



# BHRT

*Patient Handbook*



*Written by*

# Bio-Identical Hormones

The field of medicine is constantly discovering the far reaching affects of hormones from dissolving MS plaques to resolving other autoimmune diseases to restoring a failing memory.

Medicine has learned a lot about hormones in the last 45 years. Lifestyles and health risks have also changed dramatically. Increased workloads, fast food and time restraints have had negative effects on the aging process. Poor diet, stress, and xenohormones which are environmental chemicals that attach strongly to the body's hormone receptors are the most important factors that lead to hormone imbalances. Providing the body with the specific nutrients and with the actual bio-identical hormones which are derived from plants increases the body's ability to regain hormone balance and to maintain it. Each patient has their own hormonal profile that explains their symptoms. Therefore each patient needs their specific treatment plan from their physician.

The importance of hormones goes far beyond sexual function and pleasure. Every cell of the body and every biological system is influenced and connected in a complex way to the constantly circulating sea of communicating hormones. These hormones are our most fragile system and easily thrown off balance with today's chemical filled and stress filled environment.

Hormone imbalances and the resulting symptoms are extremely common health problems. Years of research and review of thousands of laboratory tests confirm that as many as seven out of ten people have some level of hormonal imbalance. Once imbalances are identified, the patient's individualized hormone treatment plan reestablishes hormonal balance and effectively resolves many if not most of these symptoms such as fatigue, headache, thyroid abnormalities, hair problems, menstrual abnormalities, infertility etc

Normal function of the body is a matter of the appropriate communication between cells and organs. The hormones are messengers helping other parts of the body to speed up their work or to slow down their work. Then feedback is passed back to the cells and organs to further make sure homeostasis and balance is maintained as best as possible.

There are many binding particles, enzymes and cofactors that add complexity onto an already infinitely complex system.

If one organ becomes weakened and doesn't accept messages appropriately and doesn't produce its' specialized product then the feedback system has to re-adjust. When pushed to the limits, one organ's weakness can throw off the balance in an area seemingly distant from the weak organ. For example; as a woman ages she will get to a point where she dos not ovulate anymore and thus her biggest source of progesterone will have dried up. This frequently will have a negative impact on the thyroid, causing an under active thyroid (i.e. weight gain, anxiety, depression, hair loss etc).

## Targeted Bio-Identical Hormone Replacement Therapy---TBHRT

A medical approach that restores hormonal imbalance by testing for the exact level of hormones active in the tissue and then targeting its' correction by prescribing the exact Bio-Identical hormones, supplements and lifestyle changes needed to restore balance and excellent health.

### What are Hormones?

- Hormones are the body's messengers transporting information between the brain, the glands, and the cells.
- Hormones repair, build and restore our bodies.
- Aging is noted as our hormones decline. We are the most vibrant and healthiest in our late 20's when our hormones are at their peak.
- Your hormones need to be balanced if you expect to see good results from your dieting and exercise program.

### Hormones Decline

- Hormones decline as we age since the glands that produce the hormones don't regenerate and become less vital as time marches on.
- So to make the aging process smooth, vibrant and healthy, we must be sure that our hormones stay in balance or we may find ourselves experiencing obesity, illness, mood swings, fatigue and aches and pains.

### Natural Hormones vs. Synthetic Hormones

- Synthetic hormones whether derived from animal urine or manufactured in the lab (plant progesterone and animal estrogens) are chemicals that act as toxins in the body. Because they are not identical to the human body, we can not metabolize them properly. They can be much stronger than our own hormones and they stay in the body much longer than our own hormones.
- TBHRT uses only natural Bio-Identical hormones. Unlike synthetic hormones, Bio-Identical hormones are natural to the body hormones and are replicas of the body's own natural hormones. They're made from plant extracts, which are changed in a lab to be biologically identical to the same hormones our body makes.
- For optimal safety and results, TBHRT prescribes only hormones that are low and are causing symptoms, and suggests regular retest of hormone levels.

