

# How to Balance Your Hormones in Your 40s

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*Bonus Book:*

*Menopause Relief*

*The Most Effective Therapies and Alternatives that Will Alleviate Severe Symptoms*

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H|N



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# Table of Contents

## Introduction

Dear Reader,

Welcome

## Chapter 1: A Time of Deep Transformation

Female Hormone Levels, Explained

Hormonal Changes in Your 40s

Premenopause

Perimenopause

Menopause

Postmenopause

## Chapter 2: Symptoms and Signs of Hormonal Imbalance

Most Common Symptoms of Hormonal Imbalances in Women

Systemic Symptoms

Psychological Symptoms

Additional Illnesses

My Hormones, My Story

## Chapter 3: Why Imbalanced Hormones Can Be the Bad Guys

The Power of Hormones

Estrogen

Progesterone

The Results of Hormonal Imbalances

Insomnia

Osteoporosis, Osteoarthritis, and Rheumatoid Arthritis

Thyroid Disorders

Hyperthyroidism

Hypothyroidism

Hashimoto's Thyroiditis

Grave's Disease

Breast Tissue Issues and The C word

Urinary Tract Infections

Diabetes

Allergies

#### Chapter 4: Spoil Your Taste Buds

Change Your Diet for the Better

Foods to Add

Foods to Avoid

Get Your Estrogen Fix

#### Chapter 5: When Modern Society Discovers Ancient Medicine

Integrative versus Function Medicine

The Stories and Studies of Intermittent Fasting

Practice Intermittent Fasting

Methods of Intermittent Fasting

Balance Your Hormones Through Intermittent Fasting

#### Chapter 6: Why Gut Health Matters

All You Need to Know About the Gut Microbiome

What Is Dysbiosis?

A Healthy Gut Is a Happy Gut

#### Chapter 7: How Plant Medicine Has Helped Women Over Millennials

Herbal Supplements

Aromatherapy and Essential Oils

Adaptogens

How Plants Support Healing

A Natural Way to Reverse a UTI

Herbs to Heal the Gut to Heal the Body

Chapter 8: Beauty, Get Your Body Movin'!

Exercise to Excel

Exercise and Your Hormones

Chapter 9: Rest Is as Important as Work

Rest to Heal

The Benefits of Sleep

Rest to Stay Balanced

Sleep Balances Your Hormone Levels

Conclusion

References

Bonus Book: Menopause Relief

# Introduction

## Dear Reader,

I am a woman just like you. I have faced the challenges of living in a female body, and I have persevered through all the ups and downs of living in this body in a society that does not support the true health and happiness of women. My story starts with my body and what it has gone through over the years, growing up from a child to a prepubescent girl, to a confused and emotional teenager, to a young woman slowly morphing into who she needs to become, to a mother fighting all the battles of childbirth, and to the present middle-aged me. The present me is a woman who has lived through the emotional and physical turmoil of hormonal changes. The word turmoil may seem like an over-exaggeration to some, but hormones are the messengers that deliver the instructions for the actions your body needs to make. When these messengers start to go off course and send differing and confusing instructions to your body, all the physical sensations and mental blocks you experience can sometimes feel like more than you are able to endure.

I have battled through all the severe symptoms of hormonal imbalances—the uncontrollable mood swings, the weakening joints, the constant muscle pain, and the sleepless nights filled with insomnia and depressive thoughts. Finally, after a period of intense pain and agony, my journey of balancing my hormones saw a happier ending. Through my learning and experimenting with different natural and holistic healing methods, I was able to control my symptoms and get my life back. As a result, my experiences have given me deep empathy for women who are misunderstood and who are not supported during the hormonal phases of change in their middle age. I want you to know that I see you, and I am here to guide you on your journey to self-acceptance, learning, body love, and your final destination of happiness and health. My passion for helping women stems from my personal hormonal battles, and it has resulted in me creating, with many talented writers and researchers, the Health and Conscious Network. I want to serve as a light of hope, as well as educate and support women like you and many others who have or are still fighting against their own minds and bodies. This fight is temporary and does not need to control your life. There will be an end to this hormonal cloud, and you can put a stop to it in a healthy and holistic way.

I believe that learning about health and knowing your body will lead you to the answers you are seeking. I have dedicated over a decade to discovering ways of hormonal healing, with an academic focus on medicine and naturopathy. I am continuing to live out my

purpose of helping other women find their unique hormonal equilibrium. I have discovered my inner strength and ability to learn how to heal and live in harmony with my body after years of defeat because I chose to get back up again and live for myself with a goal of holistic health. I am a woman just like you, and I am hoping this book can help you find healing, too.

With Hope and Light,

Louise H. Grant

## Welcome

*“Take care of your body. It’s the only place you have to live in.” - Jim Rohn*

When I talk about the symptoms I experienced due to hormonal imbalance, are you able to relate? Do you feel like you are not quite yourself lately? Are your moods getting the best of you? Or maybe you are experiencing chronic pain and feel like there is no escape? Well, do not ever believe that is what you deserve. The physical and emotional pain that you are going through will not last forever. This is and will be temporary. If you are experiencing pain, depressive thoughts, or loss of energy and motivation, please know that you are not to blame. There is a root cause to the constant discomfort you are having. The reason you are feeling like this is due to the processes that are going on inside of you. The struggles you are going through that make it feel like you are not in control of your own body come down to the changes in your hormones, changes that can become especially prominent during your 40s. While you may not have had a choice in starting this rollercoaster of physical and emotional struggle, you are definitely able to manage it. You have the power to control your hormones and become the version of yourself that you have always wanted to be. Yes, this phase of your life can be met with so much change that is difficult to accept, but you are not alone. There is a way through this emotional and physical turmoil. The answers you are looking for are right around the corner. There are various resources and a community of women who have traveled through this phase that can guide you through this hormonal journey of your 40s. A better life, a brighter mood, and a bolder body are possible and what you deserve. The strength to push through this and come out on the other side as a healthier and happier version of you has always been there inside of you. The woman you have become and the journey that life has taken you on have placed you right here. This is your time to reflect, heal, and seek the truth within you and around you.

In this book, you will discover all the answers to your burning questions. Hormone imbalances come in waves, and depending on how you treat your body, these waves can be long and treacherous or smooth and calming. You need to learn how to take care of your body, especially during this period and for the years to come.

With this book, you will soon figure out how to travel through the twists and turns that are hormonal changes in your 40s. Our lessons and discussions on the female body and hormone balancing will give you the tools you will need to push through, despite feeling like your body has turned on you. In the following chapters, with a focus on medicine and healing, we will discuss how you can nourish and care for your female body in order to treat and reverse hormone imbalances and some conditions that are symptomatic of them. We will discuss the signs and symptoms you should watch out for, and we will discover some treatments you could try out to alleviate the physical, emotional, and mental suffering brought on by menopause and hormonal imbalances.

There is a light and there is a solution to your hormonal tidal wave: holistic healing. Diet, regular exercise, and natural remedies are some of the solutions that we will discuss in great detail. Our rediscovery of and journey through the female body and her hormones will enlighten you and bring you to where you need to be. You deserve peace and balance, so come along on this exploration of wellness and wisdom to find your hormonal balance and the key to lifelong health.



# Chapter 1: A Time of Deep Transformation

## Female Hormone Levels, Explained

In order to understand the way hormones can begin to change in our 40s, let us take a brief look at how the female body works and the role hormones play during our childbearing years. Yes, we often associate puberty with female hormones, but our hormones are always at work. Reproductive age is usually a sign that the female body is growing into its full form, but we need to debunk the myth that the female body's hormones are fixed once puberty hits. Instead, we experience cycles and shifts of hormones and bodily sensations well into our 40s and throughout our whole lives. The female body has so many important roles, specifically growing and carrying a child. Our bone structure, muscles, and organs all work together to be strong enough for this task. Despite the outcome and whether or not a woman decides to have children, the female body, before birth, is shaped and wired in a way to support reproduction and carrying a child. Not only are the physical aspects of our bodies created for this role, but so are our internal and chemical processes. Female hormones are secreted at certain levels in order to support an optimally functioning female body that can reproduce. The menstrual cycle is an important part of this.

As hormones are secreted in certain levels controlled by the brain's pituitary gland and then to the ovaries, the monthly menstrual cycle is determined by the days between the beginning of two menstruation periods. While these periods are usually associated with bleeding, this phenomenon is only one factor in the menstrual cycle. The entire cycle usually lasts between 24 to 35 days, with an average of 28 days—but remember, you do not need to fit into the average. Your menstrual cycle can be longer or shorter, or even irregular due to many factors. The female menstrual cycle, central to the female body, is unique to female bodies, but is also unique to each individual. There is no such thing as a 'good,' 'normal,' or 'perfect' menstrual cycle. There is only a general idea of how the menstrual cycle presents itself. Some of these factors that affect how the body moves through this cycle include:

- Your stage of life, whether you have just experienced your first period and your body is finding its unique routine, or if you are experiencing your last few periods as you enter the premenopausal stage.
- Your lifestyle, which involves your physical activity, stress levels, your diet, etc. that all influence your hormone levels.

- Medications that alter your hormone levels, like antidepressants, ADHD medications, weight loss pills, steroids, hormone replacements or supplements.
- Health conditions which can affect your hormones and put your body under stress like the flu, hypothyroidism, uterine fibroids, genetic bleeding disorders, endometriosis, and polycystic ovarian syndrome (PCOS) (Cornforth, 2020).

Although there are so many exceptions and variations, the female body usually goes through a monthly cycle of different phases that are determined by different hormonal changes:

1. The Follicular Phase: Lower estrogen and progesterone levels signal the pituitary gland to produce Follicle Stimulating Hormones (FSH) which starts the process of maturing a follicle—a sac containing an egg.
2. The Ovulatory Phase: When ovulation occurs between day 12 and 16. During this time, the follicle produces estrogen in preparation for a possible pregnancy, increasing estrogen levels and triggering a rise in Luteinizing Hormone (LH) secreted by the pituitary gland, resulting in the release of an egg.
3. The Luteal Phase: When the ruptured follicle (corpus luteum) secretes progesterone and estrogen in preparation for a pregnancy, but these levels will drop due to a lack of fertilization. This will result in the shedding of the once prepared uterus and of the follicle and egg on the 28th day of the cycle. This is then officially the start of menstruation when the menses begin (Women in Balance Institute, 2021).

In order to continue each month, this cycle relies on key reproductive hormones. These hormones ultimately affect how your body functions and how you feel throughout the month, not only during the menstruation phase. Let us learn about the roles of these female hormones that control our menstrual cycle:

- Follicle Stimulating Hormone (FSH): A hormone secreted by the pituitary gland that is responsible for stimulating the maturation of the ovarian follicle.
- Luteinizing Hormone (LH): A hormone secreted by the pituitary that causes the mature follicle to rupture, resulting in a released egg.
- Estrogen: A sex hormone produced by the ovaries, adrenal glands, and fat tissue, which is responsible for the growth of the female body and the maturation of the egg during the menstrual cycle.
- Progesterone: A sex hormone produced by the corpus luteum that works to counter or balance the effects of estrogen, and also support the maturation of the uterine lining in preparation for pregnancy.
- Testosterone: A sex hormone that is found in both males and females, with lower levels of the hormone found in females. It is produced by the ovaries and adrenal

gland to maintain muscle and bone strength, increase sex drive, and enhance overall well-being and mood (Women in Balance Institute, 2021).

These hormones all play their role in maintaining a functioning balance for the female body and menstrual cycle. When a woman is of childbearing age, her menstrual cycle usually follows in a specific order with a dance of the key hormones making their moves and playing their part in order to achieve the body's goal: to reproduce and maintain an efficient menstrual cycle from one month to the next. This cycle comes with its ups and downs, but it is usually consistent, even in its inconsistency. Over the years, a woman starts to know her body and even predict when she will feel a certain way or sensation according to her unique cycle. This cycle continues transitioning the way it needs to until one day it does not.

## **Hormonal Changes in Your 40s**

After the years of cycles and the hormonal recipe your body follows each day, your body begins to change its path., and the formula your body once followed starts to transition away from the purpose of childbearing. This is normal and natural, but as your body's formula changes, you may begin to suddenly feel like you are no longer yourself. You might begin to feel or experience things that you have not experienced before, and you may wonder why or how this is happening. You may think that you have done something wrong or that something must be wrong with your body. But usually nothing is wrong. The answer to what you are experiencing lies in the relationship between your hormones, glands, and brain as they change their communication style with the new topic being 'I no longer need to reproduce.' This switch usually occurs in your 40s and from it comes months and years of hormonal changes that can reshape the way you think, feel, and behave.

These specific years, post-childbearing age, are depicted by the irregular fluctuations in the hormones estrogen and progesterone. They were once on your side, doing their job to maintain your menstrual cycle, but now it seems that they are acting up. You might wonder whether these hormones will ever act the same or find a new normal of harmony. Progesterone was always the calming hormone to balance out the effects of estrogen, and now? Where has it gone? Well, in this stage of hormonal changes into the ending of your menstrual cycle, there are higher levels of estrogen and not enough progesterone to calm things down in your body. This change in hormone levels can lead you to feel 'off' or not quite yourself, but try to never look for fault in yourself or blame yourself. When the day comes, the day you realize that your period is no longer how it should be and your body is

not feeling the way it used to, you need to welcome the change. You need to remember that this phase, the beginning of perimenopause, is as natural as the day you got your first period. A woman is strong and ever-glowing as she ages and grows. A woman is never meant to stagnate, she is meant to flourish and change, and so will her body.

The changes you will go through are inevitable and can be met with some hesitance, discomfort, and even pain. Change, especially the type you cannot control, can put an emotional and mental toll on you in addition to the physical confusion happening around and within you. Once your menstrual cycle comes to an end, it will not be the end of hormonal changes. You will go through the four main phases of hormonal shifts during this stage of life. Do not fear or panic, we will discuss each of these phases in detail to equip you for the change you will experience and to remind you that what you are going through is natural and you do not need to suffer alone.

### ***Premenopause***

Premenopause is the first phase you will go through before your menstrual cycle comes to an end and is generally experienced in your 40s. Again, this is just a generalization, and as we have learned, female bodies do vary, so this phase can be experienced by women in their 30s. This phenomenon is known as *premenopause* because it comes with no noticeable symptoms of change in hormones, despite there being an internal shift in hormonal levels and a decrease in estrogen due to your ovaries gradually producing less and less of the hormone. The premenopause phase can last for a few months to years, depending on your unique body and menstrual cycle. Here, you are still considered to be in your reproductive years. There are no additional changes in the body other than the slight decrease in estrogen, which is why many women in their 30s, even late 30s, are still able to get pregnant and carry a baby to full term. The body is still able to follow a menstrual cycle and has all the processes and other essentials needed to bear children.

After puberty and as you age, your body will produce less and less estrogen and this is why the age of 35 or around mid-30s has been said to be a common 'cut off point' to having children for women. This does not have to be the case, but there have been reports of women even in their 20s being in this phase of premenopause without even knowing it. Women are pressured by society to have children at a certain age, which stems from the idea of the 'biological clock', which has been a common notion shared among men and women. When you are in your 30s, this clock and the pressures of society come for you in a way that can lead to many emotional and even mental struggles. While the decrease in estrogen in your 30s may be a real biological phenomenon, there is no need to feel guilty or stressed about having or not having children. In this book, we will look at ways to increase and balance estrogen levels for women in their 40s, so there is no reason for

women to feel defeated in their 30s and leading up to their 40s. There are enough resources and remedies to support estrogen production and a goal to get pregnant even during premenopause.

### ***Perimenopause***

This phase comes after premenopause and brings with it some changes in the menstrual cycle, like irregular periods as well as other obvious symptoms including changes in mood, sleep disturbances, and hot flashes. Unlike premenopause that involves only slight (and mostly unnoticeable) changes in the menstrual cycle due to a change in estrogen levels, perimenopause *does* result in recognized symptoms due to obvious drops and spikes in estrogen levels. This phase is the outcome of months or even years of hormonal changes that are involved in the menstrual cycle. At this stage, the levels of estrogen do not just dip, but they also rise. Your body will go through periods where little estrogen is being produced and then there will be times when the ovaries may produce more estrogen. These highs and lows are uneven and therefore often unpredictable leading to physical and emotional chaos. These particular fluctuations in estrogen are why many women still have their period and can even get pregnant during this phase.

This phase is your introduction to menopause yet it can last for a few months to many years. Perimenopause is seen as the body entering into menopause, but this is not a one-off experience. Perimenopause is rather your body's hormones figuring out how to phase into the next hormonal state of the female menstrual cycle: the end. Like most processes in your body, especially hormonal processes, perimenopause is a transition phase. Imagine if one day you had a normal period and did not experience any signs and symptoms of change, so you go about your life only to discover that the next month you do not have a period and have zero signs of ovulation or premenstrual symptoms, not even spotting. This would be a shock to your mind and your body. Something like a menstrual cycle that works in a pattern and forms part of a balancing act of different hormones and stages cannot simply continue for years and just automatically come to a sudden stop in one cycle. Your body works in cycles and flows into consecutive or follow-up phases through slight adjustments as it transitions. For instance, you did not just wake up one day and look in the mirror at the reflection of a woman with a full head of grey hair. No, your hair slowly transitioned into having grey roots and a mixture of grey and colored hair. The menstrual cycle expresses its aging transitions in a similar way. Aging does not happen overnight, therefore, your menstrual cycle cannot stop overnight either.

## ***Menopause***

While premenopause and perimenopause can last a while, anywhere from a few months to 10 years, once you have not had a period for 12 consecutive months, you will have officially entered the phase of menopause. The reason behind your non-existent bleeding every month is not due to just the fluctuations of estrogen, but rather due to the fact that your ovaries have stopped releasing eggs altogether. What your body goes through during this phase can be similar to that of perimenopause, but with more distinct symptoms that are specific to the consistently low levels of estrogen rather than the consistent fluctuations of estrogen occurring in perimenopause. While during perimenopause, you may not always be ovulating each month, during menopause, there are no eggs being released at all due to very low levels of estrogen being produced. During this phase, your body's estrogen levels are at an all-time low as they decrease significantly and no longer fluctuate but stay at a final and permanent low level. This is the official sign that your body no longer wants to or can reproduce and carry a child. It is possible to enter into menopause earlier than the average age, which can be brought on by genetic or certain lifestyle factors. Some of these factors, excluding having had a hysterectomy or oophorectomy, include having a family history of early onset of menopause, being a smoker, or receiving cancer treatments.

## ***Postmenopause***

This phase occurs after a woman has not bled for at least an entire year, after you have gone through menopause. At this point, you are no longer fertile and will therefore no longer experience another period. Along with the end to your menstrual cycle, comes a beginning. In these years, which usually occur from your 40s upwards, the female body experiences many unwanted changes which require more attention and care. The risk of some health conditions increases as the body ages, and postmenopause is just a sign of your entrance into a new stage in life. Your body is at higher risk of osteoporosis due to the decrease in estrogen, which is the hormone responsible for bone health and the control of calcium. Your bones are prone to breakage or fractures and become brittle as you age. Other health conditions that may come with age, after or during menopause, are illnesses like heart disease, hyperthyroidism or hypothyroidism, autoimmune diseases, breast cancer, urinary tract infections, etc. While this all may seem daunting and gloomy, there is a light of hope during this phase. Not only will you have the wisdom to live a more beneficial life than before, but you will also learn to detox your body and mind in order to focus on and experience the positive things in life.

This is a phase where you get a real chance to readjust your lens towards life and shift your priorities, ensuring that you rid yourself of the unnecessary or negative aspects you have in your life. Here, you can rather experience only the best life has to offer. The loss of your period can be seen as a symbol of letting go of the highs and lows, tidal waves, and unpredictable fluctuations. The 'post' stage is a second chance and the next chapter of your life. This stage is a stage of detoxifying and healing your mind, body, and soul in the name of true health and happiness. During this stage, you will have the opportunity to cleanse and heal. You will have the freedom to live a life that is less focused on the superficial and the outward, and will be more in sync with the spirituality and beauty of feelings, sensations, and holistic mind-body wellness.

# **Chapter 2: Symptoms and Signs of Hormonal Imbalance**

## **Most Common Symptoms of Hormonal Imbalances in Women**

The physical and mental changes that you may experience as you enter menopause can come and go and they are unique to you. Some women your age might experience the typical hot flashes and mood swings, but you might not, and this is okay. You are not alone in this transition. You need to remember that while your body is different it does not mean that you have to go through this alone and in isolation. There are those unspoken experiences, some even embarrassing, that women go through when their hormone levels are changing. There is no need to feel ashamed or blame yourself for anything you are experiencing right now. You might look in the mirror and ask yourself “Who are you?” but remember that this feeling is temporary, and just like your cycles and stages in life, you will move through it to something newer and better soon.

Some symptoms that you may experience are the textbook and stereotypical signs of menopause that women in their 40s are always associated with. These include mood swings and sweating, and the lack of a sex drive. Women are often shamed for these as the saying “Oh, she’s just menopausal” has a negative and insensitive connotation behind it. It is similar to the common “Are you PMSing?” whenever a woman is emotional or short-tempered. Society blames us for our moods, dismisses our true feelings as just ‘hormones,’ and does not give us grace. People do not always stop to truly understand the inner workings and hormonal turmoil that is happening in women’s bodies and lives. The age-old “Women are too emotional” line is really just old and boring. The emotions and sensations you are experiencing are real and not to be dismissed as you being over-emotional or ‘hormonal.’ Yes, you may be experiencing these symptoms because of your hormones, but it is not your fault, and it does not mean that what you are experiencing is not valid. Remember, you are not wrong or crazy, you deserve to feel better, and you have the power to take control of your life through caring for your mind and body.

Let us take a look at some of the symptoms you may experience during this time before we delve into how to relieve them.



## ***Systemic Symptoms***

Here is a list of the known symptoms that are experienced by women in their 40s who are going through hormonal changes:

- hot flashes
- muscle and joint pain
- osteoporosis
- hair loss
- dry skin
- aching breasts
- headaches
- tingling extremities
- burning mouth
- bleeding gums
- heart problems
- night sweats
- insomnia
- bloating
- nausea
- digestive issues
- weight gain
- vaginal dryness
- irregular periods
- bladder problems (Megs Menopause, 2019).

## ***Psychological Symptoms***

Along with the more obvious physical symptoms, hormonal changes in women in their 40s can lead to psychological effects that are often unspoken and ignored, yet are extremely significant. Here are some of the psychological symptoms that can be experienced due to middle age hormonal changes:

- mood swings
- dizziness
- loss of or reduced sex drive
- anxiety or panic disorder
- depression

- brain fog and difficulty concentrating (Megs Menopause, 2019).

If you are struggling with mental illness or having suicidal thoughts, you can find help by using the link below:

<https://www.therecoveryvillage.com/mental-health/related/suicide-hotlines/>

### ***Additional Illnesses***

In addition to the physical and psychological effects of hormonal changes, there are also health conditions that can arise due to hormonal imbalances in your 40s. Some of these health conditions are illnesses like:

- osteoporosis
- osteoarthritis
- heart disease
- breast cancer
- diabetes
- hyperthyroidism
- hypothyroidism
- urinary tract infections
- food allergies (Berry, 2019).

