

THE COMPLETE GUIDE TO

Women's Hormone Health





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You may not have heard of bioidentical hormones before now, or you may be confused about the differences between “natural” bioidentical hormones and “synthetic” non-bioidentical hormones, such as Premarin and Prempro.

At Dr. Randolph's Ageless & Wellness Medical Center, we do our best to cut through the confusion and provide you with information you need to make the best decisions for your optimal health so you can get back to being the best you.

What Are the “Sex Hormones”?

Most people know that the sex hormones (estrogen, progesterone, and testosterone) play important roles in human reproduction. What you may not know is that they also help regulate many other functions in the body - from sleep patterns, to your moods and memory, bone growth, muscle strength, and much more.

Estrogen

The word “estrogen” is really shorthand for a group of several different, but related hormones that perform similar functions: Estrone (E1), Estradiol (E2), and Estriol (E3). Estrogen circulates through the bloodstream and fits estrogen receptors throughout the body. In women, it affects not only the breasts and uterus, but also the brain, bones, liver, heart, and other tissues.

Progesterone

Progesterone promotes regular sleep patterns, prevents bloating, maintains libido, fosters a calming effect on the body, stimulates bone building, and thickens the uterine lining to promote the survival of a fertilized egg (ovum). Although progesterone was discovered in the early 1930s, our understanding of its equally crucial role in the hormone story continues to unfold through current research. Many common hormone problems, such as PMS, irritability, and weight gain, are actually related to progesterone.

Testosterone

Testosterone is the best-known sex hormone in the group called “androgens”. We tend to think of testosterone as the “male hormone”, and indeed it is the primary hormone responsible for male physical and sexual development.

However, women also require testosterone to maintain healthy mood, sex drive, and muscles and bones; the difference is in the quantity.

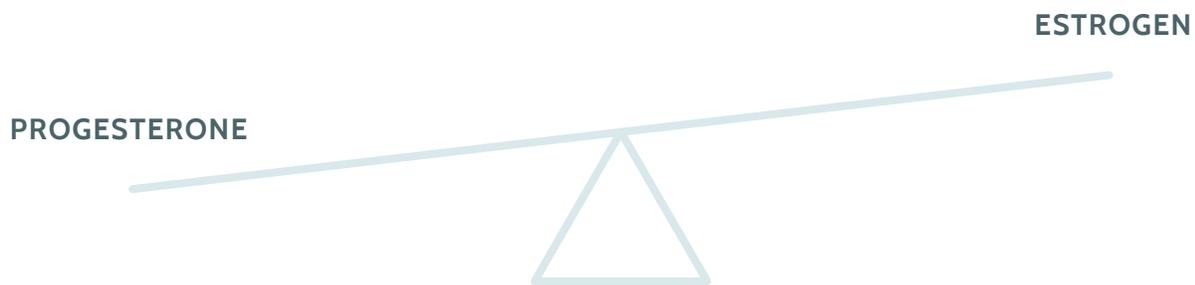
Women naturally produce 0.25 milligrams of testosterone daily, while men may produce 4 to 7 milligrams - that’s ten to forty times the amount!



How do Hormones Work?

Throughout your lifetime, your hormones have your body on “autopilot”. They act as chemical messengers communicating to all the tissues in your body, including your brain, bones, heart, and more.

When hormone production is optimal and levels are balanced, you feel great, have plenty of energy, easily maintain a healthy weight, desire and enjoy sex, and handle stress well. From your late teens to early 30s, a woman’s ratio of sex hormones is usually optimal.



The Seesaw Effect

As you get older, the amount of estrogen and progesterone your body produces can change from month to month and year to year. Due to the influence of stress and “environmental estrogens”, hormonal fluctuations can occur at any age. Even as early as a woman’s late 20s or early 30s.

When your progesterone gets low, that side of the seesaw hits the ground and negative symptoms arise. For women, that typically means poor sleep, fatigue, anxiety, heavy periods, weight gain, uterine fibroids, irritability, and even rage. The result of low progesterone is a condition called “estrogen dominance”.

