# Understanding Progesterone



## Introduction

Hormone health. We hear about it all the time, yet hormone health seems to be one of the most elusive and misunderstood health topics, especially for women. We're here to help change that. Hormones affect many aspects of female health, including cognitive function and energy; menstruation and fertility; as well as feeling your best day-to-day.

So how do hormones do it? What controls hormonal health?

The answer: Progesterone.

Progesterone is considered "The Master Hormone" in a female's body and for good reason. Progesterone is used to make each and every necessary hormone, including estrogen and testosterone.

In this Whitepaper - we're going to break down the role that progesterone plays in a woman's body. We will also discuss restoring hormone health with Globallee's ETERNITY<sup>TM</sup>: a Bio-Identical Progesterone Cream.

# What is Progesterone?

Progesterone is the single most important hormone in females. A woman's body uses progesterone to make other necessary hormones, including estrogens and testosterone. It is also the hormone necessary for conception, and plays an important role in sustaining full-term pregnancy. Progesterone is vitally important for the health of every cell and organ in a woman's body.

While the female body manufactures approximately 27 unique estrogens, it makes only one progesterone. This master hormone balances the estrogen hormones and protects against the harmful effects of excess estrogen. This condition has been labeled "estrogen dominance" and could be described as too much estrogen relative to insufficient progesterone. Progesterone directs the estrogens like a symphony conductor and allows the many positive effects of balanced, natural estrogens to exist in harmony.

Women today are exposed to many environmental toxins. These toxins can be considered environmental estrogens, which interfere with the production, function and balance of the body's natural hormones. The end result is imbalance in the estrogens and can be a primary cause for PMS, PMDD, infertility, postpartum depression, bone loss and difficult Menopause.

Progesterone supports the body's natural ability to have a painless, regular and balanced, monthly cycle. Progesterone also supports fertility, relief from postpartum depression as well as a smooth, easy transition into menopause.

Globallee is proud to offer ETERNITY™: a Bio-Identical Progesterone cream that supports hormonal balance by providing the essential "Master Hormone" for women - Progesterone. ETERNITY™ provides a safe and effective alternative to conventional, synthetic hormone therapies (ie. progesterone and estrogen). Synthetic hormones often have side-effects and do not address the underlying causes of estrogen dominance. Ironically, in many cases the synthetic therapies cause more imbalance as opposed to creating harmony.

Feel the balance naturally with Globallee's ETERNITY™: a Bioidentical Progesterone Cream!

# Benefits of Progesterone:

## **Fertility**

Progesterone is the pro-gestation hormone, making it necessary for conception and a successful full-term pregnancy. It is important to note, that while progesterone supports full-term pregnancy, it does not cause pregnancy. British gynecologist, Dr. Katharina Dalton, has carried out extensive research with bio-identical progesterone. She found that the babies of mothers who had supplemented with bio-identical progesterone cream during their pregnancies, showed improved mental and physical attributes over the children of those of mothers who did not supplement with bio-identical progesterone. She also showed that pre-pregnancy toxemia was not present in these supplementing mothers. However, 50% of the control group (the group without bio-identical progesterone) experienced toxemia. Her research confirmed the beneficial effect of natural progesterone supplementation before, during and after pregnancy.

#### **Bone Health**

The role of bio-identical progesterone in stimulating osteoblast cell activity has been clearly established. Osteoblast cells are the "carpenters" that build new bone tissue. These "carpenters" need materials to construct new tissue, so, when used in combination with a premium mineral supplement containing calcium and the necessary cofactors women enjoy strong bones for life.

## PMS/PMDD

When a woman who is going through menstruation, there are four typical periods. The first week is when the uterine wall sheds. The second week is when ovulation occurs. The final two weeks leed to the cycle starting all over again. If your progesterone levels drop any time during the final 2 week period of your monthly cycle, it is common to experience some of the 150+ symptoms of PMS/PMDD, including cramping, headaches, depression, aches and pains and much more. Correct and balanced progesterone is vitally important for a healthy and balanced menstrual cycle.

## Menopause

The normal age for menopause is 50-51. When women are undergoing this change, , maintaining optimal progesterone levels becomes increasingly important. Progesterone can reduce risk of stroke and heart disease as well as female-specific cancers. Progesterone can also help manage hot flashes & sweats.