These are often illnesses that are experienced before the onset of hormonal changes but can also very much occur due to hormonal imbalances in your 40s. While this list can be fear-inducing, you should not feel or convince yourself that you will definitely experience these health conditions. Even if you do experience symptoms or get that unwanted diagnosis, there is no need to live in hopelessness. Not only can you work to treat or prevent these illnesses, but you can also train your mind and care for your brain. A positive and healthy mind can result in a positive and healthy body. Being prepared and aware of the possible health changes that occur in your 40s is not meant to scare you. It is much better to be informed and take action than be ignorant of possible conditions or be paralyzed by fear of what might be. Knowing about the female body can help you learn more about your own body at this age, and being aware of these symptoms can lead you to take action by consulting a friend or a medical professional. This knowledge will not only help you but could also save a friend who is going through hormonal changes of their own. Treating the symptoms and the illness as soon as possible is the wisest and most effective way to find a solution and eventually live the life you desire. Do not be disheartened, the human body is flawed, but it is also so strong and resourceful. Your body is resilient and you need to learn to train your mind to become just as resilient.

Oftentimes, it is actually our mind that needs to catch up to our body as our body is a machine with so many amazing processes, functions, and self-healing mechanisms. You just need to start believing in your inner strength and know that you have come this far, so you can and will move forward into the future.

## **My Hormones, My Story**

My 4th decade was met with hormonal battles and I was exhausted. Just like most women who go through the hormonal storms in their 40s, I experienced all the menopausal symptoms. Yes, I have a long list in my head of the painful and uncomfortable experiences my body went through during this transformational time of my 40s. In addition to the many symptoms I was already experiencing, I had a fear of being diagnosed with some of the additional illnesses that often come along with this hormonal period and age milestone. I knew about these specific illnesses even before I hit menopause because my family has a history of hypothyroidism, breast cancer, and osteoporosis. Watching the women in my family suffer from these illnesses instilled a fear in me that I too would suffer these diseases, and this fear only grew when I hit my 40s.

Perimenopause was already draining my energy and soul, and I was left feeling hopeless about what menopause would bring. I felt my body had placed me in a hormonal prison. My life felt like it was on pause, and my mind and body were in constant pain during this stage of stagnation. I felt that I was not truly living, but rather surviving the wars my body was starting with itself. My body and mind could no longer move forward as I was terrified of reaching that point of sitting in the doctor's office and hearing the diagnosis I had lived my whole life trying to avoid. I feared that I would have to live life suffering through the illnesses and the medical burdens that would eventually be passed down to me. Despite my exhaustion, I was not entirely hopeless. I was determined to avoid a future of chronic pain and medication. I was already tired of the symptoms of perimenopause, and I knew deep down that I did not want to suffer any longer. I knew that I needed to make a change; I had to change my lifestyle so that I would never end up like the other women in my family. I decided to change my lifestyle, make my health my number one priority, and start my mission to rebalance my hormones.

This feat was not easy. My current life was filled with working 8 hours a day and taking care of the needs of three pubescent kids. I just did not have time left over in the day to dedicate to my healing. Instead, I resorted to the biomedical industry to fix all my problems. I went from doctor to doctor and specialist to specialist. I had emptied out my personal energy tank as well as my bank account. I spent too much money on medication

that just would not help. I continued this journey of blind faith in medication because that is all I knew, and we are conditioned to buy into the products and treatments sold by big pharmaceutical companies from before we can even remember. We too easily look to the specialist behind a desk in their office for answers. We collect prescriptions and devices, we book appointments months in advance for just a glimpse of hope for healing in our failing bodies. What do we get in return? Debt and loss, sometimes even more health complications, and deeper into the tornado of confusion. Is it possible to find health if you have no idea what true health is? I lost control of my body in those years. I looked outward to fix what was going on inside, but this was a pattern that would have to stop in order to prevent a lifetime of disappointment.

When did this cycle end? Well, it was a Saturday morning when I woke up and saw the truth. I woke up as I usually did. I was on autopilot and was about to take my prescription medication, when something inside of me, something that was more powerful than my logical brain, told me to stop taking my pills. My body was talking to me and giving me a warning sign. I had been experiencing gut issues and chronic fatigue ever since I had started my medication. My body was giving me the red light, yet my mind was still questioning whether I should stop or just continue down the road of medication and find something better. I was not ready yet to accept the reality of being off some kind of medication for good, but for some reason, I still didn't take the medication that day. Although my mind was working overtime, wondering what I was going to do if I could no longer take the pills, the lack of pills in my system allowed me to fully feel that sunny Saturday. It was a summer's day that I could actually enjoy as I finally felt more myself, more in control of my body. There was a cloud that was lifted, and my mind radiated in the newfound light, just like my skin basked in the sun on that midsummer day.

I managed to live, and I mean truly live. I took my kids out to the river near our house. I had this energy and a heightened sense of reality that I had never experienced before. I could recognize how I felt more energized than usual. My mind was clearer and I felt nourished by my surroundings as the sun rays touched my skin. I felt like I was rejuvenated. I was a new me, or maybe even the old me, before the medication. On the way home, my youngest wanted to go to his favorite restaurant, and I was more than happy to go eat out. On arrival, I received my second sign. The universe and my body were talking to me, to my logical mind yet again. The restaurant was situated next to this Ayurvedic retreat. I had always walked past it but never bothered to learn much else about the place. My daughter, as curious as she is, picked up a flyer from the front door of the retreat and handed it to me. I was confused but open-minded. She read out a line on the flyer that resonated with me: "Hormonal Balance for Women with K.L, an Ayurveda Practitioner, Herbalist, and Doctor." I accepted those words and no longer fought against the universe. Something inside of me knew that this was right and was the key to finding the answers to my health problems. I just knew that this woman could help me. I knew there was something special about this, and that it was only the beginning of my true path

to healing. From that moment, I took my first step to profound transformation and holistic healing.

That day, I not only found my way out of the tunnel of medications, hopelessness, and suffering, but I also found a way to connect and help other women who are also going through hormonal imbalances and the dizzying imbalances of life in their 40s. My story began that Saturday. I entered the next chapter that day, and so can you. It is possible to find what is right for you and your body. There is hope and a very real possibility of escaping the tunnel of hormonal turmoil, but you just need to be open and take a risk. Listen to your body and follow the true and unique path that the universe provides.

# **Chapter 3: Why Imbalanced Hormones Can Be the Bad Guys**

## **The Power of Hormones**

The flyer that my daughter showed me that day was just the beginning of my holistic healing journey. I believe it was a sign from the universe; the universe opened up the gate towards the path of healing for me and I just needed to take the steps, do the work to live a better life for myself. Once I chose to open my mind up to possibilities, I soon began to study more about the female body, particularly during this phase of my life, in order to find answers to the questions I collected over the years of suffering. As I traveled down this path of healing, I learned so much about myself and about what was truly going on inside my body. I discovered just how significant hormones are and the role they were playing in the many symptoms I was experiencing. I soon realized that they were behind my suffering. Yes, hormones can sometimes be the bad guys when it comes to how we are feeling during our 40s, but once we educate ourselves on hormonal functions we can then also find the solutions to our problems. We can learn how to improve our health by fighting off the bad guys and recovering from the destruction they have caused in our body. Hormones are powerful, but so are we!

### ***Estrogen***

Estrogen is one of the important hormones in the body, especially in the female body. This hormone, produced in the ovaries, adrenal glands, and fat tissue, has many significant roles that support the body's ability to function. Estrogen is involved in many processes in the body and it is responsible for:

- cognitive health
- metabolism
- bone health
- cardiovascular health
- progesterone control
- reproductive growth and health

- supporting reproductive organ function like the ovaries, vagina, uterus, and breasts (Nichols, 2020).

Estrogen is known as the ‘female’ hormone because it influences how the female body functions and develops along with other hormones. While the male body also produces estrogen, the female body produces much more as the hormone supports female growth and reproductive development. As a woman, your estrogen levels ultimately affect how your female body will develop and age. Estrogen is the reason why women develop breasts and why young women experience bodily changes during puberty. While estrogen is well-known and is a powerful hormone, it is an umbrella term as there are actually different forms of estrogen that women produce throughout their life and this is why our bodies change hormonally over time as we age. There are three main forms of estrogen that have different roles to play in the functioning of a female body:

1. Estradiol: The most common form of estrogen among men and women, and the type that is the most dominant during women’s reproductive years.
2. Estriol: The type of estrogen that peaks and is dominant during pregnancy, just before birth, as it prepares the body for delivering a child and supports uterus growth.
3. Estrone: The type of estrogen that is more present after menopause as it is a weaker form of estrogen and the reason why many reproductive processes in the body stop or are not as active, although this form can be converted into other forms if necessary (Nichols, 2020).

### ***Progesterone***

The partner to estrogen is progesterone. These two hormones work together, mostly to counteract one another’s effects, in order to balance the body and maintain a favorable equilibrium. This sex hormone, while also produced in the male body to support sperm development, has a maintenance role in the female body, specifically concerning the menstrual cycle and pregnancy. Although the adrenal glands and placenta produce progesterone, it is mainly produced in the corpus luteum of the ovaries during a specific phase of the menstrual cycle. The main role of progesterone is displayed during the menstrual cycle and during pregnancy. Therefore, progesterone’s functions in the female body involve:

1. The menstrual cycle, as it works to prepare the body for pregnancy by stimulating the growth of specific glands and blood vessels.

2. A pregnancy, by supporting the development of a favorable nutrient-rich placenta and sustaining embryo growth, preventing additional egg fertilization, and triggering lactation (Seladi-Schulman, 2020).

## **The Results of Hormonal Imbalances**

What I did not realize until after I stopped taking all those medications that fateful Saturday was that many of the symptoms I was experiencing were a result of hormonal changes. With all of the hormonal changes occurring in your 40s, it is natural to begin to experience certain symptoms as a result. There are common symptoms that come and go, like hot flashes and mood swings, and then there are those unbearable symptoms that feel like chronic illnesses on their own. We will take a look at some of these health conditions that I faced and that you may face during this time, as well as some simple ways to deal with them. Despite the feeling of fear and the desperate need for an escape from this suffering that these symptoms can cause, there are ways to manage them. Let us learn to open our minds to the reality of our bodies changing and discover how to care for them.

### ***Insomnia***

There are three main hormones that affect our sleep and can decrease as we approach menopause, disturbing our sleep and causing insomnia. The first hormone is melatonin, which is released during the lower and dark hours, like at night, to prepare for sleep. It is considered the body's sleep hormone. Lower levels of this hormone can keep us awake at night. Serotonin works opposite of melatonin and is the hormone that affects our mood and overall activity and performance throughout the day as it keeps us awake. The way we feel during the day and how active we are can also affect our sleep, which is how low levels of serotonin can contribute to insomnia. The third hormone that can affect our sleep is estrogen, which influences the way we function and feel as it also has an impact on neurotransmitters that are involved in our sleep-wake cycle. Similar to how it works with progesterone, estrogen also works with serotonin, therefore affecting how the body functions during its active daylight hours. Therefore, we can think of estrogen as a player in the sleep cycle. Not only does it affect our active hours, which, in turn, affects our less active and sleep hours, it also affects other processes that are involved in sleep. At night, many women who have decreased estrogen levels, especially in their 40s, will also experience hot flashes and night sweats that disturb their sleep and impact their quality



of sleep, further affecting their overall health and energy levels. Less sleep or poor quality of sleep due to unfavorable sleep conditions can also affect one's mood and performance during the day. With the additional decrease in melatonin levels, we can easily become prone to poorer quality of sleep or less sleep, a dip in energy levels, mood changes, and even increased risk of depression and anxiety. Therefore, insomnia is a problem that many women face in their 40s due to a decrease in estrogen, serotonin, and melatonin. Every symptom and health issue affect another system of the body. There is a domino effect that women experience due to hormonal imbalances and it takes time and patience to figure out the best treatment to follow.

The good news is that there are many ways to improve sleep. Despite the daily struggle of fatigue caused by the restless nights, you can create a healthy and consistent sleep-wake cycle that works for you. It is well-known that certain conditions are conducive to good quality sleep. A darker and quiet room that is cool and comfortable provides much more support for the body's sleep period as opposed to a loud and hot room in the middle of a summer's day. The body needs to and tries to maintain favorable conditions in order to support essential processes. Hormone production is one technique the body can rely on to perform what it needs to in order to function and survive in a favourable condition. Temperature is a factor in the maintenance of the body. A high body temperature, higher than the optimum 98.6°F (37 °C) is a sign of a problem and can even be fatal. Estrogen helps to keep the body at the correct temperature for sleep, which usually consists of being lowered to support sleep and prevent overheating. When there is a decrease in estrogen, the female body can overheat, which is why during menopause the body can experience hot flashes due to the lack of temperature controlling estrogen.

Since we cannot just change the way our body produces hormones and grab an estrogen booster in the middle of the night, if you are experiencing discomfort and sleep issues, you can try to first focus on improving your sleep. We know that the root cause is hormonal imbalance and a reduction in estrogen, but it is possible to take it step-by-step, and treat the present symptoms you are experiencing. You can improve your sleep by treating your body and mind through natural and easy everyday methods like

- decreasing stress levels
- exercising regularly
- taking adaptogens
- meditating
- doing yoga
- follow a sleep routine that works for your body and lifestyle
- eating balanced meals at intervals that work for your hunger needs
- practicing self-care
- journaling
- taking essential oil and salt baths

- reading and learning about positive things
- doing breathing exercises
- cutting down on caffeine
- quitting smoking
- avoiding alcohol
- having a calming nightly routine before bed
- avoiding liquids and food 2-3 hours before bed
- using the toilet before bed
- creating a calming and sleep conducive bedroom
- making use of earplugs
- sleeping in comfortable positions to support your joints and muscles
- taking melatonin supplements

### ***Osteoporosis, Osteoarthritis, and Rheumatoid Arthritis***

Bone damage or erosion is another problem that can be caused by fluctuating hormones and is much more common among women in their 40s due to changes in their estrogen levels at this stage in life. While these health conditions are usually associated with the elderly or malnourished children, it is very possible to be diagnosed with these bone-related disorders in our forties or earlier. Estrogen is responsible for the maintenance of bone health, but when estrogen levels drop, your body no longer has that support and your bones can become weak, porous, brittle, and deformed. Osteoporosis is much more common in women than in men due to hormonal differences, specifically hormonal changes that occur during menopause. While diet, physical activity, genetics, and overall health and lifestyle are factors involved in the risk of developing osteoporosis, the drop in estrogen levels is a direct catalyst for the degeneration of bones in women.

In addition to the natural drop in estrogen, some women are at a greater risk of developing osteoporosis due to:

- earlier onset of menopause—hitting menopause before the age of 45
- the surgical removal of the ovaries, which are the main organs that produce estrogen in women
- irregular or absent periods due to health and lifestyle i.e. stress, over-exercising and undereating
- disorders of the thyroid, parathyroid, adrenal, or pituitary gland
- genetics—having a family history or inherited condition of osteoporosis
- being prone to hip fractures and/or having parents who are
- having a low body mass—a BMI of 19 or less

- overuse or long-term use of prescription steroids, like steroid tablets for asthma or arthritis
- undereating or having an eating disorder that involves undereating\*
- heavy and long-term consumption of alcohol
- smoking
- malabsorption, like celiac or Crohn's disease
- hormone-altering cancer medications
- living a sedentary lifestyle, being inactive or on bed rest for a long time (NHS, 2019).

Another bone-related condition is osteoarthritis. This is a chronic disease that is degenerative and affects the body's physiopathological mechanisms. Osteoarthritis, with its degenerative effects on the joints, is also associated with the imbalances in estrogen levels. Due to the intricate joint system of the body, this disease has a lifelong physical, mental, social, emotional, and even financial impact on anyone who suffers from it. This might seem overwhelmingly sad, but there is hope as there is growth in medical research about treating osteoarthritis with estrogen drugs. Research has shown the positive effects of estrogen and selective estrogen receptor modulators, like raloxifene and bazedoxifene, in treating this particular disease. While your joints can deteriorate, they are sensitive to estrogen levels. Therefore, when estrogen levels are increased and the hormone is available, it can be used as a form of treatment for weakened joints because of the inherent bone and joint tissue support found in estrogen. Although more research needs to be done, one study found that estrogen-containing drugs and long-term estrogen treatment have been discovered to be effective forms of preventing further or future deterioration of hip joints in postmenopausal women (Xiao et al., 2016).

Rheumatoid arthritis is another chronic disease that causes the inflammation of joints. There have been many studies and reports about the link between estrogen and rheumatoid arthritis in women. The changes in estrogen levels during the menstrual cycle or pregnancy, and of course, menopause, triggers a flare-up of the disease as joints become more inflamed when estrogen levels shift. This is why the disease affects women three times more than men (Romo-Garcia et al., 2020). Although estrogen levels can be blamed for the onset of symptoms, the hormone can also be used as a treatment. Estrogen is the female body's protector and nurtures it to be able to grow, develop, and strengthen, and this involves bone and joint health.

The research and diverse treatments out there have made wellness seem much more real and reachable for many menopausal or aging women who suffer from osteoporosis, osteoarthritis, or rheumatoid arthritis. It is possible to improve your health during times when it may seem like your body is only failing. There are so many options out there that you can try, so there is no need to lose faith. Even chronic and degenerative diseases can be treated with medications, changes in lifestyle, and positive thought patterns. Yes, as

your hormones change, your estrogen levels will fall, and you could be prone to joint and bone diseases, but try to stay mindful and grounded. Know exactly what is happening to your body and find a solution. It could seem ironic or even amazing that estrogen levels can cause *and* treat many diseases. This only reveals how amazing the female body is. It is almost as if we have been given the cure before we can even begin to experience the illness. Our body provides us with the tools we need, and even though we can fall short, all we need is time to learn how to adapt to our body's own adjustments to aging and then work with what is available to us. You have the strength and the ability to improve your life no matter what you are facing, you just need to find what you need from within. You will find the answers if you just listen to what your body is saying.

### ***Thyroid Disorders***

The thyroid gland is an organ located at the front of the neck that is responsible for the release of vital hormones. These hormones produced by the thyroid control the body's metabolism. The two thyroid hormones, T3 and T4, also known as triiodothyronine and thyroxine, are produced by the thyroid. When released, these hormones tell your body's cells how much energy it needs to use to keep your metabolism working in a way that supports your unique equilibrium, energy needs, and overall health. What happens if the thyroid does not function the way it should? Well, there are quite a few disorders that involve thyroid malfunction, and we will discuss below some of the common ones that are also closely related to hormonal changes in women.

### ***Hyperthyroidism***

This is a phenomenon that causes an overactive thyroid gland. This means that your thyroid is producing too much T4 hormone, known as thyroxine. While an active thyroid is beneficial for the body's daily functioning, one that is overactive can also cause intense bodily dysfunction. More specifically this condition can cause an acceleration of certain mechanisms in your body, most importantly, an increased heart rate that can be fatal. Our body needs an appropriate heart rate for the different states it goes through throughout the day. This appropriate heart rate depends on how much blood, nutrients, and oxygen we need during certain activities. An increase in heart rate affects the rhythm of the heart, so if it increases too much, the heart no longer works to support the body's specific needs during a certain activity. This can then lead to strokes and congestive heart failure as the heart cannot circulate and pump adequate amounts of blood through the essential veins

and arteries to fuel body tissue. Heart problems are serious complications of hyperthyroidism, but other common symptoms include:

- insomnia
- heat sensitivity
- fatigue
- muscle weakness
- nervousness
- shaking
- irritability (NIDDK, 2016).

### ***Hypothyroidism***

This serious condition is usually experienced by women, especially during post-menopause. This involves an underactive thyroid. Imbalances in estrogen, specifically erratic estrogen levels that rise and fall, can affect the role of the thyroid and hinder it from producing essential thyroid hormones that control the body's daily functions. During menopause, many women fall prone to hypothyroidism, which not only negatively affects their body's overall health, but also increases the symptoms of menopause. Watching out for hypothyroidism can prevent you from suffering from this condition as well as the additional health issues that come with menopause. Symptoms of hypothyroidism include:

- fatigue
- brain fog
- weight gain
- dry skin and hair
- tingling of extremities
- muscle pain and weakness
- constipation
- sensitivity to the cold
- decrease in sex drive
- depression
- irregular periods
- increased cholesterol levels
- puffed face
- lowered voice (Cleveland Clinic, 2020a).

## ***Hashimoto's Thyroiditis***

This condition is the most common type of thyroiditis and women are about seven times more prone to developing it than men (Dunkin, 2020). Hashimoto's is an autoimmune disorder that causes the immune system to attack the thyroid gland. This results in thyroid dysfunction and hormones are not produced in the amounts needed to maintain optimal hormonal balance. Your body begins to experience similar symptoms to that of hypothyroidism, like:

- weight gain
- fatigue
- muscle pain
- digestive issues (Dunkin, 2020).

## ***Grave's Disease***

This is another autoimmune disease that affects the thyroid gland. It involves the body producing antibodies that stimulate the thyroid gland to produce excess hormones, which results in an overactive thyroid. This disease causes the body to experience symptoms that are associated with hyperthyroidism as the thyroid keeps on producing hormones that are already at high levels. Symptoms include:

- sudden weight loss
- excessive sweating
- heart palpitations
- irritability
- swelling in the neck
- difficulty swallowing (The Harley Street ENT Clinic, 2021).

## ***Breast Tissue Issues and The C word***

Although it seems that in your 40s, your body can never have enough estrogen, this is not always the case. Yes, there are many instances where the body is producing less estrogen, but there are also times when the body has excess estrogen. Too much estrogen, even for a woman, can be threatening to her health and even her life. At this age, you might want to learn as much as possible about the 'c' word—yes, cancer. We know that most cancers

become more and more of a health risk as you age. There are definitely lifestyle and genetic factors that play a role in one's risk of getting certain cancers, but we have also heard of those stories about healthy and active people receiving diagnoses out of the blue. We wonder to ourselves how it was even possible and then we look at ourselves and ask all the 'what ifs', like "What if that was me?" There are so many treatments, trials, and new drugs out there, and the support and love that others provide are endless. It is much better to stay positive *and* informed than to live in fear and denial due to all the 'what ifs.'

Knowing about how your body works and what is healthy for you is a positive step towards prevention. It is well-known in medical spheres that higher estrogen levels do contribute to the increased risk of getting breast cancer. By treating the root causes of higher levels of estrogen, you could also be decreasing your risk of developing breast cancer. Breasts produce estrogen, and like many other areas of our body, a majority of cancer cells are sensitive to hormones as they are hormone-receptor positive. This means that estrogen fuels their growth. This particular type of cell growth is not beneficial to our body. Therefore, supply of estrogen has a direct effect on the growth of most breast cancers, so if one does have excess estrogen, this could lead to unwanted and threatening growths of cancer cells of the breast tissue. Like many other estrogen-related conditions, we can actually treat and prevent breast cancers *with* estrogen. By controlling estrogen levels in the body, we can curb the growth and development of cancer cells in the breasts. It is clear that estrogen can be our friend; it is your body's healer, but only in the correct amounts. All treatments are beneficial if taken correctly, with the correct dosage, and this same principle is true when it comes to estrogen levels and our body.

