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# **Unopposed Estrogen**

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## **Estrogen and progesterone**

Under normal circumstances, the two dominant female hormones, estrogen and progesterone take different and complementary roles. Estrogen is a growth hormone and stimulates growth in the lining and muscle of the uterus, the ducts of the breasts, abdominal fat, and the bones of growing adolescents. Progesterone helps to control that growth and under its influence, the lining of the uterus matures, stops growing thicker, and gets ready to receive an egg. Breast tissue also slows growth and gets ready for milk production. Estrogen tends to turn on certain genes that promote growth but also may stimulate the growth of cancer. These so-called oncogenes, or cancer genes are turned off by progesterone.

Estrogen and progesterone balance each other in many ways. Estrogen stimulates fat production, progesterone burns fat. Estrogen retains fluid and progesterone promotes fluid elimination. Estrogen is a brain stimulator, promoting verbal thinking, and libido but also increases migraine headaches. Progesterone induces calm, reduces migraines and improves sleep. Estrogen enhances immunity, thickens gallbladder secretions, and retention of copper. Progesterone quiets immunity, thins gallbladder secretions and increases zinc, lowering copper. Both sets of hormone functions are needed, but they must be in balance.

## Loss of progesterone

Progesterone is only produced in the second half of a normal 28-day menstrual cycle. Only if a woman produces a healthy egg will the ovary add progesterone to the estrogen and testosterone it is already producing. Many young girls who are just beginning their periods don't produce good eggs. They either make too little progesterone or none at all. They usually outgrow this problem as they mature. Other women have poor hormone control centers and rarely produce eggs —this is the most common infertility problem in the U.S. As women age, they have fewer and fewer eggs. Those that remain are often defective. **After age 35, most cycles do not produce a healthy egg.** Progesterone production gets weaker and less frequent with time. Estrogen production, however, can remain strong.

#### Unopposed estrogen

Estrogen without progesterone, or too little progesterone, is unopposed estrogen. The ovaries do not usually begin producing progesterone until about Day 13 of the cycle usually lasts about 13 days. This leads to the familiar 28-day cycle. Without progesterone production and then its loss at Day 26, there would be no period on Day 28. As the days of just estrogen drag on, the lining of the uterus gets thicker and thicker. Eventually, the lining is too thick to hold together. It begins to break down in irregular bits and pieces. **This leads to irregular bleeding.** Sometimes the bleeding can be very heavy, perhaps with clots. **If a woman has fibroids,** they can grow even bigger and can make bleeding problems even worse. If a woman has endometriosis, pain can be greater than before.

## First years of menstruation

When young girls menstruate, they frequently do not produce eggs. Their cycles can be at irregular intervals and be heavy or light. With imperfect ovulation, progesterone levels are not adequate or well timed. **Cramps, heavy bleeding and PMS are common. Supplementation with real, bioidentical progesterone can work wonders.** 

### As women age

As women age, they produce fewer and fewer eggs. Fertility is greatest in the late teens and early twenties after a girl's cycle becomes organized. After that, there is a slow decline until around age 35. By the late 30s, the number of viable eggs is significantly reduced and fertility rates decline more rapidly until menopause. Progesterone levels may be too low or non-existent. Estrogen is still made and it is even possible that estrogen levels may be higher than those of a younger woman. This results in Estrogen Dominance — having normal to high estrogen levels without sufficient progesterone to for balance. Real, bioidentical progesterone can be given from 17 to 21 days in the second half of the cycle, restoring the normal rhythm, reestablishing normal cycles and balancing unopposed estrogen.

#### General problems of estrogen dominance

Estrogen promotes fluid retention and increased carbohydrate cravings, and ultimately results in weight gain. It increases nervous tone, and acts as a stimulant but may produce or worsen migraines. Sleep is not restful because of interruption of the dream cycle sleep (REM). Because the immune system is stimulated, unopposed estrogen may be connected with increased autoimmune diseases in women in their late reproductive years. Gallbladder disease has also known to develop.

After years of estrogen excess, the constant growth stimulation of the endometrium and breast tissue may lead to cancer. Progesterone has been proven to protect against endometrial cancer but no long-term studies have been done to demonstrate natural progesterone's protection from breast cancer. We do know that women with estrogen dominance have higher breast cancer rates. Restoring progesterone can reduce weight gain, lessen migraines, restore restful sleep, reduce gallbladder problems and help protect against endometrial cancer — and in all probability breast cancer.

### Gynecologic problems with estrogen dominance

Unopposed estrogen is the central cause of irregular, heavy periods. It promotes the growth of fibroids and is probably involved with the growth of endometriosis. Proper progesterone replacement or supplementation solves the majority of bleeding problems and most commonly lead to Hysterectomy, Endometrial Ablation and Uterine Artery Embolization. With proper use of bioidentical progesterone, hysterectomy and endometrial ablation rates could probably be reduced by 75-80%.

#### Perimenopause and menopause

About five to ten years prior to menopause, progesterone is rarely produced, resulting in estrogen excess. Eventually, estrogen levels will fall. If estrogen is replaced, progesterone must be replaced also. After a hysterectomy, many women are only given an estrogen replacement. The problem — synthetic artificial progestin (the imitation for progesterone) is usually included in an estrogen replacement product and produces bad side effects. Real, bioidentical progesterone is needed to balance the replacement estrogen being given.

## Replacement therapy

Between age 30 and 55, individual hormone needs vary. One woman may not need any additional hormones; another may only need progesterone and a third may require all three hormones (estrogen, progesterone and testosterone). The first step is to run blood work to evaluate the status. For women with irregular cycles, heavy bleeding or hot flashes, progesterone may be needed in a cycling pattern. In later years, as estrogen levels fall, estrogen is added. Testosterone is the last hormone to decline. Many women make adequate testosterone even into their 70s. If levels are low, bioidentical testosterone is available. Of course, if the ovaries have been surgically removed, all three hormone levels are reduced. Sometimes sufficient estrogen and testosterone can still be present as it's converted by the body from adrenal gland hormones.

#### Summarv

Many women produce estrogen without the balancing benefits of progesterone. This can lead to irregular or heavy periods, weight gain, migraines, sleep disturbance, PMS, fibroid growth and cancer. By adding natural bioidentical progesterone, many of these problems can be corrected or controlled. The need for a hysterectomy, endometrial ablation or uterine artery embolization can be markedly reduced.