This is what happens when the progesterone side of the seesaw gets “stuck” on the ground: the estrogen side is “elevated,” relatively speaking. This does not necessarily mean that your estrogen level is high — it’s that your progesterone level is so low that estrogen effectively becomes “dominate.”

Factors that Affect Hormone Balance

As you move past your 20s and into your 30s, hormone imbalances and/or symptoms related to stress, lack of sleep, synthetic birth control, and other influences, can start to appear. Some young women may experience premenstrual syndrome, or PMS. Bloating, anxiety, irritability, back pain, nausea, cramping, and lethargy are some of the most common PMS symptoms. Here are some common factors that can affect your hormone levels:

Stress

Stress – especially stress that is chronic and goes on for more than three months – triggers changes in the strength and output of the adrenal glands.

Short-term stress signals the adrenal glands to produce more of the hormone adrenaline to sustain us in an accident or emergency by signaling fat cells to quickly release energy. But when we are under constant stress, the adrenal glands flood the body with extra cortisol to meet the extended demand.

When stress becomes “distress”, the body goes into overdrive; pumping out cortisol until the pump wears out. Other hormone imbalances may crop up, allergies and insomnia may get worse, you get impatient and irritable, and every cough and flu bug seems to settle in you.

Weight Gain

When your estrogen and progesterone are not properly balanced due to age or other hormonal influences, you are predisposed at a cellular level to gain weight. For women, weight gain tends to occur around the waist, hips, buttocks, and thighs.

Fat cells actually produce estrogen, thereby worsening a preexisting estrogen dominant condition. Estrogen dominance also causes an increase in thyroid-binding globulin, resulting in a

condition of hypothyroidism. Because a primary function of the thyroid is to run the body’s metabolism, hypothyroidism causes your body’s metabolism to slow down. The result: more weight gain and a vicious cycle of ever-increasing estrogen dominance.

Nutritional Deficiencies

The Standard American Diet (SAD), also known as the “Western Pattern Diet”, is notoriously deficient in nutrients. The “sad” fact is that typical Americans are not getting all the nutrients they need from the foods they eat.

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Research has linked nutrient deficiencies to a variety of health concerns and conditions— your diet directly affects your hormone balance! Even when you do your best to eat well, you may still need to counteract the effects of processed foods and boost your hormone balance by including vitamin supplementation to your daily regimen.

Environmental Estrogens (Xenohormones)

Living in the United States, we are exposed to dozens of chemicals throughout our daily lives.



Environmental Estrogens (Xenohormones)

When you think of “chemicals”, you probably imagine a bubbling chemistry set, or spraying your yard to eliminate weeds or pests. Unfortunately, the effects of chemicals exposure are much more pervasive than that. Environmental estrogens can be found in many items we are exposed to regularly:

- Dry cleaning chemicals
- Plastics
- Meat and dairy products from animals injected with antibiotics or hormones
- Drinking water
- Cosmetics and personal care products
- Pesticides, herbicides, and industrial chemicals

There are few, if any, studies on the combined effects of common household chemical exposure on our bodies over time, and every person is exposed to different combinations. To support better hormone balance, you can better inform yourself about xenohormones and make some lifestyle changes:

- Use glass or stainless steel water bottles.
- Don't heat food in plastic containers in the microwave.
- Check labels on cleaning products and cosmetics to avoid parabens, phthalates (artificial fragrances), and sulfates.
- Reduce chemical use in your home and yard with organic plant-based sprays.
- Drink filtered water, and choose organic fruits and vegetables when possible to reduce pesticide exposure.





Where do Hormones Go Wrong?

Estrogen Dominance

Estrogen is an important key to a woman's physical well-being; however, an overload of estrogen is destructive, causing a cascade of unpleasant symptoms and raising the risk of life-threatening diseases.

As Dr. John Lee described the condition: "If estrogen is dominant and progesterone deficient, estrogen becomes toxic to the body." Untreated estrogen dominance has been clinically-linked to an increased risk of breast and uterine cancers, osteoporosis, low thyroid output, and dementia.

Artificial Menopause

Approximately one in every four American women will enter an abrupt, "artificial" Menopause, as the result of a complete hysterectomy. Many physicians commonly recommend a hysterectomy for women who have fibroid tumors, severe endometriosis, cancer, and/or constant, heavy bleeding. A "complete hysterectomy" is the surgical removal of the entire reproductive tract, including the uterus, fallopian tubes, and ovaries, whereas a "partial hysterectomy" only removes the uterus.

