



Progesterone vs Progestin

Progesterone Is Very Different From Progestin

There are many hormone replacement therapy and oral contraception options available for the treatment of estrogen dominance, menopausal symptoms, PMS and birth control available. At some point in their reproductive lives, 80 percent of American women will take oral contraceptives¹ and an estimated 10-15 million postmenopausal women are currently taking hormone replacement therapy.

It is becoming clear that some forms of hormone replacement therapy prevent serious diseases such as breast cancer, heart disease, osteoporosis and neurological degeneration while other forms actually increase the risk of these diseases. The most famous study illustrating the risk of HRT actually started out as a study to prove the safety and efficacy of HRT therapy: The Women's Health Initiative (WHI).

The Women's Health Initiative

The WHI studies were the first large, double-blind, placebo-controlled clinical trials of HRT in healthy, postmenopausal women. The estrogen-plus-progestin trial and estrogen-alone trial were both halted early (in July 2002 and February 2004 respectively) because preliminary study results indicated that the health risks of the conjugated equine estrogen and progestin exceeded benefits. It followed over 16,000 women for an average of 5.2 years, half of which were taking a placebo, the other half taking a combination of the progestin medroxyprogesterone acetate and conjugated equine estrogens. The study found statistically significant increases in rates of breast cancer, coronary heart disease, strokes and pulmonary embol for those on synthetic HRT.

The study also found statistically significant decreases in rates of hip fracture and colorectal cancer. The conclusion of the study was that the HRT combination presented risks that outweighed its measured benefits. The results were almost universally reported as risks and problems associated with HRT in general, rather than with the specific proprietary combination of conjugated equine estrogen and progestin studied.

It is generally accepted that female sex hormones are linked to the genesis of breast cancer. It is well established that estrogens markedly increase the mitotic rate of breast epithelial cells and that estradiol is carcinogenic to breast epithelium. Conversely, the picture is more complex for progesterone.

The WHI study showed that synthetic progestins, when added to estrogen in HRT, increased the risk of breast cancer risk much more than estrogen alone. Unfortunately the WHI did not test natural progesterone. Natural progesterone proves protective of the breast in many studies.

Understanding the differences between these two forms of HRT (one synthetic and one bioidentical) is vitally important. They are very different molecules and confusing them can have grave consequences for women on HRT. Scan the internet, popular magazines, or even talk to a 'conventional' physician and you will find that there is virtually no distinction made between natural and synthetic progesterone when discussing any type of hormone therapy or use. This is unfortunate, because the implications on a woman's health can be disastrous.

So what is the difference between natural and synthetic hormones and why does it matter?

Progesterone is the principal hormone of the second half, or luteal phase of the menstrual cycle. Progesterone is essential for reproductive function, breast health, bone strength and memory.

Natural progesterone products are made from the phyto-hormones that exist in wild yams and soybeans. The molecular structure of the hormones in these products is identical to those in the body.

Synthetic progesterone, known as progestin, is man-made and while its chemical structure resembles the progesterone made in the body, it is not identical. This is a very important distinction. Even a slight difference in the molecular arrangement of a compound can cause dramatically varying responses.

Here is a glaring difference between synthetic and natural progesterone: progestin is the active ingredient in many birth control pills and its function is to stop ovulation.

To take any kind of progestin during pregnancy creates a large risk of birth defects. Natural progesterone, on the other hand, is produced by pregnant women at levels that are 30-50 times higher than normal. The fetus is bathed in the hormone while in the womb. It is often prescribed by fertility specialists as soon as the patient is aware that she is pregnant. Its name says it all: 'pro-gest'...pro-gestation. Progesterone in its natural form is used to treat luteal phase deficiency/infertility, to maintain pregnancy in high risk situations, and to alleviate post partum depression.

Ironically, taking progestins can actually lower levels of progesterone detectable in saliva. Progestin acts similarly to progesterone within the brain, and a negative feedback begins when the brain thinks that there are sufficient amounts of progesterone circulating and it stops the signal to produce more. The body then becomes low in progesterone and high in the synthetic progestin. The symptoms of PMS or estrogen dominance that women are so desperately trying to alleviate worsen due to low progesterone.

Research studies have confirmed that millions of women have successfully used bioidentical (natural) hormones with a great improvement in health and wellbeing. Fewer side effects are noted, and utilization of the hormone is more consistent. ² We stand by the evidence that supports the use of bioidentical hormones, and insist that natural is better.

Reference List

1. www.orthoevra.com
2. Pete Hueseman, R.Ph., P.D., 1997