



# Newsletter

Contact us



877.656.9596



newsletter@labrix.com



## Birth Control Pills And Hormone Balancing

**Though** not a form of hormone replacement, birth control pills or oral contraceptive pills (OCPs), have multiple hormonal effects on the body when taken. As a health care provider, it is common to suspect hormone imbalance as the underlying culprit of many of the complaints in your patients utilizing OCPs but exactly how are the active ingredients in her birth control affecting her endogenous hormone levels? Which hormone levels are appropriate to test? Is bioidentical supplementation an appropriate treatment approach for her? Let's look at each question in a bit more depth: OCPs provide a convenient, non-invasive and affordable way for many women to take control of their contraceptive needs. OCPs typically contain both estradiol and a progestin (a synthetic progesterone analog), although there are a few progestin-only choices currently on the market. Though OCPs have many actions that decrease the likelihood of pregnancy, the primary mechanism of action of most OCPs is to suppress ovulation via estrogen's effect on the hypothalamus and subsequent suppression of FSH and LH production by the pituitary. This suppression of ovulation is further aided by the progestin's effect on the hypothalamic-pituitary-ovarian axis and by a change to the mid-cycle surge of FSH and LH. With this alteration of the ovulatory cycle, women taking OCPs may present with lower estradiol levels. In addition, the suppression of ovulation means that the oocyte, follicle and corpus luteum are not allowed to mature. With the corpus luteum being the main source of endogenous progesterone production, failure for it to mature causes a dramatic decrease in endogenous progesterone levels. This dramatic decline in progesterone levels relative to the decline in estrogen levels often causes these women to experience many symptoms of estrogen dominance including moodiness, water retention, breast tenderness, tearfulness and foggy thinking. Suppression of ovarian function often leads to lower endogenous testosterone levels as well, which may contribute to vaginal dryness, depressed libido and compromised bone health.

Although women taking hormonal birth control have decreased levels of progesterone, supplementation with progesterone is typically not recommended as progestins bind to progesterone receptors, causing competition for absorption at the cellular level. This competition will likely compromise the would-be therapeutic benefit of bio-identical progesterone supplementation and could potentially result in a lowered OCP efficacy.

Since OCPs suppress estradiol, progesterone and potentially testosterone levels, many providers question whether or not it is useful to do saliva testing at all in these patients. Based on symptoms and clinical suspicions the answer is often times a resounding "Yes!" Testing androgen (DHEA and testosterone) and diurnal cortisol levels can often identify underlying hormonal imbalances and be of

great benefit in developing an individualized treatment plan that successfully addresses your patient's concerns and symptoms. Additionally, assessing and addressing any concomitant neurotransmitter imbalances can be beneficial in alleviating mood, energy and additional concerns that may be present. Addressing these potential neuroendocrine imbalances for women using OCPs as their contraceptive management of choice may be beneficial in alleviating and/or decreasing her ancillary symptoms.

## Resources

1. Speroff, Leon MD and Marc A. Fritz MD. Clinical Gynecologic Endocrinology and Infertility, 8th edition. Philadelphia: Lippincott Williams & Wilkins, 2010. Print.
2. Walker HK, Hall WD, Hurst JW, editors. Clinical Methods: The History, Physical, and Laboratory Examinations. 3rd edition. Boston: Butterworths; 1990.via <http://www.ncbi.nlm.nih.gov/books/NBK283/>
3. John Lee, M.D. What your Doctor May Not Tell You About Premenopause. 1999

## Upcoming events

West Coast Core Training  
July 27, 2013  
[Register Here](#)