The Hormone Makeover Guidebook

Before you read

This third-party guide describes the author’s approach to hormone treatment. Bioidentical does not automatically mean safer. Compounded hormones are not FDA-approved, and evidence does not show they are safer or more effective than FDA-approved hormone therapy. Claims that hormones prevent cancer or heart disease should not be taken as established benefits. We individualize treatment based on symptoms, history, benefits, and risks. Testing methods, supplements, and doses in this book are not your personal treatment plan.

Reference: https://www.fda.gov/consumers/womens-health-topics/menopause

THE HORMONE MAKEOVER GUIDEBOOK

How to Overcome Hormone Imbalance with Bioidentical Hormones + Supplements

TABLE OF CONTENTS

4 FOREWORD

6 INTRODUCTION

9 **A MAKEOVER FOR YOUR HORMONES?**
How Do You Know If You Need A Hormone Makeover?
Who Do Hormone Problems Affect?
When Do Hormone Symptoms Start?
What Causes Hormone Problems?

11 **WHAT ARE BIOIDENTICAL HORMONES?**
What Are The Benefits of Bioidentical Hormones?
Are Bioidentical Hormones Safe?

14 **THE HORMONE MAKEOVER PROCESS**
How Do You Test Hormones?
Which Hormones Should You Test?

17 **BIOIDENTICAL HORMONE PRESCRIPTIONS**
What is a Compounding Pharmacy?
How Much Do Bioidentical Hormones Cost?
Does Insurance Cover BHRT?

19 **USING HORMONES**
Progesterone
Estrogen
Testosterone
DHEA

29 **CORTISOL IMBALANCES**
Managing Cortisol Imbalance

32 **THYROID HORMONE IMBALANCE**
Thyroid Treatment

35 **INSULIN RESISTANCE**
What Causes Insulin Resistance?
Addressing Insulin Resistance

37 **SUPPLEMENTAL SUPPORT FOR HORMONE IMBALANCE**
When To Expect Results for BHRT

38 RESOURCES

Copyright © 2024 by Hormone Makeover INC First Printing 2013
The Hormone Makeover Guidebook, How to Overcome Hormone Imbalance with Bioidentical Hormones and Supplements
by Donna White
Printed in the United States of America
All rights reserved solely by the author. The author guarantees all contents are original and do not infringe upon the legal rights of any other person or work. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, records, or by an information storage and retrieval system-except by reviewer who may quote brief passages in a review to be printed in a magazine, newspaper, or on the Web-without permission in writing from the author. The views expressed in this book are not necessarily those of the publisher.
Warning: This book is designed to provide information in regard to the subject matter covered. The author and publisher do not intend that information in this book substitute for personalized medical advice from a licensed medical provider. The information in this book is only intended as general information and should not be used in any way to diagnose, treat, cure or prevent any disease. It is sold with the understanding that the publisher and author are not liable for the misconception or misuse of the information provided. Every effort has been taken to make this book as complete and accurate as possible. The purpose of this book is for education only. Any suggestions or information is not intended for use without a licensed medical medical provider's approval. The author and publisher shall have neither liability nor responsibility to any person and entity with respect to any loss, damage, or injury caused or allegedly caused directly or indirectly by the information contained in this book. No suggestion contained in this book should be used to replace established, conventional medical approaches, especially in cases of emergencies, serious or life-threatening diseases or conditions. No information in this book should be used to replace conventional medical treatment or standard of care. Although the author and publisher have made every effort to ensure the accuracy and completeness of information contained in this book, we assume no responsibility for error, inaccuracies, omissions, or any inconsistency herein. Any slights of people, places or organizations are unintentional.

FOREWARD



Each of us has a unique hormonal makeup, and our bodies have different needs for different hormones at different times of our lives. Figuring out which hormones are out of balance and correcting the problem can be a confusing process for women and their healthcare providers!

In this e-book, Donna White explains how different hormones affect virtually all of the important functions in the body, and she provides information to help you understand how hormonal imbalances may be contributing to your symptoms.

Not all hormone therapies are the same - the difference between synthetic and bioidentical hormones is discussed to equip you with the knowledge you need to make well-informed decisions you can feel confident about.

Donna White has been helping women to balance their hormones for over a decade, and I am privileged to have the opportunity to work with her. She is an excellent teacher – helping patients to understand their complex hormonal puzzle, and training many healthcare professionals over the years.

Please use the information provided to guide your discussion with your healthcare provider. Balanced hormones may be just what you need to feel like yourself again!

Deborah Matthew, MD

Advanced Fellow in Anti-Aging and Functional Medicine
Diplomate, American Board of Anti-Aging and Regenerative Medicine
Diplomate, American Board of Integrative and Holistic Medicine
Founder and Medical Director of Signature Wellness Center for Optimal Health
Diplomate of the American Board of Integrative Medicine
Diplomat of the American Board of Integrative Medicine
www.signaturewellness.org

AUTHOR'S NOTE



My name is Donna White and I am a recovering PMS patient.

Just to be clear, PMS stands for Pretty Mean Sister. Yes, that was me, nearly 35 years ago, when once a month I became an irritable, grouchy, short-tempered woman with heavy periods, accompanied by premenstrual headaches and acne. It was affecting my life, my work, and my relationships.

I needed help but I did not want to take medications or synthetic hormones. Synthetic hormones are made of chemicals or are animal derived. Therefore they are different from the hormones our body is supposed to make which often leads to side effects. I wanted to fix whatever was causing my symptom so I did not have them any more. I knew my issues were hormone related and achieving hormone balance was the solution. By testing my hormones I found out that I was low in progesterone and made too much testosterone. I also learned that using natural, biologically identical progesterone (the same progesterone our body makes) has a 90% success rate in treating PMS with no side effects. I researched the supplements that help address PMS and the foods that make it worse.

I implemented these key elements and rapidly overcame the PMS. Armed with the right information and treatment plan, you can do the same thing.

However, as I moved through my thirties and forties, the stressors in my life mounted and new symptoms arose despite the fact that I followed a very healthy diet and exercised. I am sure many of you can relate to dealing with a lot of stress day after day. The severity of the stress in my life affected my adrenal gland health, resulting in adrenal hormone imbalances. With PMS managed, I then faced fatigue, feeling wired but tired, pain, and I could not get a good night's sleep because I woke up several times each night. To make matters worse, a slight thyroid hormone deficiency caused me to feel even more tired, always cold, and my hair was thinning. I soon realized that all of my hormones needed care and they all affect each other. Once again, hormone testing, nutritional supplements, and bioidentical hormones alleviated my symptoms.

Now I have gone through menopause, I watch my hormone levels and keep them managed.

This gives me great peace of mind knowing these same strategies are also protecting my long-term health. After turning 60 a few years ago, I am concerned about aging - everything from wrinkles to bone loss and Alzheimer's. I have four children and I do not want them to take care of me. I want to help them with their children and enjoy my life to the fullest. I know I can't stop the birthdays from coming but I can do a lot to slow down the effects of aging and prevent diseases associated with aging by making sure my hormones do not drop too low. So can you. You don't have to get all wrinkled, feel tired, hunched over and forgetful. You can look and feel good at 50, 60, 70, 80 and even 90.

INTRODUCTION

Do You Need a Hormone Makeover Too?

If you can relate to my story maybe you need a Hormone Makeover too. To put it simply, a Hormone Makeover identifies hormones that are too high, too low, or out-of-balance with each other then correcting those with a customized treatment plan consisting of bioidentical hormones, supplements, nutrition, and lifestyle changes to correct the underlying hormone imbalances. Let me help.

HOW TO GET YOUR HORMONE MAKEOVER

STEP 1 – REVIEW THE SYMPTOMS

I have written this guidebook to help you walk through the process of a Hormone Makeover. First, I invite you to look at the symptoms of hormone imbalance on the next page. If you have many of the symptoms in these lists, you most likely have some type of hormone imbalance and you will need to work with a medical provider trained in Bioidentical Hormone Replacement Therapy.

STEP 2 – READ THIS GUIDEBOOK BEFORE SEEING YOU MEDICAL PROVIDER

Hormones and the current treatment options can be confusing. Before you even see your medical provider for the first appointment read through this guidebook. It will answer most of the common questions about hormones. I want to help you learn more so you can make informed choices. As you learn about hormones, the better equipped you will be to help your provider help you.

STEP 3 - WORK WITH YOUR MEDICAL PROVIDER

Your medical provider will examine you, review your health history, your symptoms, and your health concerns and goals in detail. Specialty testing to verify hormone imbalances will be ordered. Armed with your personal medical information and lab results your medical provider can develop the appropriate customized treatment plan with bioidentical hormones, supplements, and nutrition to correct the underlying hormone imbalances.

