#### THE PROGESTERONE SUPPLEMENTATION HANDBOOK

by Kitty Martone

#### BIOIDENTICAL / MICRONIZED PROGESTERONE

# What is Bioidentical Progesterone?

Progesterone is made in your body from cholesterol. See HERE.

- first, your body turns the cholesterol into pregnenolone
- pregnenolone is then converted to progesterone
- your body then makes a cascade of other hormones that it needs from the progesterone (these include estrogen, testosterone, cortisol)

Bioidentical progesterone, also known as Micronized progesterone, is a plant derived molecule that is nearly identical to that of the progesterone molecule the human body makes.

These progesterone molecules are so similar that the human body treats it the same as your own. It gets used in the body the same way and is excreted the same way. Making it as safe as your own progesterone.

It is so safe in fact, there are no scientific studies or medical journals recording any overdose or toxic effects of "too much" bioidentical progesterone. See HERE.

In fact, extremely high doses of micronized progesterone have been used to treat patients of traumatic brain injury due to progesterone's anti-inflammatory benefits with zero negative side effects. See HERE.



However, just like any nutrient or supplement or even food that is meant to be good for a person, it does not mean that it will always be 100% free from causing a potential reaction.

Beginning bioidentical progesterone can trigger or antagonize estrogen receptors throughout the body and the easiest way to understand this for my brain is to say that estrogen is the lion and progesterone is the lion tamer.

It is crucial for balanced amounts of both to be 'opposing' one another always, whether levels are low or high, otherwise estrogen can easily run amuck. See HERE.

Unfortunately, this concept is poorly understood even by some professionals which means progesterone often gets blamed for just about everything from weight gain to insomnia to cancer.

There are rare occurrences of allergic reactions to bioidentical progesterone but most negative reactions point to overlooked mineral and gut imbalances that may include dietary deficiencies, impaired detoxification, poor absorption and the most common reason, under dosing.

# What are Progestins?

Synthetic progestins or progestogens have a different chemical structure from progesterone. These compounds mimic some of the effects of progesterone but may have different actions on progesterone receptors and behave more like estrogen than progesterone.

Synthetic progestin may be structurally related to progesterone, products like the birth control pill or the Mirena Coil, patches and other medicated progestin products (e.g., medroxyprogesterone acetate (MPA), dydrogesterone) but they don't act identically to natural progesterone.

Progestins have been implicated in everything from blood clots, fibroids, heart disease, high blood pressure and hormonal cancers to name just a few. You can see HERE, HERE and HERE.

It is not recommended to take medicated progestins to resolve hormonal imbalances, as these medications simply mask over the issue and never address the root cause.

### Forms of bioidentical progesterone

There are 6 forms of bioidentical/micronized progesterone:

Intravenous – Only administered by medical professionals in hospital – extremely high efficacy, absorption – hard to access, limited to condition and physician recommendation, expensive, some insurance may cover

Injections – Only available by prescription – hard to access, limited to condition and physician recommendation – low commitment because of self- administering of needles - can be expensive – some insurance may cover

Sublingual – troches, lozenges and oral oils – available by prescription and commercial sale, over the counter – high absorption – however it is used rapidly in the body so more progesterone is often needed more frequently – prescriptions tend to be more expensive and have more unwanted ingredients such as fillers – some insurance covers – commercial versions tend to be more affordable and often, many have cleaner ingredients

Suppositories – vaginal, rectal – available by prescription and commercial sale, over the counter – absorption is very high – moderately priced, tends to have fillers as a prescription – tends to be messy

Topical - creams, oils, serums - available by prescription and commercial sale, over the counter – prescriptions can have fillers and unwanted ingredients – some insurance covers – commercial versions vary in price and ingredients – strengths can vary – ideal form of progesterone because as a topical product it tends to have a time release in the body throughout the day – convenient

Oral – capsules, pills - available by prescription and commercial sale, over the counter – prescription tends to have unwanted toxic ingredients – absorption is moderate to high gut health dependent, oral forms must pass through digestion and first and second pass at the liver which can have side effects of drowsiness, which some women like to assist with sleep and anxiety, moderately priced, some insurance covers



All bioidentical/micronized progesterone is sourced from plants. A plant sterol is extracted from the plant called diosgenin and is synthesized into the molecule progesterone.

