

Bio-Identical Hormone Replacement Therapy (BHRT)

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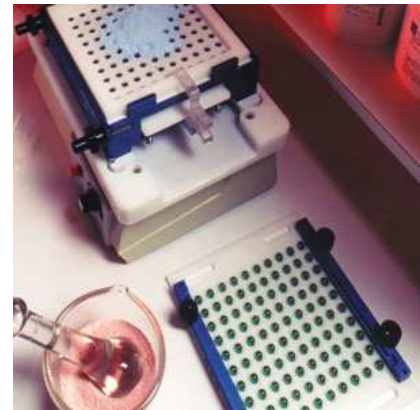
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What Is A Natural Or Bio-Identical Hormone?

Bio-identical hormones are exact duplicates of those that are natural to, or occurring in the human body. Natural or bio-identical have to do with the chemical structure of a hormone and not it's source. Synthetic hormones are not found in humans, and are not identical in structure or function to the bio-identical hormones they are intended to replace. Natural hormones are obtained from sterol analogues found in many varieties of plants, primarily soybean and wild yam. These estrogen and progesterone-like compounds are then transformed in the laboratory to the human bio-identical natural hormones.

Examples of bio-identical hormones include:

- * Estriol, estradiol, and estrone
 - Bi-Est: estriol/estradiol
 - Tri-Est: estriol/estradiol/estrone
- * Progesterone
- * Testosterone



Is There A Difference Between Synthetic And Bio-Identical Hormones?

There is a difference between synthetic and bio-identical hormones. Bio-identical hormones cause the same response as your own hormones. Synthetic hormones cause similar actions, but due to the difference in chemical structure they may produce a few undesired effects. Our body recognizes a bio-identical hormone as a friend, someone it has seen before and knows what to do with.

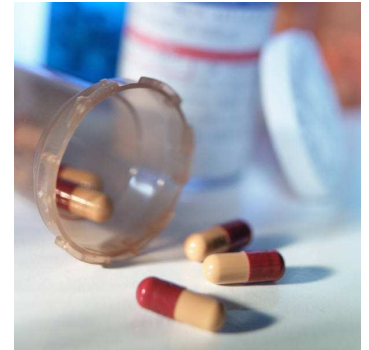
Prescriber Information:

BHRT Can Be Made in Three Dosage Forms:

Listed most absorbed to least absorbed

Topical Creams/Gels (including intravaginal cream)

- Typical doses are much smaller than capsules due to better absorption
- A combination can be compounded in one prescription depending on Current Symptoms, Medical History, and Lab levels of Estradiol, Estrone, Estriol, Progesterone, Testosterone



-Example Prescription:

FOR	Mrs. Patient	AGE	
ADDRESS		DATE	
Rx	Bi-est 1.25mg(E2 1mg/E3 0.25mg) Progesterone 20mg Testosterone 1mg Per gram or mL of emollient cream		
	Sig: Apply 0.5mL to inner thigh BID		
PHYSICIAN'S SIGNATURE	Dr. Physician		
ADDRESS			
DEA NO.		NON REF <input type="checkbox"/>	REFILL _____ TIMES

Troches (lozenge)

- Typical doses are much smaller than capsules due to better absorption
- A combination can be compounded in one prescription depending on Current Symptoms, Medical History, and Lab levels of Estradiol, Estrone, Estriol, Progesterone, Testosterone

-Example Prescription:

FOR	Mrs. Patient	AGE	
ADDRESS		DATE	
Rx	Bi-est 1.5mg(E2 1mg/E3 0.5mg) Progesterone 15mg Testosterone 2mg Per troche		
	Sig: Dissolve 1/2 troche in mouth BID		
PHYSICIAN'S SIGNATURE	Dr. Physician		
ADDRESS			
DEA NO.		NON REF <input type="checkbox"/>	REFILL _____ TIMES

Poole's Pharmacy Care understands the importance of pharmaceutical compounding, and has more than 12 years of compounding experience.

Prescriber Information Continued:

Capsules

- Typical doses are much higher than topicals due to decreased absorption
- A combination can be compounded in one prescription depending on Current Symptoms, Medical History, and Lab levels of Estradiol, Estrone, Estriol, Progesterone, Testosterone

-Example Prescription:

FOR	Mrs. Patient	AGE	_____
ADDRESS	_____	DATE	_____
Rx	Bi-est 2.5mg(E2 2mg/E3 0.5mg) Progesterone 100mg Testosterone 5mg Per capsule		
	Sig: Take 1 capsule po BID		
PHYSICIAN'S SIGNATURE	Dr. Physician		
<small>THIS PRESCRIPTION IS VALID FOR FORTY-FIVE DAYS FROM THE DATE OF ISSUANCE.</small>			
ADDRESS	_____		
DEA NO.	_____	NON REP. <input type="checkbox"/>	REFILL _____ TIMES



Why Should I Consider BHRT?