## Menopause and Perimenopause

Menopause or the cessation of the menstrual period is declared when a full year without a period goes by. The average age of menopause is 50 years old. However, women can experience menopause-related changes much earlier and years after. The stage leading to the eventual end of menstruation, called Peri-menopause, can last anywhere from 6 months to 10 years. During Peri-menopause and Menopause some women may experience hot flashes, night sweats, weight gain, mood swings, anxiety/depression, poor sleep, irritability, vaginal dryness, memory problems and other symptoms that tax the quality of life.

## Andropause---Male Menopause (Men Have Hormones Too)

Male hormone production by the testes (the male equivalent of the ovaries), tapers steadily with age. This decrease in hormone production is related to changes in sexual function, prostate enlargement, mood, energy level, and body fat/muscle composition. Men may develop hot flashes, decreased libido, erectile dysfunction, decreased muscle strength and size, bone loss (less commonly than women), decreased mental clarity, grumpiness and depression, low energy level, fatigue, poor blood sugar control, heart disease and more.

## Hypothyroidism-Hyperthyroidism :: Are Two Ends Of The Same One Illness

This when the thyroid gland doesn't produce enough or produces too much thyroid hormone (T3/T4) or the thyroid hormones are blocked from performing their function. The body's metabolism will be too fast or too slow. Thyroid levels may be abnormal for many years before symptoms become clearly noticeable. They are often confused with general age-related changes. People might experience fatigue, sluggishness, hyperactivity, depression, feeling cold, cold hands and feet, palpitations, weight gain or weight loss, thinning hair, brittle nails, dry or oily skin and constipation. Thyroid function is altered by the amount of estrogen being balanced by progesterone. For proper thyroid function, we need to give it the nutrition it needs to work properly. Our food, even if we concentrate on fruits and vegetables, are not rich with minerals as in the past, since our farmers do not enrich the soil where the produce grows. There is a better chance of getting the proper nutrients for the thyroid if we eat organic fruit and vegetables and include seaweed in our diet.

## Estrogen Dominance

Estrogen is needed for proper functioning of many processes of the body BUT TOO MUCH ESTROGEN IS DESTRUCTIVE. Most of us, women and men are overloaded with estrogen. It is no wonder when you consider the air we breathe, the water we drink and the food that we eat. Chemicals that either look like estrogen in our bodies or are synthetic estrogens are used in human medications, substances to fatten animals before slaughter, to get the cows to produce more milk, to kill the bugs on our fruit and vegetables and petroleum products that help our cars run

and in the manufacturing of plastics that hold our food. Estrogen and progesterone levels must be balanced in order to work together efficiently. Progesterone levels tend to drop off sooner and more abruptly with age and lack of ovulation than does estrogen. These factors can result in too much estrogen in relationship to the amount of progesterone being produced in the body. This estrogen/progesterone imbalance is a common cause of symptoms during peri-menopause and menopause. It can also occur after childbirth or during periods of high stress when a woman undergoes a significant hormonal shift. Estrogen dominance may be associated with thyroid problems and breast disease, with heavy or irregular periods, breast tenderness, water retention, moodiness, weight gain, trouble sleeping and more.

### Adrenal Insufficiency

The adrenal glands normally secrete cortisol in response to stress, exercise and excitement, and in reaction to low blood sugar. However, too much physical or emotional stress over a prolonged period can cause the glands to reduce their output of adrenal hormones. Feeling “Burned Out” is from adrenal exhaustion. The adrenals get weakened by stimulants like cigarette smoking, excessive coffee drinking and sugar and simple carbohydrate boosts. Certain processes happen at certain times of the day and night. The first and most important part of adrenal repair occurs only if we are lying down (to go to sleep) at a reasonable evening hour. Staying active late into the night on a regular basis has a way of not allowing our adrenals to catch up with the repair needed from a long day’s worth of stress. Low output of cortisol is associated with fatigue, allergies, anxiety, nervousness, asthma, poor memory and sugar cravings.