STEP 4 – IMPLEMENT YOUR HORMONE MAKEOVER TREATMENT PLAN

Once you have the results of your lab work and your customized treatment plan, read through this guidebook again to refer back to sections that apply specifically to you. For example, if your progesterone is low, review the symptoms of low progesterone, using progesterone, and the symptoms of excess progesterone. The information in this guidebook will be even more relevant once you know your lab results and have your plan.

Take advantage of other helpful resources on my website: **www.hormonemakeover.com**.

You can also read my in-depth book, **"The Hormone Makeover – 4 Steps to Conquer PMS or Menopause With BioIdentical Hormones"**.

INTRODUCTION

STEP 5 – ONGOING CARE FOR YOUR HORMONE MAKEOVER

You will need ongoing care and monitoring to make sure you are getting the results you want and need. This includes periodic office visits with your medical provider and repeat testing. You should see this as a way to be good to yourself and protect your long-term health.

Let me conclude with this last thought.

I realize that the symptoms of hormone imbalance (as listed in detail on page 10) are common, but they are not normal. You do not have to be resigned to just deal with them! Nor do you have to chalk symptoms up to just getting older.

You deserve to look and feel good. Believe me, I know what it is like to have hormone imbalance and I know what it is like to have balanced hormones. Balanced hormones make my life so much better. Balanced hormones can greatly improve the quality of your life too.

Get yourself a hormone makeover. I will walk you through the process.

Let's go!

A MAKEOVER FOR YOUR HORMONES?

Makeovers are the hallmark of the baby boomers – from our bodies to our homes, our careers, and everything in-between, it seems. Something needs a makeover when it no longer looks like it used to or does not function properly - when it needs to be restored or renovated. That is precisely what happens when it comes to women's hormones. They do not always function properly, triggering symptoms. These symptoms may include monthly Premenstrual Syndrome, better known as PMS, perimenopausal symptoms occurring in the years before menopause, or full-fledged menopause symptoms. Hormone imbalance certainly is not limited to reproductive hormone imbalances. Many women also have stress hormone imbalances, thyroid hormone insufficiency or blood sugar fluctuations. Problems with any of these hormones can lead to some very significant symptoms, suggesting a hormone makeover might be just what the healthcare provider should order.

WHAT IS A HORMONE MAKEOVER?

A hormone makeover addresses and corrects hormones that are too low or too high by testing your hormones and then using the indicated bioidentical hormones, supplements, and proper nutrition. The goal is to balance hormones, thereby eliminating symptoms and preventing diseases associated with excess or deficient levels of hormones.

To experience a hormone makeover women must work with a medical provider trained in bioidentical hormones and its application called Bioidentical Hormone Replacement Therapy or BHRT for short. A BHRT medical provider will evaluate your hormones and prescribe a personalized treatment plan that addresses your specific imbalances. BHRT typically consists of prescriptions for bioidentical hormones and supplements, as indicated by your lab results and your specific symptoms, that will correct the underlying hormone imbalances. Your healthcare provider will monitor your progress to make sure you are on appropriate therapy and your symptoms have resolved.

HOW DO YOU KNOW IF YOU NEED A HORMONE MAKEOVER?

Here are a few questions that may help you determine your own need for a hormone makeover, Have you gained weight, especially around the abdomen or hips? Are you having hot flashes or night sweats? Have your menstrual cycles becomes irregular or recently stopped? What about hormonal headaches or migraines? How about your skin - has it become very dry or too oily? Has your healthcare provider told you that you have lost bone mass? Are you having trouble remembering what you went to the pantry for or even close friends' names? Do you have brain fog? Perhaps you have lost interest in physical intimacy or maybe you are having trouble sleeping. In addition to these physical and intellectual symptoms, have you experienced unexplainable depression or weepiness? Have you felt more anxious, easily stressed or irritable? Have you had a hysterectomy and found that you have not been the same since? If you answer "yes" to any of these, be assured, you do not have to live with these symptoms. Perhaps you need a hormone makeover, in order to regain the quality of life you had before the onset of these symptoms.

WHO DO HORMONE PROBLEMS AFFECT?

All women are prime candidates for hormone imbalance. If you are experiencing some of the previously mentioned symptoms, you are not alone. In fact, there are an estimated 75 million women in the United States in menopause. Additionally, 80% to 90% of all women report PMS symptoms.

WHEN DO HORMONE SYMPTOMS START?

Hormone imbalance can occure in women of all ages, even in young women in their twenties. As women approach their thirties, hormones begin to decline, thus triggering symptoms associated with the menstrual cycle. These same early imbalances can cause weight gain, headaches, lack of sex drive, or depression, just to list a few. Unfortunately, it does not get any better as women move into their forties and fifties when new symptoms can add to their dilemma such as hot flashes, night sweats, vaginal dryness, foggy thinking, or insomnia. Left unattended, some types of hormone imbalances can result in bone loss, breast cysts, uterine fibroids, and increased risk of cardiovascular disease.

WHAT CAUSES HORMONE PROBLEMS?

Hormone imbalance stems from several different factors that commonly affect women, including:

- Age related decline of estrogen, progesterone or testosterone
- Stress triggered changes in adrenal hormones, DHEA and cortisol
- Significant weight gain or loss
- Nutritional deficiencies and poor diet
- Failure to ovulate or ovarian dysfunction
- Other glandular dysfunctions such as thyroid or blood sugar problems
- hormones – HRT or any type of synthetic hormones including birth control pills
- hormone like synthetic chemicals in the environment or food supply

DO YOU NEED A HORMONE MAKEOVER?

Because hormones affect every cell in your body, it's not surprising that hormone excesses, deficiencies or imbalances can produce some very unpleasant, debilitating and even dangerous symptoms. For example, hormones affect your cardiovascular system, central nervous system, blood sugar levels, bone density, weight and skin. Hormones also affect brain function and mood, so hormone imbalances can impair mental sharpness, ability to focus, and short-term memory, causing you to feel as if your brain is in a fog. At the same time, mood swings, irritability, depression, and anxiety may increase, thus creating a dreadful combination! Needless to say, this perfect storm of 'out of control' hormones can be pretty rough on your career, relationships, and all other areas of your life. The following questions can help you decide if you might need a hormone makeover...

SYMPTOMS OF HORMONE IMBALANCE...

Progesterone Deficiency

Physical symptoms or related conditions:

- _ Weight gain
- _ Low body temp
- _ Headaches
- _ Hypothyroidism
- _ Heart disease
- _ Hair loss
- _ Fluid retention
- _ Allergies/Sinusitis
- _ Bone loss
- _ Sleep disturbances

Gynecological symptoms or related conditions:

- _ Breast pain/cysts
- _ Breast cancer
- _ PMS
- _ Fibroids
- _ Heavy cycles/clots
- _ Irregular cycles
- _ Endometriosis
- _ Cramps
- _ Miscarriage
- _ Water retention
- _ Hot flashes/Night sweats

Emotional symptoms or related conditions:

- _ Anxiety
- _ Depression
- _ Irritability
- _ Tendency to be stressed easily
- _ Low libido

Excess Estrogen

- _ same symptoms as progesterone deficiency

Estrogen Deficiency

Physical symptoms or related conditions:

- _ Hot Flashes/Night sweats
- _ Poor memory
- _ Insulin resistance
- _ Bone loss
- _ Hair loss
- _ Dry skin /eyes/ wrinkles
- _ Insomnia-wake up frequently
- _ Headaches
- _ Heart palpitations
- _ Poor concentration
- _ Lack of focus
- _ Increased cholesterol
- _ Increased blood pressure
- _ Heart disease

Gynecological symptoms or related conditions:

- _ Lighter/no cycles
- _ Irregular or missed cycles
- _ Vaginal dryness
- _ Urinary tract infections
- _ Incontinence

Emotional symptoms or related conditions:

- _ Depression
- _ Anxiety
- _ Carb cravings
- _ Low libido
- _ Teary/Weepy

Testosterone Deficiency

Physical symptoms or related conditions:

- _ Aches and pains
- _ Thinning skin
- _ Loss of muscle
- _ tone
- _ Fatigue
- _ Heart palpitations
- _ Insomnia
- _ Bone loss
- _ Hot flashes
- _ Poor memory
- _ Weight gain
- _ Elevated cholesterol

Gynecological symptoms or related conditions:

- _ Vaginal dryness
- _ Incontinence
- _ Loss of pubic hair
- _ Impaired sexual function

Emotional symptoms or related conditions:

- _ Loss of libido
- _ Depression
- _ Lack of motivation

Excess Testosterone

- _ Acne/oily skin
- _ Facial hair
- _ Thinning scalp hair
- _ Excess body hair
- _ Mid-cycle pain
- _ Pain in nipples
- _ Ovarian cysts
- _ Hypoglycemia
- _ Insulin resistance
- _ Aggression
- _ Irritability

Thyroid Deficiency

- _ Fatigue/exhaustion
- _ Cold hands and
- _ feet
- _ Weight gain
- _ Memory lapse
- _ High cholesterol
- _ Low blood pressure
- _ Decreased
- _ sweating
- _ Hair loss
- _ Aches/pain
- _ Heart palpitations
- _ Bone loss
- _ Infertility
- _ Slow pulse
- _ Constipation Depression
- _ Low body temperature
- _ Inability to loose
- _ weight
- _ Puffy eyes
- _ Poor concentration
- _ Dry skin
- _ Brittle nails
- _ Low libido

Insulin/glucose

- _ Fatigue after meals
- _ Weak, skaky, brain fog, headaches when missing a meal
- _ Poor concentration
- _ High blood pressure, triglycerides, or cholesterol
- _ Weight gain, abdominal obesity Sugar cravings especially after meals

Cortisol Deficiency

- _ Fatigue
- _ Allergies
- _ Stress
- _ Irritability
- _ Heart palpitations
- _ Sugar cravings
- _ Chemical sensitivity
- _ Cold body temperature
- _ Arthritis
- _ Aches/pain

Excess Cortisol

- _ Sleep disturbances
- _ Tired but wired feeling
- _ Low libido
- _ Cravings
- _ Stressed feeling
- _ Irritability
- _ Bone loss
- _ Loss of muscle mass
- _ Thinning skin Symptoms of low thyroid, estrogen, testosterone, or progesterone
- _ Breast cancer
- _ Headaches
- _ Heart palpitations
- _ Cardiovascular disease
- _ Insomnia

WHAT ARE BIOIDENTICAL HORMONES?

Bioidentical hormones are derived from plants and are converted into chemical structures that precisely match the human hormones manufactured by the body. The plant derived bioidentical hormones function exactly the same as the hormones the body makes and in fact, the body recognizes them as if they were actually produced by the ovaries. To be clear, there is no difference between the hormones the ovaries make and the bioidentical hormones used in BHRT. BHRT has a long history of safe and successful use, specifically in Europe where they have been used for over 65 years.

WHAT IS HRT AND SYNTHETIC HORMONES?

HRT stands for Hormone Replacement Therapy, which does not usually consist of hormones biologically identical to those our bodies produce. Instead, HRT is comprised of synthetic and/or animal-derived hormones. I refer to them as non-bioidentical. Since non-bioidentical hormones differ in molecular structure from those the human body produces, they do not function exactly like endogenous human hormones. Nor do our bodies process them the same way. These non-bioidentical hormones are similar enough to mimic some of the activities of the human hormones they are replacing but only in a clumsy way. While they perform some of the vital functions of endogenous hormones, they can cause problems that human-produced hormones do not. We know these problems are side effects, which vary depending on the type of non-bioidentical hormone.

WHAT CAN BIOIDENTICAL HORMONES DO FOR YOU?

As we explore the realm of Bioidentical Hormone Replacement Therapy (BHRT), it's essential to understand the pivotal role it plays in restoring and maintaining our health. BHRT offers a wide array of benefits tailored to meet the diverse needs of women experiencing hormonal imbalances. Let's delve into what bioidentical hormones can do for you.

A SPECTRUM OF BENEFITS

- **Regulating Menstrual Cycles**: BHRT can bring balance to irregular or painful menstrual cycles, providing relief and regularity for those who have struggled with their monthly cycles.
- **Alleviating Menopausal Symptoms**: For women in the throes of perimenopause or menopause, BHRT can be a game-changer. It effectively reduces hot flashes, night sweats, mood swings, and other symptoms, making this natural transition smoother and more comfortable.
- **Enhancing Mood Stability:** Hormonal imbalances can lead to emotional turbulence. BHRT helps stabilize mood swings and reduce feelings of anxiety and depression, contributing to a more stable and positive emotional state.
- **Boosting Energy Levels:** One of the most common effects of hormonal imbalance is fatigue. BHRT can revitalize energy levels, helping women feel more alert and engaged in their daily activities.
- **Supporting Bone Health:** Hormones play a crucial role in maintaining bone density. BHRT can help prevent osteoporosis and reduce the risk of fractures by ensuring your hormones are balanced and supportive of bone health.
- **Improving Heart Health:** BHRT can also contribute to a healthier heart, reducing the risk of heart disease and improving cardiovascular health overall.
- **Enhancing Cognitive Functions:** Cognitive decline, brain fog, memory lapses, and concentration difficulties can often be attributed to hormonal imbalances. BHRT helps clear the fog, improving cognitive function and memory.

A PERSONALIZED APPROACH

Every individual's hormonal needs are unique, and BHRT is tailored to meet those specific requirements. By working closely with a healthcare provider, you can ensure that your treatment plan is precisely customized to restore your hormonal balance effectively.

EMPOWERING YOUR HEALTH JOURNEY

Understanding the potential of bioidentical hormones is the first step towards taking control of your health and well-being. With BHRT, you're not just treating symptoms–you're addressing the root cause of hormonal imbalances and paving the way for a healthier, more vibrant you.

ARE BIOIDENTICAL HORMONES SAFE?

It's natural to be concerned about the safety of any treatment, especially when it comes to hormones. While traditional synthetic hormone replacement therapy (HRT) has been associated with significant side effects, bioidentical hormone replacement therapy (BHRT) has shown a more favorable safety profile.

Recent research provides reassuring evidence about the safety of BHRT:

1. Cardiovascular Health: When started within 10 years of menopause or before age 60, BHRT may reduce the risk of heart disease. Transdermal estrogen (applied through the skin) doesn't increase blood clot risk, unlike some oral estrogens. Even women that start hormones later in life still get some benefits without any significant increased risks.
2. Cancer Risk: Estrogen alone doesn't increase breast cancer risk and has been shown in several studies to actually decrease it. When combined with bioidentical progesterone, there's no increased breast cancer risk. BHRT can also significantly lower colon cancer risk as well as other cancers.
3. Bone Health: BHRT effectively prevents bone loss and reduces fracture risk, making it a first-line treatment for osteoporosis prevention in menopausal women under 60.
4. Brain Health: Current evidence suggests BHRT doesn't increase dementia risk when started before age 60. Some studies indicate potential protective effects against cognitive decline.
5. Quality of Life: BHRT can significantly improve quality of life by effectively treating menopausal symptoms like hot flashes, sleep disturbances, and mood swings.

Dr. Kent Holtorf, in a 2009 Postgraduate Medicine article, reviewed 196 studies and concluded: "Physiological data and clinical outcomes demonstrate that bioidentical hormones are associated with lower risks, including the risk of breast cancer and cardiovascular disease, and are more efficacious than their synthetic and animal-derived counterparts."

It's important to note that while this information is encouraging, every woman's situation is unique. The key to safe BHRT is personalization and ongoing monitoring. Your doctor should consider your individual health profile, family history, and specific symptoms to create a tailored treatment plan. Regular check-ups and adjustments ensure you're getting the right balance of hormones for your body's needs.

Always discuss the potential benefits and risks of BHRT with your healthcare provider to make the best decision for your health. By staying informed and working closely with your doctor, you can make confident decisions about hormone therapy that support your health and well-being during and after menopause.

HORMONE MAKEOVER PROCESS

You will start by making an appointment with a medical provider that offers BHRT. At the initial visit your BHRT medical provider will conduct a thorough physical exam and evaluation of your medical history, health, and symptoms as they relate to hormone imbalance. He or she will order hormone testing. This should include saliva testing or dried urine and blood work. You can expect your results to be back in 2 weeks if you don't have periods. Some tests have to be performed on a specific day of your menstrual cycle if you still have periods. If you do have periods, your healthcare provider will help you determine when to take your test and when to expect your results. You should expect to have another office visit with your healthcare provider once your lab tests are back.

At your second visit you should expect your healthcare provider to review your lab work with you. This is a very interesting visit because hormone testing explains the cause of your symptoms. You will also receive your treatment plan designed to correct the imbalances detected by the labs and to address your specific symptoms. A hormone makeover treatment consists of any indicated prescriptions for bioidentical hormones, supplements or dietary changes required to balance hormones, complete instructions on how to take hormones or supplements, and follow-up care instructions.