The source of the plant sterol is insignificant to the final product, as there are no remnants or residue left of that plant.

Concerns of soy allergies do not come in to effect in this case. The only thing derived from the plant is the sterol which has no potential for allergic reactions.

### Tips

\*if a product says soy or wild yam in the ingredient list there is no guarantee that this product is free of soy or wild yam. LOOK FOR PRODUCTS THAT SAY sourced from wild yam or sourced from soy.

\*if a product has the name progesterone in the name or front label, there is no guarantee that it contains progesterone. The ingredients should list 'USP progesterone' or 'Micronized progesterone'.

\*Some products are wild yam extracts and do NOT contain progesterone however some can be helpful to women with mild hormone imbalance. These products do very little for severe hormone imbalance and do NOT contain progesterone. The human body cannot convert wild yam cream into progesterone. However, the adaptogenic effects of wild yam can be of help to some women.

#### Absorption

This is probably one of the more complicated aspects of understanding progesterone.



### Strengths vs Dosing

Strength percentage - i.e.; 3%, 10% etc. This describes how much progesterone is contained in one application or dose. If the label reads "3%, 30mg per pump, apply 3 pumps daily, that means of that one pump of cream 3% of it contains 30mg of progesterone and 3 pumps would equal 90mg per dose of progesterone daily.

If the label reads "10%, 100mg per 1/4 teaspoon, apply 2 pumps per day", that means of that 1/4 teaspoon of cream, 10% of it is progesterone and 2 pumps equals 200mg per dose daily, the rest of the cream is carrier oils and other ingredients which are needed to help get the progesterone into the skin and carried to its receptor sites.

Dose – this describes how much of the total product is recommended to apply when using the product, The label may say, "Apply 100mg, ¼ teaspoon per day to forearms at night", this means that the product recommends one dose of ¼ teaspoon at night and the 'serving size' or 'recommended dose' will be listed as 100mg. Apply 100mg on forearms at night.

200mg of a 3% product and 200mg of a 20% product is STILL 200mg, however how you absorb those two strengths varies from person to person and product to product.

200mg of the oral pill, Prometrium, once the oral Prometirum is ingested, it must make its way through the digestive tract and liver before it is utilized, this process can degrade absorption, but once that process happens the 20-30% of progesterone that is utilized is highly effective. There is also a progesterone metabolite that is created when it passes through the liver and this can cause drowsiness in some women.

200mg of topical cream is identical in milligrams to the oral Prometrium however, the cream is immediately taken into the keratinocytes on the skin and slowly utilized throughout the day. USUALLY progesterone is utilized within 12 hours of application.



### Tips

- \*a higher strength doesn't always mean you will absorb more.
- \*Higher strengths simply mean that more progesterone is squeezed into the carrier oil of the product which can sometimes cause grittiness or a sandy quality to the product. Higher strength products are more expensive but also mean you are applying less cream.
- \*I repeat this tip often: It is hard to know who does better with higher or lower strengths, it is unfortunately an experiment we all need to figure out on our own.
- \*Lower strengths may be inconvenient because they require more applications throughout the day if you are on higher doses, however anecdotal research shows more women tend to absorb better using lower strengths.
- \*Using two forms of progesterone will help insure absorption, i.e.; and oral oil + a topical cream.

### TWO SUGGESTED METHODS OF DOSING PROGESTERONE

#### THE MAINTENANCE METHOD

This often looks like a method of dosing progesterone that a medical doctor might recommend. It is meant to fluctuate with your cycle. This can vary from your 1st day of ovulation until your 1st day of bleeding, to days 14 -28.