### Polycystic Ovarian Syndrome (PCOS)

PCOS, is a condition in which cysts form in the ovaries, disrupting the process of ovulation. Strangely enough, ovarian cysts are noticed only in 50% of the women known to have PCOS. Infertility and other menstrual problems can occur as a result but may be reversible with hormone balancing treatment. Although the cause of the condition is unknown, it is marked by several hormonal imbalances, including the overproduction of estrogen and androgens by the ovaries. These excess hormones can lead to obesity, facial hair, acne and scalp hair loss. Adrenal hormones are often out of balance as well. In addition, there is a strong link between PCOS, insulin resistance and type II diabetes which has led many doctors to pursue part of the treatment is to deal with the nutritional blood sugar balance.

### Pre menstrual Syndrome (PMS)

A woman between the years of her first period until menopause is always experiencing hormones cycling up and down. That cycling is normal and should not cause any negative feelings. It is when the hormones become out of balance that the problem begins. And sometimes the symptoms are big time. For women who have one or more hormones out of balance, their hormonal

shifts during the menstrual cycle can bring uncomfortable physical or emotional symptoms that affects her daily functioning and quality of life. PMS sufferers may experience painful periods, bloating, fatigue, breast tenderness, irritability, mood swings, depression, increased appetite and forgetfulness.

## Osteoporosis

Osteoporosis or bone loss is experienced by both men and women although there are many more women than men. Bone is a hormonally sensitive tissue that is affected by age-related decline in production of these hormones. In women, declining production of estrogen and progesterone in the 10 years leading up to menopause and afterwards speeds up this process. Decreasing levels of male hormones like testosterone also play a role since these hormones stimulate bone growth. Imbalances of cortisol and thyroid hormone also contribute to bone loss. Saliva testing can accurately test for imbalances in each of the major hormones that have an impact upon bone health. We know that too much stress raises cortisol output, interfering with calcium absorption and bone-building activity, while at the same time stepping up the activity of bone destroying cells. We also know that cigarette smoking, alcohol intake and a lack of physical activity are associated with bone loss. Common symptoms of osteoporosis are thinning and brittle bones, broken bones, loss of height and bone pain. A holistic approach using bio-identical hormones can prevent, stop or slow down those symptoms.

## Endometriosis

When the cells of the endometrium (lining of the uterus) get outside of the uterus, for example, in the pelvic cavity, begin to be stimulated by hormonal changes in the monthly cycle, severe debilitating pain can occur. There can be pelvic pain, menstrual irregularities, inflammation and infertility. This condition has been helped dramatically by balancing the hormones and in particular, with use of bio-identical progesterone.

## Breast Conditions

The breasts should not be tender, painful or full of cysts even just prior to the menstrual period. If they are, then there is a hormone imbalance that should be corrected. Breast tissue contains estrogen receptors. High levels of estrogen or an estrogen/progesterone imbalance (estrogen dominance) can cause all of the symptoms and also can be relieved with BHRT treatment.

## Infertility

An imbalance of the female hormones can disrupt ovulation and implantation. Commonly the ovary's corpus luteum doesn't produce enough progesterone long enough to help the conception progress. Many young women have a DHEA deficiency or a thyroid weakness when corrected helps the fertility naturally. BHRT has brought many babies into the world without having to risk the health of the mother with exceedingly high doses of toxic hormones.

# Let's Meet The Players:

## The Hormones

Both men and women have a full set of hormones. Women have estrogen and also have and need testosterone. Men have testosterone but also produce and need estrogen. The difference is the amounts. Women have lots of estrogen and a small amount of testosterone while men have the opposite. Should these levels get out of balance in women, acne and facial hair may be a problem and if a man has too much estrogen, he might notice weight gain and prostate problems.

## The Androgens

Testosterone and DHEA are together known as androgens (male hormones). They are basically responsible for similar processes, like the health of hair, bones, nails, skin and libido. The outer negative signs of male “andropause” (weight gain, hair thinning, poor sexual response) may very well be connected to internal signs of “aging,” like high cholesterol, high blood pressure and painful joints.