After you start on BHRT you will need follow-up care. You should plan to repeat your hormone testing in about 3 months and then see your medical provider again. By repeating your lab work or reviewing your progress, you and your medical provider can determine if your treatment plan is appropriate for you or needs some adjusting. It may take a couple of adjustments to get your hormones balanced; it takes some patience, but you'll find it is well worth it. Paying careful attention to changes in your symptoms, taking good notes about them, and conveying that information to your BHRT practitioner can speed the process and improve the results. Once your hormones are balanced, you will need to be evaluated once or twice a year. You may find that your treatment protocol needs to be adjusted after periods of stress, significant weight gain or loss, or as endogenous hormone levels shift such as during perimenopause. If you notice that your symptoms are not under control you may need to change your treatment plan.

WHAT IF YOU CANNOT FIND A HEALTHCARE PROVIDER?

Go to my website for resources to help you locate the nearest medical provider to you that has experience in BHRT. If your medical provider wants to start prescribing BHRT, I have training resources on my web site. www.hormonemakeover.com. If your medical provider gave you this guidebook, you're in good hands.

HOW DO YOU TEST HORMONES?

To determine the underlying hormone imbalances causing your symptoms, it is essential to test your hormones. A comprehensive analysis of all hormones requires blood testing along with dried urine or saliva testing. Blood testing is used to assess thyroid hormone levels, glucose metabolism, and reproduction hormones and their function while saliva or dried urine testing measures adrenal hormones.

SALIVA, BLOOD, AND URINE TESTS: A TRIAD APPROACH

- **Blood Testing:** Blood serum testing remains the gold standard for evaluating a wide range of hormones. This method is comprehensive and can measure both bound and free hormone levels, providing detailed insights into thyroid function, insulin levels, and more. Blood tests are typically performed in a clinical setting and are crucial for diagnosing specific hormonal disorders.
- **Saliva Testing:** Saliva testing has become a popular method for assessing levels of certain hormones,

including cortisol, estrogen, progesterone, and testosterone. It's non-invasive and can be done at home, making it a convenient option for many. Saliva tests are particularly useful for monitoring topical hormone replacement therapy and assessing circadian patterns of cortisol secretion.

- **Urine Testing:** Urine testing offers a unique advantage by measuring hormone metabolites.. This gives a broader picture of hormone production and metabolism, allowing for a more in-depth analysis of hormonal imbalances as well as adrenal hormone metabolites.

INTERPRETING THE RESULTS: A COLLABORATIVE EFFORT

Interpreting hormone test results is a nuanced process that requires expertise. It involves understanding not just the individual hormone levels but how they interact within your body's ecosystem. Collaborating with a healthcare provider skilled in hormonal health is crucial. They can decipher the complex language of your hormones and tailor a treatment plan that aligns with your body's specific needs.

NEXT STEPS: BEYOND TESTING

Once your hormone levels have been accurately mapped out, the next steps involve a detailed discussion with your healthcare provider about the most appropriate treatment options. For many, this will include considering BHRT as a way to restore balance and improve overall well-being. Lifestyle modifications, dietary changes, and supplements may also be recommended to support your hormone health.

WHICH HORMONES SHOULD YOU TEST?

Your healthcare provider will find these blood tests particularly helpful to your hormone makeover.

- Thyroid Stimulating Hormone
- Free T4
- Free T3
- Reverse T3
- Thyroid Peroxidase (TPO)
- Vitamin D (25-hydroxy)
- Estradiol (Testing Estriol and Estrone is also helpful.)
- Progesterone
- Testosterone
- DHEA
- Morning Cortisol
- Noon Cortisol
- Evening Cortisol
- Night Cortisol

OPTIONAL BLOOD WORK YOUR HEALTHCARE PROCIDER MAY ORDER:

- Complete Blood Count - a broad screening test to determine general health status
- Complete Metabolic Panel – to measure your sugar (glucose) level, electrolyte and fluid balance, kidney function, and liver function
- Fasting Insulin and Hemoglobin A1c – to assess insulin resistance
- Serum Iron - measures how much iron is in your blood

- Advanced Cardiovascular Risk Factors such as: C Reactive Protein, Homocysteine, Lipid Profile
- Ferritin

Optional urine tests your healthcare provider may order:

- Bone Turnover – to evaluate if your body is breaking down your bones faster than normal and to monitor treatment of osteoporosis
- Estrogen Metabolism – to see how estrogens are metabolized by your body

BIOIDENTICAL HORMONE PRESCRIPTIONS

Bioidentical hormones can be administered in various forms, each with its own set of advantages:

- **Topical Creams and Gels:** Applied directly to the skin or labia for highly effective absorption.
- **Oral Capsules:** Oral progesterone and DHEA only, never use oral estradiol or testosterone.
- **Patches** (estradiol only) applied to the skin
- **Sublingual Tablets or Troches:** Dissolve under the tongue for direct absorption into the bloodstream.
- **Vaginal Creams and Suppositories:** Useful for localized symptoms of hormonal imbalance, such as vaginal dryness.
- **Intramuscular Injections:** Used once to twice weekly.

Your medical provider may recommend bioidentical hormone prescriptions prepared at a compounding pharmacy. Prescriptions may include one or more hormones compounded in the specific dose you need by a compounding pharmacy. Some prescriptions may come from traditional pharmacies such as a bioidentical estradiol (estrogen) patch
Hormones commonly prescribed are:

- Progesterone
- Biest – a combination of Estriol and Estradiol, both are estrogens
- Estriol
- Estradiol
- Testosterone
- DHEA

WHAT IS A COMPOUNDING PHARMACY?

Compounding pharmacies create formulations of hormones and other medicines customized for each patient according to healthcare providers' specifications, thus permitting the healthcare provider to adjust the dose to fit each patient's needs. Unfortunately, some opponents to BHRT want you to think that compounded hormones are not safe or that compounded hormones may not be reliable. Compounding pharmacies are regulated by each state's pharmacy board and by the Pharmaceutical Compounding Accreditation Board. The hormones they use are regulated by the U.S. Pharmacopoeia and the Code of Federal Regulations, which requires purity testing. The prescriptions filled at compounding pharmacies are not FDA regulated or FDA approved but do contain FDA approved hormones.

The benefit of compounded medications is that your healthcare provider can prescribe bioidentical hormones in individualized dosages and combinations with delivery systems that are not commercially available. Compounded prescriptions can also specify the creation of hypoallergenic creams and gels without the use of excipients and chemical preservatives.

HOW MUCH DO BIOIDENTICAL HORMONES COST?

Of course, costs do vary. To give you a general idea, hormone creams, for example, which are very commonly prescribed, average from $45 - $75 a month. Costs vary depending on how many hormones are compounded into the cream. There may be benefit to having separate prescriptions in some instances. For example, you may need or want to use estrogen and progesterone on your face to help and reduce wrinkles. If you also need testosterone, you will not want to use that on your face.

DOES INSURANCE COVER BHRT?

Some medical providers that offer BHRT do take insurance for office visits, some do not. Practices that do not take insurance often provide a fee statement that you can submit to your insurance company for reimbursement. Do not rule out working with a cash-only practice. There is great value to working with these medical providers because they are able to spend more time with their patients.

WHAT HORMONES DO AND HOW TO USE THEM

The following sections will help you understand more about what each hormone does in the body, the symptoms of each hormone deficiency, and how to use prescription hormones.

PROGESTERONE

SYMPTOMS AND CONDITIONS ASSOCIATED WITH PROGESTERONE DEFICIENCY:

Progesterone has 300 jobs in the body and over 9000 genetic mechanisms. This explains why it is so imperative to have a normal level. The ovaries make approximately 4 to 28 milligrams of progesterone during ovulation, which tends to occur sporadically by the mid-thirties. This means that typically progesterone is the first hormone that begins to decline leading to many symptoms. Women without ovaries and women on the pill or hormones that block ovulation are more than likely progesterone deficient.

