What is progesterone?

Progesterone is a generic term used to describe the hormone group known as progestin. About sixty years ago, progesterone was found to be one of the hormones produced by the ovaries. It was found to be necessary for fertility and for maintaining a healthy pregnancy. Some people thought it wasn’t needed when the women were not pregnant but in fact, it is one of the most important and protective hormones the female produces.

As long as a woman is ovulating, there is progesterone produced in the ovaries. Progesterone levels naturally rise and fall during the monthly cycle, rising rapidly the latter two weeks of the cycle. This rise readies the uterus for implantation of a fertilized egg, should there be one, and is vital to the survival of the embryo and fetus throughout gestation (pregnancy).

But what, then is the purpose of P4 (Progesterone) in a woman that fails to ovulate or the ovaries do not produce progesterone? When a woman fails to ovulate, (anovulatory) her ovaries do not produce progesterone. This failure to ovulate can begin as early as the mid thirties and can become more frequent as perimenopause approaches. In comparison, the estrogen levels may drop forty to sixty percent but the progesterone levels drop to much lower percentage. This drop plays a major role in upsetting the natural balance of estrogen to progesterone ratio. By the time of menopause or postmenopausal a woman’s progesterone level will fall to near zero.

Is progesterone functions related to my other hormones?

Progesterone works in the body by traveling in the blood to tissue where there are progesterone receptors. Progesterone attaches to these receptors and begins their actions for many purposes in the female body. The major role of progesterone is in opposing the effects of estrogen on the lining of the uterus (endometrium). This is the primary reason that progestins are included as part of the hormone replacement therapy (HRT) in women who have not had their uterus surgically removed (hysterectomy).

It has been determined that progesterone has many other functions in the female body. Normally, the brain contains a very high concentration of progesterone, reflecting its protective function for that most important organ. The thymus gland, the key organ of the immune system, is also profoundly dependent on progesterone. By it’s counter to the effects of estrogen in various parts of the body, progesterone reduces anxiety, increases sleepiness, aids in building and maintenance of bones. The adrenal glands use progesterone to produce their anti-stress hormones and when there is sufficient progesterone they will not produce the potentially harmful cortisol. Over production of cortisol causes osteoporosis, aging skin, damage to brain cells, and the accumulation of fat, especially on the buttocks, back, and abdomen. Studies have shown that progesterone relieves anxiety, improves memory, protects brain cells and promotes respiration. In the circulatory system, progesterone prevents bulging veins by increasing the tone of the blood vessels. It can reverse many signs of aging in the skin and helps to promote healthy bone growth. Also it can relieve many types of arthritis and helps a variety of immunological problems.

As the female body continues to age, this often leads to an unbalanced decline in hormonal levels and cause many women to experience a variety of unpleasant symptoms called estrogen dominance. These symptoms include hot flashes (flushes), sleep disturbance, poor bladder control, dryness of the vagina, mood swings, and irritability. Some women experience weight gain, fatigue, malaise, forgetfulness with clouded thoughts, anxiety or panic attacks, and general aches and pains. Other undesired effects are slowing of the digestive process while promoting appetite and fat storage, particularly if there is too much progesterone in relation to estrogen. This may raise insulin levels, decrease insulin sensitivity, reduce libido and cause depressed mood. An excessive estrogen versus progesterone ratio is generally involved in producing or aggravating symptoms, compared to either a simple excess of estrogen or deficiency in progesterone. However, even this ratio is conditioned by other factors, including age, diet, steroids, thyroid, and other hormones produced in the body. Excess estrogen seems to act by producing tissue hypoxia (lack of oxygen) with the results seen in changes in the lung alveolar diffusion, peripheral vascular system, and intracellular oxygen wastage. The consequence of hypoxia is the production of swelling (edema) and hypoglycemia (low blood sugar) and elevated muscle lactic acid. This condition is manifested by the feelings of fatigue, bloating, low energy, depression, and often times migraine headaches.

The medical profession has for decades been convinced that women are estrogen only
entities and that progesterone is a nebulous hormone. The truth is that progesterone is a pivotal hormone for the propagation of life and for the production of other hormones, including estrogens. Without progesterone there would be no menstrual cycle or reproduction. Progesterone has its own distinct and active role to play in the body, including keeping the stimulatory effects of estrogen under control. Correcting the imbalance between the hormone estrogen and progesterone, especially the lack of progesterone, will usually rid an individual of many of their symptoms within a few months.

**How do I get tested for progesterone levels?**

Okay, now what does the woman do who might be experiencing early menopause or premature ovarian failure and/or a number of other related symptoms related to progesterone levels? The old diagnosis of “it’s all in your head” or “you’re suffering from stress” is a prime and important example for the woman to have her hormone levels tested, whether in her 20’s (too young for menopause) or post menopausal. These tests may help the woman and her physician to determine just what’s happening within the body and whether or not the ovarian functions are showing signs of menopause or ovarian failure.

Women should keep in mind that different labs may use different ranges in their testing. If a blood test is done, the woman should ask the physician not only for specific results, but also the range used by the lab. It is beyond the scope of the article to explain each of the many test that the woman and her physician may and should consider. These tests usually include follicle stimulating hormone (FSH), leutinizing hormone (LH), (during the luteral phase), estrogen E2 (Estradiol), testosterone, progesterone, DHEA, and thyroid hormones for pre-menopausal women; whereas perimenopausal or menopausal women are tested for estrogen E2 (Estradiol), testosterone, progesterone, DHEA, and thyroid hormones.

In regard to progesterone, most labs and studies state that menopausal levels are around 0.03 to 0.3 ng/ml. By way of comparison, pre-menopausal women will have progesterone levels around 7 to 38 ng/ml during their luteral phase, less than 1.0 ng/ml during their follicular phase.

**What do I do if I feel that hormone replacement is for me?**

When considering hormone replacement therapy a menagerie of questions and choices have to be made by the individual and their physician. It can take some time to reach the goal of which hormones and dosages are the right ones for the body’s capabilities. But also bear in mind that these capabilities change over time. This is especially true in the early years of menopause. Women should not be fooled by someone insisting that this procedure, product, or hormone replacement approach is the perfect fit. An understanding not only of the hormones and their actions on the female body is a challenging task for all practitioners. When considering hormone replacement therapy, remember there are no “right” answers. The best answer is to get the hormone replacement therapy that meets the individual’s needs.

Contact your physician to learn if our patented hormone replacement drops will meet your treatment plan that fulfills the menopausal wellness goal.