**TESTOSTERONE** – the male hormone that both men and women have

- Improves brain function
- Increases energy
- Improves sugar metabolism thus prevents and improves diabetes
- Increases muscle and bone strength
- Increases bone density
- Increases sex drive and sexual function
- Improves HDL and LDL levels
- Improves cardiovascular health



**DHEA** – also a male hormone

- Improves immune function
- Increases sense of well being, vitality and energy
- Increases bone density
- Improves stress tolerance
- Increases metabolism
- Guards cardiovascular health
- Can convert into both estrogen and testosterone, so should be prescribed and monitored by a physician

## **ESTROGENS** – the female hormone

Estrogen is the family name of three hormones, Estrone, Estradiol and Estriol. In the words of Uzzi Reiss MD, a BHRT practitioner, “estrogen is the essence of femininity...It makes a woman feel sensual. It brings a glow to the skin, moisture to the eyes, fullness to the breasts and clarity to the mind. It keeps the vagina lubricated. It uplifts and stabilizes your mood. It influences your brain and your bones.”

- Protects against heart disease, stroke
- Decreases cholesterol
- Lowers incidence of Alzheimer's
- Improves memory
- Alleviates symptoms of menopause: headaches, mood swings, bloating, hot flashes, fatigue, waning libido
- Causes cells to grow, so too much of it will cause breast tenderness, cysts and even cancer
- Suppresses thyroid function

## **PROGESTERONE** – Good Stuff

Progesterone is the great balancer. In addition to helping a woman become pregnant and avoid miscarriage, another major function of progesterone is to bring balance to the negative effects of excess estrogen and environmental xenohormones (an effect known as estrogen dominance) which is so common in this day and age.

- Protects against uterine cancer
- Protects against fibrocystic disease
- Helps fat metabolism
- Helps normalize blood sugar
- Helps reverse osteoporosis by building new bone cells
- Helps thyroid hormone function
- Acts as a natural antidepressant
- Protects against nervousness
- Protects against anxiety and irritability



## **PREGNENELONE** – The Precursor Hormone

- Promotes formation of male hormones, female hormones and adrenal hormones
- Repairs brain and nerve tissue

- Improves aging skin
- Improves sense of well being
- Increases energy and mobility
- Improves sleep quality
- Reduces harmful stress effects
- Reduces aging brain deficiencies



**THYROID** – the hormone of metabolism

The Thyroid produces T3 (the active thyroid hormone) and T4 (the less active thyroid hormone). The brain produces TSH according to how much T3 and T4 it detects in the blood. If there is too much T3 or T4 then the brain produces very little TSH but if there is not enough T3 or T4 then TSH production goes way up. The thyroid is in the neck and acts as the message giver and taker between the brain and the rest of the body. It is affected by the hormones, by the immune system, by foods and more.

- Increases energy
- Increases fat burning, and controls weight
- Increases your heart rate
- Increases your appetite
- Helps your bowels work properly
- Helps your cycle to be regular

**MELATONIN** – produced by the brain when you are asleep

- The strongest anti-oxidant that the body makes
- Responsible for maintaining sleep
- Helps alleviate “jet-lag”
- Improves one mood
- Improves the immune system (by decreasing cortisol)

**CORTISOL** – the stress hormone

Cortisol is the hormone made by the adrenal glands. The adrenals are responsible for emergency energy (adrenaline), your immune system (protection against infection and against G-d forbid cancer) and for a part of the sex hormones. Not waking with great energy, needing to be revived throughout the day with caffeine, sugar and wheat are signs of adrenals weakness.

