



Hope & Healing For Hormone Imbalance



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Hormone Mastery Course

Hormone Imbalances

Hormones are chemicals released from specialized glands in the body (called endocrine glands) and travel to the target organ or tissues through the blood stream. They are an integral part of the body's homeostasis machinery to maintain harmony and a healthy life. Hormones are released in small quantities sufficient to cause changes throughout the entire body. Under production of any hormone can have far-reaching systemic effects resulting in hormonal imbalances. With these changes even small amounts of insufficient production of a certain hormone, (e.g. estrogen) can manifest as a hormonal imbalance.



There are ten endocrine glands in the body:
Hypothalamus, Pituitary, Thyroid,
Parathyroid, Adrenal, Pineal Gland,
Pancreas, Thymus and the Ovaries or
Testes.

The pituitary is called the master gland as it controls the function of many other endocrine glands of the body. Male and females produce all the same hormones from the same regions, except for the testes (in males) and ovaries (in females). Problems in these glands can bring about hormone imbalances.





Like any body organ, endocrine glands, if they are damaged or diseased, can release more or less of the hormone they produce, which will result in significant hormone imbalances. These hormone imbalances, if left untreated, can lead to health issues and various conditions, which include diabetes, infertility, chronic fatigue, poor immune function and more.

Unfortunately, individuals can experience hormonal imbalances at various stages of their life, and they are not just a condition of the elderly or someone going through menopause.

Causes of Hormonal Imbalances

Causes of hormonal imbalances can be many. In some people, the cause is genetic. However, in the majority of people, the cause for hormonal imbalance is lifestyle-related, including poor diet, sedentary habits, stress, medication use, etc.



Signs & Symptoms of Hormonal Imbalances

The signs and symptoms of hormonal imbalances vary greatly depending upon the endocrine gland involved. Most of the symptoms are common for both males and females, as most of the glands are similar in both the genders.

The most common symptoms include lethargy and fatigue, acne, weight issues (weight gain or weight loss), mood swings, loss of libido (decreased sex drive), poor sleep, frequent illness and loss of memory. However, if the imbalances are severe, then significant issues can occur such as arthritis, fibromyalgia, anxiety, cardiac problems, osteoporosis, etc.





Alopecia (hair loss) is mostly related to the hormonal imbalances. It is important to note that hair loss is not just related to the sex hormones released from the reproductive organs (testosterone, estrogen and progesterone), it can also be related to hormones from the other endocrine glands of the body such as the pituitary, thyroid, parathyroid, pineal, or adrenal glands.

Investigating Hormonal Imbalances

Saliva, blood or urine tests are commonly used to diagnose various hormonal imbalances. Urine testing can measure select hormones directly or measure metabolites of various hormones within a 24-hour period (wet urine) or at a specific time of day (dried urine). Blood tests, either via blood draw or dried blood spot, are the best choice when measuring thyroid hormones, follicle stimulating hormone (FSH), luteinizing hormone (LH), glucose and insulin levels. Saliva testing can measure estrogen, testosterone, progesterone, cortisol and DHEA-S and is a convenient and cost-effective choice to evaluate hormone production throughout the day.



Treatment Options



Treatment depends upon which hormone is deficient and the underlying reasons for its deficiency. Hormonal imbalances need to be dealt with on an individual basis, looking at underlying causes related to lifestyle, diet, sleep, infections/inflammation and stress level. Hormone replacement therapy, nutritional supplementation, resolution of infections and causes of inflammation along with stress management, can effectively treat most hormone imbalances resulting in great improvements in overall health and wellness.

When it comes to women, estrogen is often a primary concern regarding hormonal imbalances. To get a better idea of estrogen, let's look at the various types and their roles in the body.

Meet The Estrogen Family

Estrogen is the surname for a family of three similar hormones – **Estrone (E1), Estradiol (E2) and Estriol (E3)**. Women who are on bio-identical hormone replacement therapy may be familiar with the different estrogens by name but not really know the differences between them.