### The Brain

The female brain has a large number of progesterone receptors. These receptor sites are where the hormone plugs in and accomplishes its mission. Currently, we do not know all the ways progesterone benefits your brain, however, there are studies showing how progesterone has helped accelerate the recovery of ones who have experienced brain trauma. Reference here.

# Understanding Hormonal Imbalances:

Let's examine two different, clearly identified hormone disruptors that are found in our everyday life and are responsible for the imbalances you feel.

**1.** For decades scientists have studied the ill-effects of xenoestrogens (xeno=foreign) and their effect on the endocrine system. The endocrine system is the collection of glands that produce our hormones. These hormones regulate metabolism, growth & development, tissue function, sexual function, reproduction, sleep & mood, among many other things. Xenoestrogens have hormone-like activity in both genders and are known as endocrine disruptors.

Since the endocrine system is responsible for our hormone production, today's chemical environment is the first of two primary causes of hormone imbalance and low progesterone levels.

Our bodies are continually flooded with an onslaught of xenoestrogens, which negatively impact theendocrine system. This results in a moderate to severe imbalance of our own natural hormones, in particular the master hormone, progesterone. Where do these xenoestrogens and other toxic chemicals come from? They are extremely prevalent in beauty products and fragrances. They can be found in plastics and pesticides. They can be found in household cleaning products. In fact, there are more than 10,000 petroleum based ingredients in use by the cosmetic industry today. These could all be considered xenoestrogens!

**2.** The second cause of hormone imbalance is recombinant bovine growth hormone (rBGH) and it is found in most commercially grown meat, dairy, and animal by-products. Unless otherwise specified on the label, most chicken, beef, pork, eggs and dairy contain synthetic estrogens from rBGH.

Synthetic estrogens shorten the growth time of the animal to profit the farmer, and reduces costs for consumers. When consumed on a daily or weekly basis, these foods directly affect our endocrine system and hormone balance.

We encourage Globallee customers and Independent Brand Ambassadors to reduce toxins as much as possible. Look for foods that are locally grown and organic. Eliminate as much petrochemical sources as possible in your daily life and use ETERNITY<sup>TM</sup>: a Bio-Identical Progesterone Cream.

## The Solution:

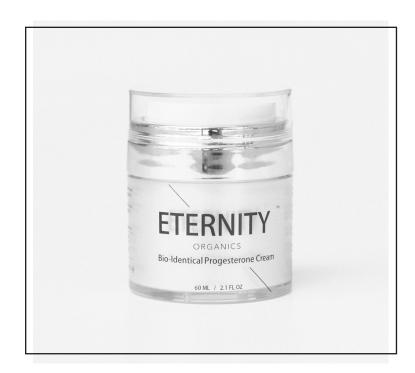
Bioidentical progesterone (biologically identical to what your body makes) will safely support your body's ability to be in balance. It's one simple thing you can do every month to make substantial changes from the time you enter puberty until after menopause.

Optimal progesterone levels, at the correct time of the month, will address the causes for the painful symptoms of PMS/PMDD & menopause. Progesterone stimulates osteoblast cells to get busy building new bone tissue. Progesterone is the progestational hormone, the one necessary for conception and full-term pregnancy. At birth, progesterone levels drop sharply from 350-400mg/day to 0 mg/day. Is it any wonder our dear mothers experience postpartum depression?

Progesterone's health benefits don't end in the hormone department. Did you know progesterone has also been proven to have a supportive effect on brain chemistry? It contributes to production of the 'neurotransmitters' that enhance our mood, like serotonin. It also helps promote healthy sleep patterns, healthy cell renewal, healthy weight, healthy hair and improved skin elasticity.

This master hormone, progesterone, plays a vital role in overall health & vitality, and it does so for life.

With this in mind, what is the safest and most effective method to supplement with progesterone? The answer: Globallee's Bio Identical Progesterone Cream, ETERNITY™.



## Why ETERNITY™ Cream?

ETERNITY™: a Bio-Identical Progesterone Cream supports optimal progesterone levels in the body for approximately 12 hours. ETERNITY™ delivers 98-100% of the progesterone to target tissues.