Even before menopause, certain symptoms may be signs that hormonal adjustments are needed (breast tenderness and fibrocystic breast disease, migraines and headaches, bloating, mood swings, anxiety, and hot flashes, for example). Use of bio-identical hormones in the proper doses will not only control menopausal and peri-menopausal symptoms, but will greatly improve quality of life both short-term and long-term. Protection against heart disease, reduced risk of breast cancer, improved cholesterol and lipid profiles, and osteoporosis prevention are all valid reasons for monitoring hormone levels and using individualized bio-identical hormone replacement therapy (HRT).



“BHRT is not a one size fits all situation, and a woman’s need for hormones is as individual and unique as she is”

Are There Side Effects Associated With Use Of Bio-Identical Hormones?

Because bio-identical hormones are just like the ones produced by your body, there are relatively few side effects. Women in general tolerate bio-identical HRT better than synthetic hormone therapy. The risks identified are primarily associated with excess estrogen levels, whether the excess occurs naturally or as a result of hormone replacement therapy, even bio-identical hormones. The body’s natural mechanism for moderating estrogen includes progesterone, and studies have demonstrated its effectiveness in decreasing the risks of breast cancer and cardiovascular disease. Studies have shown that it is safer to restore hormone balance with bio-identical hormones than to leave the body with a state of deficiency or excess. Bio-identical hormones must be dosed properly for each individual in order to avoid adverse effects.

Is BRHT Individualized?

BRHT is not a one size fits all situation and a woman’s need for hormones is as individual and unique as she is. The few selected strengths of hormones manufactured by pharmaceutical companies do not meet the needs of every woman. Bio-identical hormones can be compounded to meet your exact needs. Ask your pharmacist and physician for more information.



Should I Quit Or Change My Hormone Replacement Therapy?

Always consult your healthcare provider before stopping any medication, including hormones. Discuss your situation and the options available to you with both your physician and pharmacist. You do have choices regarding BHRT and we encourage you to learn as much as possible about the pros and cons of the different options before making your decision. Our pharmacists at Poole’s Pharmacy Care are knowledgeable and experienced with bio-identical hormones, and are available to answer more detailed questions.

How Do I Get Started On BRHT?

Review the information in this handout and talk to your physician. Often one cannot determine the types and amounts of necessary hormones by symptoms alone. We now have the ability to tailor BHRT more precisely by measuring active hormone levels in saliva rather than in blood. The pharmacists at Poole's Pharmacy Care can speak with you about your symptoms and what hormone levels might be checked. Saliva test results can be interpreted for you taking into consideration your symptoms, medical history, and needs. A recommendation for possible therapy, which might include both prescription and OTC products, can be developed for you and your provider to consider.



Ten Reasons Why Your Hormones Could Be Imbalanced:

Too much estrogen may be caused by:

1. Food that have hormones added to them, such as meat, milk, eggs, and dairy products.
2. Herbs that have an estrogenic effect in the body, such as licorice, and black cohosh.
3. Birth control pills that contain estrogen.
4. Environmental toxins that mimic the actions of estrogen (known as xenoestrogens)
 - The largest source of xenoestrogens is pesticides.
5. Exposure to radiation, which increases estrogen levels in the blood.
6. Chronic constipation which interferes with the body's ability to eliminate estrogen properly
 - Estrogen then builds up in the colon and can be reabsorbed by the body.
7. Estrogen supplements as part of a hormone HRT for menopausal symptoms.

Too little progesterone may be caused by:

1. Birth control pills or hormone replacement therapy with synthetic progestins, which decrease the body's natural production of progesterone.
2. Chronic stress
3. Lack of insufficient ovulation (which is a natural consequence of going into menopause)

"Always consult your healthcare provider before stopping any medication, including hormones."

Frequently Asked Questions About Estrogen:

What is Estrogen?

-Estrogen is not one hormone, but a group of similar hormones of varying degrees of activity, all made by the ovary. The three most important hormones of this estrogen group are estrone (E1), estradiol (E2), and estrin (E3).

What Does Estrogen Do?