Understanding the role each form of estrogen plays in the balance of our hormones and addressing dietary and lifestyle issues that support healthy estrogen metabolism gives us the ability to be proactive in keeping hormones balanced.

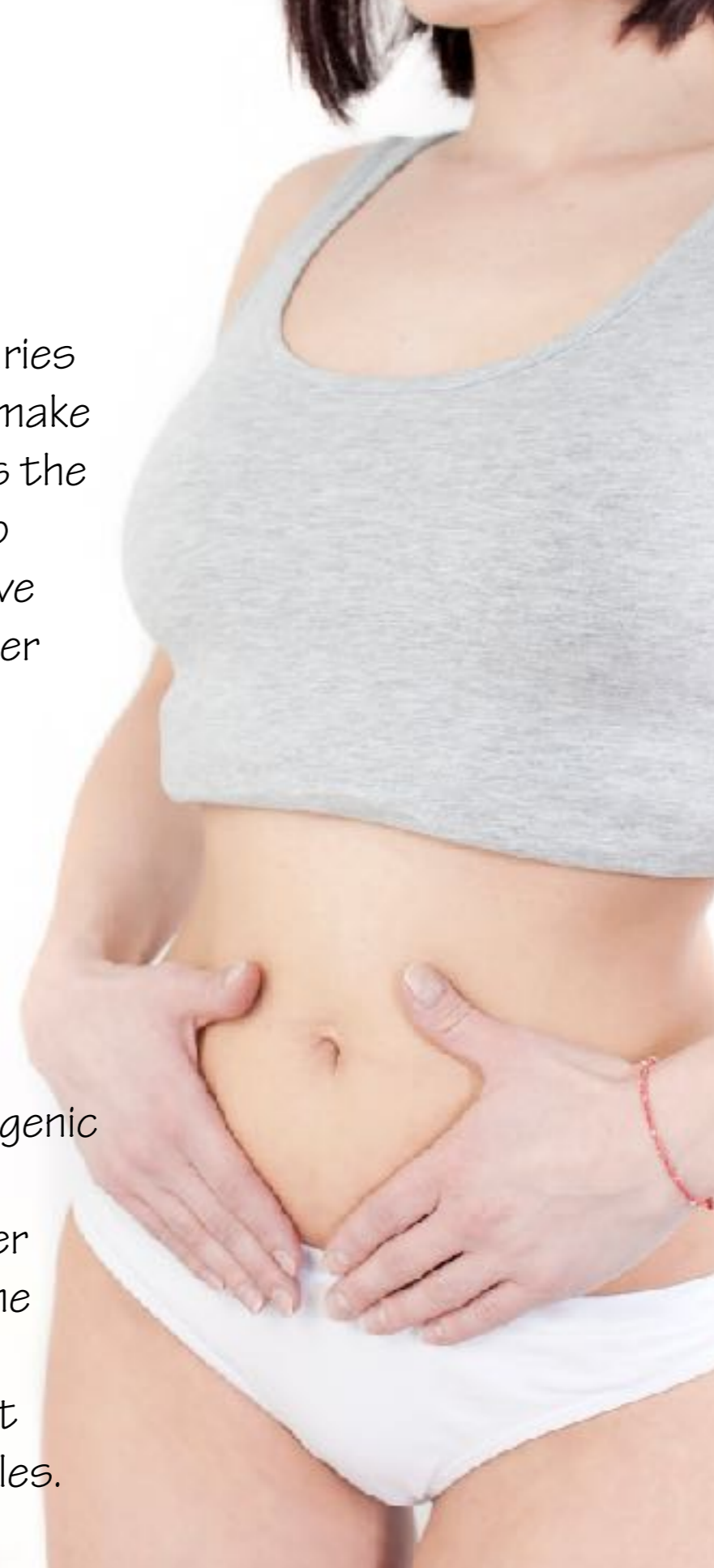


Estrone (E1)