ETERNITY™: a Bio-Identical Progesterone Cream is nonGMO, contains USDA certified organic and Ecocert approved ingredients. It contains no petroleum based chemicals (xenoestrogens). The bio-identical progesterone and the cream are both Made in the U.S.A.

Each batch is meticulously hand-crafted, ensuring the freshest, bio-identical progesterone cream anywhere on the earth. Based on 24 years of clinical experience and 40+ years of research, the suggested 1/8th tsp, every 12 hours, has been carefully calculated to parallel a balanced body's normal production of progesterone.

There simply is no other progesterone cream on the market anywhere in the world that delivers the positive results of ETERNITY $^{\text{TM}}$ : a Bio-Identical Progesterone Cream.

ETERNITY™ is the purest, most effective, progesterone cream in the world with all plant-based ingredients.

## **Suggested Use:**

Where to Apply? Apply to Face, Neck, Breasts and Abdomen.

How Often? Apply approximately every 12 hours.

#### What time of the Month?

Puberty to Menopause:

Apply on Days 14 - 28 of your cycle (Day 1 = first day of a period).

#### Menopause:

Apply for 25 - 26 consecutive days each month. Do not apply for 5 consecutive days of the month.

## Additional Science:

## **Progesterone and Brain Health:**

Progesterone has been tested in aiding in traumatic brain injury repair and the results are astounding! Progesterone has many pleiotropic properties as a neuroprotective agent in humans. <sup>10</sup>

"The mechanism for PROG's neuroprotection clearly does not target a single aspect of the TBI cascade, instead it works through multiple mechanisms to enhance the repair of damage to nerve cells caused by CNS injury; for example, neurotrophic, anti-inflammatory, anti-excitotoxicity, anti-lipid peroxidation and anti-apoptotic properties and so on.<sup>10</sup> "

Table 1

Two independently conducted, randomized, double-blind, placebo-controlled phase II clinical trials used to assess the efficacy of progesterone in TBI patients.

Characteristics	Wright <i>et al</i> <sup>21</sup>	Xiao et at <sup>20</sup>	
Country	US	China	
Glasgow coma scale (GCS)	4 to 12	≤8	
Time after injury	<11 h		
Delivery method (length)	Intravenous (3 d)	Intramuscular (5 d)	
Outcome assessment post-injury	30 d	3 and 6 months	
Randomization (progesterone:placebo)	4:1	1:1	
Patients	100	159	
Progesterone	77	77	
Placebo	23	82	
Primary endpoint	GOS-E; DRS and Mortality GOS; Mortality and the modified FI		

GOS, glasgow outcome scale; GOS-E, glasgow outcome scale-extended; DRS, disability rating scale; FIM, functional independence measure.

# Progesterone and Menopause:

Many women also face the side effects of menopause, without a safe way to treat them or treat menopausal issues. A study done in Germany found the Bio Identical Progesterone is one of the best ways to naturally treat menopause in Women.9 Progesterone has both systemic and local effects. At the systemic level, progesterone increases diuresis through activation of the renin-angiotensin system, triggers the catabolic metabolism, relaxes smooth muscle cells, increases excretion of calcium and phosphorus, raises basal body temperature, has sedative and analgesic effects, improves visual memory and the proliferation and differentiation of osteoblasts and has additionally been found to have an immunosuppressive effect.<sup>9</sup>

"Progesterone or corpus luteum hormone can be used safely and effectively to treat menopausal symptoms or for hormone substitution in menopausal women, as it constitutes a bio-identical preparation which can be used to correct deficiency symptoms.9"

**Table 1** Results of the endometrial biopsies at the end of the trial <u>34</u>.

Results	Placebo	CEE alone	CEE + cyclic MPA	CEE + cont. MPA	CEE + micronized progesterone
Normal	116	45	112	119	114
Simple (cystic) hyperplasia	1	33	4	1	5
Complex (adenomatous) hyperplasia	1	27	2	0	0
Atypical hyperplasia	0	14	0	0	1
Adenocarcinoma	1	0	0	0	0

CEE: conjugated equine estrogens; MPA: medroxyprogesterone acetate; cont.: continuous

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