- Responsible for responding to stress
- Too much can make you fat and too little will make you feel exhausted
- Have allergies? Get your saliva cortisol checked
- Mobilizes energy, improves fatigue
- Increases your appetite for sugar
- Decreases bone mass, muscle mass, and slows down your metabolism

## Abnormal Hormone Levels Can Cause Many Symptoms Including:

### Estrogen Deficiency

Hot Flashes	Disturbed Sleep	Breast Sagging
Night Sweats	Heart Palpitations	Dry Eyes, Skin, Vagina
Headaches/Migraines	Depression	Mental Fogginess
Memory Difficulties	Tearfulness	Back/Joint Aches
Lessened Self-Image		

### Estrogen Excess and Progesterone Deficiency

Mood Swings	Irritated, Uptight	Headaches
Breast Tenderness	Anxiety	Uterine Fibroids
Water Retention	Fibrocystic Breasts	Feels Cold
Bleeding Changes		

### Androgen Deficiency

Hair Loss (scalp, armpit, pubic)	Low Libido	Vaginal dryness
Flabby Muscles	Unsteady, Poor Coordination	Incontinence
Low Energy and Stamina	Depression	Bone Loss

### Androgen Excess

Acne	Weight Gain	Irritable & Aggressive
Oily Skin	Insulin Resistance	Loss of Scalp Hair
Excess Facial & Body Hair		

### Cortisol Excess

Irritable	Muscle Loss	Low Libido
"Tired But Wired" Feeling	Bone Loss	Insulin Resistance
"Burned Out" Feeling	Loss of Scalp Hair	Poor Memory
Weight Gain Waist	High Blood Pressure	Insomnia

### Cortisol Deficiency

Fatigue	Feeling Cold	Morning Sluggishness
Allergies	Neck Stiffness	Burned Out/Unable to Cope
Aching Muscles	Increased Inflammation	Low Libido

# Normalize Your Hormone Levels

In the past, most medically prescribed hormones such as those used in HRT (hormone replacement therapy) have a bad reputation ever since reputable research concluded that there is higher incidence of cancer and other diseases in people who take them. The word “Hormone” in this case actually means synthetic hormone which may be derived from horse urine. Synthetic hormones do not look exactly like our hormones and because of that, they do not allow themselves to be broken down like our own natural hormones. They are thought to build up in the body and add to the disease making process.

BHRT are hormones that look exactly and behave exactly like our own hormones. In the lab, you can not tell the difference between the hormones that are produced in our body and bio-identical hormones. They look identical and after 45 years, we can say that they act identically too. They are not associated with causing illnesses. Yes, double blind randomized studies are needed to confirm what we have seen in the clinical office setting hundreds of thousands of times over the last 45 years. The firm conclusion held by thousands of cutting-edge physicians world-wide is that BHRT when used appropriately are health restoring.

## What Are Your Options When You Have A Hormonal Imbalance?

### Options For Restoring Balance and Health

#### 1. Do Nothing

This is not a good idea even if you can suffer with hormone imbalance. Your hormones affect your total health. Being out of balance can be the start of diseases developing

#### 2. Chemical Synthetic Hormones (HRT) are hormones made to be partly like our hormones and partly DIFFERENT. WHI and other medical research projects show that these hormones can possibly make you feel better but they come with a risk of causing other serious diseases