### ***Urinary Tract Infections***

While urinary tract infections (UTIs) are quite common, especially among women of all ages, as you head into a stage where estrogen levels drop, you fall prone to UTIs. As you enter menopause, your vaginal tissue starts to thin and your urinary tract is less sensitive to symptoms and changes than ever before. Therefore, as you head into your menopausal years, you may experience UTI symptoms like:

- increased frequency and urgency to urinate
- nocturia—waking up in the middle of the night to urinate
- recurrent infections of the urinary tract

These are UTI symptoms that are closely related to age, unlike symptoms that are experienced by young adults or children. There are medications and methods you could use to treat and prevent recurring UTIs while alleviating the symptoms during an infection. This is not something to feel embarrassed about. You need to know that just

like growing pains, teething, or pubescent acne, your body does go through discomfort during certain stages of life. These changes come down to hormones as your body is busy transitioning internally and externally. You should try to adjust your perspective, and see these conditions and symptoms as part of another aging stage, as something temporary and treatable. Try to never forget how you managed to get through messing in your bed at night as a toddler during your potty-training years, and then the discomfort and fear of messing again during your first year of getting your periods. Those experiences were normal and natural, and so is this. You can definitely get through this current phase. In chapter 7, we will explore a few more tips for dealing with UTIs.

## ***Diabetes***

There are many causes and risk factors that are behind the development of diabetes, but our hormones are very much involved in the blood sugar regulation system of the body. Estrogen and progesterone levels play a major role in controlling blood sugar and they influence how the body responds to insulin. The body's insulin sensitivity is so important in maintaining balanced blood sugar levels, and estrogen can actually improve the body's sensitivity to insulin. When your body is sensitive to insulin, it is able to use sugar optimally without requiring a lot of insulin; it is sensitive to fewer amounts of insulin which support glucose breakdown and its role in being an energy source. This is why a woman in her 40s can have an increased risk of developing insulin resistance, pre-diabetes, or even type 2 diabetes, as her estrogen levels drop and her body becomes less sensitive to insulin.

Type 1 diabetes is usually hereditary and diagnosed early on in life. It is an autoimmune disease that involves cells attacking the pancreas. Under attack, the pancreas is unable to produce insulin, a hormone that regulates blood sugar. This condition requires one to take insulin in order to keep the body's blood sugar levels stable. Type 2 diabetes is often caused by long-term lifestyle activities and bodily occurrences that cause resistance to insulin. This type usually starts with pre-diabetes, and then due to prolonged insulin resistance of the body, type 2 diabetes develops, in which the pancreas does not produce enough insulin to regulate glucose (sugar) levels in the bloodstream. If not treated early enough, this type leads to the inability of the pancreas to produce insulin altogether. With less estrogen, your body can become less sensitive to insulin, which can lead to your body struggling to use sugar needed for energy while experiencing higher blood sugar levels. Diabetes can lead to serious complications if not treated, so if you are experiencing any of these symptoms, it is best to speak with your doctor. Treatment and early diagnosis are vital in living a better quality life with both types of diabetes. Insulin as medication is a must, but a change in lifestyle and having a well-balanced but adjusted diet are also



important when living with diabetes. Although this condition is lifelong for type 2 patients, there are so many ways to support a healthy and active life. Type 2 diabetes can be treated successfully and even reversed in some cases with the right medication and support, a balanced diabetes-friendly diet, and regular physical activity.

### ***Allergies***

Another great role estrogen plays in maintaining overall health is its support in allergy and inflammation defense, and the effects and efficiency of estrogen are always balanced and controlled by progesterone. When estrogen rises and falls during perimenopause and menopause, progesterone levels can dip. The imbalance of estrogen and progesterone can cause your body to become more prone to inflammation. This is why symptoms of allergies, food intolerances, and asthma, can become worse during these hormonal stages in your 40s. Treating the symptoms of these inflammatory allergies can be worthwhile, especially during this period of your life. Your hormones are changing and your body needs time to adjust. Do not fight your body, rather care for it by giving it the rest, hydration, oils and lotions, nutritious food, and the anti-inflammatory treatments it needs at this time of your life.

# Chapter 4: Spoil Your Taste Buds

*“Let your food be your medicine.” - Hippocrates*

## Change Your Diet for the Better

Once your body stops menstruating and low estrogen levels are not supporting your body’s health maintenance system, you may experience a decrease in the body’s natural ability to detox and fight off threatening substances or infections. Your immune system, metabolism, and natural anti-inflammatory mechanisms all slow down and work less efficiently due to the hormonal imbalances that occur at this age. This means that you will need to look elsewhere and outward to find your solutions. For instance, now that estrogen and progesterone levels are shifting and often out of balance, you might be more prone to inflammation and would need to seek out anti-inflammatory medications or consume foods that have anti-inflammatory properties. You need to accept your current bodily conditions and then navigate and learn how to make the necessary beneficial lifestyle shifts while you are also experiencing the terrible hormonal shifts of your 40s.

These years of your 40s can be overwhelming from an emotional and physical point of view, but you are also as wise as you will ever be. You know yourself and know your body better now than ever before, so learning about the unique foods and nutrition needed for your body to thrive will be another way to discover new skills and acquire new knowledge. It is possible to heal your body through your diet. Once you know your body and know the suitable foods to fuel it, you will be on your way to living as a healthier, lighter, and brighter version of yourself. How will you do this? Well, we will go through some foods that will benefit your body and mind during this time. We will also list some foods you should try to avoid so that you can prevent your menopausal symptoms from worsening.

<b><i>Foods to Add</i></b>	<b><i>Foods to Avoid</i></b>
<ul style="list-style-type: none"><li>• whole foods</li></ul>	<ul style="list-style-type: none"><li>• refined wheat products (high in additives and preservatives,</li></ul>

<ul style="list-style-type: none"> <li>● organic foods (look for the label on the packaging)</li> <li>● locally-sourced foods</li> <li>● fruits</li> <li>● vegetables</li> <li>● whole grains</li> <li>● legumes</li> <li>● nuts and seeds</li> <li>● organic or free-range meats and eggs</li> <li>● fatty seafood like salmon and mussels (high in omega 3 fatty acids)</li> <li>● healthy fats like extra virgin olive oil, seeds, nut butters, avocados (high in HDL ‘good’ cholesterol)</li> <li>● phytoestrogens (foods naturally containing plant-based estrogen)</li> </ul>	<p>potentially dangerous for the gut microbiome)</p> <ul style="list-style-type: none"> <li>● dairy products (highly acidic, difficult to digest due to lactose, have inflammation properties which can worsen menopausal symptoms like hot flashes, low moods, anxiety, and sleep issues)</li> <li>● free sugars like refined sugars, artificial or processed sugars and syrups like white sugar and corn syrup</li> <li>● alcohol</li> <li>● caffeine</li> </ul>
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While changing your diet and the way you do your grocery shopping may not sound like fun and may even be a hassle, you can easily follow an improved diet by being prepared and having a positive attitude. Instead of seeing this dietary change as a form of missing out or losing some sense of food freedom and fun, you can take this opportunity to learn about new ways of cooking and different types of cuisines and recipes. When I began to switch from a diet high in sugar and processed foods to more of a plant-based diet, a whole new world opened up for me! I had so much fun in the kitchen cooking healthy, fresh meals, especially when I focused on finding new recipes, dishes from other countries, and healthy alternatives to my favorite comfort foods. Focus on *adding* healthy and high-estrogen foods to your meals instead of thinking about all the foods you need to cut out. See this as part of your treatment, but one that is accessible, varied, and definitely delicious. Your food is your medicine, those organic blueberries filled with antioxidants are your new blue pills. The teaspoon of extra virgin olive oil that is drizzled over your salad is your new medicinal syrup that will fight inflammation and irritation, just like those cough syrups you used to swallow as a child. Try to see the good in your new meals, and the benefits these added foods will bring into your life other than giving you fuel. Remember that your food is a blessing as it fuels your mind and body with calories, and it also provides so many nutrients you need to thrive and survive during this time of your life.

Following a balanced diet full of energy-packed nutrients is essential to human development and well-being. The foods you eat have an impact on your energy levels, mood, digestion, and many other systems of the body. Your diet and the substances you put in your body have and always will be central to your body's overall health, but when you reach your 40s, your diet is even more significant to your health and hormones. Eating a well-balanced and nutrient-dense diet that promotes optimal wellness is so effective when treating and caring for your body during this stage in your life. We have learned from our previous discussions about all the complications and symptoms that come with the illnesses and health conditions brought on by hormone imbalances and age. Therefore, it is only natural that we look for ways to treat these conditions or alleviate the pain and discomfort some of these illnesses might cause. Yes, health conditions like osteoporosis, heart disease, and allergies are all treated with certain medications and procedures, but the food you consume every day can also support the recovery and prevention of health issues. You are now on your way to discovering all the healing properties of food.

### ***Get Your Estrogen Fix***

You can get your estrogen fix through prescribed medications from your pharmacists, but you can also get your fix at your local grocery store or organic farmer's market. It is amazing that there are foods out there that naturally contain estrogen, which is similar to the estrogen that the female body produces. These foods contain phytoestrogens, a form of estrogen found in plants. This is why changing to an organic plant-based diet to support your body in your 40s is beneficial and a great way to alleviate and prevent adverse health effects from hormonal changes. I bet you are curious to know exactly how you can consume estrogen and boost your estrogen levels from plant-based foods! Well, here is a list of some accessible and essential foods that contain phytoestrogen:

- soy products like tofu, soy milk, tempeh, and soybeans (ensure that these products are organic and free from GMOs)
- ginseng
- licorice
- black cohosh
- red clover extract

These products can be found at grocery stores or health shops that sell powders or tea leaves. While these are not your usual convenience-store snacks, there are ways you can incorporate them into your meals. Soy products make great plant-based milk and protein replacements, so instead of your usual dairy milk which contains inflammatory properties, you could add soy milk to your morning latte. Firm or silken tofu also works

for savory meals like stir fry or curry, and you could even use silken tofu in your pick-me-up smoothie with some fresh raspberries, which are filled with antioxidants.

The other estrogen-filled products that were listed come in extracts and can be enjoyed as teas or infused in certain baked or cooked meals. You do not want to put yourself off the taste by gulping down a tablespoon of pure ginseng, but you can definitely add it to your daily meals by infusing it into your meals or beverages with other ingredients. There are also capsules available that you could take as daily supplements for your convenience. Think about what you want and your lifestyle, and find a way to add these phytoestrogen products that best suits your preference and daily needs.

# Chapter 5: When Modern Society Discovers Ancient Medicine

## Integrative Versus Functional Medicine

There are two main approaches to medicine—integrative medicine and functional medicine, which also overlap, but view wellness, health, and recovery differently:

<b>Integrative Medicine</b>	<b>Functional Medicine</b>
<ul style="list-style-type: none"><li>● Aims to heal the entire body.</li><li>● A holistic approach that combines traditional and alternative therapies.</li><li>● The entire person is observed, including the body, mind, and spirit, rather than focusing on one health problem.</li><li>● It aims to make the person happier and healthier generally.</li><li>● Physical, mental, emotional, social, and environmental influences are taken into consideration, and it is believed that health problems arise when issues are found in one or more of the areas.</li><li>● Examples: regenerative medicine, nutritional therapy (including herbal medicines, supplements, and naturopathic medicines), medication reduction therapy, and detoxification therapies.</li></ul>	<ul style="list-style-type: none"><li>● Focuses on the optimal functioning of the body by looking at the functioning of each organ of the body.</li><li>● A more personalized approach as it recognizes that each person is different in terms of biochemical makeup and genetics.</li><li>● This approach starts with a diagnosis and continues to treatment. It relies on scientific evidence and testing to reach an understanding of all factors.</li><li>● This approach acknowledges how hormonal changes linked to a change in lifestyle includes the correct processing of a wide range of nutrients and antioxidants.</li><li>● Medical practitioners see the big picture and then look at individual aspects of it. Instead of focusing on treating symptoms, they find ways</li></ul>

<ul style="list-style-type: none"> <li>• Therapies are sometimes used with traditional treatments to increase their effectiveness and speed the healing process.</li> </ul>	<p>of normalizing and optimizing the body's mechanisms.</p> <ul style="list-style-type: none"> <li>• This medicine empowers patients and practitioners to work together to reach optimal wellness and to discover what the underlying causes of disease are.</li> <li>• A root cause is looked at, rather than just the symptoms; the complexity of a disease is identified, but many different causes and symptoms of corresponding conditions are also acknowledged.</li> <li>• Therapies: acupuncture, massage, chiropractic and osteopathic medicine, naturopathy, tai chi, yoga, and other body movement therapies</li> <li>• Natural supplements are used whenever possible to correct problems. Traditional medicine is also used only when necessary.</li> <li>• Lifestyle changes to address health issues like diet, exercise, healthy sleeping patterns, controlling stress, etc. are also used.</li> </ul>
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While both integrative and functional medicine can be used to help keep the body in balance, functional medicine explains hormone imbalance in the body by digging deeper than the simple explanation of symptoms occurring just because of high or low hormone levels. The interplay between hormones and other bodily functions is examined. For example, if a woman in her 40s has high levels of adrenaline (she is stressed out a lot of the time), even a small drop in estrogen may trigger a hot flash or another symptom for her.

Similarly, we can get symptoms of hormone imbalance related to our diets and they can be triggered by sugary or starchy foods, which cause our glucose levels to shoot up, which makes insulin kick in to control them. Cortisol from the adrenal glands rises at the same

time as insulin. If you are low on a certain hormone, if there is no estrogen to balance the rise in insulin, for instance, it can trigger the same symptoms that adrenaline can.

Learning all of this led to me another surprising technique for helping to balance out our hormones—intermittent fasting.

## **The Stories and Studies of Intermittent Fasting**

I am sure you have heard the term ‘intermittent fasting’ somewhere in recent years whether it be during your work break or on social media. People, especially in the wellness community, have recently taken up this form of fasting. Why? Why has there been a hype? Why is intermittent fasting so popular? Does it work, and if so, could it work for you? Well, intermittent fasting has recently been ‘discovered’, or rather, *rediscovered* by Western medicine and dietitians and among many health and wellness communities, but it is definitely not a new way of eating. We need to be conscious of the fact that many medicines and forms of treatment are ancient and originate from other cultures. Maybe Western biomedicine and wellness communities have just caught on to the benefits of ancient treatments. Just because dominant science and culture have finally supported this form of eating does not mean that it has only now been ‘verified.’ Western biomedicine is not the global standard of health and healing, in fact, there are so many different types of medicines and medical practices out there, and we will discuss those throughout this book.

Intermittent fasting has been a natural way of eating for centuries due to the lifestyles of our ancestors and has also been a practice among monks and spiritual teachers, specifically Indian Buddhists. To truly understand the impact and long term validity of this beneficial way of eating, we need to look at its Buddhist origins. When Buddhism was founded centuries ago, around the 5th and 4th century B.C., followers practiced fasting in order to improve their physical, mental, and spiritual well-being. In fact, the earliest Buddhist practitioner, Siddhartha Gautama, the Buddha himself, would fast intermittently due to its many benefits and its support in holistic health. From there, this form of fasting was followed by many more as it enhanced spirituality and overall health. From being a spiritual practice to a weight loss technique, intermittent fasting is popular due to the many benefits it brings with it.

Interestingly, intermittent fasting has also been associated with hormone balancing. Dr. Jason Fung, in his book *The Obesity Code*, shared the secret cause of weight gain and obesity: hormones. Fung shed light on the often ignored or unknown power of hormones and their effects on bodily functions, specifically their effects on insulin and insulin



resistance. Fung's book discusses the connection between glycogen provided by the food we eat and our body's use of energy or fat stores. Our glycogen levels are reliant on whether or not our body needs the energy of the carbohydrates (glucose) in our foods at certain times of the day or during certain activities. The more carbohydrates we eat, the more our body receives and relies on its sugars, like glucose, for energy. This means that our body never needs to tap into our fat stores for energy. Therefore, a diet high in sugars and refined carbohydrates followed by a sedentary or extremely inactive lifestyle is a route to weight gain and even obesity. Using energy and fueling our body enough to meet these energy needs is the key to weight maintenance or even weight loss.

So, what influences our food choices? Why are some people naturally drawn to refined carbohydrates and remain inactive for most of the day? The answer, according to Dr. Fung, is found within our body's hormone production system. Fung suggests that hormonal imbalances can cause changes, even unhealthy changes, in our eating habits. I am sure we can all remember the days leading up to our periods when we only craved doughnuts or candy bars. During the luteal phase, it seemed like carbohydrates were our best friend and the only ingredient that we really needed to get us through those mood dips and hours of fatigue. So yes, Dr. Fung is on to something here. Our changes and imbalances in hormones can actually be behind our attraction to certain foods and unconscious eating habits. Our hormones can influence us and lead us to snack on refined carbohydrates that are high in added free sugars.

Most times these cravings and eating habits are temporary and usually a once a month occurrence, but for some people, this way of eating is their normal everyday diet. This diet can affect the body's insulin levels as a high sugar diet provides the body with high amounts of sugar that need to be balanced and used up by the body for energy, which is the main role of insulin. More glucose equals more insulin needed by the body. This consistent state of insulin production can put a toll on our bodies. Not only is this state of high blood sugar spikes and insulin production not conducive for everyday functioning and activity, but it also takes away the opportunity for the body to use fat for fuel. Instead, this way of eating actually causes the body to store fat and even leads to excess fat, depending on how many carbohydrates and calories you consume throughout the day. Intermittent fasting allows your body to take a break from producing insulin and gives your body time to balance out or use up the glucose provided by carbohydrates in your food. During fasting periods, your body does not receive food, therefore no carbohydrates for energy. When you are breathing, walking, and working throughout these fasting hours, your body still needs energy though. This is when your body looks to its fat stores for energy instead due to no available glucose. This way of eating can promote weight loss, more specifically fat loss, as it promotes the fat-for-energy mechanism in your body.

From the results of this natural fasting state, we can see why in recent years, especially due to the global obesity pandemic, intermittent fasting has gained popularity as a

supportive tool in weight loss and metabolism enhancement. Many other health benefits have been reported due to the growth in research on intermittent fasting, yet the ancient Buddhists knew these benefits before our science could even prove it. How? Well, because they were constantly tuned into their mind-body connection and lived as spiritual beings. Their senses of the outside world and the sensations within their body were felt intensely. Unlike today, where we are much more focused on the outside world and what others are doing or what society expects of us. We go, go, go, and never give ourselves the opportunity to just stop and breathe, and just be. This is where we and our modern society have failed. We need to learn the ways of the past, as we have done with intermittent fasting, and truly observe the present in order to find the sweet spot in the middle. Healing your body with your body and mind is possible. Holistic health and healing are made up of all the small things, all the natural or conscious daily routines and habits we perform. We need to approach healing by following the patterns of the body. Like our hormone changes fluctuate and come in cycles, stretched out waves, we need to care for and treat our body by consistent patterns of behavior. One day of intermittent fasting will not show much of a difference, but maybe six months to a year could. Healing your hormones through daily shifts and rituals needs to flow within and out of you. There is no one instant and easy answer to your body's problems.

## **Practice Intermittent Fasting**

### ***Methods of Intermittent Fasting***

Although intermittent fasting is a particular cycle of eating and fasting, there are different methods of intermittent fasting. Each method can be followed and have similar results. Depending on your lifestyle, physical needs, preferences, and routine, you can choose a method that is best for you. No matter what method you choose, you will still be able to experience the benefits of intermittent fasting as long as you are consistent and give your brain and body the time it needs to adapt and heal. Here are the six methods of intermittent fasting:

1. The 16/8: Fasting every day for 16 hours (including sleeping hours) while having an eating window of 8 hours.
2. The 5:2 Diet: Eating how you would usually eat for 5 days of the week and restricting your calorie intake for 2 days of the week with a caloric limit of 500-600 calories on fasting days.

3. **Eat Stop Eat:** Eating how you usually eat on most days of the week, but fasting for 24 hours (a full day) once or twice in the week.
4. **Alternate-Day Fasting:** Fasting every other day of the week. Eating how you would usually eat on one day and then not eating or eating a minimal amount of a few hundred calories the next, doing this alternating throughout the days of the week.
5. **The Warrior Diet:** Eating minimal food throughout the day of raw low-calorie fruits and vegetables until you eat a large full meal at the end of the day, usually allowing for a full meal eating window of 4 hours in the evening.
6. **Spontaneous Meal Skipping:** Fasting and skipping meals without following a structured time-based eating window, which usually involves skipping meals or fasting for hours throughout the week when you are not hungry (Gunnars, 2021).

### ***Balance Your Hormones Through Intermittent Fasting***

As we have discussed the influence of hormones on diet and body mass, it is also important to note how fasting and eating patterns can affect hormonal shifts in your 40s. Intermittent fasting can actually benefit women who are struggling through hormonal imbalances in their 40s. Due to the many symptoms or side effects of hormonal shifts, the natural benefits that come with intermittent fasting can actually alleviate some symptoms of hormone imbalance, specifically by reducing the risk of weight gain, improving mood during those years that bring about mood swings, and even improving sleep quality for those who suffer from insomnia. While this seems great and the discipline appears worth it, you need to ensure that you never feel like you are starving or suffering from physical and mental hunger. This will only worsen your mood and reduce your energy levels.

You need to listen to your body in order to find out what it needs to thrive. If you are seeing that all you are thinking about is food and cannot stand the hours of fasting, you should maybe accept that intermittent fasting is not for you. You could become ‘hangry’—angry due to intense hunger—and experience real energy and mood dips. You need to find out what makes you feel your best, so if fasting for hours on end does not make you feel emotionally satisfied and makes you feel physically tired, then intermittent fasting is not benefiting you. At this age, despite the constant confusion and ups and downs that hormone imbalances bring, you do know your body and you know what makes it feel great. You cannot work on healing your mind and body and focusing on treating your menopausal symptoms if you are feeling tired, hungry, and agitated. If you are feeling worse than before you started fasting then I suggest you grab the nearest snack and enjoy the flavorful fuel that is starchy, sweet, and crispy food!

# Chapter 6: Why Gut Health Matters

*“All disease begins in the gut.” - Hippocrates*

## All You Need to Know About the Gut Microbiome

Many of us have heard the saying about the gut being the second brain. Well, this is not far off from reality. The gut is not just about transporting food from our stomach, through the body, and then out again. Our gut actually causes many bodily functions and processes to happen...or not. In the digestive process, lots of other processes are occurring simultaneously. The gut is central to how and why we store and use up the nutrients from our food. The gut controls the way our bodies respond to what we consume and is connected to how we fight or feed the harmful organisms that make their way into our bodies.

