

# Hormones SIGNS & Symptoms

P E R I & P O S T M E N O P A U S A L W O M E N

E S T R O G E N - P R O G E S T E R O N E - T E S T O S T E R O N E

Menopause is a transitional time that all women will go through, but the length and severity of symptoms will be different for each individual. Typically during a woman's late thirties, a change begins known as peri-menopause. Peri-menopause is a natural decline of the hormones, estrogen and progesterone. These hormones are produced by the ovaries and while they are responsible for a wide variety of tasks one main task is to regulate menstruation. During peri-menopause there is such a fluctuation in hormones many women experience symptoms that may cause significant changes in their everyday lives.

Symptoms associated with hormone imbalance in menopausal women:

- Menstrual Irregularities
- Hot Flashes
- Vaginal Dryness
- Mental and Emotional Changes
- Skin and Hair Changes
- Changes in Bone Mineral
- Higher Risk For Heart Disease
- Insomnia
- Chronic Fatigue
- Decreased Libido
- Thyroid Problems
- Weight Gain, *especially in waist and hips*



As the transition from peri to post-menopause continues, the menstrual cycles will change. These changes will vary from woman to woman but cycles may become longer or shorter, heavier or lighter, with more or less time in between until the ovaries stop producing eggs and the menstrual cycles will stop. Post menopause is technically defined as occurring twelve months after your last menstrual cycle. There are sometimes instead of this natural process of declining hormones women may find themselves abruptly in menopause because of a surgical procedure such as hysterectomy or chemotherapy.

While this may be a natural biological process, seeking treatment of the physical and emotional symptoms that come along with menopause is something every woman should be able to discuss with her healthcare provider. Hormone replacement helps, not only with symptoms but also decreases disease risks that are usually associated with the aging process, such as osteoporosis, heart disease, and cancers such as endometrial and breast cancer. No matter what approach you and your healthcare provider decide, the goal is to create and restore a balance to alleviate symptoms that may be causing disruptions in living a quality and fulfilling daily life. With this handout our goal is to provide you with:

- The signs and symptoms of both the excess and deficiencies of specific hormones.
- Explain the difference between blood and saliva testing when looking at hormone levels.
- Comparison between compounded hormone replacement options and commercially available products.
- Conditions to consider when beginning treatment and what to expect.

We hope you find this information useful and understand that we are here to help you and your physician achieve the best results. We look forward to working with you and please do not hesitate to contact us if you have any questions or if we can assist you in any other way.

# Estrogen

Estrogen is not a single hormone. There are three primary types of estrogens, each having their own unique profile of activity. The three primary estrogens are Estrone (E1), Estradiol (E2), and Estriol (E3). All of these primary estrogens carry out a wide variety of tasks such as increasing metabolism, regulating the menstrual cycle, preserving bone density and skin tension, and protecting against heart disease. They also have an affect on the reproductive and urinary tracts, the heart and blood vessels, bones, breasts, skin, hair, mucous membranes, pelvic muscles, and the brain. When estrogen levels become too high or too low you may experience the following symptoms:

## Estrogen Deficiency Symptoms:

Hot Flashes	Memory Lapses
Night Sweats	Heart Palpitations
Sleep Disturbances	Yeast Infections
Vaginal Dryness/Atrophy	Painful Intercourse
Dry Skin	Depression
Headaches	Low Libido
Foggy Thinking	Bone Loss

## Estrogen Excess Symptoms:

Water Retention	Heavy, Irregular Menses
Craving for Sweets	Breast Swelling & Tenderness
Fibrocystic Breasts	Low Thyroid Symptoms
Mood Swings	Nervousness
Uterine Fibroids	Anxiety
Weight Gain	Irritability
Fatigue	

# Progesterone

Progesterone's main function is to help prepare your body for conception, pregnancy, and regulates the monthly menstrual cycle. The role of progesterone in bHRT is to aid in the function of thyroid hormone, help to maintain sex drive, improve mood, relieve hot flashes, protect against breast cancer and endometrial cancer, and even protect against osteoporosis, at times even reversing it. Progesterone also helps to balance out estrogen levels and reduce the chance of "estrogen dominance" symptoms. During menopause, the main hormonal change that occurs is not a decline in estrogen, it is the loss of progesterone. While estrogen levels drop 40-50% at menopause, progesterone levels decline by almost 100%. When progesterone levels become too high or too low you may experience the following symptoms:

