microbiology, diagnostic immunology and chemistry. The microbiology subspecialties include bacteriology, mycology and parasitology. Diagnostic immunology includes the subspecialty of general immunology. Chemistry includes the subspecialties of general chemistry and endocrinology.

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*WHO is the World Health Organization that sets international standards for various parameters in medical practice. World Health Organization (WHO) has designated The Joint Commission and Joint Commission International (JCI) as the world's first WHO Collaborating Center dedicated solely to patient safety.

**With over 55 years of experience, The Joint Commission has become recognized as the worldwide leader in driving performance improvement in health care organizations. The Joint Commission conducts an independent and objective evaluation of health care organizations and the services they provide to ensure safe and high quality care. The Joint Commission is recognized by the Centers for Medicare and Medicaid Services.

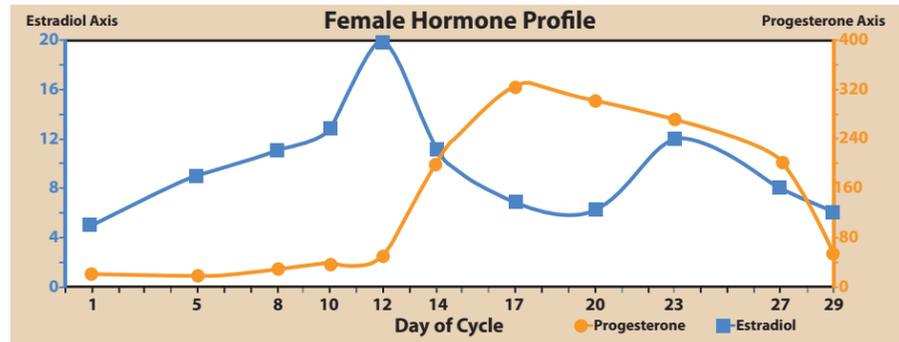
Female Hormone Panel™

The Science of Laboratory Medicine



Female Hormone Panel™

The Female Hormone Panel™ (FHP™) is a dynamic mapping of the free-fraction levels of estradiol (E2) and progesterone (P) throughout one cycle. The panel also includes a cycle average value for free testosterone and DHEA/DHEA-S. This panel uses 11 saliva samples collected during specified time slots throughout a menstrual cycle. The expanded panel version includes five additional FSH and LH measurements.



FHP™ Overview

The FHP™ is used to identify menstrual cycle deficits and imbalances in progesterone, estrogen, testosterone and DHEA/DHEA-S. This panel provides a profile of the hormone fluctuations in a woman's cycle for test-guided BHRT.

The FHP™ test is most applicable in cycling women with any of the following conditions:

- Weight gain.
- Functional infertility.
- Osteoporosis.
- Endometriosis and ovarian cysts.
- Fibroids and fibrocystic breasts.
- Increased risk of breast cancer.
- Recurrent cycle-related symptoms and irregularities, such as PMS, migraines, breast tenderness, emotional and cognitive issues, insomnia and spotting.

Physiologic Roles of Hormones Tested

LH and FSH

The pituitary luteinizing hormone (LH) and follicle-stimulating hormone (FSH) regulate ovarian function. FSH promotes ovarian estrogen production, where LH induces ovulation and progesterone production. In perimenopause, there is a growing scarcity in ovarian follicles. LH and FSH levels show respectively, a threefold and sevenfold increase over values found in young menstruating women.

In perimenopause and postmenopause, FSH is closely correlated with hot flashes and night sweats, bone loss and osteoporosis and sleep disturbances. Stress or excessive exercise have an adverse effect on LH and may inhibit ovulation. Stress makes women more estrogenic and less fertile and more prone to proliferative diseases.