GENERAL PHYSICAL SYMPTOMS OR RELATED CONDITIONS:

- Weight gain
- Fluid retention
- Low body temperature
- Hypothyroidism (under-activity of the thyroid gland)
- Headaches – especially before periods
- Pain and inflammation
- Allergies/sinusitis
- Insomnia or sleep disturbances
- Hair loss
- Bone loss

GYNECOLOGICAL SYMPTOMS OR RELATED CONDITIONS:

- PMS
- Cramps
- Breast pain/benign cysts
- Heavy periods
- Irregular cycles (periods too close together)
- Spotting before period or break-through bleeding
- Fibroids
- Endometriosis
- Infertility
- Miscarriage

EMOTIONAL SYMPTOMS OR RELATED CONDITIONS:

- Depression
- Anxiety
- Irritability
- Mood swings
- Tendency to be stressed easily

ACTIONS AND EFFECTS OF PROGESTERONE

GESTATION:

- Enables egg implantation
- Protects against miscarriage
- Facilitates fetal brain development

EFFECTS ON ESTROGEN AND REPRODUCTIVE FUNCTIONS:

- Decreases and normalizes menstrual bleeding
- Permits action of estrogen
- Normalizes clearance of estrogen and protects from excessive estrogen stimulation
- Inhibits Fibrocystic Breast Disease
- May inhibit growth of fibroids
- Counters symptoms of Estrogen Dominance: breast tenderness, fluid retention, headaches, irritability, etc.

SKIN:

- Inhibits aging of skin by increasing production of collagen and elastin

CARDIOVASCULAR PROTECTION:

- Protects against hardening of the arteries
- Has no negative affect on lipid profile
- Has no negative affect on blood pressure
- Does not raise C-reactive protein

CENTRAL NERVOUS SYSTEM:

- Improves brain structure/function/memory
- Reduces irritability/anxiety
- Protects brain and nervous system
- Promotes normal sleep patterns

ANTI-MINERALOCORTICOID:

- Acts as a potassium sparing diuretic

SKELETAL:

- Stimulates osteoblast production for new bone growth

MISCELLANEOUS:

- Increases endurance during exercise
- Increases metabolic rate
- Prevents and reduces PMS
- May increase libido
- Enables growth/development/repair of tissue

- Has anti-inflammatory properties
- Decreases hot flashes

BREAST PROTECTION:

- Stops breast cell multiplication and helps prevent breast cancer, breast cysts, and breast tenderness

EFFECTS ON OTHER HORMONES/GLANDS:

- Facilitates thyroid hormone utilization
- Opposes stress hormone cortisol
- Balances or opposes estrogen

USING PROGESTERONE

If your progesterone is low and your healthcare provider writes a prescription for progesterone it may be in the form of a cream or an oral capsule. Your prescription may have other hormones in it as well. Your treatment plan should indicate when and how you are to use progesterone. Directions will also be on the label.

In general you use progesterone once daily for 3 weeks according to the menstrual cycle starting on day 5 and stopping on day 26. (To determine the day of your cycle always count day one as the first day of blood flow.) Non-cycling women typically use progesterone once daily on days 1-26 of the calendar month. Depending on your symptoms or response to progesterone, your healthcare provider may have you use progesterone twice daily or use it until day 28 of your cycle.

Progesterone cream may be applied to the arms, legs, behind the knees, on the breasts, abdomen, face, labia or vaginally.

Common dosing ranges for progesterone cream are 20mg-100mg. Most healthcare providers will allow you to use progesterone cream in the morning or at night. It is best to keep it in your bathroom or somewhere convenient. Do not use any hormone cream in such as way as to expose children or your partner.

Oral progesterone is often prescribed for women with sleep disturbances or anxiety. Common doses of oral progesterone range from 50mg -300mg. Oral progesterone is taken at bedtime.

SYMPTOMS OF EXCESS PROGESTERONE

Women never over produce progesterone. However, symptoms may arise if you take too much progesterone. These may include: drowsiness, slight dizziness, increased water retention or heaviness in extremities and depressed feeling. Rarely do women have side effects to using progesterone but a small percentage of women are sensitive and require very small doses. Call your healthcare provider if you feel that you are experiencing any of these symptoms or notice any unfavorable changes since starting progesterone.

ESTROGEN

Estrogen has an estimated four hundred crucial functions in the body. The ovaries make 60% of our estrogen while the other 40% comes from other sources, including the adrenal glands. The body converts androgens such as DHEA and testosterone made by the adrenals or ovaries into estrogen. Women make approximately 0.01 to 0.03 mg of estradiol, one of the three primary estrogens. Estradiol is the strongest estrogen and is the most abundant estrogen produced premenopausally. Estrone is the main estrogen made after menopause. Both estradiol and estrone are stimulatory estrogens especially to the breast and uterine tissue. Therefore, they need to be used in small amounts and monitored properly. Estriol is not considered to be stimulatory and believed to be protective against hormone-related cancers.

GENERAL PHYSICAL SYMPTOMS OR RELATED CONDITIONS:

- Hot flashes/night sweats
- Headaches or migraines
- Inflammation
- Insomnia or sleep disturbances
- Poor memory/concentration or forgetfulness
- Hair loss
- Dry skin/eyes/hair
- Thinning /aging skin and wrinkles
- Bone loss
- Insulin resistance
- Increased cholesterol
- Poor carbohydrate metabolism/weight gain
- Heart palpitations
- Oily skin /acne
- Insulin resistance

GYNECOLOGICAL SYMPTOMS OR RELATED CONDITIONS:

- Lighter/non-existent periods
- Vaginal dryness
- Urinary tract infections
- Incontinence

EMOTIONAL SYMPTOMS OR RELATED CONDITIONS:

- Depression or depressed / low mood
- Weepiness
- Anxiety
- Carbohydrate cravings
- Low libido

ACTIONS AND EFFECTS OF ESTROGEN

REPRODUCTIVE SYSTEM:

- Creates the blood lining in the uterus and regulates menstrual cycles

CARDIOVASCULAR PROTECTION:

- Prevents heart disease by lowering LDL (bad) cholesterol, increasing HDL (good) cholesterol, lowering triglycerides
- Decreases other risk factors: homocysteine, lipoprotein (a)
- Manages blood pressure

EFFECTS ON CENTRAL NERVOUS SYSTEM:

- Prevents memory disorders
- Increases neurotransmitters that improve mood, alertness, focus and attention
- Acts as an anti-depressant

EFFECTS ON GLUCOSE/INSULIN:

- Improves carbohydrate metabolism and keeps insulin in check, helping to manage weight

EFFECTS ON SKIN HEALTH:

- Increases water/moisture content of skin
- Increases collagen, elastin, and hyaluronic acid formation preventing wrinkles
- Thickens skin
- Maintains oral health by preventing gum disease
- Maintains eye health by preventing cataracts and macular degeneration

EFFECTS ON UROGENITAL SYSTEM:

- Increases thickness of walls of the vagina
- Reduces vaginal dryness and painful intercourse
- Decreases frequency of urinary tract infections
- Decreases frequent urination

EFFECTS ON SKELETAL SYSTEM:

- Slows bone loss and assists in calcium utilization

USING ESTROGEN

If your estrogen is low and your medical practitioner writes a prescription for estrogen it may be in the form of a cream, patch, or pellet. You may be offered an estrogen patch or pellet if your hot flashes are severe, you tend to have migraines, or if you are being switched from HRT to BHRT. You should never take estrogen orally due to increased risk of stroke, blood clots, and potential negative effects on the liver. If prescribed a cream it may have other hormones in it as well.

You will be taking progesterone in addition to estrogen since estrogen should never be taken without it. This is because estrogen stimulates hormone sensitive tissue such as the breasts and uterus. Progesterone is necessary to moderate the stimulatory properties of estrogen. This also applies to women that have had a hysterectomy. Even without a uterus you still need the many other essential and protective properties of progesterone and for your overall hormone balance.

When prescribing bioidentical estrogen cream, most medical providers order BIEST. This means that there are two estrogens in your cream: estriol and estradiol.

Your treatment plan should indicate when and how you are to use estrogen. Directions will also be on the prescription label. Estrogen cream is typically used once daily for 3 weeks according to the menstrual cycle starting on day 5 and stopping on day 26. (To determine the day of your cycle, always count day one as the first day of blood flow.) Non-cycling women typically use estrogen once daily on days 1-26 of the calendar month. Depending on your symptoms or response to estrogen, your medical provider may have you use it twice daily or during different times of your cycle.

BIEST cream may be applied to the arms, legs, behind the knees, abdomen, face labially, or vaginally. Do not use hormone creams containing estrogen of any type on the breast tissue. Alternate the place you apply the cream from day-to-day. Most practitioners will allow you to use estrogen cream in the morning or at night. It is best to keep it in your bathroom or somewhere convenient.

Do not use any hormone cream in such a way as to expose children or your partner. Common doses of Biest: 0.25mg-1.0 milligrams per milliliter.

SYMPTOMS OF EXCESS ESTROGEN

Starting estrogen should alleviate symptoms of estrogen deficiency without causing symptoms of excessive estrogen. After starting estrogen, if you experience any of these symptoms call your healthcare provider for a reduced dose or further instructions: fluid retention, breast tenderness or pain, headaches, heavy periods, or vaginal bleeding if you are postmenopausal.