The gut survives and functions by having a microbiome that is made up of trillions of microbes—different types of beneficial bacteria and organisms—to help it perform its roles and digest food while also absorbing nutrients needed by the body. A healthy gut microbiome is one with as many beneficial bacteria as possible to support the body’s balance and to also guard against the overgrowth of fungus or harmful bacteria. It is clear that having a vast number of bacteria, so a thriving microbiome, is needed for the success of a working gut and digestive system. This is why the microbiome can be seen as the energy source of the gut. The microbiome helps the body to metabolize nutrients and even to produce and store many essential sources of energy and molecules needed for other vital systems of the body. The breakdown of food into different nutrients and energy so that the body can distribute and use it as needed fuel, is all thanks to the gut and its microbiome that are always hard at work. Without the nutrients and energy from food made available to us, what would we be or where would we be? The microbiome provides the body with the fuel it needs and all the building blocks for a functioning metabolism and immune system. There would be no point in eating an orange that is packed with vitamin C if the gut was not able to break down that orange and absorb the vitamin C as well as some other essential nutrients like fiber and glucose. The microbiome of the gut needs to be diverse and filled with beneficial types of bacteria in order to maintain a thriving digestive system. Certain bacteria have properties that heal the gut and the body with their anti-inflammatory compounds and their abilities to keep the intestinal tract, the wall of the gut, and the immune system protected and strong.

## What Is Dysbiosis?

The condition of an unhealthy gut microbiome is known as dysbiosis. This occurs when there are changes in the bacteria of the microbiome, but not advantageous changes. When the microbiome is in this state, the body is directly affected, and many health complications present themselves as a result of an unhealthy gut. Remember, a healthy gut leads to a healthy body. When the gut microbiome is imbalanced or in an unhealthy, dire state, one can experience unwanted health complications and even illnesses like:

- allergies
- headaches
- bloating
- excessive gas
- constipation and/or diarrhea
- inflammation
- 'leaky gut' syndrome
- malabsorption
- fatigue
- headaches
- vitamin deficiencies
- weak immune system
- hormonal imbalance
- cancer
- auto-immune disease (Scott, 2021).

Among all these illnesses and conditions, inflammation is a common symptom of dysbiosis. Like an open wound, when the gut is inflamed and irritated there is an infection. When the microbiome is not healthy and is inflamed, this is when pathogens and toxins take over and can grow, even spreading into the bloodstream. This is a result of a weak intestinal wall that is not supported by the bacteria needed to fight off harmful organisms. Dysbiosis is also linked to hormonal imbalances. Actually, it *increases* the risk of a person suffering from hormonal issues. With many other supportive roles of the microbiome, hormone balance is another responsibility on its list of things to do for the body.

There is even a connection between the gut and mental health that has been under investigation and in popular debates for years. This is the main reason why people liken the gut to a type of brain. Your gut actually produces and stores the hormone serotonin, which is responsible for mood balance and elevation. In fact, about 90% of serotonin comes from the gut (Scott, 2021). This is why many patients with anxiety and depression,

which are mental disorders linked to low levels of serotonin, experience digestive issues such as constipation and diarrhea.

Furthermore, serotonin levels are closely connected with estrogen levels. Serotonin release and estrogen levels are connected, and serotonin and gut health are connected. Do you see just how intricate and interconnected the different systems and organs of our body are? Our gut influences our mental health and our mental health influences our physical health. The gut can influence your hormones, therefore, an unhealthy gut can lead to unhealthy hormonal release—hormonal imbalance. Hormonal imbalances and all the symptoms and struggles that it causes can be traced back to the gut. This just proves that you can never assume someone is healthy based on what they look like; our physical health is not always visible to the eye. One can look healthy and fit, but their gut may be in danger, which can then cause so many other internal complications due to hormonal imbalances. Our health is so much more than exercising or appearing energized, it is about caring for and protecting our gut.

## **A Healthy Gut Is a Happy Gut**

When your gut is healthy, meaning that there is an abundance of beneficial bacteria making up your microbiome, your body is protected from toxins. The intestinal wall is responsible for protecting your body and its organs from any ingested toxins by preventing these toxins from entering the bloodstream. This wall is made up of bacteria, almost like armies of bacterial organisms guarding your gut lining. When this wall is dense with a diverse microbiome, your gut is healthy and can perform its jobs optimally, allowing your intestinal wall to prevent toxins from flowing into your bloodstream. Your intestinal wall is a barrier to keep these toxins contained in the gut so that they can eventually exit the body by being expelled with your stool. This is probably the most common and simplest understanding of gut function, but we now know the gut is involved in so many other processes of your body, not just moving unwanted toxins of ingested food out of your body.

The gut is responsible for providing your body with the correct nutrients, and it can perform this job well if you provide it with the *right* nutrient-dense foods it needs. If this is the case, we need to help it by following a gut-friendly diet. Your body does so much for you, and your gut can help keep your body and mind energized and fueled, so why not support it and give your body the best? But what is the best?

A balanced diet that consists of a variety of foods from different food groups creating a sufficient caloric intake is the number one rule of nutrition. You need to make sure that

you are getting all the micronutrients that support gut health and organ function. This is only the first step. You also need to consume specific foods that promote and sustain the health of your microbiome and incorporate foods that aid in gut health. Foods that are nutrient-rich and have anti-inflammatory properties are good for hormonal balance as well as alleviating symptoms of menopause, but these foods are also great for your gut. There is no coincidence that what is good for your hormones is also good for your gut, as we have just learned how the gut is central to hormone balance. Foods that promote beneficial microbial growth are those that are fermented. These are the foods that contain available probiotics for the gut. These foods contain bacteria that are good for your microbiome and support a thriving and diverse microbiome with specific beneficial bacteria strains. Some foods that are great to add to your meals and to feed your gut are:

- **Fermented drinks** like kombucha (fermented tea) and kefir that contain the live enzymes. Kombucha has also seen a rise in sales lately due to the natural probiotics found in the drink as well as being a lower sugar alternative to usual high-sugar carbonated sodas. There are many different brands and flavors of kombucha or kefir drinks, so this can be an exciting but new change in your diet.
- **Soy-based products** like miso and tempeh are accessible and easy-to-use ingredients that you can incorporate into your meals without the added worry of trying a completely new type of food and flavor. Soy-based foods have become very popular, especially due to the rise in popularity of the plant-based diet. Try to look for soy products that have fewer to no additives and are low in sodium. You can make miso soup or fry up some tofu in olive oil for a great appetizer for your next family dinner.
- **Polyphenols** that stimulate digestion and are found in green tea, dark chocolate, and olive oil. There may be people who do not enjoy green tea as it is, so if you are one of those people, you could always try fun and refreshing green tea flavored iced teas or matcha (green tea powder) lattes with a little bit of stevia or honey to keep it sweet. Dark chocolate is another convenient snack that has so many health benefits. This sweet and rich treat with all its nutrients is best when it is organic or naturally sweetened, but this version is not always the easiest to consume due to the deep earthy flavor of the cocoa bean. If you are a chocolate lover who also likes sweet treats, you can opt for a milder dark chocolate. You could also seek out dark chocolate that is slightly sweetened with natural sweeteners like stevia or even try out a flavored bar with nuts or mint.
- **Water**, the original cleansing and hydrating substance. Water is a necessity and is found in so many meals and beverages we consume throughout the day. Water is needed for the intestine to perform peristalsis—to break down food and cleanse the digestive tract through muscle contractions. A cup of room temperature water first thing in the morning can really aid in digestion and kickstart the working day for your gut. Increasing your water intake is beneficial to prevent dehydration and

digestive issues like constipation. You could try to have a water bottle on hand so you can sip throughout your busy day or have a mindfulness ritual in the morning with your cup of water. Infusing your water with fresh fruit, lemon, or cucumber is another smart way to encourage yourself to drink water without getting bored of the zero flavor, and to look forward to the taste of your daily default beverage instead.

Most processes and areas of your body change during menopause, and your gut is no exception. Menopause is said to alter the gut microbiome. This is why it is important to remain aware of your digestion and observe how you feel after or even between meals. Try to give yourself the time to listen to your body so that you will know how to care for it. The right diet with the addition of herbal remedies or supplements can improve your gut microbiome and prevent it from experiencing any imbalance or overgrowth of certain harmful organisms.

Now that we have discussed the connection between hormones and the gut, try to remember this the next time you are feeling hopeless during a flare-up of menopausal or digestive symptoms: A healthy gut is a balanced gut, and a balanced gut balances hormones. With preparation and nutrition knowledge, along with the awareness of your body, you can change up your diet to be gut-friendly without the stress that comes with change. Create meals that excite you and that energize you because many times the foods that are good for us will make us feel mentally and emotionally better after we eat them. Try to eat with your mind *and* gut to support a healthy mind-body connection. Following a diet and lifestyle that is good for your gut does not have to be seen as some kind of medically prescribed gut treatment. It can be a fun way to explore new foods and to give yourself energy and help you feel better. Remember, our food is our medicine, so eating the right foods that you and your body enjoy is only going to leave you healthier and happier.



# Chapter 7: How Plant Medicine Has Helped Women Over Millennials

## Herbal Supplements

While many visit the local pharmacist to provide them with the right concoction of synthetic pills, there is always an alternative. For some, the popular way of treating their ailments with the latest pharmaceutical drug just does not work. Herbal supplements are key to holistic healing, especially for people who have struggled through the cycles of prescriptions to only be met with more chronic pain and symptoms. This is the window of opportunity to seek out new paths. Herbal supplements are organic and sourced from plants that contain natural chemicals and ingredients that have beneficial effects on the human body. Here is a list of the popular and most effective herbal supplements:

- Ashwagandha—An Ayurvedic herb that supports the functioning of the hormonal system and energy storage.
- Black Cohosh Root—Helps to reduce menstrual pain and menopausal symptoms.
- Dandelion—Aids in liver functioning and helps to reduce water retention.
- Dong Quai—An herb that supports the balancing of hormones as well as the treatment of irregular and painful menstrual or menopausal symptoms.
- Ladies Mantle—Helps to reduce heavy periods through maintaining a more balanced and regular period, as well as being beneficial for health around menopause.
- Motherwort—An herb that may treat many menstrual and menopausal issues like irregular or painful periods, hot flashes, and premenstrual syndrome (PMS) symptoms.
- Valerian—Helps to reduce PMS-related and menopausal anxiety as well as sleep issues.
- Wild Yam—Supportive in treating hormonal imbalance during menopause (McIntyre, 2013).

These herbal supplements are directed at treating the symptoms and complications associated with female hormonal imbalances, specifically during menopause and during PMS, which can often act up in our 40s. You can find them at homeopathic aisles or through naturopaths. Sticking to this list provided and trying out new ways to incorporate

these special supplements into your daily treatment is beneficial to your health. These treatment options will also help you to strengthen your mind-body connection as you will soon learn, through exploration, the supplements that work for you and your body.

## **Aromatherapy and Essential Oils**

Natural plant-based essential oils have organic properties that promote health and healing. Today, the use of essential oils is on the rise as people are looking for new and more natural ways to treat their ailments, especially due to the lack of trust in the safety of many synthetic substances found in biomedical drugs. Despite current fads and preferences, these plant extracts have been used over centuries and our research on their benefits is slowly growing with information and new data being shared. You may be wondering how you would take these plant extracts in an effective way. Of course, you cannot just eat a few sprigs of thyme or consume a whole bowl of fennel soup. Instead, due to the potency of the oils, remember these are rich *extracts* of the plant, most people incorporate these oils into their daily holistic health maintenance through diffusion and even massage.

Diffusion is a method that sprays oils into the air where they are inhaled into our bloodstream. The way you expose your body to these oils depends on what specific symptom you are trying to treat. If you are unsure of the dosage you can always consult a medical or health professional. For diffusion, which is a safe way to absorb the essence, one would need a specific oil diffuser to ensure that the body is given the best and easiest route for absorption of the essence. You could also massage the oils around the area of pain. The best way to do this is to add a few drops of the oil to another oil in order to dilute the essence while still maintaining the oil-like texture for your massage base. You can use extra virgin olive oil or coconut oil as a base and then add a few drops of your essential oil of choice into this base. This is a great and easy way to treat an area like painful and aching muscles or joints, which makes this massage option perfect for those who are suffering from osteoarthritis and osteoporosis.

If you are a woman going through hormonal imbalances and need answers you did not find in taking prescription or generic drugs, here is a list of the plant extracts, along with their benefits, you can add to your treatment:

- Fennel—Reduces stress and anxiety.
- Lavender—Reduces depression and anxiety, stress, and inflammation.
- Jasmine—Relieves depressive feelings and uplifts mood.

- Pine—Reduces the risk of bone loss and the development of osteoporosis; very beneficial for women in their 40s.
- Vitex Agnus-Castus—Supportive in the treatment of menopausal symptoms.
- Rose—Improves mood and also reduces the occurrences of hot flashes.
- Geranium—Treats symptoms of hormonal imbalances like mood swings and hot flashes while also working to support the regularity of periods during perimenopause (Villines, 2020).

Not only are plant extracts used for the treatment of hormonal imbalances and the symptoms that go with them, but essential plant oils have also been said to be effective forms of antioxidants as they can work to reduce inflammation of the body. As we have discussed before, inflammation is one of the conditions caused by the hormonal imbalances of your 40s. Below is a list of a few essential oils that are commonly used daily to treat inflammation:

- Thyme
- Clove
- Rose
- Eucalyptus
- Fennel
- Bergamot (Brazier, 2017).

## **Adaptogens**

Adaptogens have been used for centuries in traditional Chinese and Ayurvedic medicine. As we have previously learned, adaptogens are beneficial plant-based substances, and they can inevitably help with the symptoms of imbalanced estrogen levels. They help to decrease stress and the additional health issues that are caused by stress due to their ability to regulate hormone responses. When these adaptogens are at work, they can reduce the additional complications caused by stress like hormonal imbalances and inflammation. Some adaptogens you could try out to treat stress and inflammation include:

- Ashwagandha—Helps treat stress-related issues and conditions.
- Rhodiola Rosea—A stimulant that supports and improves the body's response to stress and may also alleviate symptoms of depression.
- Schisandra Chinensis—Boosts mental performance and alertness, reduces exhaustion, may improve sleep and fatigue in those who suffer from depression caused by stress.

- Eleutherococcus Senticosus—Improves mental and physical performance, relieves the symptoms of depression like appetite and sleep changes as well as headaches.
- Holy Basil—Improves the symptoms of anxiety and depression (Reid Health, 2021).

You can find these substances in the form of capsules, teas, powders, or tinctures. They are usually sold at local health stores, online stores, or in the organic health section at the pharmacy. Like most drugs and medical treatments, although deemed safe, adaptogens and their effects are still under research. It is always wise to know what your body needs, to be informed about your treatment options, and consult a health professional if you are unsure about adaptogen treatment.

## **How Plants Support Healing**

Now that we've seen how plant medicines can help women, let's take a look at some other ways plants can support healing, from fruits like cranberries that can reverse UTIs to herbs that can curb nausea and reduce inflammation.

### ***A Natural Way to Reverse a UTI***

Getting a UTI during your lifetime is not out of the ordinary, and as we've already discussed, UTIs might become even more regular during your 40s. But having any sort of infection, especially with painful and uncomfortable symptoms, is usually unwanted and can be a trying ordeal, and we will find any way to get rid of it. Yes, we have heard all the myths and the lists of treatments, but here are some tips that follow the natural golden way to reverse a UTI:

1. Take care of your gut microbiome by taking probiotics and following a balanced and diversely nutritious diet.
2. Stay hydrated, so drink your H<sub>2</sub>O wherever you go.
3. Manage and decrease stress and inflammation with lifestyle changes, medications, or natural treatments.
4. Consume cranberry extract or juice daily with a month break every second month, or you can take a tincture twice a day by adding 25-30 drops into room temperature water.

## ***Herbs to Heal the Gut to Heal the Body***

Some herbal medicine, or plant extracts, that have been said to improve gut health and ease digestion include:

- Ginger—Reduces nausea, stimulates saliva and bile production, soothes the stomach, and reduces gas and bloating.
- Turmeric—Contains antioxidants and anti-inflammatory properties.
- Cinnamon—May reduce inflammation of the lower gut, has antioxidant properties as it contains polyphenols.
- Bay Leaves—Contain antioxidants, help to soothe the bowels, and may improve digestion, specifically the digestion of protein.
- Cardamon—Protects the gut with its anti-inflammatory compounds and can even support the healing of stomach ulcers.
- Slippery Elm—May reduce inflammation, improve colon function, and protect the gut against infections.
- Cloves—Have antimicrobial actions that are able to balance gut bacteria.
- Oregano—Rich in antioxidants and could also have an antimicrobial effect (McGrath, 2021).

In addition to these herbs, you could try using probiotics to provide your gut with its daily dose of good bacteria for a healthier and more efficient gut. We have previously touched on the importance of a diverse gut microbiome consisting of many beneficial bacteria, but the certain probiotics that will improve gut health are *Lactobacillus rhamnosus*, *Lactobacillus casei*, and strains of Bifidobacterium (Brown, 2016).

In addition to these medicinal and usually ingested treatments, there are other alternative methods you could try to heal your body with the power of natural elements like:

- Lymphatic drainage massage

This is a gentle massage that moves lymphatic fluid around the body. The lymphatic system is a vital part of the immune system as it works to remove toxins and waste from the body. Lymphatic fluid can sometimes build up, especially due to certain health conditions. Therefore, to support the lymphatic system, regular massages can improve lymphatic circulation and reduce swelling around affected areas. The rhythmic massaging of smooth muscles to move fluids through lymph vessels all over the body can help to alleviate stress, insomnia, fatigue, depression, migraines, and digestive problems, amongst other things.

- Float therapy

This is also called sensory deprivation therapy. It involves floating in lukewarm water with magnesium sulfate (or Epsom salts) in it, preferably in a bath and in a quiet room with dim light for a conducive relaxation setting. Magnesium sulfate has anti-inflammatory properties and soothes joint pain and damage while also relaxing muscles. When your body is in a deeply relaxed state, your brain can repair and rest. Therefore, float therapy has the potential to alleviate stress, anxiety, and depression, and is a way to reach mindfulness states, resetting the nervous system.

- Grounding/earthing

When your skin touches the earth and comes into contact with the ground, it supposedly takes in negatively charged electrons. This has beneficial effects on our physiology and health. Grounding is a way to naturally treat your body by exposing it to the earth. The different types of grounding include

1. walking barefoot on natural ground like grass, sand, and mud, etc.
2. lying on natural ground.
3. submerging the body in natural water like swimming or diving into a lake or in the ocean.
4. using grounding equipment like grounding mats, blankets, socks, and bands.

- Light therapy

Also known as phototherapy, this is a method to treat hormonal or psychological disorders like depression and anxiety and even sleep disorders. This treatment involves the exposure to an artificial light source for consistent 10 to 15 minutes sessions in order to elevate mood. Exposure to sunlight can also improve mood as it is believed that light can trigger the production of the 'feel-good' hormone serotonin.

# Chapter 8: Beauty, Get Your Body Movin’!

## Exercise to Excel

In addition to the treatments listed above, there is another surefire way to help your body get back into balance—exercise. We have heard time and time again about the importance of regular physical activity. We need to move our bodies to prevent living a sedentary life that could lead to so many common health issues like depression and obesity. Before humans lived to sit in front of a computer, we would hunt and gather food, we would migrate for better weather conditions and build our own shelters with our body strength. Now that we live in a world of instant convenience, our physical strength and activity have dipped. Not only is living a sedentary lifestyle harmful to your physical health, but it also places you at a higher risk of mental health and hormonal issues. Why is this? Well, exercise relieves stress and actually helps your body to balance its hormones. When you exercise, you sweat and this is when toxins are eliminated from the body, specifically the ones that cause inflammation. I believe that the root cause of pain and illness is inflammation, and inflammation is caused by hormonal imbalance. Therefore, we can see that hormonal imbalance is the root of many health conditions that involve inflammation. Although most illnesses need to be treated with certain medications, procedures, or holistic therapy, exercise and physical movements are another way to heal the body.

One study involved the observation of women who exercised for 60 minutes, three days a week for 12 weeks. Their exercises consisted of yoga and light dance. The findings revealed the improvements in the women’s balance, flexibility, strength, and estrogen levels. The study also showed that yoga had double the benefits of light dance as it was beneficial for physical and mental health due to it being a stress reducer (Basile, 2020). Similarly, Dr. Akhunji, an endocrinologist, recommends Pilates as a stress reduction exercise. Like yoga, Pilates is a physical activity that improves flexibility while also working to reduce stress and improve mood. A study on the effects of Pilates found that women doing Pilates for eight weeks experienced a decrease in their menopausal symptoms (2020). Pilates is also a great physical activity for women in their 40s as it is beneficial for one’s mental health and targets the pelvic floor. While yoga and Pilates are specifically recommended for women in their 40s, regular exercise in any form that is fit for your unique body and that you find enjoyable will only benefit your health in so many ways, more than you could even imagine. Here are a few more ways you can move your body and heal your mind:

- Zumba

- dance
- walking—take about 10, 000 steps per day
- movement mindfulness—be aware of your daily physical activity and try to increase it in subtle ways (e.g. taking the stairs instead of the elevator)
- high-intensity interval training (HIIT)—short bursts of intense exercises with rest periods in between like pushups, weight lifting, squats, etc.
- jogging or running
- hiking in nature
- cycling

## **Exercise and Your Hormones**

While we know that exercise is so important for your physical health, it is also just as important for your hormonal health. How does exercise influence your hormones? Getting your heart rate up for at least 30 minutes per day helps to boost estrogen levels, which then treats the symptoms and illnesses, like mood swings and weight gain or even diabetes, that come with menopause due to low estrogen levels. The more intense your workout is, the more hormones you will release which will lead to experiencing the beneficial effects of these released hormones. The specific hormones that are released during exercise include:

- Dopamine—Decreases stress and depression, enhances ‘feel-good’ transmitters.
- Serotonin—Improves sleep, mood, memory, appetite, digestion, and performance in socialization and sexual function.
- Estrogen—Alleviates symptoms of menopause.
- Testosterone—Slows down the effects of aging (Piedmont Healthcare, 2021).

These hormones and their effects on the body can be linked to alleviating the symptoms that can be brought on by menopause. Not only does exercise reverse the low levels of estrogen—the direct cause of menopausal health issues—but it also improves other aspects of your mind and body. Your mood will improve, your insomnia and sleep disturbances that you have been suffering through may be reversed, and even your sex drive that saw a dip could spike instead. The benefits of moving your body and breaking a sweat for even 30 minutes in your day can make all the difference and ease this period of menopause.



# **Chapter 9: Rest Is as Important as Work**

## **Rest to Heal**

### *The Benefits of Sleep*

Sleep is essential to our everyday life and we should sleep every day for six to nine hours. Humans need even more sleep in their younger years for development and growth. When you get to your 40s, you may feel like you are needing less sleep and not getting good quality sleep. You need to remember that good quality sleep not only supports basic daily functions, but also prevents illness and inflammation. During sleep, the body goes through processes that rejuvenate its systems and cells. The liver detoxes the body from excess toxins that have accumulated during the day. Allowing your body to rest after hours of activity, even activities like just sitting and thinking, actually works to keep you going. Your body goes through wear and tear throughout the days and years. Therefore, rest along with a nutritious diet will provide balance, cleansing, and fuel for your body.