I have seen a lot of different ways that physicians recommend but commonly they are trying to mimic the natural rhythms of progesterone production.

This maintenance method is simple and has worked for many women. It is recommended for women who have mild symptoms of hormonal imbalance or who are trying to conceive.

### What are considered "mild symptoms"?

- Spotting between periods
- Mild irritability or moodiness
- Light, short period
- Slightly heavy period or lasting more than 5 days
- Irregular period

As mentioned earlier, you may see varying recommendations of dosing for the Maintenance Method. For the sake of simplicity, we will stick with the most common.



Beginning bioidentical progesterone on the first day of ovulation and apply consistently, daily until the first day of red blood flow, menstruation, then cease to apply again until first day of ovulation and repeat.

- Spotting or discharge is not day one of your period, red blood flow is day one
- For a 28-day cycle, day 16 is usually ovulation, however this can vary from woman to woman
- Using an ovulation app and ovulation test kit is one way to track your cycles and to find your day of ovulation and is highly recommended whether you are contemplating dosing progesterone or not.
- If your ovulation day is irregular and difficult to track, this may indicate that you would be better served to use the Therapy Method of dosing progesterone to help regulate your cycle before switching to the Maintenance Method
- Starting progesterone can and often does, cause some irregularity in the cycle at first. Knowing your cycle BEFORE starting progesterone will help you to stick to your dosing method. For example; if you discover you ovulate consistently on day 18, begin progesterone on day 18, if you bleed early, it is recommended to continue to dose the progesterone until your recorded day of menstruation regardless if you have already begun to bleed. Another example; if your day of ovulation is day 18 however you can tell that you are ovulating on day 13 continue to stay on the original schedule and don't begin dosing again until your recorded day of day 18.

# **Tips**

\*As a reminder, the irregularity that happens once you begin dosing progesterone is the estrogen being antagonized. The lion (estrogen) needs taming by the lion tamer (progesterone). The progesterone needs to oppose the estrogen always. Consistency is key

\*If you are dosing the Maintenance Method and your cycle has not normalized or regulated within 3 months of dosing, this may indicate you would be better served by the Therapy Method.



The Maintenance Method of dosing bioidentical progesterone can begin with 50mg to 250mg daily. This can be broken into two doses throughout the day (AM/PM) to avoid progesterone levels crash-ing mid-day.

Many women can stay at this dosing for many years without having to raise the dose, however, as we age progesterone levels naturally decline and other factors have an impact on progesterone levels such as extreme or even mild stressful time periods in our lives, illness and even extreme exercise can reduce progesterone levels.

As we age and we approach perimenopause and menopause, it is not uncommon to raise the dose or to even switch from Maintenance Method to the Therapy Method. Other life changes can require increasing dosing as well, like pregnancy, miscarriage, abortion and breastfeeding.

Progesterone is donated to make cortisol, cortisol is a stress hormone that comes into help reduce the inflammatory effects of stress. Progesterone does not randomly donate to make cortisol, it does so when cortisol is in demand. Something you may commonly hear in hormone circles is, "I cannot take progesterone because it converts to cortisol".

This is a misunderstood concept. We absolutely want progesterone to convert to cortisol. The larger concern is, what is going on in the body that is demanding consistent cortisol?

This is a much larger issue that needs tending to and stopping progesterone is robbing your body of the one hormone trying to put out the fire, cortisol! Thank the progesterone for revealing the issue to you and get to work to find the culprit/s.



#### THE THERAPY METHOD

This method is a daily dose of bioidentical progesterone throughout the month. This method is recommended for women at any time of life, with chronic, severe symptoms of hormone imbalance.

The 'Therapy Method' can also be good for women who are suffering from the hormone crashes that occur with perimenopause, menopause, pregnancy, miscarriage, abortion, medicated birth control including IUD's and pellets and patches and any form of a hysterectomy.