#### 3. Bio-Identical (Human Identical) Hormones

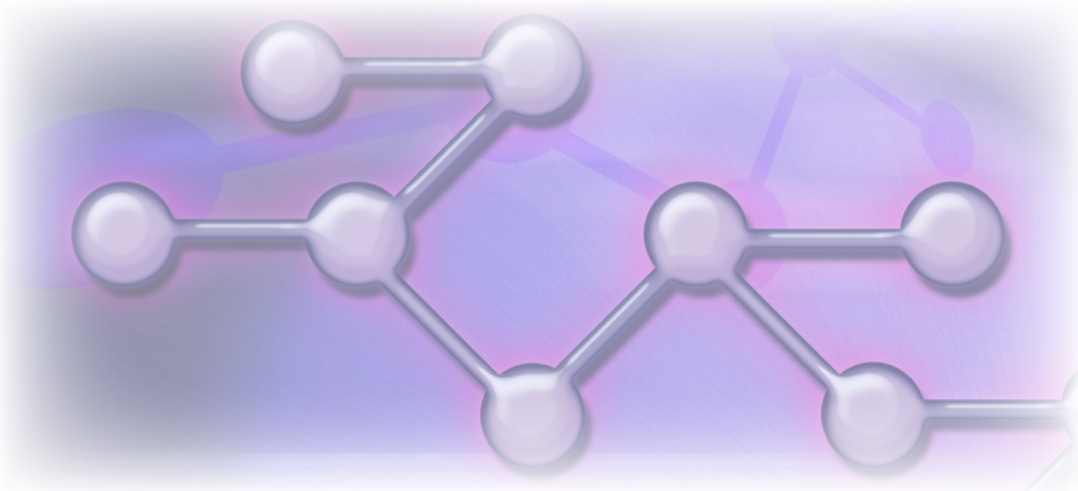
- Hormones derived from Mexican Wild Yam or Soy and modified in the lab to be EXACTLY like our own hormones
- Used by thousands of doctors for 40 years without being associated with causing illnesses, instead restores balance and good health
- Personalized Program for your needs is prescribed using the different hormones that all need to be in balance with one another like estradiol, estriol, progesterone, testosterone, DHEA, pregnenolone and natural thyroid hormones
- Your body changes in how it uses and needs hormones so you are taught how to understand how your body feels and what you can do to restore the balance

# Hormone Testing --- The Old And The New

The Old way of testing the hormones is through the blood. The blood is excellent for testing many things we need to know about ourselves, like our blood count, cholesterol, liver function etc. But blood testing the hormones is passé and misleading. Combining the blood's active and inactive hormones together may make it look like we are fine when we know that there are some big imbalances happening. The standard blood lab can tell us a free testosterone but it is only a calculated estimate which has been determined to underestimate the true testosterone activity, as found by the AACE Hypogonadism Task Force. Blood samples are taken from the veins. The hormones in the veins are not the same concentration of hormones that are in the tissues. It is the tissue levels that we need to know.

## The New

For more than 25 years doctors on the cutting edge have realized that a more accurate and consistent picture of the body's hormones comes from testing a substance from the body that contains only active hormones. That substance is saliva. Did you ever wonder why saliva doesn't look like blood? Why isn't saliva red and thick like blood? The reason is that there is a filtration process that occurs to produce saliva. Those filters in the glands of the neck don't allow the big protein bound inactive hormones to get into the mouth. Only the small active hormones are found in the saliva. You can test the saliva and be confident that the test result will give you only active hormones and as the saliva just exuded from the tissues, you are getting levels that parallel the levels of hormones in the tissues. With a pure test result for active hormones, you can plan an accurate treatment. Not only that, but since saliva is fluid that has just come out of the tissues, it has the same concentration of hormones as the tissues itself which is what want. To know how much active hormones are in the breast or the prostate, check the saliva.



## BHRT Evaluation and Treatment Overview

### Step 1

- Medical Evaluation
- Receive Saliva Test Kit and Instructions

### Step 2

- Review Test Results
- Receive Treatment Plan which includes
  1. prescription for personalized compounded human identical hormones (one size does not fit all)
  2. suggestions for vitamin and herbal therapy
  3. suggestions for dietary and other lifestyle healing changes

### Step 3

- Medical Evaluation for “Fine-Tuning” the BHRT Program
  1. This may be needed on a monthly basis or every 2, 3 or 6 months depending in the individual circumstance.
  2. Re-testing of saliva hormone levels may be needed in 3 months, 6 months or a years’ time.



In the 1980s, Diagnos-Techs Inc. was the first lab in the US to accurately analyze saliva for the free or active form of the hormones. Their proprietary test analysis is the reason why DTI does over 1 million tests a year. The physicians who send their patient samples to DTI recognize the accuracy of the testing and stay with them for the long run despite many competing labs out there today. They are licensed and accredited by the state of Washington and CLIA. In addition they maintain their laboratory standardization protocols in accordance with the World Health Organization (WHO).



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