Lack of sleep can actually lead to severe illness because a worn-out body does not have the energy to fight off infections that come its way. Not giving your body the basics—food, water, and rest—will very soon take a toll on its immune system. Sleep protects the body in the sense that it gives it the time it needs to refuel and reset so that it can perform its daily functions and be on guard during a stressful time or the flu season. Sleep is the natural and automatic way of healing the body. There needs to be a balance: we have to sleep to stay active. This pattern of action and rest or rest and action can be understood through the traditional Chinese healing philosophy: yin and yang. The two complement each other and serve as a pair. Yin is the calm, still, silent, and slow part of us. Yang is the fierce, active, loud, and moving part within us. Therefore, this philosophy of maintaining the balance of yin and yang is key to optimal health—staying energized and having a healthy sleep-wake cycle.

## **Rest to Stay Balanced**

## ***Sleep Balances Your Hormone Levels***

Sleep can support hormonal balance as it consists of many hormonal processes. How can you maintain this balance with sleep? During sleep, a variety of hormones are released into the bloodstream. These hormones are responsible for healing, replenishing, and balancing the body to prepare it for the next day of activity. The hormones released during sleeping work to fight against inflammation, repair damaged tissues, destress and detox the body. Sleep also controls the balance of both insulin and cortisol levels. Your hormones increase and decrease with a certain cyclical or rhythmic pattern, therefore, having a set sleep routine, as well as other daily routines like exercise and mealtimes, will support hormonal balance and hormonal release patterns. You need to give your body the time to be in sync with your mind and lifestyle.

Having a sleep routine as well as some sort of bedtime ritual will follow your body's natural way of working within a particular pattern to remain balanced. The recommended time period of sleep ranges due to age, lifestyle, and genetics, but the average is eight hours of sleep per night. You should also try to set and then follow a bedtime routine and sleep schedule, as you are more likely to get quality sleep when being comfortable with your surroundings and the daily timing of your sleep. Therefore, it is recommended that a person should try to go to bed at the same time and then wake up at the same time every day while getting enough hours. You may start off doing this consciously and needing to plan it out, but after a few nights, you will find that your body will have natural and default waking and sleeping hours without you even having to think about it.

If you are one of those women in her 40s who is struggling with sleep disturbances like insomnia or hot flashes, here are some techniques you could try to improve your sleep and enhance your sleep schedule:

- having a beneficial and balanced daily routine
- avoiding screen time an hour before your bedtime
- avoiding caffeine in the late afternoon or a few hours before you plan to sleep
- avoiding eating less than two hours before your bedtime
- drinking chamomile tea at night
- taking a calming bath of oils or bath salts in the evenings with candles to set the sleep mood
- remaining comfortable by wearing soft, well-fitted, and temperature appropriate clothes to bed
- sleeping in a dark room
- wearing earplugs or blocking out noises around your bedroom
- listening to calming music at night
- ensuring that you have the correct pillows and support

- supplementing with valerian
- taking the adaptogens, Schisandra Chinensis and Eleutherococcus senticosus
- taking essential oils like lavender and chamomile

## Conclusion

We have come to the end of our lessons on life in your 40s, but your journey does not end here. We have discussed the power of hormones and the physical and mental toll a hormonal imbalance can have on your body. I hope through our lessons, you've learned how to rebalance your hormones in a long-lasting way and that through simple everyday methods that reflect holistic lifestyle transformations, you can treat and even reverse your menopausal symptoms. This book is about hope and self-care for women in their 40s—for a woman just like you.

I want you to know I believe in you and I believe that you will get through this time. I have found my solution and so will you. Do not blame yourself. Look and listen, and remind yourself that while your hormones are not how they used to be, you are able to treat your symptoms of this imbalance and you will also find your equilibrium very soon. You do not need to just live through the pain and discomfort, you can take action by putting into practice all that we have learned about hormonal imbalance in your 40s. Try a few of the treatments and techniques. Don't be afraid to experiment, adjust, change up what isn't working for you. It is my hope that in doing so, you will find a method that works for you. Your health and wellness come from living a balanced life and caring for your mind and body in a holistic way.

I hope you have spotted the sun rays coming out from the clouds. You should never forget that there is a way out of the suffering, the rollercoaster of moods, and the disheartening discomfort. Just because you have accepted or have become numb to your reality does not mean that you cannot or should not change your life. You can change your reality with the right attitude, medicine, and therapy. You can wave goodbye to the hot flashes, depression, mood swings, muscle and joint aches. Growing and glowing are possible in this time where you feel like your body is only being reduced to loss—loss of a period, the loss of energy, the loss of bone, and the loss of happiness. There is room to grow and to improve. Just because you are in your 40s does not mean that you have no more time to finally meet the best version of yourself.

You can do this. You can find the answers to your menopausal problems. Yes, I call them *menopausal* problems rather than hormonal problems because your life is not upside down or a disaster, and you are much more than your hormones. You are a full woman with a full life. You just need to believe that there is a better version of your life and your body. Believe in yourself.

I hope this book taught you how to find the power and knowledge needed to transform your life and maintain balance by balancing your hormones. If you have learned anything from this book, please let me know by leaving a review. Your voice and experience matter

just as much as mine and every other woman out there. I would love to hear from you and learn more about the thoughts and feelings you have had throughout your reading of this book.

All the Best,

Louise H. Grant

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# **Bonus Book**

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# **Menopause Relief**

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*The Most Effective Therapies and  
Alternatives that Will Alleviate Severe  
Symptoms*

**Louise H Grant**

H|N



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# Table of Contents

---

## Introduction

### Menopause Stories

#### There is Nothing to Fear

## Part One: Understanding Menopause

### Chapter 1: Two Approaches to Menopause

#### Menopause Hormone Therapy (MHT)

##### What Is It?

##### The Basic Kinds of MHT:

##### Systemic Hormone Therapy

##### Cyclical MHT

##### Continuous Combined Therapy (CCT)

##### Estrogen Only MHT

##### Tibolone

##### Long-Cycle MHT

##### Testosterone

##### Low-Dose Estrogen Vaginal Products

#### 2. Alternatives to MHT

##### Integrative Medicine

##### Functional Medicine

##### Mind-Body Practices

##### Natural Products

##### Whole-System Approaches

#### Allopathic or Alternative Health

##### Owning Your Own Health

## Chapter 2: Gut Health: Setting a Foundation For Relief

The Microbiome

What Can a Healthy Gut Offer Us On the Menopause Journey?

The Endocrine System

How to Have a Healthy Gut

Eat a Healthy Diet

Take a Daily Probiotic

Avoid Antibiotics Whenever Possible

Lower Your Stress Levels

Get Enough Sleep

Inflammation and the Gut

Bone Health

Muscle Health

Joint Health

Brain Health

Weight Gain

Important Supplements to Prevent Inflammation

Vitamin D

Boron

Omega-3 Fatty Acids

Turmeric/Curcumin

Resveratrol

Glutathione

The Connection Between Menopause, a Healthy Gut, and Immune Function

## Chapter 3: Looking at Hormones in Menopause

Estrogen, Progesterone, and Testosterone

Estrogen

Estradiol

Estriol

Estrone

Progesterone

Testosterone

Dehydroepiandrosterone (DHA)

Cortisol

Pregnenolone

Stages of Menopause

Perimenopause

Menopause

Postmenopause

Part 2: Relief Remedies

Chapter 4: Menopause Hormone Therapy (MHT) or Holistic Therapy?

Is Menopausal Hormone Therapy Right For You?

Who Can Benefit from MHT?

Who Should Avoid MHT?

When to Stop Taking MHT

Side Effects of MHT

The Risks of MHT

Criticisms of MHT

A History of the Concerns of MHT

Holistic Options

Mind-Body Interventions

Hypnosis

Cognitive Behaviour Therapy (CBT)

Biofeedback and Relaxation Training



Mindful-Based Stress Reduction (MBSR)

Aromatherapy

Herbal Products, Vitamins, and Supplements

Whole System Alternative Medicine Approaches

Homeopathy

Reflexology

Acupuncture

Traditional Chinese Medicine (TCM)

Vaginal Steaming

Hyperbaric Oxygen Therapy

Lifestyle Changes

Exercise

Diet

Mental Health

Practical Measures

Sun Exposure

Smoking

Chapter 5: Symptoms of Menopause

Vasomotor Symptoms (VMS): Hot Flushes and Night Sweats

Abnormal Bleeding

Loss of Bone Mass

How to Diagnose Osteoporosis

Brain Fog

Depression

Alzheimer's and Dementia

Genitourinary Symptoms of Menopause (GUSM)

Urinary Problems

Lack of Sexual Interest/Desire

Insomnia

What Are the Therapies?

Treatment for Hot Flashes

Treatment for Osteoporosis

Exercise

Calcium and Vitamin D

Medications to Reduce Bone Loss

Treatment for Brain Fog

Treatment of Dementia

Treatment for Symptoms of GUSM

Treatment for Urinary Problems

Treatment for Insomnia

An Evaluation of What Works

Chapter 6: Stress Relief

Methods Recommended by the Medical Profession

Cognitive Behavior Therapy (CBT)

Alternative Therapies

Meditation

Mindfulness Meditation

Transcendental Meditation

Guided Meditation

Vipassana Meditation

Loving Kindness/Metta Meditation

Chakra Meditation

Yoga Meditation

Forest Bathing or “Shinrin - Yoka”

Grounding

Benefits of grounding

Breathwork

Breathwork Methods

Sound Healing

Lymphatic Drainage Massage

Float Therapy

Exercise for Stress

## Chapter 7: Supplements for Menopausal Symptoms

### What Does Research Say About Supplements?

Black Cohosh (*Cimicifuga racemosa*)

Wild Yam (*Dioscorea*)

Dong Quai (*Angelica Sinensis*)

Maca (*Lepidium meyenii*)

Evening Primrose Oil (*Oenothera biennis*)

Vitex/Chasteberry

Ashwagandha

Ginseng

St. John's Wort

Phytoestrogens

Pollen Extract or Bee Pollen

Himalayan Salt

Sea Moss/Irish Moss

Cannabis

Vitamin E

Vitamin D

Vitamin C

Magnesium

B Vitamins

Bioidentical Hormone Therapy (BHT)

What the Research Says

Chapter 8: Mental and Emotional Health

Menopause As an Emotional Rollercoaster

Treatment Modalities

Medical Treatment of Depression

Antidepressants

Psychotherapy

Group Therapy

Holistic Mental Health Treatments

Neurofeedback

Transcranial Magnetic Stimulation (TMS)

EMDR Therapy (Eye Movement Desensitisation and Reprocessing Therapy)

Mental Health Apps: The Switch App

Relaxation Techniques

Acupuncture

Exercise

Improve Gut Health

Lifestyle Mental Health Tips

Support Groups

Conclusion

Using the Information You Got From This Book

The Intricate Relationship Between the Biological, Psychological, and Social Aspects of Menopause in a Woman's Life

References

# Introduction

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I would suddenly wake up in the middle of the night with a pounding heart feeling a rush of panic, then the hot flush would come. It felt so uncomfortable and seemed to last forever and nothing I did would help. I would battle to fall back asleep.

During the day I would feel that same panicky adrenaline rush and would brace myself for the hot flush that would surely come again. I would suddenly get very flushed in the face and sweaty and feel very self-conscious if I was in the middle of having a conversation with someone, or even worse, teaching a class of 30 children! I would have days when this happened every 30 to 40 minutes.

It seemed to me like I was on my own in this situation, and there was nobody to talk to about it. Even women who had been through menopause themselves seemed to be reluctant to talk about it or had no real solutions for me. Certainly, nobody seemed to have had as much of a problem as me!

I didn't want to take hormones, so I tried random natural remedies without really knowing what I was taking, or why. I became more and more desperate as the years (yes, **years!**) went by. I eventually hit on the right solutions for me, and the difference in how I felt was like night and day.

I still sometimes miss having periods and knowing that I'm still fertile. A weird kind of sadness. But I'm learning to celebrate my new state and appreciate it as a special and natural part of life's journey.

I don't want anyone else to suffer in silence with no guidance for so long before navigating their own personal solution. And it does seem to be a very unique, personal journey. It's different for everyone, yet exactly the same.

Let's join forces and share our experiences and solutions openly on this potentially positive and beautiful rite of passage. Menopause is talked about as The Change, and maybe we should change how we think and feel about it. Let's start sharing stories of the joys of menopause—stories of freedom, love, and self-acceptance.

Let's also see this change as good. There's no way to prevent it from happening anyway!

## Menopause Stories

On the AARP website, Rhonda Burgess wrote a blog in the Disrupt Aging section titled, “Why We Should Celebrate the Joys of Menopause.” In it, she tells the story of deciding to follow a friend’s advice about going into perimenopause and avoid reading about all the negative accounts of it—the depression, weight gain, hot flushes, lowered libido, etc.

She instead decided to focus on the positive aspects like no more periods and birth control and to surrender herself to any changes that were going to come her way.

Of course, not all of the changes in menopause feel positive or good. Rhonda found the sudden onset of hot flushes a bit annoying and alarming, but she coped with them by accepting them.

She also decided to accept the changes in her body’s appearance like less taut skin and lowered breasts rather than dwelling on and worrying about them. Instead of letting those changes affect her confidence in herself she focused on the positives, like the fact that she hadn’t gained a lot of weight, and decided that she still had plenty going for her. With her newly found confidence in her body, she even started having the best sex of her life!

Another optimistic account of menopause from Kim, aged 54, is cited in repeller.com (2018). After suffering from endometriosis and fertility issues most of her life, she felt that menopause was a breeze.

She had always had bad cramping, nausea, and diarrhea with her periods. The pain from endometriosis was so bad, she had to have a few operations for it. She also endured many unpleasant interventions for her fertility issues, though these treatments ultimately allowed her to conceive three children. By the time menopause came around, it was a welcome change from the issues she’d had. Once her irregular periods that she had in perimenopause stopped, she started having mild hot flushes, which she described as more of a warm feeling, and they never lasted for long. She also sometimes started waking up in the middle of the night and had difficulty going back to sleep, but this didn’t last that long and she didn’t see it as such a big deal.

This is not to suggest that all women will have such mild symptoms or even feel positive about the changes to come. It’s just meant to give you hope. Menopause does not have to be as miserable as some people make it out to be. In fact, even if you are suffering severe symptoms, there are so many options for treatments that there is still hope.

Heidi Houston, director of the film “Hot Flash Havoc”, shared that, during menopause, she had terrible joint pain in her hips and ankles and difficulty walking in the mornings.

She also had depression, dry eyes, heart palpitations, headaches, and mood swings. She gained lots of weight in a short time and suddenly developed high cholesterol. She was struggling to cope, but when a doctor recommended hormone therapy, she finally got some relief from her symptoms and started to feel like herself again.

Michelle, 53, also had a more difficult time with severe hot flashes, insomnia, and changes in physical appearance and mood. Her hot flashes came unexpectedly and would happen at any time of the day. When they did, she felt like her body had heated up to 120 degrees. She was also often woken up at night with bad night sweats. She found it difficult to cope with and didn't talk to many people about it, so got very little support, and she felt pretty powerless about the things that were happening to her.

When she was diagnosed with hormone depletion and put on estrogen and progesterone, all her symptoms disappeared, and she started feeling like the person she was three years before. Perhaps if she'd had some support, she could have gotten help even sooner. That's why it's so important for us to start opening up and talking to each other about it, and to erase the taboo.

While the challenges of menopause and all the mysterious symptoms that come with the change shouldn't be sugar-coated, they seem less daunting when we have a supportive community that can talk openly about it and express how they're feeling.

Another thing that helps is to empower ourselves with the right information to cope with the different symptoms and understand what is happening in our bodies.

### ***There is Nothing to Fear***

Although it's a historically uncelebrated chapter in a woman's life, lots of women are thrilled to arrive at menopause. It means an end to pregnancy scares, bloodstained panties, monthly cramps, and mood swings, etc.

Women need to share their different experiences of menopause, whether or not they think they are unusual. Talking to friends and laughing about it sometimes puts it into perspective, and some people go through a lot more than others.

Never feel embarrassed or inferior about what's happening, even if you're hesitant to talk about sexual aspects of it. You need that communication and support and you will feel less alone.

Talking to your doctor about concerns is important too, and if you feel you can't, change doctors. There has been so much useful information and advice written about menopause, but we don't always need to see our bodies as a diagnosis.

This book provides information on what symptoms you can expect in menopause and what to do about them. You have many choices in the way you want to handle menopause. There is the conventional, allopathic approach that doctors recommend, and the non-conventional, holistic route. This book outlines both in an objective way so that you can make your own choices on what would be best for you. It may even mean that you follow a combination of traditional and alternative approaches to get the results you want.

We also explore the emotional/psychological aspects of menopause in depth. There are aspects of it that are incredibly hard but you can also transform your life during this time, and experience it as freeing, a time to say no more often, to be unapologetic, and to enjoy life.



# **Part One: Understanding Menopause**

## **Chapter 1: Two Approaches to Menopause**

It's important to remember that menopause is not a diagnosis of something that is wrong with you, but a normal part of life, and there are many ways to manage the changes it can bring. One option is the conventional, medical route, which often includes hormone treatment; another is an alternative route that focuses on using natural, holistic remedies and therapies. It is also possible to combine conventional medical treatment with holistic treatment or use one approach for a short time. Both have their place and can be used together or apart.

Some women may choose the alternative route because they have a philosophy that natural methods are better and already use them in other areas of their healthcare, or they do not want to risk the possible side effects of hormone therapy, like breast cancer and heart disease. Other women may not find natural remedies effective for them and will choose to go the conventional route. There are many options for women who wish to go either route in terms of both therapies, supplements, and lifestyle factors.

Lifestyle factors like diet and exercise have major influences on menopausal symptoms and can be implemented to prevent and treat a host of them, no matter which route you choose. Let's explore conventional medical therapy first.

### **Menopause Hormone Therapy (MHT)**

#### ***What Is It?***

Conventional medical treatment for menopause usually includes a hormone therapy prescribed by doctors called Menopause Hormone Therapy (MHT), formerly known as Hormone Replacement Therapy (HRT). The name was changed because "hormone replacement" falsely implied that low levels of estrogen and other hormones are biologically abnormal and are missing because of a medical problem, when in reality, it is perfectly normal to experience declining levels of

estrogen during menopause. Calling it “hormone therapy” instead correctly implies that the therapy is a hormone intervention, not a replacement for something that the body was never producing properly. There are known side effects to MHT but it can improve the quality of life for many women. Apart from relieving the physical symptoms of menopause like night sweats and joint pains, it can also alleviate the mental health symptoms like anxiety and depression that can sometimes accompany menopause.

With the hormones estrogen and progesterone falling at menopause MHT is a medication that replaces it to treat symptoms like hot flashes, night sweats, vaginal dryness, reduced libido, and mood swings. Many of these symptoms pass within a few years but can be unpleasant and life-disrupting, so MHT, of which there are 50 types, can provide almost immediate relief from them.

For best results, MHT is customized to suit each individual and it’s also important that the regimen is reviewed regularly so that benefits continue to outweigh risks.

## **The Basic Kinds of MHT:**

### ***Systemic Hormone Therapy***

This is a high dose of estrogen that is absorbed throughout the body. It treats common menopausal symptoms and comes in different forms: pills, gel, ring, skin patch, or spray.

There are different MHT treatment plans, and you can take it continuously without stopping, or use it in cycles where you use estrogen continuously and progesterone-only every few weeks. You may need to take more than one type before you find the MHT that suits you best.

### ***Cyclical MHT***

This mimics the menstrual cycle. At the end of each course of progesterone (the synthetic form of progesterone), there is some

bleeding as the uterus lining (endometrium) is shed. Progestogen protects the endometrium from precancerous changes.

### ***Continuous Combined Therapy (CCT)***

This is a combination of estrogen and progestogen allowing period-free MHT, unlike cyclical MHT, where a bit of bleeding occurs. Women often start on cyclical MHT and change to CCT later.

### ***Estrogen Only MHT***

This is prescribed for women who have had a hysterectomy as progesterone is only necessary to protect the lining of the womb.

### ***Tibolone***

This is a tablet form of synthetic MHT that is period-free and similar to CCT. It can be used for women with an intact uterus with no risk factors for breast cancer, as MHT has been associated with causing this cancer. If a woman has a family history of breast cancer, or has had breast cancer herself, then these risks should be weighed against the benefit of treatment.

### ***Long-Cycle MHT***

This kind of MHT causes withdrawal bleeding every three months instead of every month and is used when women have side effects from taking a progestogen. It does have a questionable safety record though.

## ***Testosterone***

This can be taken in gel or implant form to treat decreased libido.

## ***Low-Dose Estrogen Vaginal Products***

Atrophic vaginitis can happen with the vagina becoming delicate and dry with declining estrogen. These products minimize the amount of estrogen delivered to the body and are used mainly to treat only the vaginal or urinary symptoms of menopause. They come in cream, ring, or tablet form.

## **2. Alternatives to MHT**

Research shows that only a small minority of women are getting the medical care that they deserve. A review of insurance claims done by Yale University showed that 60 percent of women with menopausal problems go to doctors for medical attention, but nearly three-quarters of them are left untreated.

Doctors can be unhelpful because they often lack training and don't keep up to date with research. Most medical schools don't teach their residents about menopause and the courses are mainly elective. Eighty percent of medical residents report feeling "barely comfortable" discussing or treating menopause. This means that a lot of women are suffering needlessly.

Apart from the relief of symptoms, women need to get the proper treatment, and if menopause is properly managed and the right treatment is given from the beginning it lowers a woman's risk for many common life-threatening diseases that can happen in later life. A study done in 2017 found that if a woman has severe and long-lasting hot flashes and night sweats, she is at greater risk for developing type 2 diabetes.

Other studies show the increased risk of osteoporosis, heart disease, and cognitive decline in menopause if untreated, indicating that menopause can accelerate aging. A key neuroprotective element in the female brain is lost during menopause and a woman is more vulnerable to Alzheimer's and brain aging. Many women live a third of their lives in this state without being prepared for it and without any help.

According to the North American Menopause Society (NAMS), 75% of women experience distress with the symptoms of menopause, and for 20% of these women, these symptoms (especially hot flashes and night sweats) are so severe that they impact every meaningful area of their lives, such as work, sleep, and relationships. Severe symptoms can last for seven years and 15% of women who get hot flashes can have them for more than 15 years.

Medical menopause management is a skilled subspecialty and it requires a deep understanding of how falling hormones affect the body and detailed medical history. It may not be an area as profitable as surgery or delivering babies for the medical profession.

Jo Pinkerton from NAMS says, “It can be hard enough to be menopausal. Women deserve to have a provider who understands menopause and can guide them through it” (AARP.org,2018).