Once a woman has had a complete hysterectomy, her body will immediately enter menopause regardless of her biological age; there are no ovaries to produce any level of hormones. Regrettably, too many physicians make the mistake of prescribing "only estrogen", but estrogen alone is not enough. In fact, estrogen prescribed without progesterone to balance it will inevitably trigger "estrogen dominance", along with potential risks for breast cancer, low thyroid, and other preventable diseases.



What You Need to Know about Hormone Therapy

There are two main types of hormone replacement therapy (HRT): synthetic hormone therapy and bioidentical hormone replacement therapy.

Thanks in part to synthetic hormone therapy, HRT has a complex reputation. Synthetic hormones such as Premarin and Prempro have been shown to lead to risk of breast cancer, stroke, heart attack and more. Hormone therapy doesn't have to be dangerous however, there is a natural option that can provide relief from symptoms of estrogen dominance: bioidentical hormone replacement therapy.

The Dangers of Synthetic Hormones

The landmark 2002 National Institutes of Health (NIH) Women's Health Initiative (WHI) study revealed "synthetic" hormones are a serious health risk. The study had menopausal women take synthetic estrogen and progesterone, in an effort to curb the effects of menopause.

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"Relative binding affinity", or RBA, describes how hormones fit into receptor sites (like a key fits into a lock). Synthetic progestins have an RBA of only 78%. Synthetic products are not the same as the hormones your body produces naturally. Replacement hormones with a higher affinity fit into the "lock", meaning that they are safer and easier for your body to process.

WHI's study was concluded three years early due to the increased risk of breast cancer, heart

attacks, and strokes associated with the synthetic hormones Premarin and Prempro.

Bioidentical Hormone Replacement Therapy (BHRT)

Bioidentical hormones are derived from a plant molecule called "diosgenin" that is found in wild yam and soy and synthesized in a laboratory to be identical to naturally produced hormones. The lab process ensures that these hormones have the exact molecular structure and duplicate the exact same functions as the hormones made by your body. When you use bioidentical hormones, the cells of your body recognize them as familiar and know how to put them to best use.

Bioidentical hormones are safe because, like your own hormones, they fit perfectly into the hormone receptor "locks" of the cells in the body where they do their work. And because they have a 100 percent relative binding affinity (RBA) for your internal hormone receptor sites, they do not trigger side effects.

Just as the key to your car fits perfectly into the ignition and sparks the engine when turned, bioidentical hormones fit into your body's hormone receptor locks and spark exactly the same response as the hormones produced in your ovaries, testes, adrenal glands, or hypothalamus.

Medical research has shown that when BHRT is used to re-establish the body's optimum hormone levels, positive effects happen at a cellular level. Which bioidentical hormones you need, and how much, will depend on your individual body chemistry or physiology. The objective of BHRT is to replace or rebalance hormones that are deficient or in excess in order to restore optimum hormone balance.



Help is Available

How do you know what type of supplementation you need for natural symptom relief?

Dr. Randolph has created specific guidelines to help you determine your individual supplementation needs, depending on your age, menstrual history, symptoms, and hormone test results.

All hormonal supplements offered by Dr. Randolph are bioidentical formulations that duplicate the natural physiology of hormones in the body. Recommended supplements are based on specific criteria, including: age range, life cycle, associated hormone level shifts, resulting type of imbalance/medical condition, and common symptoms. Ingredients as listed are derived from natural and/or plant-based substances.



Meet
Dr. Randolph

Dr. Randolph is widely acknowledged as one of our nation's leading medical pioneers in the fields of hormone health and optimal aging medicine.

A graduate of Louisiana State University School of Medicine, Dr. Randolph is triple board-certified: in Age Management Medicine by The Age Management Medicine Foundation, by the American Board of Integrative Holistic Medicine, and by the American College of Obstetrics and Gynecology. Dr. Randolph's distinctive expertise also derives from his training as a licensed compounding pharmacist specializing in pharmacognosy (plant-based medicines).