Dosing bioidentical progesterone using the Therapy Method

A therapeutic dose of progesterone is considered anything over 200mg daily, consistently throughout the entire month or cycle without ceasing. This analogy can be helpful;

\*If you need gas in your car and you don't fill it up, it won't be long before you'll need to stop and put gas again. Filling up the tank with gas will get you further until you are able to deal with the leak in the tank. Stopping to fill your tank just enough to get the car going again is going to constantly leave you in a state of deficit. Applying just enough progesterone to get in front of your deficiency is going to leave you constantly needing more. And then stopping the progesterone completely will cause a severe drop in progesterone. Then starting again for half the month, leaves you starting all over again from an empty tank.

The idea behind the Therapy Method, is to stay in front of the deficiency, not allowing the estrogen to dominate at the wrong time and cause estrogen dominant symptoms.



# What are considered "estrogen dominance symptoms"?

- Fatigue
- Migraines
- Cramping
- Low libido
- Hot flashes
- Painful breasts
- Excessive menstrual flow
- Depression
- PCOS
- Fibroids
- Clotting
- Breast cysts
- Endometriosis
- Miscarriage

# Why am I in such demand of progesterone?

Stress, inflammation, poor diet choices, low grade infections all cost us progesterone. It costs us progesterone to be stressed and inflamed and ill.

The **Therapy Method** of dosing progesterone can begin with 200mg of progesterone per day, as the estrogen is antagonized, symptoms can rise. When a symptom arises, this tells us the Lion is in control and the Lion tamer is needed. It is recommended to raise the dose between 50mg and 100mg.

A symptom can arise in the morning and you raise the dose 50mg and another symptom may arise in the evening, it is recommended to raise the dose every time a symptom arises. Some women can be at 500mg within the first few days of starting the **Therapy Method**. If a woman is experiencing relief of symptoms with doses over 400mg, it is highly likely that there is an issue with absorption, which is why multiple mediums of progesterone are recommended to raise your chances of absorbing the progesterone.



### **Tips**

- \*Dosing multiple times throughout the day will insure absorption instead of once or even twice per day
- \*Though there are keratinocytes all over the body, even our scalp and elbows, it is recommended to apply to thinned skinned areas to insure absorption.
- \*As mentioned in the recommended diet chapter of this book, having a snack with doses helps because progesterone cannot be properly absorbed without carbohydrate as a facilitator. See **HERE**.
- \*Don't forget the bottoms of the feet before bed, or the nape of the neck and behind the ears.
- \*Progesterone serums are an excellent 'beauty' cream and moisturizer.
- \*Inter-labial application of cream and oil is also excellent for absorption and for lubrication, be cautious of ingredients when applying vaginally.
- \*If a woman is taking 'mega-doses' of progesterone, over 400mg and is not experiencing any relief whatsoever after 10 days, something is being overlooked.

The normal and common progesterone therapy method experience is one of up and down symptoms however a slow progression upward. For example; You have relief of migraines, yet you are still experiencing heavy bleeding. You have more energy, yet you have a new symptom of mild anxiety in the morning. Your PMS is gone, but you aren't having a period.

There are many combinations of symptoms and relief that can happen at the same time but the big takeaway is THERE IS SOME improvement. If you are on high doses for 10 days and experiencing no relief whatsoever, something is being overlooked.



#### What can be overlooked?

- You need more fuel to be able to absorb and process the progesterone.
- You are on one or more medications like antidepressants that could be making things more complicated. (it is recommended to see a functional practitioner who can help you manage this complexity)
- There are nutritional deficiencies and/or gut health/thyroid issues that the progesterone alone cannot remedy
- Your Toxic Bucket is full this is common. Many women get on to bioidentical progesterone without doing any sort of homework on their health in any other way. This may be fine for some women, but most of us need to encourage detoxification through diet, exercise and stress management changes if we want a healthy life.