If you can't go on MHT because you have, for example, had breast or uterine cancer, you can find a holistic remedy (or a combination of them) to help you through menopause. Fortunately, there are many to choose from and many good alternative health practitioners.

There are two main approaches to treating health—integrative and functional medicine, which also overlap.

### ***Integrative Medicine***

Instead of treating just the symptoms of a single health problem, integrative medicine aims to heal the entire body. Integrative medicine is a holistic approach that combines traditional and alternative therapies. The entire person is looked at body, mind, and spirit, rather than focusing on one health problem. It aims to make the person happier and healthier generally.

The different aspects that are looked at and that work together are physical, mental, emotional, social, and environmental influences. Health problems arise when issues are found in one or more of the areas.

Examples of integrative medicine are regenerative medicine, nutritional therapy (including herbal medicines, supplements, and naturopathic medicines), medication reduction therapy, and detoxification therapies. Sometimes these treatments are used with traditional treatments to increase their effectiveness and speed it up.

## ***Functional Medicine***

Functional medicine focuses on the optimal functioning of the body by looking at the functioning of each organ of the body. It has more of a personalized approach as it recognizes that each person is different in terms of biochemical makeup and genetics. This personalized approach starts with diagnosis and continues to treatment. It relies on scientific evidence and testing to reach an understanding of all factors.

Functional medicine explains menopausal symptoms by digging deeper than the simple explanation of symptoms occurring just because of low estrogen levels. The interplay between estrogen and other bodily functions is examined.

For example, if your levels of adrenaline are high (you are stressed out a lot of the time), even a small drop in estrogen may trigger a hot flash or another symptom. So many of us are living very hectic lives, constantly stressed out so our adrenal hormones tend to be out of balance. As a result, as soon as estrogen levels fall we get a cascade of different things that happen in the body, which trigger hot flushes. So a functional medicine doctor will look at adrenal function at the same time as estrogen levels to relieve symptoms like hot flushes.

Similarly, we can get hot flushes related to our diets and they can be triggered by sugary or starchy foods, which cause our glucose levels to shoot up, which makes insulin kick in to control them. Cortisol from the adrenal glands rises at the same time as insulin. When there is no estrogen to balance the rise in insulin, it can trigger the same flushes that adrenaline can.

Sometimes as soon as a woman changes her diet, it's enough to alleviate her menopausal symptoms. For our bodies to make hormones and our liver to process them correctly we need a wide range of nutrients including B vitamins, zinc, magnesium, and selenium. We also need antioxidants like vitamin C, A, and sulfur from garlic and onions, and enough of the right kind of proteins.

While conventional gynecologists often don't raise these topics with their patients because they weren't taught about nutrition in medical school, functional medical practitioners see the big picture and then look at individual aspects of it. Instead of focusing on treating symptoms, they find ways of normalizing and optimizing the body's mechanisms.

Functional medicine empowers patients and practitioners to work together to reach optimal wellness and to discover what the underlying causes of disease are. As root cause is looked at, rather than just symptoms, the complexity of the disease is identified and you may find that one condition has many different causes, and correspondingly, that one cause can result in different conditions.

With functional medicine, natural supplements are used whenever possible to correct problems, and traditional medicine is also used only when necessary. This branch of medicine uses lifestyle changes to address health issues like diet, exercise, healthy sleeping patterns, controlling stress, etc.

Therapies used in functional medicine may include acupuncture, massage, chiropractic and osteopathic medicine, naturopathy, tai chi, yoga, and other body movement therapies.

**We can also divide alternative health into three broad categories:**

### ***Mind-Body Practices***

Hypnosis

Cognitive Behavior Therapy (CBT)

Relaxation

Biofeedback

Meditation

Aromatherapy

### ***Natural Products***

Herbs

Vitamins and minerals

Dietary supplements

### ***Whole-System Approaches***

Traditional Chinese medicine

Reflexology

Acupuncture

Homeopathy

## **Allopathic or Alternative Health**

There are many reasons people decide that they would prefer to use alternative medicine:

- They may have misgivings about conventional treatments.
- They prefer having more autonomy and control over their own health care.
- Alternative therapies may be more congruent with their value systems.

A study was done in the US in 1998 with 1035 randomly selected subjects to determine what kind of people prefer using alternative medicine. The main factors that influenced them to do so were higher education levels, poorer health status, and the fact that they identified with the values, philosophies, and beliefs of the therapies.

### ***Owning Your Own Health***

Although there are so many remedies for menopausal problems, both conventional and holistic, it is possible to find out about your options, make informed decisions, and be an active participant in your healthcare.

A woman can choose to use only allopathic, or only natural remedies for various reasons, or even to combine the two modalities to treat all the symptoms she experiences.

Menopause is a natural biological process and so not to be seen as a problem that needs to be solved. Symptoms like hot flashes and night sweats will decrease over time and disappear without any treatment. If your symptoms aren't too severe, natural remedies can help at this time.

Not all complementary and alternative medicine (CAM) is safe or effective though and women need to inform themselves about the risks and benefits of CAM. It can be quite a challenge to do so because there aren't always reliable sources on the internet. We can look at studies that have been done on all the treatments critically and choose remedies based on their safety and efficacy.



# **Chapter 2: Gut Health: Setting a Foundation For Relief**

The connection between a healthy gut microbiome and female hormones is a trending topic, but a fairly new one that we can now study more in-depth due to technological advances. We now know that the digestive system is not a “simple” body system made up of simply a long tube for our food to pass through, get absorbed and digested, and then passed out of the body.

Although we still have questions about the role of the gut microbiome and menopause, we know that gut health and overall health are linked, and hormone levels influence the make-up of the microbiota in many sites of the body. There are ways we can look after our gut and boost its health during menopause.

## **The Microbiome**

The microbiome is made of billions of bacteria, viruses, fungi, and other life forms that live in a complex ecosystem in our guts. They are also found in our digestive tract, mouth, respiratory tract, nose, and genitals. Major bodily functions like digestion, immunity, and brain function are regulated by these bacteria. These microbes are very small, making up only 2 to 3% of the total body weight of the human body, yet outnumber the cells in the body. (There are 10 times more microbial cells than human cells.)

Sustained wellness and clean living can help our gut microbiome remain balanced so that it contains many beneficial bacteria. Gut health is especially important to menopausal women because they are prone to issues like depression, anxiety, and acid reflux, which are some of the results of an unbalanced diet.

## **What Can a Healthy Gut Offer Us On the Menopause Journey?**

It does many things from:

- Maintaining the body's homeostasis.
- Breaking down complex carbohydrates to optimize the energy extraction from food.
- Fighting pathogens.
- Producing short-chain fatty acids, vitamins, and minerals.
- Helping in digestion and absorption and maintaining our gut integrity.
- Fermenting dietary fibers.
- Metabolizing drugs.
- Providing anti-inflammatory responses and secretions when the body needs them.
- Acting as an endocrine organ.

### ***The Endocrine System***

This is a network of glands in the body that produces hormones. The microbiome acts as an organ of the endocrine system and some gut bacteria produce hormonal chemicals that travel through the body to the brain.

We used to think that during perimenopause the only thing that was happening in a woman's body was the gradual reduction of estrogen, but the gut plays a vital role as it regulates the levels of estrogen.

There is a subset of gut bacteria called the “estrobolome” that works to metabolize estrogens. This maintains homeostasis, a healthy and balanced gut. When it's unbalanced either too much or too little estrogen is produced and this is where estrogen-related health problems can happen, like menopausal symptoms.

If the gut is unbalanced and in a low-estrogen state we can expect issues like obesity, cardiovascular disease, and increased risk of osteoporosis. Falling estrogen levels also cause an imbalance of the gut microbiome, causing weight gain around the middle and IBS.

# How to Have a Healthy Gut

## *Eat a Healthy Diet*

The gut responds very quickly and favorably to the right foods, with processed foods being the most destructive to it.

The four types of food for gut health are:

- High fiber: Legumes, beans, oats, berries, bananas, asparagus, peas, and leeks. The recommended amount of fiber to eat is 25 g per day to give the following benefits: It prevents and reduces constipation, stabilizes blood sugar, reduces total cholesterol and LDL cholesterol (the bad kind). Fiber has a positive effect on estrogen in the body, reducing the risk of breast cancer. It is also anti-inflammatory and has a positive effect on the gut microbiota. Many fiber-rich foods are prebiotics that encourage healthy bacteria in the gut to grow. Research has also shown lower rates of cardiovascular disease, colon cancer, and type 2 diabetes with high fiber diets.
- Garlic and onion: These are anti-cancer and immune-system enhancing.
- Fermented foods: Sauerkraut, kimchi, kombucha, and kefir. These have live probiotic strains that can replace bacteria quickly.
- Collagen-boosting foods: bone broth, salmon, mushrooms, good dairy (unpasteurized milk from grass-fed cows), and certain meats. Collagen has anti-inflammatory properties and repairs the intestinal lining.

To digest food properly, chew well, and be in a relaxed state while eating so that gastric juices that are needed to absorb food are produced.

## *Take a Daily Probiotic*

Probiotics are microorganisms that help to balance the gut with “good” bacteria. Get a reputable brand, especially one with multiple strains, with most containing Lactobacillus and Bifidobacterium strains, which work in different ways.

Make sure that it is organic, non-GMO, and has no additives. Most probiotics need to be stored in the refrigerator.

Colony-forming units (CFUs) exist in different amounts, from 1 to 50 billion or more. A higher amount isn't necessarily better as manufacturers only need to list the total number of microorganisms, including live and dead ones. Only live ones can benefit your health so instead look for products that list the number of CFUs at the end of the product's shelf life at the time of manufacture.

Also, eat prebiotics to support the efficiency of the probiotic. They are specialized fibers that act as food for the good bacteria and you find them in asparagus, garlic, onions, mangoes, and artichokes.

It's especially important to protect your gut microbiota with probiotics if you have had surgery or have been exposed to chemotherapy or heavy metals. Exposure to heavy metals is possible through diet and is found in polluted air, water, and soil.

### ***Avoid Antibiotics Whenever Possible***

Often we take antibiotics when we don't need to and doctors often overprescribe them. Antibiotics kill all bacteria, even the good ones, which may take a while to replenish, putting your health at risk. If the issue or infection is not too serious, try to deal with it by resting, drinking plenty of fluids and raw juices, and taking probiotics.

### ***Lower Your Stress Levels***

Chronic stress is hard on the gut, so when you feel stressed, try to make time for yourself to do whatever relaxes you, like reading a book, taking a hot bath, or spending time with friends. You can also try relaxation techniques like meditation, walking, or doing yoga to help calm you.

### ***Get Enough Sleep***

Sleep deprivation causes microbes and serotonin in the gut to be depleted. Research done in Japan has shown that gut bacteria could influence normal sleep patterns by creating serotonin and dopamine (both important chemical messengers) in the brain. These findings suggest that diet can be altered to change sleeping patterns.

## **Inflammation and the Gut**

Inflammation has been identified in many aging disorders, and menopause can lead to increased gut permeability and inflammation, which leads to other conditions like lower bone mineral density, deteriorating muscle and joint health, and declining brain health. Hormones have anti-inflammatory effects and when our levels drop we can experience these issues.

Dysbiosis (imbalance of the gut microbiome) is closely related to metabolic and immunological inflammatory diseases like lupus, rheumatoid arthritis, type 2 diabetes, and heart disease.

### ***Bone Health***

After food has been digested by the stomach and small intestine, most nutrients have been absorbed and what is left behind are undigested carbohydrates and proteins. A healthy gut microbiome will ferment these in the colon, and produce short chain fatty acids (SCFA). These SCFAs protect us from bone loss and regulate the formation of new bone by releasing minerals that we can then absorb more easily.

Bones have both osteoblasts that form new bone and osteoclasts that help to grow and heal bones. Osteoclasts are on the bone surface and they break down bone tissue and release minerals into the blood in a process called resorption. This sustains blood calcium levels, and we need it, but it can also lead to fragile bones if left unchecked. Healthy gut microbes can increase bone mass and prevent or improve osteoporosis by promoting new bone and reducing bone resorption.

T-cells (a type of white blood cell) will use interleukin-6 (IL-6) (a kind of protein produced in the body when there is inflammation) to prolong the life of osteoclasts, but if they are left to break down more bone than they should, they get weak and brittle. If we have estrogen it will inhibit IL-6, preventing this from happening. Less estrogen will also make bones more sensitive to the effects of parathyroid hormone (PTH) which also increases the effects of bone resorption.

Oral health also increases if women have higher levels of estrogen. This is related to the decreased bone density common in menopause, but there is also the risk of periodontitis (chronic inflammatory gum infection) at this time.

The gut microbiota also influences bone homeostasis and studies have been done that show women who consumed fermented milk with good bacteria increased their calcium absorption, which is important for bone health.

### ***Muscle Health***

Estrogen and its precursors (or forerunners) DHEA and pregnenolone also contribute to muscle mass and strength and that is why postmenopausal women often have a decline in muscle mass. Compared to men of the same age, they show a reduced muscle response to the same nutrition and training.

A healthy gut microbiome has a positive effect on skeletal muscle growth and mass, with a connection from the gut to skeletal muscle called the “gut-muscle axis.” A balanced gut has a positive effect on the synthesis of muscle proteins. It also protects against age-related muscle loss and lowers inflammation in the muscles, enhancing immune function.

### ***Joint Health***

Estrogen regulates fluid levels in the body, so if levels are low the body becomes less able to hold water, which affects all joint tissues like cartilage (which is 80% water), ligaments, and tendons. The flexibility and lubrication of tissues are impaired, and together with inflammation, cause joint pain.

Estrogen also inhibits an enzyme (cyclooxygenase-2) that causes inflammation in joints. This is why there is a connection between low estrogen and inflammatory conditions like arthritis and osteoarthritis. When estrogen and other hormones decrease, the protective effects on joint cartilage are reduced, making them more vulnerable to inflammation.

Joints like the hips and knees that are involved in high-impact movements tend to be most affected as can the neck, shoulders, elbows, hands, and fingers.

Specific microbes like *Lactobacillus* and *Bifidobacterium* inhibit the inflammatory response, and changes in gut microbiota and disruptions in the walls of the intestine cause inflammation. A healthy gut can prevent these occurrences, because when we have a healthy gut, the presence and growth of proinflammatory cytokines and bacterial metabolites are inhibited or controlled, preventing joint diseases.

## ***Brain Health***

With millions of nerves and neurons connecting the brain and gut, by changing the type of bacteria in the gut we directly influence brain health. The microbiome can be thought of as a miniature world inside your gastrointestinal tract, and when all is right with this world, your body is better for it. You have more neurotransmitters in the gut than in the brain, especially serotonin (70% of which is made in the gut) that is the “feel-good” hormone that influences mood, memory, and sleep. When your gut is out of balance you can become anxious and depressed.

Estrogen also helps to keep neuroinflammation in check. The risk of neurodegenerative diseases like Parkinson’s, Alzheimer’s, and Multiple Sclerosis can increase when there is chronic neuroinflammation. Specialized cells are activated to produce anti-inflammatory cytokines and remove damaged neurons, but if the brain and nervous system are in this constant state the brain is left unprotected and more minor conditions can happen, like brain fog.

The hormone pregnenolone is a “neurosteroid” that regulates memory and mood and has neuroprotective, neurogenesis, and neuroplastic roles. If this hormone is low we can get depression, memory problems, and fluctuations of other hormones, like estrogen.

DHEA, a hormone that is produced by the adrenal glands can also cause cognitive decline and conditions like dementia, and Alzheimer’s.

A study published in the *Journal of Clinical Psychiatry* has found that there is more of a likelihood of a person having depressive symptoms if she has levels of a specific inflammatory molecule called GlycA.

Another effect of inflammation coupled with excess weight is low cerebral blood flow and brain activity. Fat cells can increase inflammation and store toxins that can damage the brain.

It has also been found that the perimenopausal state prompts an intrinsic inflammatory response to the female reproductive organs that spreads to the brain, making it more susceptible to damage.

Many studies show that as women go into menopause there are increases in systemic and vascular inflammation, especially amongst women who lead a sedentary lifestyle and have a high carbohydrate intake. These women have chronic low-grade inflammation as seen by raised levels of C-reactive proteins. Their biomarkers for inflammation were improved within three months if they were obese and lost weight.

## ***Weight Gain***

Women with balanced hormones before menopause tend to gain weight around their thighs and buttocks. After menopause, this shifts to visceral fat in the abdominal area. This is highly inflammatory and can cause high levels of inflammatory cytokines that cause issues like type 2 diabetes and Alzheimer's.

A healthy gut microbiome changes estrogen to a bioavailable form that can be taken up by the tissues. This helps to keep weight down, improves glucose tolerance, and reduces abdominal fat. Estrogen decreases inflammation in the body by producing an enzyme that binds with "Gram-negative" bacteria that can damage your gut lining and allow pathogens to cross to the rest of the body.

## **Important Supplements to Prevent Inflammation**

### ***Vitamin D***

This is both a fat-soluble vitamin and a hormone that helps with calcium absorption and bone growth. It also reduces inflammation, boosts immunity, cell growth, and neuromuscular function.

Our bodies can also convert vitamin D from sunlight, especially if we go out between 11 am and 2 pm, but the body's ability to do this declines with age. Most people are deficient and need to supplement it, but it's found in tuna, cod liver oil, salmon, swordfish, eggs, and beef. It's important to take a vitamin D supplement in winter in certain parts of the world due to lack of sunlight. It's also important to get your vitamin D levels tested to see if you have a deficiency, but also to see if your levels are too high as this can be toxic.

### ***Boron***

This is a mineral that is found in green leafy vegetables like kale and spinach, but can also be found in prunes, non-citrus fruits, raisins, dried beans, and coffee. It also plays a role in bone health and prevents loss of calcium and bone demineralization. It reduces urinary



excretion of calcium and magnesium and can increase serum levels of calcium, estradiol, and testosterone in peri and postmenopausal women.

It also plays a role in brain health and helps you to absorb important vitamins and minerals. It extends the half-life of vitamin D and estrogen, allowing them to last longer in the body.

### ***Omega-3 Fatty Acids***

These are polyunsaturated acids that your body cannot make on its own so you have to get them from your diet. There are three important types:

ALA (found in flaxseeds, walnuts, hemp, and chia seeds), DHA (found in fatty fish and fish oil, meat, eggs, and dairy from grass-fed animals, and EPA (found in fatty fish, fish oil, and some microalgae).

Omega-3s are very important for inflammatory conditions and brain health.

### ***Turmeric/Curcumin***

Curcumin is a very powerful anti-inflammatory found in the yellow spice Turmeric. It has antioxidant properties, can improve brain function, and treat neurological conditions like Alzheimer's and depression, as well as type 2 diabetes.

### ***Resveratrol***

This is one of the plant polyphenols found in the skins and seeds of red grapes and berries. It acts as an antioxidant and strong anti-inflammatory. It can reduce pain and improve cognition and mood.

### ***Glutathione***

This is a potent antioxidant found in all human cells and tissues and is often depleted as we age. It activates the other antioxidants C and E and can lower oxidative stress and

inflammation, and help in preventing osteoporosis and cognitive issues. Some foods are naturally high in glutathione like spinach, avocado, okra, and asparagus. It is also in whey protein and in foods high in sulfur like broccoli, kale, and watercress. You can also take a supplement of this antioxidant.

## **The Connection Between Menopause, a Healthy Gut, and Immune Function**

The immune system is a group of cells, organs, and proteins that protect our bodies from harmful foreign invaders like viruses, germs, fungi, and pathogens. It acts as the body's first line of defense against harmful environmental or pathogenic substances by identifying and neutralizing them when they find their way into our bodies.

There are two parts of the immune system: the innate system and the adaptive immune system. Non-specific pathogens that enter the body are defended by the innate immune system. It does this via cells called "killer" cells and phagocytes that engulf and eat pathogens that find their way into the body through the mouth, skin, and nose.

Pathogens that have already entered the body are dealt with by the adaptive immune system (also called the acquired or specific immune response). This system learns to defend the body over time as it adapts to changes in bacteria strains and viruses.

The immune system as a whole gets activated when the body doesn't recognize something as belonging to it. When proteins on the surface of bacteria, viruses, and fungi called antigens get into the body, the immune system responds to these "invaders" by attacking them. Once an antigen is identified by the immune system it is also remembered for future reference and, in this way, immune cells will know what to do if a germ reappears. When the immune system is malfunctioning or weak it can confuse our own healthy cells with antigens and attack them, causing us to become ill.

To keep the immune system healthy, it is important to understand how it interacts with the gut. 70-80 percent of the immune system resides in the gut and it is interconnected with gut bacteria. We can be seen as the host surrounded by other species that live with us. Symbiosis exists between human cells and microbial units and we have co-evolved with the introduction of bacterial (prokaryotic) cells into human and animal (eukaryotic) cells.

Together with the microbiota, the immune system and the gut have a symbiotic relationship, working together to protect the body and get rid of any harmful pathogens.

This interaction starts at birth when a baby comes into contact with bacteria in the birth canal.

The gut and immune system then support each other throughout a person's lifetime to keep it healthy. The diversity of the microbiome formed by the immune system, together with other factors like diet, lifestyle, and the environment shape the make-up of the gut flora.

When the gut and immune system are functioning well together the body is equipped to tolerate harmless bacteria and to deal with pathogens, so an autoimmune response can be prevented and overall well-being is ensured. It includes lymph nodes that trap microbes and filters blood. It also regulates our body's thermostat that destroys pathogens by causing our temperature to rise.

An unbalanced gut where the beneficial bacteria are compromised is often the underlying cause of many menopausal symptoms from acid reflux to depression. There is often inflammation in the body and a complex interplay between immune health and the gut microbiota, both of which affect each other. A balanced gut microbiome is important for anyone but vital for women going through menopause. If your gut is balanced with healthy bacteria you will navigate the symptoms of menopause, or you won't experience any of them to a significant degree.

## **Chapter 3: Looking at Hormones in Menopause**

Hormones are the cornerstone of good health and well-being throughout a woman's life and regulate the activity of cells and tissues in different organs of the body. They tell your body how to grow, breathe, eat, and drink. They are chemical messengers that affect everything—our reproductive organs, heart, brain, muscles, and skin. These chemicals are secreted by one tissue (the endocrine glands) and travel via body fluids to affect another tissue in your body.

They work best when they are balanced and give us energy, sexual vitality, and good sleeping patterns. The amounts are secreted in microscopic quantities, and it takes these small amounts to cause big changes in the body, so even a small excess or deficiency can cause disease states. Hormones like estrogen, progesterone, testosterone, and other ones like DHEA and cortisol have powerful influences over a woman's life, and some people are more sensitive to them than others.

The number of hormones in the body and their levels change daily. Estrogen and testosterone (the sex hormones) are secreted in pulses, or short bursts, which change from hour to hour and even minute to minute. This release of hormones varies from one stage of the menstrual cycle to the other, and between day and night.