Starting BHRT should not cause women that no longer have menstrual cycles to start having periods again. If you experience this you need to be evaluated by a gynecologist.

TESTOSTERONE

Even though testosterone is thought of as a male hormone, women do make and need a normal amount of testosterone for good health. The ovaries make around 0.3 mg of testosterone daily, which is about 60% of the total testosterone. The rest comes from DHEA contribution, which is made by the adrenal glands.

Symptoms and Conditions Associated with Testosterone Deficiency:

GENERAL PHYSICAL SYMPTOMS OR RELATED CONDITIONS:

- Hot flashes/night sweats
- Aches and pains
- Fatigue
- Insomnia
- Poor memory
- Thinning skin
- Loss of muscle tone
- Bone loss
- Heart palpitations

GYNECOLOGICAL SYMPTOMS OR RELATED CONDITIONS:

- Loss or thinning of pubic hair
- Vaginal dryness
- Incontinence
- Loss of libido
- Impaired sexual function or female sexual arousal disorder

EMOTIONAL SYMPTOMS OR RELATED CONDITIONS:

- Depression
- Lack of motivation
- Low self-esteem
- Hypersensitive
- Anxiety

ACTIONS AND EFFECTS OF TESTOSTERONE

EFFECTS ON THE SKELETAL SYSTEM:

- Increases bone mineral density
- Reduces fractures

EFFECTS ON THE MUSCULAR SYSTEM:

- Increases muscle bulk and tone
- Maintains lean body mass, strength and stamina

EFFECTS ON THE BRAIN:

- Increases libido
- Increases sense of well being
- Improves mood

If your testosterone is low and your healthcare provider writes a prescription for testosterone it will be in the form of a cream. You should never take testosterone orally since it can have negative effects on the liver. For convenience, testosterone may be added to any other hormone cream that is prescribed for you or it may be used separately.

Your treatment plan should indicate when and how you are to use testosterone. Directions will also be on the prescription label. If your testosterone is combined with progesterone and/or estrogen cream, your directions will be to use it once daily for 3 weeks according to the menstrual cycle - starting on day 5 and stopping on day 26. (To determine the day of your cycle always count day one as the first day of blood flow.) Non-cycling women typically use hormone cream once daily on days 1-26 of the calendar month. Alternatively, you may be advised to use testosterone daily.

- Increases energy
- Improves memory
- Supports self esteem

If your testosterone prescription contains only testosterone or is combined with DHEA, your healthcare provider may have you take this on a daily basis.

Testosterone cream may be applied to the arms, legs, behind the knees, abdomen, or vaginally. Alternate the place you apply the cream from day-to-day. Do not use hormone creams containing testosterone to the breast tissue or on the face. Testosterone cream may be prescribed for application to the clitoral area or inner labia. In this instance you do not need to alternate application site. Do not use any hormone cream in such as way as to expose children or your partner.

Common doses of testosterone: 0.5 – 4.0 milligrams per milliliter.

SIDE EFFECTS OF EXCESS TESTOSTERONE

Starting testosterone should alleviate symptoms of testosterone deficiency without causing symptoms of excessive testosterone. After starting testosterone if you experience any of these symptoms call your healthcare provider for a reduced dose or further instructions: oily skin or hair, acne, increased facial hair, or increased body odor.

DHEA

Made by the adrenal glands, DHEA is the most abundant steroid hormone in the human body. DHEA is a precursor of (or contributes to the formation of) other hormones. About 40% of our estrogen and testosterone are made from the conversion of DHEA. Therefore, a deficiency in DHEA can trigger shortages of these hormones. DHEA levels decline with age, dropping from its highest level in the second decade of life to about 50% of youthful levels by the time we reach the age of fifty. In our sixties, we typically produce only about 20% of what we did in our youth. Longterm, chronic stress can also reduce the adrenals' production of DHEA.

DHEA DEFICIENCY IS ASSOCIATED WITH THESE PROBLEMS:

- Immune dysfunction
- Greater risk for certain cancers

- Heart disease in men
- Excess body fat
- Type 2 diabetic complications
- Chronic Inflammatory Disease
- Rheumatoid Arthritis
- Chronic back, neck, and shoulder pain
- Osteoporosis
- Neurodegenerative diseases
- Cognitive decline
- Depression

MANY SYMPTOMS OF DHEA DEFICIENCY CAN ALSO RESULT FROM OTHER PROBLEMS, MAKING DIAGNOSIS DIFFICULT. BUT HERE ARE COMMON SYMPTOMS OF DHEA DEFICIENCY:

- Feeling stressed
- Intolerance of loud noises
- Moodiness
- Memory loss
- Constant fatigue
- Lack of stamina
- Poor abdominal muscle support
- Impaired immunity
- Dry eyes and skin
- Loss of pubic hair
- Low sex drive

ACTIONS AND EFFECTS OF DHEA

PROTECTS THE CARDIOVASCULAR SYSTEM BY:

- Strengthening the heart muscle
- Preventing blood clots
- Protecting against atherosclerosis
- Lowering cholesterol
- Reducing amount of atherosclerotic plaque (in animal studies)

PROTECTS THE BRAIN AND CENTRAL NERVOUS SYSTEM BY:

- Protecting against age-related deterioration of mental function
- Promoting brain function
- Protecting the brain from damage due to stroke
- Reducing risk of Alzheimer's
- Protecting brain from excess cortisol, which may prevent dementia
- Reducing inflammation

HAS ANTIBACTERIAL/ANTIVIRAL PROPERTIES/IMMUNE PROPERTIES WHICH IMPROVE IMMUNE FUNCTION BY:

- Supporting immune system
- Helping decrease allergic reactions
- Possibly protecting against activation of HIV
- Possibly fighting, in conjunction with melatonin, retroviral infection and anthrax toxin
- Protecting against bacterial sepsis
- Developing mature immune cells and enhancing antibody production

ADDITIONAL PROPERTIES OF DHEA:

- Decreases formation of fatty deposits
- Increases bone growth
- Promotes weight loss
- Increases sense of well-being
- Helps repair and maintain tissues
- Diminishes allergic reactions
- Helping reduce lupus symptoms

DHEA

If your DHEA is low, for your convenience your healthcare provider may order it to be compounded with other hormones in a cream, in combination with testosterone, or by itself. Some medical providers recommend oral DHEA.

Your treatment plan should indicate when and how you are to use DHEA. Directions will also be on the prescription label. If your DHEA is combined with progesterone and/or estrogen cream your directions will be to use it once daily for 3 weeks according to the menstrual cycle - starting on day 5 and stopping on day 26. (To determine the day of your cycle always count day one as the first day of blood flow.) Non-cycling women typically use hormone cream once daily days 1-26 of the calendar month.

If your DHEA prescription contains only testosterone or is combined with DHEA your healthcare provider may have you take this on a daily basis.

DHEA may be applied to the arms, legs, behind the knees, abdomen, or vaginally. Alternate the place you apply the cream from day-to-day. Do not use hormone creams containing DHEA to the breast tissue or on the face. DHEA cream may be prescribed for vaginal application. In this instance you do not need to alternate application site. Do not use any hormone cream in such as way as to expose children or your partner.

Common doses of DHEA cream: 2.0 – 10.0 milligrams per milliliter.
Common doses of DHEA pills: 5.0 – 25.0 milligrams daily.

CORTISOL IMBALANCES

SIDE EFFECTS OF EXCESS DHEA

Starting DHEA should alleviate symptoms of deficiency without causing symptoms of excessive DHEA. After starting DHEA, if you experience any of these symptoms call your healthcare provider for a reduced dose or further instructions: oily skin or hair, acne, increased facial hair, or increased body odor.

Cortisol, an important hormone made in the adrenal glands, is involved in proper glucose metabolism, regulation of blood pressure, insulin release for blood sugar level maintenance, immune function, and inflammatory response. It has been termed "the stress hormone" because it's also secreted in higher levels during the body's "fight or flight" response to stress and is responsible for several stress-related changes in the body. Cortisol plays a role in the metabolism of fats, proteins, and carbohydrates. When you sleep at night, cortisol prevents glucose from dropping too low.

Just as with the other hormones, both excessive levels and deficiencies result in symptoms and health problems. Chronic stress initially raises your cortisol level. If stressors last long enough, cortisol levels may then begin to fluctuate between normal to high or low, or eventually become deficient throughout the day. We think of stress as being caused by our life circumstances and events, and it often is, but physical stressors like illnesses, injuries, viruses, bacteria, and exposure to certain chemicals all stress our bodies too. Chronic pain and inflammation and even hormone imbalances can stress our bodies and affect cortisol levels. Some medications can increase cortisol as well. Unfortunately, eating high-glycemic foods like white flour and white sugar raises cortisol too.