## Progesterone Deficiency Symptoms:

Many of the symptoms of estrogen excess listed above, plus:

Swollen Breasts	Irregular Menses
Weight Gain	Depression
Headaches	Cramping
Low Libido	Pms
Anxiety	Infertility
Mood Swings	Fuzzy Thinking

## Progesterone Excess Symptoms:

Many of the symptoms of estrogen deficiency listed above, plus:

Drowsiness
Bloating
Acne
Edema



# Testosterone

Testosterone is not only beneficial for men, but women also and found to be helpful in protecting the heart, improving mental alertness and energy levels, making bones stronger, and reviving a lagging sex life. When testosterone levels become too high or too low you may experience the following symptoms:

## Testosterone Deficiency Symptoms:

Fatigue	Heart Palpitation
Fuzzy Thinking	Thinning Skin
Memory Problems	Bone Loss
Depression	Vaginal Dryness
Decreased Libido	Lack Of Motivation
Incontinence	Decreased Immunity
Muscle Weakness	Loss Of Muscle Tone
Osteoporosis	

## Testosterone Excess Symptoms:

Acne
Deepening Of Voice
Clitoral Enlargement
Aggressiveness
Increased Libido
Rage
Anxiousness
Polycystic Ovary Syndrome (PCOS)

## *I have symptoms, but how can I make sure?*

While blood testing is fine for looking at glucose levels and proteins, there are a number of studies that state it is not so good for measuring “free” hormones. More than 95% of hormones found in the blood are bound to circulating proteins and in this bound state, they are unable to fit into receptors. Therefore, these hormones will not be delivered to tissues and are considered inactive, or non-bioavailable. The bound hormones that are measured in blood testing are too large to pass through the cell membranes of the salivary glands. Only the unbound hormones may pass through into the saliva. These hormones are going to be, the “free” or bioavailable hormones that are going to be delivered to the receptors in the tissue of the body. This concentration of free hormones is going to show a more clinically significant result of hormones levels, thus making saliva testing far more superior. Saliva tests are very stable and can be collected in the privacy of your own home, stored at room temperature, and are stable for an extended period of time. Typical hormones studied in saliva testing are Estrogens (Estradiol, Estrone, and Estriol), Progesterone, Androgens (DHEA, Testosterone), and Cortisol for assessment of adrenal functions. Cost is typically around \$30 per hormone tested\*. For information about getting a kit or if you would like more information feel free to contact us.



\*Subject to change

# The Differences Between Compounded and Commercially Available Products

The goal of any hormone replacement is to restore a balance between hormone levels. There are many options that patients and their prescribers may use but at NaturalMed we like to utilize hormones that match human hormones and this is called hormone replacement therapy, not hormone substitution therapy. So, let's go over some quick definitions:

- The term **synthetic** refers to drugs whose origins are not primarily organic, but rather produced through a **chemical** process that requires additional chemical structures added to attempt to make the body believe it is receiving the desired hormone. These additional chains are added to help drug companies obtain patents on the drugs. Which in turn costs you and your insurance company more money. Commercially available hormone replacements are from synthetic products including conjugated estrogens having chemical structures that **are not** the same as what the body produces.
- The term **bio-identical** or **bHRT** is derived from plant sources, usually from the yam, and is modified to become identical to the form of human hormones. Because they are exactly the same as the human body manufactures you are able to achieve results without negative side effects.

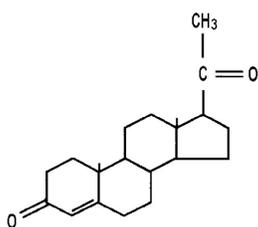
It is estimated that 60% of women who start on traditional and commercially available hormone replacement discontinue use after a year. When using products that **imitate** human hormones like conjugated equine estrogen (*which some may consider "natural"*) and medroxyprogesterone (*synthetic*) a true balance is **not** achieved thus, resulting in discontinuation of the therapy as the typical outcome.

On the other hand, a study revealed that out of 100 patients there was a 96% compliance rate with compounded bio-identical hormone replacement and a statistically significant improvement for 24 out of 37 symptoms evaluated in that particular study. Compounded bHRT are substances that have been derived from plant oils (*the yam plant*) and put through a chemical conversion resulting in pharmaceutical-grade hormones that are a direct match to the structure and function of the human body.