-Estrogen is the female hormone produced by the ovaries that is responsible for ovulation. Estrogen is secreted by the ovaries throughout a woman's reproductive years. Special estrogen receptors are located in the breasts, lining of the uterus, cervix, brain, bones, and in the vagina.

What is Menopause?

-Strictly speaking, menopause means the end of your menstrual cycle. But more commonly it refers to the 5-10 years when the ovaries gradually stop producing eggs, and there is a progressive decline in hormone production, most notably, estrogen.

What Does Estrogen Hormone Replacement Do?

-With the onset of menopause (peri-menopause), the ovaries produce less and less estrogen. During this time, many women experience hot flashes, night sweats, vaginal dryness, urinary tract infections, and emotional changes such as depression and irritability. Estrogen replacement therapy can help relieve these symptoms, as well as, lower the risk of cardiovascular disease and osteoporosis.

Frequently Asked Questions About Progesterone:

What is Progesterone?

-Progesterone is one of two main hormones produced by the ovaries. More specifically, it is produced by the corpus luteum just after ovulation.

What Does Progesterone Do?

-Progesterone is responsible for preparing and maintaining the lining of the uterus in preparation for the fertilized egg. Progesterone secreted from the ovary is necessary for the survival of the ovum and the resulting embryo until the placenta takes over this production. The decline in progesterone each month triggers the menstrual cycle. Progesterone and Estrogen are closely interrelated and their actions in the body are in a delicate balance. PMS symptoms can be relieved by progesterone therapy from day 14 to day 28 of a woman's cycle. After menopause, progesterone stimulates osteoblasts to help build bone and increase bone density, as well as increasing good emotional health.

What is the Difference Between "Natural" Progesterone and Other Progestins?

-Progesterone is the natural hormone produced by the ovaries. Progestin refers to the group of synthetic hormones (like medroxyprogesterone) that have actions similar, but not identical to that of progesterone.

What Exactly is Natural Micronized Progesterone?

-Natural micronized progesterone is obtained from Wild yams or soybeans as a precursor substance called diosgenin. This precursor is then converted in the laboratory to progesterone. It is bio-identical to the progesterone produced by the ovaries. The term "micronized" refers to the small particle size of the progesterone itself. Progesterone is better absorbed when it is micronized and compounded in PLO transdermal base or cream base.

Who Should Take Progesterone?

-Any woman taking estrogen replacement therapy who still has a uterus should take progesterone. Any woman who has had their uterus removed but still has a hormone imbalance should take progesterone as well. This is due to progesterone's delicate balance with estrogen, and it's effects on bone density and emotional health. Progesterone opposes the stimulatory activity of estrogen on the endometrial lining and protects against uterine and cervical cancer.

Any of the pharmacists at Poole's Pharmacy Care would gladly answer any questions you may have about BRHT.



Frequently Asked Questions About Testosterone:

What is Testosterone?

-Testosterone is a hormone produced by both men and women. It is not just a male sex hormone. In men testosterone is primarily produced in the testes and to a lesser extent in the adrenal glands. In women testosterone is produced in the ovaries, adrenals and to a lesser extent in the skin, brain and liver.

What Does Testosterone Do?

-Testosterone behaves differently in the bodies of men and women, but it plays a very important role in the overall health and well being of both sexes. *In men* testosterone builds muscle, enhances sex drive, elevates the mood, prevents osteoporosis, and increases energy. *In women* testosterone enhances the sex drive, helps relieve menopausal symptoms, restores energy, strengthens bone, elevates the mood, and increases the sensitivity to sexual pleasure.

What are the Benefits and Risks of Taking Testosterone?

-Testosterone can improve the energy and strength in both men and women. It has a "tonic" affect on the body. Reports indicate that adequate levels of testosterone can help prevent heart disease, stroke, and vascular disorders such as diabetic blindness. Testosterone supplements in men and women can increase the risk of liver toxicity, especially if taken orally. This is because the oral drug goes directly to the liver. It is better to take testosterone transdermally— by patch, gel, or cream for men and by gel, cream, or vaginal cream for women. In women side effects such as oily skin, acne, irritability of behavioral changes and increased facial hair are dose related. When dosed correctly these problems rarely occur.

What is the Difference between Testosterone and Methyltestosterone?

-Testosterone is the active form of the hormone. It is this form that binds to receptors in the body and cause the desired affects. However, testosterone may increase the levels of estrogen in some men and women which is not always desirable. The "methyl" form of testosterone is less likely to be converted to estrogen and is better absorbed orally, however, due to its toxic effects on the liver your physician will have to monitor your liver function more closely.



Simply the only pharmacy you'll ever need!