The menstrual cycle is a complicated network of hormones that causes your reproductive system to function. If we didn't have these hormones we wouldn't be able to experience sexual desire or become pregnant, and our reproductive organs would be stagnant. We've already briefly discussed some of the hormones that are affected during menopause, but let's take a deeper look at each of these hormones and how they function.

### **Estrogen, Progesterone, and Testosterone**

#### ***Estrogen***

By now you know that the functions of estrogen are multifaceted. You know the important role estrogen plays in alleviating some of the symptoms of menopause like hot flashes and how it interacts with the gut and the immune system to reduce inflammation in different parts of the body. Estrogen also stimulates the growth of reproductive tissue and the

development of breast tissue. It helps to stimulate the growth of the egg follicle in the ovaries. It boosts the function of neurotransmitters in the brain that affect factors like mood, memory, sleep, libido, and even cognition, which can enhance learning and attention span.

It preserves bone mass, increases HDL (good cholesterol), and decreases pain perception. It also keeps the skin healthy by preserving its moisture content and elasticity, increases blood supply to the skin and increases its thickness, helps your body to heal from bruises and injury, and stops plaque from forming in blood vessel walls.

Apart from relieving symptoms of menopause, estrogen helps to maintain vaginal health and protects against symptoms like dryness, atrophy, and atrophic vaginitis (inflammation of the vaginal tissues). When estrogen levels are low you can experience changes to the tissue, lining, and pH balance of your vagina.

Other symptoms of low estrogen are weak bones, an increase in urinary tract infections (with the thinning of the tissues of the urethra), and depression.

Some symptoms of high estrogen levels in the body are weight gain, especially around the waist and hips, cold hands and feet, insomnia, hair loss, uterine fibroids, and problems with memory.

Estrogen levels fluctuate throughout a woman's life and some of the factors that influence the levels are pregnancy and breastfeeding, obesity, and extreme dieting.

### ***Estradiol***

This hormone is the most potent form of estrogen and it affects most of the body's organs. It's the main estrogen before menopause and is made by the ovaries, adrenals, the endometrium (lining of the uterus), liver, bone, brain, and fat cells. Too much estradiol can cause loss of sex drive, acne, depression, and osteoporosis. Very high levels can lead to a risk of breast and uterine cancer. Low levels of this hormone can cause weight gain and cardiovascular disease. It was originally thought that estradiol levels dropped slowly, and that triggered the brain to produce more follicle-stimulating hormone (FSH). It's now known that it's a lot more complex and it's about more than just estradiol. FSH may also play a role in some of the conditions and symptoms of menopause and high levels can cause osteoporosis.

Research done by the American Study of Women's Health Across the Nation (SWAN) has identified four common patterns of estradiol levels in menopause:

1. A rise during the transition and then a sharp drop about a year before the final menstrual period (FMP). This pattern is most common amongst Caucasian women.
2. A rise during the transition and then a slow drop that lasts for two years after the FMP. This has a similar distribution amongst all race groups but is the least common.
3. Flat, where estradiol levels start low with less of a decrease. This is common amongst African-American women.
4. A slow decline with estradiol levels dropping slowly. This is more common amongst Chinese-American, Japanese-American, and Hispanic women.

### ***Estriol***

This kind of estrogen only functions during pregnancy and is the weakest and less active form of it.

### ***Estrone***

This is a weaker estrogen than estradiol and is produced by fat cells after menopause.

### ***Progesterone***

This hormone is made by using cholesterol as a building block, mainly by the ovaries, with the adrenals, brain cells, and peripheral nerves making smaller amounts. It binds to certain receptors in the brain to give us a calming, sedating effect. It protects us from seizures and promotes good sleep. It also promotes the development and function of the female reproductive tract and breasts. It's the major hormone that advances pregnancy.

It is also a diuretic and sensitizes the body to insulin and ensures the functioning of the thyroid hormones. It builds bone and blocks the formation of plaque in the blood vessels, lowering triglycerides and protecting the cardiovascular system. Progesterone also increases libido and contributes to the efficient use of fat as an energy source.

Signs of low progesterone could be heavy, long, or irregular periods, and spotting before a period. High levels can cause ovarian cysts and tumors, and abnormal pregnancies.

## ***Testosterone***

This is made in the ovaries and adrenal glands and it enhances libido and sexual response. It promotes well-being, stamina, assertive behavior, and good sleep. It also strengthens ligaments and builds bone and muscle. It protects men and women from cardiovascular disease.

Testosterone levels rise and fall and if there is too much of it, the following symptoms can be experienced: No menstrual periods or irregular periods, more body hair than the average woman, frontal balding, acne, deeper voice, enlarged clitoris, increased muscle mass, obesity, and an apple-shaped body. Women with polycystic ovarian syndrome (PCOS) have higher testosterone levels and often suffer from infertility.

By the time a woman is two years away from her final menstrual period, she is only producing 50% of the appropriate levels of testosterone. At menopause, there is a reduction in testosterone that can cause low libido. Testosterone replacement therapy can be prescribed if there is no history of breast or uterine cancer. The sex hormones estrogen and testosterone use a protein, sex hormone-binding globulin (SHBG) to function properly. SHBG takes a specific sex hormone out of the direct circulation of the body and takes it to the necessary tissue.

## ***Dehydroepiandrosterone (DHA)***

Made mainly by the ovaries and adrenal glands with smaller amounts being made in the brain and skin, DHA protects against inflammation and the physical effects of stress. It can improve libido and motivation, decrease pain, boost the immune system, and bring about a sense of well-being. It plays an important role in the REM cycle of sleep, improves memory, and helps to maintain normal cholesterol levels. It can be converted into estrogen and testosterone through fat, bone, liver, and muscle.

## ***Cortisol***

This is made by the adrenal glands and has the following functions: It regulates immunity, helps with short-term memory, stimulates glucose production, and helps the body to adapt to stress by increasing blood pressure, respiration, and heart rate.

It is always at a higher level in the morning so that the demands of the day can be met, it gradually decreases throughout the day, and is at its lowest in the evening. (This is the correct circadian rhythm pattern.)

During menopause cortisol levels increase, possibly causing vasomotor symptoms like hot flashes, depressed mood, cognitive difficulties, and lower bone density.

### ***Pregnenolone***

This is the building block (called a precursor) for other steroid hormones. Made from cholesterol it is a natural steroid hormone that is converted into DHEA and/or progesterone. DHEA is converted into estrogen and testosterone, and progesterone converts to estrogen, aldosterone, and cortisol.

## **Stages of Menopause**

There is no clear starting or ending point on the menopausal journey. There are many twists and turns, with an estimated arrival time that could take many years. There are, however, three typical stages in which hormones in the body will be affected. They are perimenopause, menopause, and postmenopause.

### ***Perimenopause***

This phase is connected to the years leading up to full menopause when hormone production begins to drop and when some women experience imbalances. A drop in progesterone is followed by lower estrogen levels, but a woman still has her period during this time and can get pregnant. It can start in her forties or older (though can even be in her thirties) and can last for a few months to ten years though the average is four years. Perimenopause ends at menopause when a woman stops producing eggs.

During perimenopause hormone tests are not very helpful because hormone levels change throughout the menstrual cycle, so there is no simple test to predict or confirm perimenopause, although research is ongoing.



The symptoms of perimenopause could be: periods become light or less frequent or heavier, short menstrual cycles, breast tenderness, muscle aches, night sweats, wakefulness or trouble sleeping, worsening of PMS symptoms, changes in libido, headaches, racing heart, memory lapses/difficulty concentrating, forgetfulness, emotional changes (mild depression, irritability, and mood swings), anxiety, hair loss/thinning, weight gain, urinary urgency and/or urinary tract infections, vaginal dryness/discomfort during sex, loss of sex drive, and dry skin, eyes, or mouth.

Half of these symptoms can be relieved by lifestyle changes like eating a healthy diet and managing stress. About 15% of women have none of these symptoms, 15% have them very severely, with most women falling in the middle where symptoms disrupt their lives in a mild to moderate way.

## ***Menopause***

The basic plan for menopause is laid before birth with the fetus developing primordial follicles (immature eggs and the tissue around them) from the early stages of its life. By 20 weeks there are six to seven primordial follicles, and no more can be made at this point.

When menopause happens, there are no follicles left that are capable of ovulating (producing a mature egg). Before this happens though, the millions of primordial follicles start to disappear, or become dormant until puberty when the brain starts to signal the action of ovulation.

What happens during menopause is that there is an increased loss of these follicles, changes in hormone production by the follicles that are remaining, and changes in brain signaling. The reasons for the loss of follicles are complex: The follicles themselves may be aging, or the remaining ones were never that healthy to start with so were never recruited previously. There is also a reduction of blood flow to the ovary and this may change its ability to make hormones. This may be more as a result of aging than menopause itself.

Doctors divide the process of menopause into two phases; early and late, with the difference between the two stages being the length of the menstrual cycle. The time between periods gets longer and longer.

In the early phase, a menstrual cycle may get longer than seven or more days or a period may be missed altogether. In the late phase, there will be more missed periods, sometimes there are 60 days between periods. There is a 95% chance that a woman's final menstrual period will be within the next four years if she starts missing two periods in a row.

Symptoms like insomnia and hot flushes often start in the late phase but some women experience them in the early phase. Some may even miss three or four periods in a row and have no symptoms at all .

The diagnosis of menopause is based on age, history of irregular periods, and 12 months with no period, with the average age of this occurring being 51. It officially marks the end of female reproduction and estrogen drops significantly, as do other hormones. It happens when there are no more eggs or follicles in the ovaries that ovulate. Estrogen levels drop in such a dramatic way because the follicles are where we get most of our estrogen from.

There is a menopause continuum where we start experiencing a few symptoms and irregular periods at the transition until the end which is the final menstrual period (FMP). This passage is different for every woman and there is no test we can have done that can tell us how close we are to menopause, how long it's going to last, or when it's going to end. Often we think we have had our FMP and we get another one.

You may go into early menopause if you:

- Are a smoker.
- Have had a hysterectomy or oophorectomy (removal of the ovaries)
- Have a family history of early menopause.
- Have had cancer treatments.

The symptoms of menopause are similar to those experienced in perimenopause and include:

- Hot flushes
- Night sweats
- Depression
- Anxiety/irritability
- Fatigue
- Insomnia
- Mood swings
- Vaginal dryness
- Dry skin
- Frequent urination

Cholesterol levels can also increase, which increases your risk for heart disease.

A primary concern for low estrogen is bone loss. As mentioned earlier, osteoblasts are promoted with the presence of estrogen, and with lower levels, we can't absorb calcium effectively, which is needed to build bone mass.

Every woman's menopause experience is unique with 34 possible symptoms in many different combinations. Sometimes symptoms of menopause and symptoms of aging are not clear-cut, as menopause happens as we age, so telling the difference can be difficult.

### ***Postmenopause***

This is the phase after the final menstrual period. Medical professionals used to believe that the ovaries were "dead" or "non-functional" at this stage. It has now been discovered, with better testing methods, that the ovaries still manufacture hormones, although to a lesser extent. They make a hormone precursor called androstenedione that the other tissues can convert into estrogen and testosterone.

In the years after menopause, menopausal symptoms start to ease in intensity and frequency or go away completely. Unpleasant symptoms like hot flushes and night sweats disappear but the concern for osteoporosis and bone loss remains.

An exception is the Genitourinary Syndrome of Menopause (GSM) which refers to genital and sexual symptoms of menopause, which 50% of women experience severely. These are vaginal atrophy, where there is thinning and drying of the vagina and inflammation of the vaginal walls. These symptoms can cause painful sex and lead to other issues, but many effective treatments are easy to use, like low-dose vaginal estrogen treatment and simple over-the-counter remedies.

There is a complex interplay of hormones during a woman's life, with the groundwork already laid while they are in utero. Menopause can be seen as a continuum where some phases or patterns can be identified but every woman has a different experience. What will certainly happen over time is irregular periods happening in a woman's late forties or early fifties on average, leading up to her final menstrual period.

Hormone levels during menopause will be erratic and there will be many changes, which will be more than just changing levels of estradiol. It's not reliable to use hormone levels to diagnose menopause, predict the timing of the final menstrual period, or even guide therapy for symptoms of menopause. Instead, we should look at other factors to guide us through these events.

## **Part 2: Relief Remedies**

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# **Chapter 4: Menopause Hormone Therapy (MHT) or Holistic Therapy?**

The treatment of menopausal symptoms like hot flushes is often unacceptably neglected, and women are often told to just layer clothing and keep cool as best they can. Others are told about medical options but in a way that presents risks and side effects in a way that is falsely alarmist and discourages women from using them.

## **Is Menopausal Hormone Therapy Right For You?**

In chapter one, you learned that Menopausal Hormone Therapy (MHT) is a conventional therapy for regulating estrogen during menopause. Perhaps by now you are wondering whether MHT is right for you. While most experts agree that MHT can be used to control moderate to severe menopausal symptoms within ten years of menopause and up to the age of sixty, women need to balance the risks and benefits of it with their doctors. The lowest dose should be used for the shortest possible time needed to control symptoms.

## **Who Can Benefit from MHT?**

You may benefit from MHT if you are healthy and you:

1. Have moderate to severe hot flushes and night sweats. MHT is highly effective for these symptoms.
2. You are experiencing other menopausal symptoms like vaginal dryness, burning, itching, or pain with intercourse. The estrogen in MHT can also help to maintain or return normal sex drive.
3. You have osteoporosis (a bone-thinning disease). Systemic estrogen helps to protect your bones, along with other medications that are prescribed for this condition.
4. You have estrogen deficiency or are experiencing early menopause.
5. You have a premature or early menopause and you have stopped having your periods before the age of 45.
6. You have had your ovaries removed.

7. You have “primary ovarian insufficiency” and your ovaries are not functioning normally before the age of 40.

Other potential health benefits that aren't covered by the FDA-approved guidelines are decreased risk of colon cancer, cataracts, glaucoma, depression, loss of muscle mass, and type 2 diabetes. It can also be beneficial for the skin because of the improvement in collagen levels, and it can improve sleep and help with genitourinary symptoms.

## **Who Should Avoid MHT?**

You should avoid MHT if you:

1. Have a history of blood clots, breast, ovarian, or uterine cancer.
2. Have high blood pressure. You can start taking MHT if the condition has been treated though.
3. Have non-alcoholic fatty liver disease (NAFLD) This can happen in overweight people and can lead to serious conditions like cirrhosis of the liver.
4. You are pregnant. Care should be taken with contraception at this time as it is still possible to be taking MHT and get pregnant. It's advisable to continue with contraception until two years after your last period if you're under the age of 50, or for a year after the age of 50.

## ***When to Stop Taking MHT***

You can stay on it as long as you like if you are being monitored by your doctor, but most women stop taking it after a few years when their menopausal symptoms have stopped. Guidelines that have previously been given are that women should stop taking it automatically at the age of 65, but nowadays, as long as cholesterol, blood pressure, and triglycerides are stable, there is no medical reason to stop, and it may be beneficial to continue. It's recommended that you stop gradually instead of suddenly because then it's less likely that your symptoms will come back in the short term.

## ***Side Effects of MHT***

Side effects of MHT mainly pass within three months and include headaches, breast tenderness, vaginal bleeding, indigestion, and abdominal pain.

## ***The Risks of MHT***

Many studies on MHT published over the last 15 years or so have stressed the risks, and as a result, many women and their doctors have been reluctant to use it. However, current research (or analysis of the results of previous studies) shows that the risks may not be so high. Although not entirely risk-free, it does depend on a few factors; the type of MHT you take, how long you've been using it for, and any other health risks that you may have.

Some known risks:

- Endometrial cancer (If you still have your uterus and are not taking progesterone together with estrogen)
- Breast cancer
- Ovarian cancer
- Gallstones and gallbladder issues.
- Blood clots

Transdermal estradiol, instead of MHT tablets, is the safest option and is available in patches, creams, sprays, lotions, and a vaginal ring.

## **Criticisms of MHT**

In a 2007 article in "The Guardian," Sarah Bosely wrote an article titled "The Truth About MHT." A reason for the widespread use of MHT, according to her, is that studies that are now minimizing the risks of MHT are all funded by drug companies and many of the clinicians who prescribe the drugs are paid consultancy and lecture fees by the drug companies. Bosely asked why women were so relaxed about using it after studies have shown that it increases the risks of heart attacks, strokes, blood clots, and breast, ovarian, and uterine cancer, and why doctors were prescribing it so freely and insisting that the risks were exaggerated. She said that MHT is so widely used despite the risks partly

because it is so effective in dealing with hot flashes and osteoporosis, but also perhaps partly due to a myth that MHT is the elixir of youth and that it can undo the aging process. Bosley's theory is that women are choosing to believe that there is no proof of the alarming side effects of MHT and that it will preserve their beauty, youth, and sexual pleasure.

Professor Adriane Fugh-Berman of Georgetown University in Washington DC in a paper published in 2006 titled "Gynecologists and Estrogen: An Affair of the Heart" writes about MHT being presented about 10 to 20 years ago as a cure-all for so many things: incontinence, wrinkles, dementia, and making you look and feel better. But she warns that you should always be skeptical of something that is presented as a panacea, as it will most certainly be a fake. She also says that this is just as true in conventional medicine as in alternative medicine.

While it's true that we should always be skeptical of anything presented as a panacea, the conclusions Bosely alludes to about the risks of MHT come from studies that have been criticised for various problems with their methodologies and for being biased. We'll take a closer look at the studies below and discuss their findings as well as their methodologies.

In reality, we now know that MHT, although it has its risks, needs to be seen more objectively, can be used safely if carefully monitored, and there are many women who can benefit from it without fear.

### ***A History of the Concerns of MHT***

MHT first became available in the 1940s but was only used widely in the 1960s when it caused a revolution in the management of menopause.

In the 1990s there were two large studies done on MHT users. They were:

- A study done by the Women's Health Initiative (WHI) in the US that was a clinical randomized trial.
- Research done in the UK called the Million Women Study (MWS) that was an observational questionnaire study.

The results of the studies were published in 2002 and 2003 and many concerns about the safety of MHT were raised. These revolved around the increased risk of breast cancer and heart disease.

The problems of the choice of subjects for the studies which caused a strong bias in the findings were only recognized years later. In the WHI study, all the women were North

American, in their mid-sixties, and often overweight. They were unrepresentative of women in the UK and elsewhere in the world who were around 45-55, who may have benefitted from MHT.

It was also established that the WHI study results showed an apparent increase in breast cancer was found in those subjects who had been on MHT before the study.

Due to the findings of these studies, there was an entire generation of women who were unable to benefit from MHT and had to put up with menopausal symptoms. The risks of MHT must always be taken into consideration, but the balance of benefit to harm seems to have shifted back towards the use of MHT as a relatively safe option when the results of these two studies were analyzed more closely. The risks are low especially during the first four years of taking it, with the goal being to give the lowest amount of estrogen as possible to manage symptoms and prevent osteoporosis.

It is now known that before ten years have elapsed since the final menstrual period, or before the age of 60, MHT provides the fewest risks and the most benefits. For most women, MHT has such a high success rate with symptoms like hot flushes, genitourinary issues, and osteoporosis that the benefits outweigh the risks.

## **Holistic Options**

We know, though, that MHT is not the only option for relieving symptoms of menopause. There are several holistic options that can help.

## **Mind-Body Interventions**

There are several kinds of mind-body interventions that can help a woman during menopause. Mind-body interventions are therapies that focus on using the mind to improve the body, and vice versa.

### ***Hypnosis***

Hypnosis involves getting into a very deeply relaxed state of relaxed attention, suggestion, and mental imagery. It can be used to relieve menopausal symptoms like hot flushes and



has been shown to reduce their severity and frequency. There is also anecdotal evidence that it can improve the quality of sleep and sexual function.

### ***Cognitive Behavioral Therapy (CBT)***

Cognitive Behavioral Therapy (CBT) is a psychological intervention that is action-based and can be used to treat depression, hot flashes, and other symptoms.

Treatment is time-based and revolves around changing cognition and behavior choices to change symptoms. This may include relaxation, education, paced breathwork, and motivational interviewing.

Hot flashes have an impact on the way we feel and the same neurotransmitters that influence thoughts and behaviors also impact hot flashes. With CBT we get educated about what is happening on a medical level and also about possible positive skills to use instead of negative beliefs. For example, having the thought, “I can’t stand this hot flash. It’s going to last forever,” can make the hot flash feel much worse and actually strengthen parts of the brain that make hot flashes feel worse. You can say instead, “I can deal with this hot flash easily. It’s only going to last two minutes.” These positive statements are combined with slow, deep breathing that will lower heart rate and blood pressure, calming some of the physical responses of stress.

Changes in the brain from CBT are visible on imaging and it’s not known if what is working is affecting the brain’s perception or if it is physically stopping the heat.

### ***Biofeedback and Relaxation Training***

Menopausal symptoms can be treated by progressive muscle relaxation, biofeedback training, breathwork, and applied relaxation. A device is used to measure bodily functions that are normally automatic like heart rate, skin temperature, and muscle tension. “Feedback” (visual or auditory) is given to the patient, so stress responses can be controlled and relaxation techniques control the stress responses.

## ***Mindful-Based Stress Reduction (MBSR)***

These practices are based on experiencing the present moment and include meditation, yoga, gratitude, and acceptance. They can be learned and practiced in group classes, done one-on-one, on weekends, or longer retreats, and daily home practices.

## ***Aromatherapy***

Aromatherapy, also called essential oil therapy, uses plant extracts and aromatic essences to treat psychological and physiological imbalances. It is believed that aromatherapy increases relaxation and reduces anxiety, which may help with many menopausal symptoms. The oils may help to balance hormones and relieve symptoms like hot flashes and mood swings.

Examples of essential oils are lavender to reduce stress, anxiety, and depression; Jasmine to relieve depression and uplift mood; and Geranium to lift depression. Additionally, Clary Sage acts as an antidepressant and lowers blood pressure, and Neroli reduces anxiety and improves sleep.

The oil can be diluted with a carrier oil like coconut, jojoba, almond, or evening primrose oil, and can be massaged onto the body or applied to pulse points. The oils can also be used in a diffuser or as a roll-on or spray. It is important to buy organic essential oils from a reputable source and to use only the recommended dose.

## **Herbal Products, Vitamins, and Supplements**

We know the symptoms of menopause are caused by a combination of hormone imbalance, and often, vitamin and mineral deficiencies. Supplements can help to balance out deficiencies and improve the symptoms caused by dietary imbalances and poor lifestyle choices. In Chapter 7, a list of supplements is provided along with information about their effectiveness according to studies.

## **Whole System Alternative Medicine Approaches**

## ***Homeopathy***

Practitioners prescribe dilutions of natural compounds which could be harmful to a person in perfect health. Each patient is given an individualized formula to treat presenting symptoms. In a process called “potentisation” or “dynamisation” a substance is diluted with distilled water or alcohol and shaken in a procedure called succussion. Homeopaths claim that the original substance is diluted so much that the water retains memory, and that it’s the memory of the substance that makes the remedy effective. Homeopaths believe in the principle of “like cures like,” and some preparations that are used are:

- Sepia (from cuttlefish ink) is said to treat feelings of worthlessness and lack of self-confidence which can lead to depression.
- Pulsatilla (from a flower) is said to treat weight gain.
- Lachesis (from snake venom) is said to treat irritability, night sweats, and disturbed sleep.