Estrone (E1) is the major form of estrogen made by a woman's body in menopause. Estrone is made primarily in the liver and fat cells. As the ovaries age and the production of estradiol decreases, estrone levels increase to make up for the loss of estradiol. A common complaint during peri-menopause is the development of belly fat. This increase in fat supports the body's ability to make estrone. This also may be why women who are overweight tend to have higher estrogen levels and higher estrogen-related problems, like gall bladder disease, fibroids, uterine hyperplasia and fibrocystic breasts. Most of our estrogens metabolize into some form of estrone. There are three major estrone metabolites:

- 2-hydroxyestrone
- 4-hydroxyestrone and
- 16-hydroxyestrone

2-hydroxyestrone is more protective because it asserts a mild anti-estrogenic effect while 4-hydroxyestrone and 16-hydroxyestrone are considered mutagenic, meaning they potentially promote cancer growth. Genetics, liver function, diet and lifestyle determine which metabolite will be formed. Some women simply inherit the genetic predisposition to faulty estrogen metabolism. In this case, it is very important to keep weight down, support healthy liver metabolism and eat a diet rich in cruciferous and sea vegetables.



Estradiol (E2)



Estradiol (E2) is the most potent of the estrogens. It is the major hormone made by the ovaries before menopause. It is the hormone that makes us feel womanly by enhancing sex drive, moisturizing all mucous membranes in the body including skin, lips, eyes and vagina. It strengthens bones, skin and hair, and can help lessen the fine lines that occur around the eyes and mouth as we get older. Estradiol also raises serotonin levels which is why women feel calmer and more focused when they have enough estradiol. Estradiol is metabolized to one of the three estrones as determined by genetics, diet and lifestyle.

Estriol (E3)

Estriol (E3) is the weakest of the circulating estrogens and the one that is highest during pregnancy when it is made by the baby's placenta. When women are not pregnant, this hormone is primarily made in the liver and breast cells from 16-hydroxyestrone. It provides similar benefit as estradiol but in a much weaker potency being about one-eighth as strong. It is theorized that the role of estriol is to modulate and balance the effect of the more potent estradiol since they bind to the same receptors. Much of the current beliefs about the effect of estriol come from its potential effects during pregnancy. Some studies have shown that exposure to high estriol levels during pregnancy decreases a risk for breast cancer later in life.



Estrogen metabolites can be measured in a 24-hour urine test. With that, you can assess the ratio of 2-hydroxyestrone to 16-hydroxyestrone. You can also assess the level of 4-hydroxyestrone and estriol. If the ratios are not where they should be, there are supplements and dietary changes that can help to bring them back into balance. To increase 2-hydroxyestrone, eat plenty of cruciferous vegetables, berries, iodine-rich foods, flaxseeds, grapefruit and rosemary. Get plenty of exercise and make sure that thyroid function is optimal. Supplements that increase 2-hydroxyestrone are indole-3-carbinol (I3C) and diindolylmethane (DIM). Both of these products are isolates of plant compounds found in cruciferous vegetables. Keep the diet low in excess carbohydrates (grains, sugars) and include adequate amounts of quality protein (lean, organic meats, chicken and fish), essential fats (fish oils, flax oil, nuts and seeds) and plenty of vegetables.





A healthy diet and lifestyle will improve every aspect of health and must be the cornerstone of every program designed to address illness and imbalance. We can't get around this one! Food, sleep, stress, alcohol consumption, medications and toxic exposures have a profound effect on our health. Each of us has our genetic weaknesses and that will ultimately determine the type of illness we may develop as a result of poor diet and lifestyle. Take control where you can!

For men the same principles apply with regards to lifestyle factors including diet, stress reduction, exercise, etc. However, men have their own unique balance of hormone and therefore their own challenges with hormonal imbalances.

“Men”opause – Male Hormones

The “mid-life crisis” that affects men in their 40’s and 50’s has never been well understood in medical terms. We now know that men go through hormonal changes in their middle years, just like women do. It’s been termed “andropause,” and it can be just as debilitating and emotionally challenging as menopause can be for women.