# Progesterone is wonderful but it's NOT magic

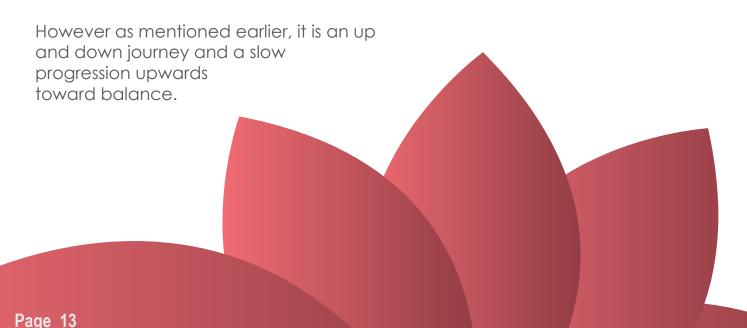
What is a toxic bucket?

Our bodies are ridding of toxicity every minute of every day. These pathways of detoxification can become stagnant and 'clogged' for many reasons. Genetic mutations like the MTHFR. Exposure to toxins in our food, water, air, medications, ongoing low grade infection like dental, Lyme, herpes etc.

# How long do I need to stay on the 'Therapy Method' of progesterone?

There are many different answers to this depending on what a person is dealing with in terms of imbalance. But the therapeutic period when women begin to see balance is approximately 3 months.

This is anecdotal and based on the info compiled (Platt, Wray, Peat, Lee). There are no studies to show why this time-period seems to be the mark most women begin to see the normalizing of their cycles and diminishing of symptoms. Some women will begin to see changes as soon as their first dose.



Depending on the severity of symptoms and what a woman is dealing with physically, some women can totally come off progesterone all together. This is quite a challenge because most of us are faced with so many factors that cost us progesterone in today's world. Equally a challenge is perimenopause and menopause which can begin as early as 38, as these phases of life are synonymous with crashing hormone levels.

After the 3 months of finding balance, a woman is faced with whether to continue the Therapy Method or to downgrade to the Maintenance Method.

#### This, once again, is very individual.

It really depends on how we have addressed the 'leak in the tank' analogy mentioned earlier. If the issues that are causing us to spend our progesterone are not addressed, we will constantly be faced with a deficiency every time we lower our levels of progesterone. So once again working towards encouraging detoxification, supporting healthy digestion and managing our stress levels all help to reduce our need for progesterone therapy.

# How do I transition from the 'Therapy Method' to the 'Maintenance Method' of taking progesterone?

Wait for your first day of bleeding and stop progesterone totally, then start again on your first day of ovulation (around day 16-19, use an ovulation test kit to determine when this is).

Start progesterone again at the same dose you stopped at, on your first day of ovulation. Repeat.

If stopping progesterone completely sends symptoms into a tailspin you know you are not ready to downgrade to the Maintenance Method.

If stopping progesterone for your period works for you, you can begin to play with lowering your dose while on progesterone. Lower the dose slowly and steadily.



Menopausal women can do the therapy method, taking daily.

Applying progesterone and having a small snack or meal is advisable as progesterone requires healthy carbohydrates to be absorbed properly. See HERE.

I hope that The Progesterone Supplementation Handbook has provided you with valuable information and practical tips to help you achieve hormonal balance.

This guide is just the beginning of your journey towards a healthier and happier life, free from the symptoms of hormone imbalance.

But this is just a small sample of the things I teach my community of followers.

You have the opportunity to unlock the secret to hormonal balance and live your best life.

Join the Estrogen Dominance Support Group on Facebook that has 25 000 members.

Keep in touch and stay informed on the latest developments in hormone supplementation.

And don't forget to check for my messages in your email as I send out regular newsletters and special offers to my subscribers that you won't want to miss.

-Healthy Gut Girl Kitty Martone

#### Disclaimer:

\*No information in this guide is meant to heal, cure, diagnose any illness, disorder, imbalance, or disease. If you feel you need the attention of a medical doctor please seek help from a professional. The information shared is in no way meant to replace the advice of a medical professional.