Estrogen

Reproductive

- Aids in endometrial growth and proliferation
- Aids in inducing ovulation
- Aids in maintaining vaginal lubrication

CNS

- Neuroprotective
- Neuroexcitatory, motivational and promotes territorial inclinations
- Exacerbates migraine and other headaches

Sexuality

- Estrogen/progesterone balance promotes arousability

Growth

- Increases growth hormone secretion

Bone health

- Limits bone elongation in adolescents, and prevents bone loss in adults

Glycemic regulation

- Improves insulin function

Adipose tissue

- Increases size and number of fat cells

Immune system

- Immune activator and pro-inflammatory; estrogen dominance promotes autoimmunity

Skin

- Maintenance and regeneration

Progesterone

Reproductive

- Matures endometrium in preparation for pregnancy
- Facilitates embryo implantation
- Maintains pregnancy through maintaining endometrial lining and preventing uterine muscle contraction

CNS

- Promotes better sense of dominance, attenuates aggressiveness and is a sedative
- Promotes neuronal healing (neuroprotective)

Bone health

- Promotes new bone formation and deposition

Sexuality

- Estrogen/progesterone balance promotes arousability; may play a role in overcoming inhibitions

Breast

- Promotes breast growth and development during pregnancy
- Inhibits lactation during pregnancy

Immunity

- Lowers immune system activity (immunosuppressive)
- Anti-inflammatory

DHEA

Reproductive

- Integrity of vaginal mucus; eases premenstrual symptoms

Sexuality

- Improves well-being and sexual arousability

Antiglucocorticoid hormone

- Opposes catabolic cortisol effects during stress

Breast

- Reduces breast proliferation

Bone health

- Enhances bone deposition and remodeling

Glycemic regulation

- Improves insulin sensitivity, increases muscle mass and reduces fat mass

Immune system

- Stimulates immune system activity; reverses stress-related immunosuppression

Somatic

- Helps with control of hot flashes and night sweats

Cardioprotective

- Reduces the incidence of heart attacks by lowering total and LDL cholesterol

Anticarcinogenic

- In breast, pancreas, colon and ovaries

Testosterone

CNS and behavioral

- Improves mental faculties including memory and artistic inclinations
- Excess may lead to aggressive pursuit

Sexuality

- Promotes erotic thoughts and orgasms

Breast

- Reverses estrogen-induced breast proliferation; reduces breast tenderness

Bone health

- Helps reduce bone loss; may have a role in bone formation

Glycemic regulation

- Improves insulin sensitivity and increases muscle mass

Somatic

- Helps attenuate hot flashes and night sweats

Cardiovascular

- Increases blood flow to tissues and may reduce blood pressure

Immune system

- Immunosuppressor; promotes suppressor T cell dominance

Clinical Applications

Customize BHRT

Presently hormone therapy is very empirical, and a one-size-fits-all approach is applied to most women. Due to variability among women, and the natural cyclical changes of hormones, a more frequent sampling is needed for proper hormone quantification. A single sample taken between day 20 and 22 of a cycle is less than 50% accurate. The Female Hormone Panel™ panel remedies this shortcoming by using a schedule for 11 samples distributed over a full cycle — start to end.

The FHP™ report includes 11 estradiol (E2) and 11 progesterone (P) measurements, cycle average DHEA/ DHEA-S and testosterone, three progesterone production indices, four estradiol production indices, a full-cycle P/E ratio graph and an example of a restorative plan.

Assess Risk of Breast and Uterine Diseases

It is universally accepted that there is an increased risk of proliferative disease in breast and endometrial tissue when estrogen is overly dominant. The FHP™ basic report and the expanded one both include the follicular estrogen priming index (E TI), which quantifies the impact of excess estradiol in menstruating women. Treatment recommendations are routinely offered in the report.

Please note that certain estrogen metabolites are falsely promoted as risk markers for breast cancer. A recent study which compared ²/₁₆ hydroxyestron ratio in women with breast cancer to a control group of cancer-free women concluded that there is no support for the hypothesis that the ratio of ²/₁₆ hydroxyestron is an important risk factor for breast cancer.

(J Nat'l Cancer Inst 1999 Jun 16;91(12):1067-72)