See the images below to see the difference between natural and commercially available drugs. You don't have to know chemistry to see the additional chains that are added on both the synthetic progesterone and conjugated estrogen.

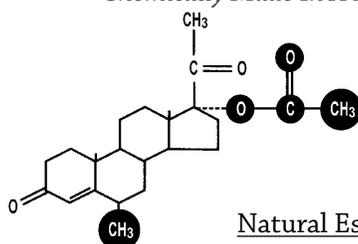
## Natural Progesterone

*Produced by the body*



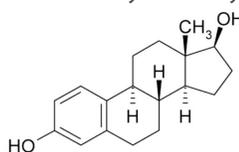
## Synthetic Progesterone

*Medroxyprogesterone  
Chemically Made In A Lab*



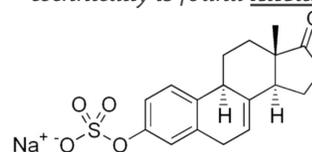
## Natural Estrogen

*Produced by the body*



## Conjugated Estrogen

*From a pregnant mare's urine which technically is found **naturally** in nature*



# Beginning Treatment and What To Expect

After reading through this packet it is safe to say hormone replacement therapy has a lot of different angles and approaches. It is best to keep in mind the number one goal is to restore a balance. It must be understood that when trying to find a proper balance it is not a "one-dose-fits-all" approach. It takes patience, communication, adjustments, and fine tuning to meet your proper balance.

## *Talk to your prescriber about symptoms and treatment options.*

When approaching your physician remember the only person that can feel a hot flash...is the one having the hot flash. Keep a record of symptoms and their severity as they arise to discuss with your physician. NaturalMed has a hormone questionnaire attached to this handout and also on our website at [www.naturalmedapothecary.com](http://www.naturalmedapothecary.com). You can use this as a tool to discuss your symptoms. If your physician is not familiar with our questionnaire or bHRT, let us know and we will be happy to discuss this therapy option with them. Or if you are looking for a prescriber that works with bHRT just let us know and we can refer you to one we currently work closely with.

## *Be patient...*

A typical timeline to correct a hormonal imbalance is generally around 3-6 months and may require multiple consults with your physician or pharmacy. So don't get frustrated or discouraged after the first couple months, bHRT has been shown to have increased compliance and satisfaction. If you have questions or are having issues with reoccurring symptoms and feel like a dosage change would be beneficial do not hesitate to communicate that.

## *Other recommendations to consider...*

Living a healthy lifestyle can play another crucial role in balancing hormones.

- Make sure to keep a good diet, limiting excess sugars, high carbohydrates, and fats.
- At least 30 minutes of exercise at minimum three times a week.  
A 30 minute workout is only 2% of your day and a small 1% of your entire week.
- Proper nutrition such as a quality balanced multi-vitamin and omega-3 fish oil.
- Keep stress levels to a minimum.
- Get at least 8 hours of sleep .
- Don't smoke, consume excessive amounts of alcohol or caffeine.



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# Quick Reference Guide for BHRT

	ESTROGEN	PROGESTERONE	TESTOSTERONE
<i>Pre</i> Menopausal (~Age < 40)	Usually not needed.	Needed for PMS (Days 14-25 Only)	Low dose occasionally needed for sex drive

## Menopausal Period

<i>Peri</i> Menopausal (~Age 40-55)	Low dose needed to control menopausal symptoms <i>- If progesterone alone isn't effective.</i>	Replacement is frequently needed.	Low dose occasionally needed for sex drive
<i>Past</i> Menopausal (~Age > 55)	Low dose needed to control menopausal symptoms.	Replacement is frequently needed.	Occasionally needed.

As mentioned on previous pages, if you are not interested in the “one-dose-fits-all” philosophy for hormone replacement, NaturalMed Apothecary is your answer. Since all of our medications are made specifically for you, we are able to work closely with your prescribing physician to create the proper dosage form and strength for you. If you are looking for a natural “hormone friendly” doctor, please contact us for a referral list.

We find most insurance companies cover bio-identical hormone replacement and we do accept most major insurance carriers. You may also use your flexible spending account or Health Savings Account.



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