Men and women have the same sex hormones in their bodies, just in different proportions. Men have a predominance of testosterone, while their estrogen levels are supposed to be much lower than those of women.





Testosterone is commonly regarded as a “sex hormone”, but it’s really so much more than that – it’s a “total body hormone” affecting every cell in the body. As men age, their hormone levels change, and this causes a range of effects in the body, including a loss of muscle mass, weight gain especially around the abdomen, decreased libido and sexual function, and depression.

Hormone changes in men are also associated with a range of significant degenerative diseases, including heart disease, stroke, diabetes, arthritis, osteoporosis and hypertension.

There are several changes in the hormones that contribute to andropause. One is a reduction in free testosterone. This is the testosterone that is “unbound” in the body, and therefore free to exert its effects. But low testosterone is just part of the picture. Research shows that as men age, they convert more of their testosterone to estrogens. In fact, it is the increase in estrogens that is thought to be responsible for Benign Prostatic Hypertrophy (BPH), which is extremely common. Men also have increased levels of Sex Hormone Binding Globulin (SHBG), a protein that binds testosterone and leaves less of the free, active testosterone in the blood.

ANDRO PAUSE





Bio-identical hormone therapy can be just as effective and important for men as it is for women. Lab testing is crucial to determine the levels of active, “free,” and bound testosterone, estrogens, DHEA and other markers such as Prostate Specific Antigen (PSA), which is important in assessing BPH and prostate cancer. Once this information is gathered, a regimen of natural hormones and specific nutrient and herb supplementation can be prescribed to help boost the free testosterone levels, decrease the excess estrogens and protect the prostate gland.

There are many potential benefits of hormone replacement therapy for men, including increased feeling of well-being, increased libido and greater sexual performance and satisfaction, increased strength and stamina and greater muscle mass, and weight loss (especially around the abdomen). There are also longer-term benefits such as protection against cardiovascular disease and neurological diseases including Alzheimer’s. For men taking anti-depressants, which frequently have negative sexual side effects, hormone rebalancing may provide a much more desirable outcome.

Andropause is not just a psychological phenomenon – it's a very real physiological change involving the hormones that keep men young and healthy!

Summary – Benefits of bio-identical hormone replacement for men:

- Increase well-being.
- Increased strength and stamina.
- Weight loss (especially abdominal fat).
- Cardioprotective benefits (strengthens heart muscle, decreased cholesterol, natural blood thinner).
- Neuroprotective benefits (including protection against Alzheimer's disease).
- Increased libido and sexual performance).
- Protective against BPH and possibly prostate cancer.





Age-related changes that may be due to changes in testosterone levels:

- Loss of lean body mass.
- Decline in energy, strength and stamina.
- Unexplained depression.
- Decrease in sexual sensation and performance.

Diseases associated with hormone changes:

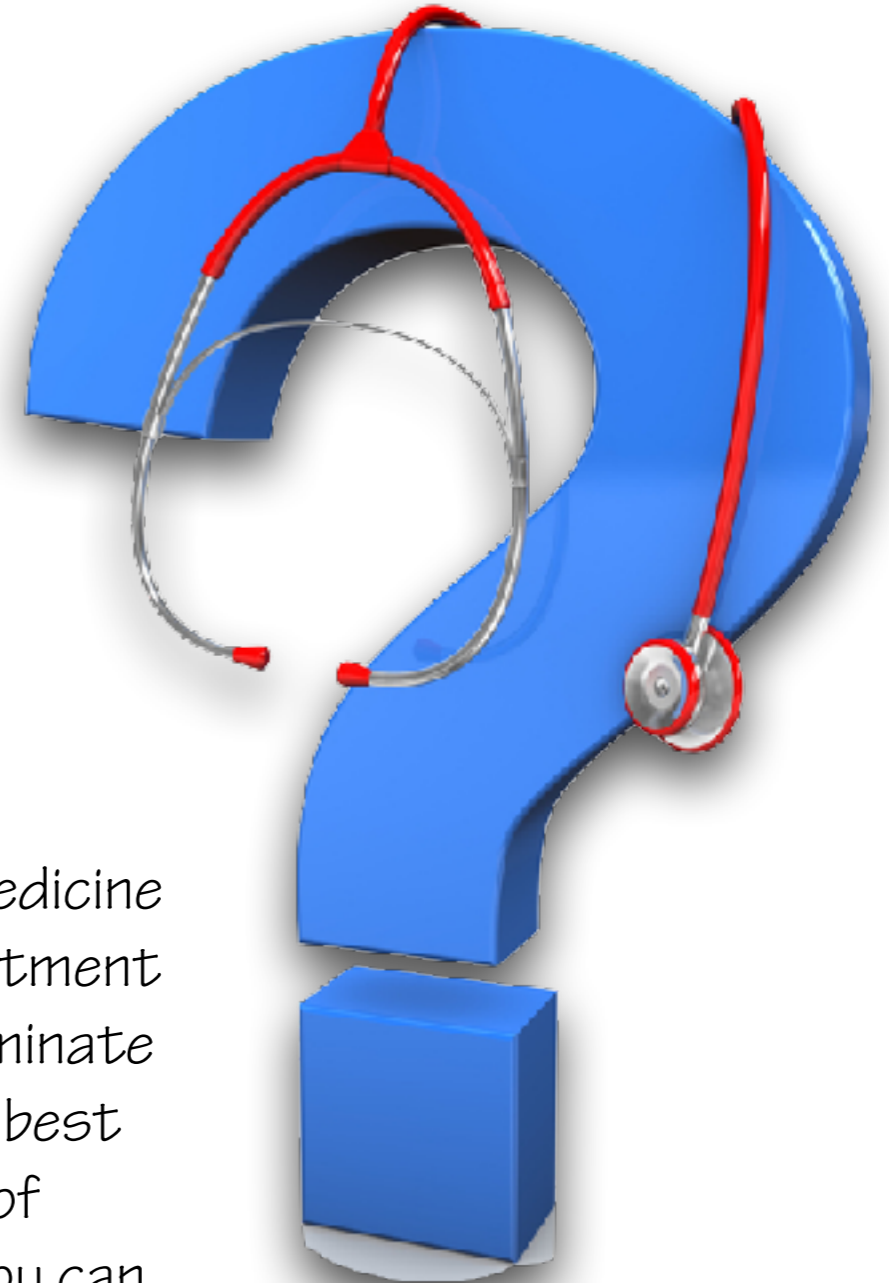
- Heart disease
- Stroke
- Diabetes
- Arthritis
- Depression
- Osteoporosis
- Hypertension

Is There A Solution To Hormone Imbalance?

Many people—male and female—are living with common, misdiagnosed conditions related to Hormone Imbalance. Common conditions associated with hormone imbalance include:

- weight loss/gain
- sleep problems
- infertility
- depression
- fatigue
- hair loss
- body pain
- joint pain

These issues can dramatically and negatively affect the quality of someone's life. The good news is that integrative and functional medicine can provide the solution. Integrative and Functional medicine treatment protocols can dramatically improve hormone function and even eliminate those conditions. By learning to properly assess and identify the best approaches for common hormone intervention, effective dosages of various hormone options and what order to start supplements, you can help your patients and clients enjoy a better quality of life.



Learn to Treat Hormone Imbalances with Functional Medicine



Hormone imbalances, including sex hormones, thyroid and adrenal are common problems causing or contributing to a host of chronic health issues. Unfortunately, conventional medicine often doesn't understand the significant role hormone imbalances play in many health complaints.

For years, integrative and functional medicine practitioners have known that various disorders can often be traced back to problems originating from poor hormone function.

Introducing The Hormone Mastery Course

The Hormone Mastery Course from Integrative Medicine Academy will teach you what you need to know to thoroughly assess and treat hormone imbalances and common co-morbid conditions using integrative and functional medicine.