Your cortisol level does not remain constant. Instead, cortisol production follows a daily rhythm. It should be at its lowest level between midnight and 2:00 a.m., when it slowly starts to rise to help us wake up and prepare for another day. It normally drops rapidly between 8:00 and 11:00 a.m. and then continues to decline gradually throughout the rest of the day. Due to the change in cortisol through the day it is important to test cortisol with saliva testing 4 times during the day: upon awakening, noon, evening and before bed.

SYMPTOMS OR CONDITIONS RELATED TO ELEVATED CORTISOL:

- Insomnia/sleep disturbances
- Headaches
- "Tired but wired" feeling
- Stressed feeling
- Irritability
- Low libido
- Depression
- Food cravings
- Low serotonin (causes depression and carbohydrate cravings)
- Hormone resistance (meaning that the body is unable to properly use any or all of these hormones: thyroid, insulin, estrogen, testosterone, and progesterone - causing symptoms of deficiencies of these hormones)
- Thinning skin
- Loss of muscle mass
- Bone loss
- Heart palpitations
- Cardiovascular disease
- Breast cancer

SYMPTOMS OF CORTISOL DEFICIENCY

- Severe fatigue
- Allergies
- Stressed feelings
- Irritability
- Aches/pains such as muscle and joint pain
- Heart palpitations
- Sugar cravings
- Chemical sensitivities
- Low body temperature or any low-thyroid symptoms
- Hypoglycemic symptoms when missing a meal or eating sugar: irritability, shakiness, headache, and foggy thinking

MANAGING CORTISOL IMBALANCE

If your cortisol level is abnormal, your healthcare provider will most likely recommend 1-2 supplements to support the health of your adrenal glands and to address the symptoms of cortisol imbalance. You may only need to use adrenal supporting supplements for a short period of time. However, some people with significant stressors use them indefinitely. Your treatment plan will tell you how and when to take the supplements.

CORTISOL MANAGEMENT SUPPLEMENTS

Addressing cortisol imbalance is critical for treating symptoms and achieving overall hormone balance. This typically involves use of one or more supplements for a short period of time. However, some people with significant stressors use them indefinitely. These include plant adaptogens, adrenal glandulars, and cortisol reduction or fortifying supplements.

PLANT ADAPTOGENS

The primary benefit of plant adaptogens is the ability to restore healthy, balanced adrenal gland function. They are indicated for all types of cortisol imbalance whether it is too high, too low or fluctuates between high and low.

ADAPTOGENIC HERBS ARE USED TO:

- Normalize release of cortisol from the adrenal glands
- Support symptoms of fatigue
- Enhance endurance
- Support normal mental and emotionally well-being
- Increase the body's ability to resist and recover from stress
- Can support mental performance and physical working capacity

PHOSPHATIDYL SERINE

Phosphatidyl serine is used to decrease high cortisol levels. It may be taken at times of the day when your saliva test shows elevated cortisol levels. Many people have elevated cortisol at night, which will cause them to be unable to go to sleep or repeatedly wake up through the night. Phosphatidyl serine is especially

helpful to improve sleep. Research has also found phosphatidylserine to have protective effects on brain function and memory.

GLANDULAR EXTRACTS

Many healthcare providers recommend glandular extracts for patients with low cortisol and/or significant fatigue. The action of adrenal glandular supplements is to support, fortify, and restore normal adrenal function. They are not replacement hormones but provide constituents for adrenal repair. As the cells of the adrenals recover, they can begin to produce normal levels of adrenal hormones once again.

NATURAL CORTISOL

Some people are so exhausted and have such low cortisol levels they need to temporarily take very low doses of natural cortisol medication, hydrocortisone, (another name for cortisol). This is marketed under the brand name Cortef or compounded by compounding pharmacists. Taken in small doses it can imitate the natural secretion of cortisol, giving the adrenal glands a rest so they can recover and start producing their own cortisol again.

THYROID HORMONE IMBALANCE

Hypothyroidism often surfaces during perimenopause. Hypothyroidism is the condition in which the thyroid gland does not produce enough of the thyroid hormones. Subclinical hypothyroidism, also called mild thyroid failure, is diagnosed when thyroid hormone levels are within normal reference laboratory range but thyroid stimulating hormone (TSH) levels are mildly elevated.

Additionally, some women have thyroid hormone blood work that is "normal" but their results may be close to the upper end or lower end of what the lab says is normal. Moreover, some women have many of the symptoms of hypothyroidism with perfectly normal lab results. In these two scenarios, symptoms may improve with treatment, such as a trial of medication, a supplement that supports thyroid function, or correcting other hormone imbalances that affect thyroid hormone function.

Hyperthyroidism is a condition in which the thyroid gland overproduces thyroid hormones. This is less common and not addressed in this guidebook. It is most often treated by an endocrinologist.

Optimal function of the thyroid is vital to health in many critical ways. The thyroid gland regulates the body's metabolism, thereby controlling the rate of function of every cell and gland in the body, including growth and repair. It also controls calcium balance throughout the body. The thyroid gland uses iodine to produce and secrete iodine containing hormones called thyroxine (T4) and triiodothyronine (T3). Thyroid hormones in conjunction with the hormone calcitonin, promotes the formation of bone. The T4 and T3 hormones stimulate every tissue in the body to produce proteins and increase the amount of oxygen used by cells.

Since thyroid hormones influence and interact with the adrenal and sex hormones, it is important to evaluate and correct any underlying thyroid problems to achieve overall hormone balance and to feel your best.

SYMPTOMS OF HYPOTHYROIDISM

Symptoms may include:

- Weight gain
- Difficulty losing weight
- Exhaustion
- Lack of energy
- Excessive sleeping
- Sleep disturbances
- Low body temperature
- Intolerance of cold
- Cold hands and feet
- Decreased sweating
- Anemia
- Hair loss
- Thinning or loss of sides of eyebrows
- Itchy scalp
- Dry skin
- Thinning skin
- Persistent cold sores, boils, or pimples
- Orange-colored soles and palms

- Joint and muscle pain
- Carpal tunnel syndrome
- Tingling sensation in wrists and hands that mimics carpal tunnel syndrome
- Low blood pressure
- Slow pulse
- Heart palpitations
- Blood clotting problems
- Bruising
- Depression, mild to severe
- Memory loss
- Fuzzy thinking
- Difficulty following conversation or train of thought
- Slowness or slurring of speech
- Slowed reflexes
- Brittle nails or hair
- Elevated LDL (the “bad” cholesterol)
- Irregular periods
- PMS
- Diminished sex drive
- Infertility
- Miscarriage
- Headaches
- Allergies (sudden appearance or worsening)
- Hoarseness
- Puffiness in face and extremities
- Constipation
- Calcium metabolism difficulties resulting in leg cramps or bone loss
- Insulin resistance

THYROID HORMONE TESTING

Thyroid hormones are tested through blood work. A comprehensive thyroid evaluation should include thorough testing. Your healthcare provider may order labs for Thyroid Stimulating Hormone (TSH), Free T3 (triiodothyronine), and Free T4 (thyroxine). Other thyroid tests may include Reverse T3, Total T4, and Thyroid Peroxidase.

Even if you are already taking thyroid hormone medication you may be asked to repeat blood work. This is to make sure that the dose you are taking has your levels in optimal ranges and that all of the important labs have been done.

OPTIMAL THYROID HORMONE LEVELS

TEST	Optimal Range
TSH	0.2 to 2.0
Free T4	1.0 to 2.0 or middle to upper end of range
Free T3	3.0 to 4.5
Reverse T3	11 to 32 - lower end of the range

THYROID TREATMENT

If you have symptoms and non-optimal labs your medical provider may decide to prescribe thyroid nutritional supplements. If so, you will need to repeat the blood work to make sure your dose is correct in 4 to 12 weeks.

COMMON BRANDS AND STARTING DOSES

Dessicated thyroid USP: Armour, Naturethroid, Westhroid, or Compounded Thyroid starting with 15-30mg.
T4 Only: Synthroid or Levoxyl starting with 25 mcg.

INSULIN RESISTANCE

Carbohydrates are broken down into glucose, so when you eat too many of certain types of carbohydrates, like simple carbohydrates or high glycemic carbohydrates, the level of glucose in your blood increases dramatically, causing the pancreas to release a large amount of insulin to lower it. This surge often lowers blood sugar too much, causing fatigue, irritability, depression, mood swings, memory problems, confusion, and carbohydrate cravings.

Long-term overproduction of insulin, along with other risk factors (such as those listed below) can lead to insulin resistance, which means that cells become less sensitive to insulin. This insensitivity forces your body to produce yet more insulin to deal with glucose. Unfortunately, high insulin levels cause the body to store fat, which is why insulin is often called the fat storage hormone.

Since insulin is a major hormone, it is critical in managing the minor hormones such as estrogen, testosterone, and progesterone. But the minor hormones affect insulin in turn. A decline or imbalance in the sex hormones in women can cause them to become increasingly intolerant of carbohydrates; therefore, the cells become less sensitive to insulin. This leads to weight gain and increased risk of other health problems.

THE CAUSES OF INSULIN RESISTANCE

Several factors can lead to insulin resistance which include:

- Genetic predisposition
- Diet (high carbohydrate, high glycemic, with excess simple carbohydrates)
- Obesity
- Sedentary lifestyle
- Smoking
- Stress
- Elevated cortisol
- Oral contraceptives
- Synthetic progesterone
- Hormone Replacement Therapy (Non-Bioidentical)
- Hypothyroidism
- Estrogen deficiency
- Elevated estrogen levels from overproduction or from excessive Estrogen Replacement Therapy

SYMPTOMS AND EFFECTS OF INSULIN RESISTANCE

Symptoms of insulin resistance and long term effects may include:

- Fatigue (especially after meals)
- Poor mental concentration
- Weight gain
- Abdominal (apple-shaped) obesity
- Edema
- Intense craving for sweets (especially after meals)
- Excess testosterone and/or DHEA
- Increased risk of breast cancer, endometrial cancer, and other cancers
- Increased risk of cardiovascular problems

- Accelerates aging and premature death
- Increased risk of alzheimer's disease
- Increased risk of diabetes

OPTIMAL INSULIN AND GLUCOSE LEVELS

Glucose: 80-90 ng/dL (fasting level)
Fasting Insulin: 5- 10 IU /ml or below
HBG A1C or Glycated Hemoglobin: 5.4 or less
(This is another optional test for insulin resistance, which is a marker for average blood glucose levels over the previous months.)

Insulin Resistance Calculations:

- (Fasting Insulin X Fasting Glucose) ÷ by 405. Results > 1.8 may = insulin resistance
- Triglycerides ÷ HDL. Optimal 1-1.5. >2.0 = insulin resistance

ADDRESSING INSULIN RESISTANCE

It is very important to have normal glucose and insulin levels for many aspects of health and long-term disease prevention. Doing so can promote fat loss, increase energy, enhance mental clarity, slow aging, lower blood pressure, improve cholesterol, and is essential for overall hormone balance.

DIET AND EXERCISE

Improve your diet by eating low-glycemic foods which promotes a slower, sustained release of glucose and insulin, and increasing your fiber intake. Non-starchy vegetables generally have low glycemic index levels. Proteins and good fats are also good choices for blood sugar and insulin control because they contain no carbohydrates; therefore, they register zero on the glycemic index.

Exercise is highly effective at preventing insulin resistance and helping to improve insulin sensitivity.

DIETARY SUPPLEMENTS TO IMPROVE INSULIN SENSITIVITY

A variety of supplements and herbs are very effective to reduce insulin resistance. Some of these are: berberine, thiamin, biotin, chromium, alpha-lipoic acid, N-acetyl-cysteine, Gymnema sylvester, fish oil, Coenzyme Q10, L-carnitine, fiber, and magnesium. Your BHRT practitioner may recommend a supplement consisting of some of these key supplements in your treatment plan.

MEDICATION FOR INSULIN RESISTANCE

Medical providers often put their patients with elevated glucose or elevated hemoglobin A1c levels on medication when necessary. Metformin is a medication that reduces insulin resistance, reduces the release of glucose from the liver, stimulates the clearance of glucose, and reduces the absorption of glucose in the small intestine after a meal. This and other similar medications are generally well tolerated.

SUPPLEMENTAL SUPPORT FOR HORMONE BALANCE

Optimal amounts of key nutrients are absolutely critical for hormone balance. They are required for synthesis and healthy metabolism (clearance) of hormones. Specific nutrients that help balance hormones and the conditions associated with hormone imbalance such as PMS, perimenopause, bone loss, and aging include: antioxidants, B-vitamins, fish oil, calcium, magnesium and probiotics.

Just as critical as the nutrients themselves, is the quality of the supplements. Cheaper, inferior supplements just do not work and may do more harm than good. Supplements should be pharmaceutical grade, which have superior bioavailability and potency. Pharmaceutical grade supplement manufacturers follow the same strict production guidelines as pharmaceutical companies.

WHEN TO EXPECT RESULTS

Typically once you start your BHRT treatment plan you can expect to start noticing some results within the first month. By the time you repeat your testing in 3 months and then see your healthcare provider for any necessary adjustment, you should be very close to having your hormones in balance. Should any new symptoms arise, you should contact your medical provider's office. If you feel as though you are not making progress, you should discuss this with your medical provider. Hormones always do what they are supposed to do in the body. There are times when some women are slow to make progress in symptom improvement. This can be due to other health related factors which need to be addressed through different types of tests and treatment modalities, such as performed by a medical provider specializing in Functional Medicine, Environmental Medicine, Naturopathic Medicine, Acupuncture, etc.

Women who have experienced hormone makeovers repeatedly report, "I feel like me again", "I can't believe the difference", "You have given me my life back", "My husband thanks you", and "I feel like I did when I was in my twenties."

NOTE

The educational content I have included does not guarantee that you will experience the results suggested or the results you may anticipate. Not all women respond to these approaches. Ultimately, it is up to your medical provider to treat your symptoms and appropriately address your health care goals.

.

MORE RESOURCES

For more information about hormones I invite you to read my book, **The Hormone Makeover- 4 Steps to Conquer PMS or Menopause with Bioidentical Hormones**. On my website, you will find articles on specific topics such as, "Hormones and Weight Gain", The Effect of Hormones on Wrinkles" as well as a variety of topics under the, "Frequently Asked Questions".

www.hormonemakeover.com

ABOUT THE AUTHOR:

Donna White



PROFESSIONAL BACKGROUND

Donna White is a leading authority in Bioidentical Hormone Replacement Therapy (BHRT) with over 30 years of dedicated experience. As the Founder and Executive Director of Education at BHRT Training Academy, Donna is not only the author of the internationally acclaimed bestseller “The Hormone Makeover” but also a pioneer in developing comprehensive BHRT training programs globally. Her impactful work has significantly advanced the hormone health movement.

PHILOSOPHY AND APPROACH

Donna’s approach is characterized by genuine care and a readiness to engage personally with both patients and practitioners. Drawing on her own journey with hormonal imbalance, she offers an empathetic and expert perspective, making her a trusted figure in her field. She excels in making complex medical topics accessible and practical, greatly benefiting both patient care and practitioner knowledge. Under her leadership, BHRT Training Academy has transformed hormone therapy practice, substantially improving patient outcomes and fostering growth in medical practices.

RECOGNITION AND ADVOCACY

A sought-after speaker on BHRT, Donna has been named to the Board of Advisors for the Menopause Association, underscoring her influence and leadership in women’s health. A staunch advocate for evidence-based treatments, she tirelessly works to ensure women have the information needed to make informed healthcare decisions. Her commitment has not only raised the standard of care but has also empowered a generation of medical professionals with the tools to drive positive change in hormone health.

FUTURE VISION

Looking forward, Donna remains committed to promoting innovation and education in BHRT, aiming to expand the impact and effectiveness of hormone health solutions.

THE HORMONE MAKEOVER GUIDEBOOK

HOW TO OVERCOME HORMONE IMBALANCE WITH BIOIDENTICAL HORMONES AND SUPPLEMENTS

The Hormone Makeover Guidebook is the ideal resource to guide you through the process of working with your healthcare provider to get your hormones back in balance. Hormones and the current treatment options can be confusing. Learning more helps you make informed choices. This guidebook addresses the most common questions about hormones and is designed to be a reference as you work through the process of your own hormone makeover. As you learn about hormones, the more equipped you will be to help your healthcare provider help you and monitor your progress.

Symptoms of hormone imbalance are common, but they are not normal. You do not have to be resigned to just deal with them. Nor do you have to chalk symptoms up to just getting older. You deserve to look and feel good. Balanced hormones make life so much better. Get yourself a hormone makeover. The Hormone Makeover Guidebook will show you how step-by-step.

HORMONE MAKEOVER