What You'll Learn From Hormone Mastery Course

- Which lab tests are most beneficial for various hormone problems including sex hormones, adrenal and thyroid.
- Interpret the most popular salivary tests from various labs with regards to adrenal (cortisol and DHEA) function, sex hormone (progesterone, estrogens, testosterone) and melatonin.
- Interpret popular blood tests for sex hormones and how they correlate with salivary testing. Why you use one variety of tests over the other.
- Identify common menstrual problems and estrogen and progesterone imbalances often linked to infertility, menstrual headaches, etc.
- Interpret extended premenopausal hormone profiles and identify normal, estrogen dominant, progesterone dominant, deficiencies and luteal phase deficits.





- Successfully implement a progesterone augmentation protocol.
- Identify the differences and some similarities between estrogen dominance/deficiency and progesterone dominance/deficiency.
- Assess testosterone imbalances in both men and women.
- Understand the link between adrenal imbalance, thyroid dysfunction and sex hormone problems.
- The successful use of various bio-identical hormones (BHRT), including dosing, types of administration (creams, oral, sublingual, etc.), pros and cons, contraindications and best labs to track levels overtime.
- The successful use of complementary supplements for hormone support, including adrenal imbalance.
- The successful use of natural thyroid remedies, as well as supplements to naturally support thyroid function.
- The questions to ask each patient/client during a clinical intake that is used to better assess their problems.
- Clinical troubleshooting for difficult cases, non-responders, supplement and hormone sensitive patients/clients.

Meet The Instructors



Hormone Mastery Course

Tracy Tranchitella, N.D.

Dr. Tracy Tranchitella is a Doctor of Naturopathic Medicine and an integrative medicine physician specializing in Small Intestine Bacterial Overgrowth (SIBO) and other chronic digestive disorders. She is also a specialist in autoimmune and cardiovascular disease, chronic fatigue, bio-identical hormone replacement therapy (BHRT), thyroid and adrenal dysfunction and women's health.

Dr. Tranchitella worked for 10 years as a clinical consultation and educator for BioHealth Laboratory providing doctors and other health professionals lab testing interpretation and clinical troubleshooting assistance, and currently works for ZRT Laboratory as a clinical writer and consultant. She is an author, educator and co-founder of Integrative Medicine Academy, an online resource for health professionals seeking educational information regarding integrative medicine.

Dr. Tracy Tranchitella can be reached for private consultations through Sunrise Functional Medicine.



Kurt N. Woeller, D.O.

Dr. Kurt N. Woeller is a Doctor of Osteopathic Medicine, integrative medicine physician and biomedical autism treatment specialist. He is the author of several integrative health books:

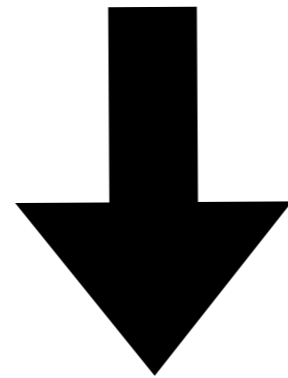
- *Autism – The Road To Recovery*
- *Methyl-B12 For Autism*
- *7 Facts You Need To Know About Autism*
- *Methyl-B12 & Methylation Therapy for Alzheimer's & Dementia.*
- *5 Things You MUST Do To Treat Your Rheumatoid Arthritis.*



Dr. Woeller is an international lecturer, educator and co-founder of Integrative Medicine Academy, offering training courses for medical professionals. He is the Medical Director of Autism Recovery System, an online resource for parents of autism-spectrum individuals. His private practice, Sunrise Functional Medicine, focuses on specialized diagnostic testing and treatment of complex medical conditions like Autism, Rheumatoid Arthritis, Mental Health Disorders and other chronic health conditions. Dr. Woeller serves as a clinical consultant for Great Plains Laboratory, providing patient and physician education through one-on-one training and webinars. He is on the Integrative Medicine for Mental Health Scientific Advisory Panel and is a member of the American Osteopathic Association.

See If The Hormone Mastery Course Is Right For You!

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