No research to date has shown that homeopathy is effective, the theory of dilution seems implausible and it is known as a pseudoscience, so most researchers would advise against it.

## ***Reflexology***

This is a type of massage done to the hands and feet that is understood to stimulate corresponding organs and glands in the body. Pressure is applied to these reflex points on the hands and feet and energy blockages that may cause disease are released.

Reflexology can work for menopausal symptoms by:

- Regulating hormones and glandular functions of the body. This is done by treating the pituitary and hypothalamus to balance the endocrine system.
- Preventing bone loss by balancing calcium and phosphorus levels in the thyroid gland.
- Helping the ovaries to regulate estrogen production, and the uterus to maintain its health and flexibility.
- Helping with hot flushes and night sweats.
- Balancing physical and emotional systems, as the central nervous system is calmed, symptoms of stress, anxiety, and depression can be alleviated.
- Helping with sexual dysfunction, as shown by research.

## ***Acupuncture***

This method comes from traditional Chinese medicine and involves inserting small needles into the skin at acupoints and meridians of the body. The belief is that symptoms occur because of disturbances in the life force energy, called qi of a person's body.

Studies have shown that acupuncture can improve vasomotor and somatic symptoms and sleep problems. One study showed that it can achieve this in five weeks with no side effects. It can also treat mood swings, anxiety, fatigue, and vaginal dryness.

Other clinical trials have been unable to show that acupuncture makes a difference in symptoms where a placebo group was used, indicating that if women report feeling better, it may be as a result of the companionship and attention of being with a practitioner rather than the acupuncture itself.

## ***Traditional Chinese Medicine (TCM)***

This treatment uses herbs, acupuncture, diet, moxibustion (burning dried mugwort on points of the body), self-massage, and meditative exercise like Tai Chi. Qi (life force energy) and yin and yang (the harmony between opposing forces) are the tenets that tie these treatments together.

There is the belief in TCM that menopause results because of kidney dysfunction or deficiency. During perimenopause, there is a gradual reduction in kidney qi, essence, and blood leading to imbalances. We need to do more studies on TCM with larger sample sizes to identify how it can be applied holistically in a repeatable way with guidelines.

## ***Vaginal Steaming***

Also called V-steaming or yoni steaming, this is a natural remedy that cleanses the vagina and uterus and is said to relieve stress, depression, hormone imbalances, hemorrhoids, fatigue, digestive problems, and generalized pain.

Herbal-infused steam is directed into the vagina by a woman squatting over a container with the warm infusion in it for 20 to 60 minutes. Herbs often used, alone or together, are chamomile, basil, mugwort, oregano, wormwood, and calendula.

Vaginal steaming is not well researched and benefits are anecdotal, but it could help to ease cramps, and aid in relaxation.

### ***Hyperbaric Oxygen Therapy***

With this therapy, oxygen is breathed in a pressurized environment so that your lungs take in much more oxygen than normal. The pressure is increased two to three times higher than normal and blood carries the extra oxygen throughout the body to promote growth factors and stem cells and helps fight bacteria. With a few treatments, these temporary high levels of oxygen promote normal tissue oxygen levels, even after therapy has been completed.

Oxygen therapy can be useful for menopausal women for several reasons; it boosts energy levels, decreases stress, improves sleep apnea, and addresses signs of aging like a compromised immune system, joint pain, foggy thinking and dementia, and weaker heart muscles.

## **Lifestyle Changes**

Part of owning your health involves living in a healthy way, and there are so many things in our daily lives that we can do (or not do) to prevent and improve menopausal symptoms:

### ***Exercise***

Regular exercise has been shown to reduce hot flushes and improve sleep. It also has beneficial effects on the brain and boosts mood and reduces anxiety and depression. Include a variety of different kinds of exercise in your weekly routine:

Cardio like walking, running, biking, aerobics, etc. to keep your heart healthy and burn fat. Include a short HIIT (High-intensity interval training) session in your week to boost fat burning and anti-aging benefits. Spend at least 150 minutes per week on cardio.

Strength training is especially vital because of bone and muscle loss during menopause. It also burns body fat and revs up metabolism. You can do bodyweight exercises, use resistance bands, free weights, or machines at a gym. Do strength training twice a week.

Yoga or stretching workouts are good for balance, flexibility, and strength and have positive, calming effects on the mind. Fit this at least once a week in your weekly routine.

## ***Diet***

There are risk factors and symptoms with the onset of aging and menopause that we can't control, but we can prevent or alleviate some menopausal conditions and symptoms by eating a healthy and varied diet. A balanced diet high in whole foods with organic fruits and vegetables with quality proteins and fats is one of the measures you can take to sail through menopause. If we aren't eating organic, our liver has to detoxify extra toxins, pesticides, and chemicals that will act as extra hormones in our bodies.

Eat organic fruits and vegetables that have antioxidants like vitamin C, lycopene, and beta carotene to slow down aging, and dietary fiber to keep your gut healthy and manage your appetite. Leafy green vegetables, like kale, spinach, cabbage, and watercress, and cruciferous vegetables like cauliflower, broccoli, brussel sprouts, and bok choy, are especially important for alleviating the symptoms of menopause. Eat at least two cups of vegetables and one and a half cups of fruit per day.

Other high fiber foods are nuts, seeds, legumes, beans, avocado, and whole grains. These foods balance the production of estrogen as well as cholesterol levels and reduce constipation. The recommended daily dose is 21 g per day.

High-quality protein is also vital for building muscles, hormones, healthy skin, strong nails, and digestive enzymes and can be found in grass-fed meat, wild caught fish, and free-range chicken and eggs. To use the protein you are eating more efficiently, add collagen in the form of powder or broth to your muscle meat to decrease the inflammatory properties and increase the bioavailability of their amino acids.

Eat more foods that give you energy and nutrients like blueberries, superfoods (for example turmeric, chia seeds, green tea, and almonds), herbs, leafy greens, and foods high in vitamin C.

Iron needs decrease with menopause but it still plays an important role in supporting red blood cell formation, and blood health. Iron-rich foods are lean meat, fish, poultry. eggs, nuts, leafy green vegetables, broccoli, lentils, tofu, dark chocolate, and enriched grain products. Have at least 3 servings of these foods or 8mg per day.

Healthy fats high in omega 3s from flax seeds, and fatty fish like salmon, sardines, and mackerel, reduce inflammation, are good for the skin, protect the heart, and reduce bone loss, depression, and breast cancer. Exclude highly processed vegetable oils like margarine, sunflower, canola, safflower, soybean, and corn oils. They are high in omega 6 fats that can cause inflammation and other problems. Replace them with healthy oils like olive, avocado, and coconut oil.

Eat foods rich in calcium, magnesium, and vitamin D, like eggs, dairy products, green leafy vegetables, broccoli, legumes, and tinned salmon and sardines. Aim for 1,200 mg per day or two to four servings of dairy products and calcium-rich foods.

Foods high in phytoestrogens have naturally occurring plant compounds that mimic the effects of estrogen on the body, supposedly balancing hormones. You get these compounds in soy products (make sure you eat only organic, non-GMO soy) including fermented soy like miso, tempeh, and natto. You also get phytoestrogens in beans, flaxseeds, linseeds, and sesame seeds.

Probiotic-rich foods have healthy bacteria that improve the health of your gut and regulate hormones like insulin, leptin, and ghrelin. They also protect cognitive functioning and raise immunity. Eat foods like yogurt, kefir, fermented vegetables like sauerkraut, kimchi, and fermented soy. Gut health and healthy digestion become even more important when we reach menopause and we need good production of hydrochloric acid and digestive enzymes. It may be necessary to supplement with digestive enzymes in the short term to help your body to make enough hydrochloric acid on its own.

Foods to avoid are sugar, which will increase hot flashes and weight gain and cause digestive problems, hormonal imbalances, and candida. Carbonated drinks, even the sugar-free ones, have many harmful chemicals and deplete the body of calcium, causing bone loss and teeth problems.

Processed foods are full of sugar, trans fat, and other harmful additives. Read food labels!

Be sure to drink enough water (8-12 glasses a day) to help with bloating and dry skin. You may also want to reduce your intake of certain drinks like alcohol and caffeine. Alcohol can cause weight gain and worsen hot flashes and caffeine can cause insomnia

Caffeine can also increase LDL cholesterol levels so decrease your intake if you have high cholesterol. However, new data has shown that drinking up to five cups of coffee a day can have benefits like reducing mortality, liver disease, Parkinson's, gallbladder issues, and depression while increasing alertness.

Try replacing one or more cups with decaf, drinking drip coffee instead of unfiltered or espresso (which has less caffeine), and use Lion's Mane (a kind of medicinal mushroom that heals the nervous system),

Check for food intolerances. If you have symptoms like bloating, pain, cramping, diarrhea, nausea, rashes, fatigue, and acid reflux you can try eliminating trigger foods and see if symptoms improve. These could be:

Dairy causing a lactose intolerance

Gluten

Caffeine

Salicylates are natural chemicals that we get in foods like vegetables, teas, nuts, honey, and spices. They are produced by plants to defend themselves against environmental stressors like disease and insects, but some people are sensitive to them.

Other examples of allergens are:

Amines, produced during food storage and fermentation and found in many foods.

Sulfites, chemicals mainly used in food preservatives, drinks, and some medicines.

FODMAPs, short-chain carbohydrates that cause digestive distress. These are found in many foods and drinks like beans, apples, beer, yeast, MSG, eggs, Aspartame, and food colorings.

Maintain a healthy weight as it's common to gain weight during menopause due to changing hormones, genetics, aging, and lifestyle. Excess fat, especially around the waist puts you at risk for diseases like diabetes and heart disease. You may need to consume fewer calories overall, and because of slowing metabolism and decrease in muscle mass, it's even more important to eat a "clean" diet. This includes healthy fats, quality proteins, probiotic foods, no sugar or processed foods, whole grains, and organic fruits and vegetables.

A study done of 17, 473 postmenopausal women found that losing weight has a highly positive effect on reducing hot flushes and night sweats.

### ***Mental Health***

- Reduce stress levels and use meditation, breathwork, yoga, and other relaxation techniques to do so. If you are suffering from depression take natural remedies where possible, or go on antidepressants if you need them.
- Clinical trials have shown us that healthy relationships, social support, and relaxation are vital in reducing menopausal symptoms and other effects of aging.



- Get good quality sleep, which is so important for the body and healing. Stress, high cortisol, an imbalance in neurotransmitters, poor sleep hygiene, hypoglycemia, adrenal fatigue, and poor circadian rhythms (with low cortisol levels during the day and high levels at night), can all cause poor sleeping patterns.

### ***Practical Measures***

- Deal with hot flushes by staying cool at night, sleeping in a cool, well-ventilated room, and wear loose and layered clothing. Find out if you have any triggers for hot flushes like hot drinks, spicy foods, caffeine, stress, alcohol, hot weather, or a hot room.
- Use over-the-counter water or silicone-based vaginal lubricant for dryness. Staying sexually active increases blood flow to the vagina and also helps with discomfort.
- Strengthen your pelvic floor by doing Kegel exercises which can help improve urinary incontinence and improve your orgasms. With these exercises, you isolate and contract the pelvic floor by squeezing and lifting your vagina, urethra, and anus, with the rest of your body remaining relaxed. Make sure that you are contracting inwards and upwards, similar to the sensation of stopping urination mid-stream. To fully strengthen the pelvic floor do a routine with both strong contractions held for a few seconds, and also quick contraction/release exercises. Release the contractions fully to prevent overworking and over-tightening the muscles. Be consistent and do the exercises for five minutes every day and take note of your progress. It takes 12 weeks to experience a real change. You can do Kegel workouts on YouTube and follow someone like Michelle Kenway.
- Avoid plastics and obesogens as much as possible. These can disrupt our production of hormones and metabolism. 20 obesogens have been identified, with Bisphenol-A (BPA) being one of them. Its structure resembles the most important form of estrogen, estradiol, and BPA binds to its receptors causing weight gain and obesity, amongst other issues.

To minimize your contact with these chemicals, avoid drinking hot or frozen liquids from plastic cups, and drinking bottled water out of plastic bottles. Invest in a water filtration system and drink water out of glass or stainless steel bottles. Don't use non-stick cookware and use stainless steel and cast iron pots and pans instead. These chemicals can be found in cosmetics too, so use as many natural products for your face and body as you can.

## *Sun Exposure*

Get enough sun exposure: We are wired to get a “Light-Diet” and the human body needs light for our cells to function well, similar to the nutrients we get from food. Sunlight helps power up our cells, affects hormones and neurotransmitters, balances our mood, enhances physical performance, increases recovery from stress, and improves sleep. To get the benefits from sunlight go out into it at all times of the day, in the mornings, at midday and in the evenings, building up slowly to prevent becoming sunburned and don't wear sunglasses all the time, so that you can absorb the beneficial rays through your corneas.

Dr. Leland Stillman, internal medicine specialist and naturopath in Portland, feels that we should be questioning many of the theories about health that are accepted by the mainstream. One is the supposed relationship between the development of melanomas and sun exposure. He has seen many patients in his practice who developed melanomas with very little exposure to the sun, and the common factor between them was low vitamin D levels.

He also warns about exposure to blue light from computers, smartphones, and TVs, and suggests that we minimize our screen time as much as possible, especially in the early mornings and evenings, and at least one to two hours before we go to sleep at night, to increase the quality of our sleep.

Delaney's tips for sun exposure are as follows:

To increase the absorption of vitamin D get some sun exposure between 11 am and 2 pm when UV rays are optimal.

- Use a zinc-oxide-based, chemical-free sunscreen on your hands, face, and neck to avoid getting sun damage on these areas of thinner skin.
- Never overdo sun exposure and go into the sun a maximum of one to two hours, and even less if your skin is fair, avoiding getting sunburned as this is highly dangerous.
- To increase the skin's resistance to UV exposure, get 15 to 20 minutes of early morning sunlight or use an infrared lamp if you can.
- Make sure that you stay hydrated in the sun to keep your skin healthy, and ensure that you are getting enough electrolytes and minerals.
- Green tea is good to drink for the polyphenols it has that protect our skin from sun damage.
- When you will be more exposed to the sun in the summer months, eat more foods that contain skin-protecting flavonoids and carotenoids, like

tomatoes for lycopene, salmon, and shrimp for astaxanthin, and dark chocolate for flavonoids.

If we use sunlight in a responsible way we can use it to upgrade our health in so many ways.

If you don't get a lot of sun exposure, or you have had low vitamin D levels confirmed with a blood test, take a vitamin D supplement. (D3 as this is best absorbed) and vitamin K2, to increase absorption.

### ***Smoking***

Give up smoking or cut down. Smoking can cause early menopause, sometimes by three or four years. It impacts the nervous system and makes menopausal symptoms worse; hot flushes and night sweats, anxiety, mood swings, sleep disruption, and it can have a detrimental effect on the skin which can become thinner and drier. The nervous system should be supported as much as possible during menopause, and smoking has the opposite effect. It also increases the risk of heart disease, stroke, cancer, and osteoporosis.

## **Chapter 5: Symptoms of Menopause**

### **Vasomotor Symptoms (VMS): Hot Flashes and Night Sweats**

We've spoken a lot about hot flashes and night sweats already, but what exactly are they and where do they come from? Hot flashes affect 80% of women going through menopause at some point. A hot flash is a wave of heat lasting on average two to four minutes that suffuses the head, neck, arms, and upper chest. Some women experience hot flashes between 20 to 30 times a day, and it's not just a perception of heat as the body is actually warm to the touch. There may be sweating, agitation, anxiety, nausea, and redness in the face. Night sweats are another type of hot flash that cause excessive sweating and sometimes sleep disturbances at night. Hot flashes and night sweats both happen because of a faulty internal thermostat, where thermoregulation (control of body temperature) is not regulated properly by the hypothalamus in the brain, hormones, and neurotransmitters that normally work together to keep body temperature in a fairly narrow zone.

A hot flash happens more than as a result of just low estrogen levels, otherwise, girls below puberty would get them. It happens because the body and brain have received spikes of estrogen and then it is taken away. Estrogen acts as a gatekeeper to neurons in the brain that communicate about heat, so with lower levels, we no longer have that control. Some research suggests that the follicle-stimulating hormone (FSH) that rises during menopause may also play a role in hot flashes.

Without the regulatory influence of estrogen, the body becomes very sensitive to minor increases in temperature and responds in an extreme way. The blood vessels dilate to cool off and some heat is lost by blood being shunted to the surface of the skin. This is the wave of heat and redness we experience, and sweat glands are also activated. The heart rate goes up, often feeling like anxiety, and blood flow to the brain is reduced. When the heatwave has passed, the body often gets chilled as the body temperature is now lower than necessary and some women experience shivering to get the body temperature back to normal.

The degree of these vasomotor symptoms varies from woman to woman, but mostly negatively affects the quality of life, with the added aggravations of sleeping difficulties

and depression. The flushes are also unpredictable, stressful, draining, and make women feel awful and unsettled.

If a woman's vasomotor symptoms are moderate to severe, she is also more at risk for cardiovascular disease and stroke, because the factor that predisposes her to hot flushes also predisposes her to heart disease. A factor in heart disease and stroke is a miscommunication between the nervous system and blood vessels, and this may be the link for these women.

Vasomotor symptoms can start early in menopause and on average last about seven years. Four patterns of these symptoms have been identified and are spread evenly amongst women in North America:

- Starting early and reducing after the final menstrual period (FMP)
- A later onset during the menopause transition with the most severe symptoms around the FMP, then decreasing slowly postmenopause and lasting around four years.
- Few or no symptoms.
- Some women start having hot flushes early in the transition and keep on long into postmenopause for ten years or longer.

There are a few factors that increase or decrease the risk of vasomotor symptoms:

Race is one factor with African-American women experiencing the longest duration of hot flushes (11 years or more), Japanese-American and Chinese-American women for around five to six years, and White and Hispanic women are in between.

Smoking is another influence and hot flushes are experienced for a longer time in former or current smokers.

Social factors including a lower level of education, poverty, and adverse childhood conditions (ACES) are all linked with a longer duration of symptoms. Some examples of ACEs are being exposed to or enduring abuse or neglect (physical and emotional), mental illness, family violence, divorce, and substance abuse. They can cause permanent structural changes in the brain that may make it more vulnerable to the process that triggers hot flushes.

Cultural and genetic factors are also an influence with hot flushes and night sweats being experienced differently around the world. In cultures that don't emphasize the negatives of aging and where menopause is seen as a natural stage of life, women do a lot better and their symptoms are less severe. Where the experience of menopause is normalized it's easier to feel more positive about what you are experiencing and to get information about what to expect. Other cultural factors might influence the experience of symptoms like climate, access to good medical care, diets in particular areas, and physical activity.

Genetics may also play a role and some studies suggest that there is a particular gene that is associated with experiencing more hot flushes. Some Asian countries like Japan also seem to have a lower incidence, but this may not be accurate as these studies were not objective in their data collection.

Mental health could also be a determinant and anxiety, stress, and depression may increase the risk of hot flushes.

Alcohol is a factor and heavy drinking may increase hot flushes whereas light drinking may reduce them. Caffeine can also trigger flushes in some women.

Time of day and climate are also factors as hot flushes are often worse in the afternoons and can be more severe in the summer months or a hot, humid climate.

## **Abnormal Bleeding**

Abnormal bleeding is a common experience amongst menopausal women leading up to the final menstrual period (FMP). It is so common that it's a sign that the FMP is arriving.

The significance of abnormal bleeding is as follows:

- It can be a warning sign for endometrial cancer and thyroid conditions.
- The amount of blood loss may be medically concerning.
- It impacts the quality of life.

The frequency of abnormally heavy periods varies with some women having only one or two missed periods or a few heavy periods, while others have a lot of irregular and heavy bleeding.

Menstrual bleeding is seen as abnormal if it is too heavy or doesn't follow a regular pattern (every 24 to 38 days from the start of one period to the first day of bleeding in the next cycle). If there are missed periods it's most likely to be a part of the menopause transition, but changes may be worth reporting to a doctor, especially if the period is heavier or lighter than expected.

A normal volume of blood for a menstrual period is 30-80ml (1-3 ounces). It is considered heavy if:

- It leaks through menstrual products enough to soak clothes or bed sheets.
- Menstrual products become blood-soaked every hour for a few hours and constantly need to be changed.

- Bleeding lasts for longer than seven days.
- Clots are larger than the size of a quarter.

The amount of blood lost with each period during the menopause transition often increases, but there should be no bleeding after the FMP and, if there is, it is considered to be abnormal. It could be a sign of endometrial cancer (cancer of the lining of the uterus).

The root causes of abnormal bleeding are hormonal changes causing the endometrium to be too thick or too thin; polyps in the lining of the uterus; hormonal contraception, menopausal hormonal therapy, and supplements that have hormones in them; fibroids, which are benign tumors of the uterine muscle; adenomyosis, where the lining of the uterus grows into the muscle; and issues with the blood's ability to clot due mainly to anticoagulant medications like Aspirin.

There are many treatments for heavy bleeding and drugs like tranexamic acid, hormonal contraception, nonsteroidal and anti-inflammatory drugs, progestogens, and standard MHT can be prescribed. An IUD can also be fitted or an endometrial ablation is done (removal of the lining of the uterus) but the definitive treatment is a hysterectomy.

## **Loss of Bone Mass**

Bone loss happens because of lower estrogen levels in menopause. In their first five years after menopause women can lose up to ten percent of their bone mass, but this can be higher, and is different for each woman.

Being female puts you at risk for osteoporosis, which causes bone to become fragile, and the structural integrity of the bone is compromised, with the risk of fracture increasing. There is a decrease in the amount of bone mass as well as microscopic changes in the architecture, with other changes in bone quality that are not well understood.

Bone is constantly being remodeled (reabsorbed and new bone is made) throughout a lifetime, and your skeleton is replaced every ten years. Estrogen produces bone mass so the most rapid loss peaks about one year before the final menstrual period, lasting about three years. This may be 6% of a woman's bone mass and she will continue to lose it at a higher rate than before menopause. Aging also harms bone integrity in other ways.

There are several factors that can affect the loss of bone, like:

- Age of menopause. The earlier this happens the more bone mass is lost and the risk of fractures goes up.
- Genetics. This is the greatest contributing factor to bone health.
- Anorexia Nervosa. Very low body mass can stop ovulation and estrogen levels get very low. There are also other bone changes with anorexia.
- Alcohol. If a woman consumes three or more units a day the risk increases.
- Medications. Certain contraceptives, steroids, and heavy use of cannabis increase risks.
- Medical conditions. Examples are type 2 diabetes, rheumatoid arthritis, and hyperparathyroidism.
- Nutrition. Lack of calcium and vitamin D causes weak bones, and women who drink too much coffee and diet soda are also at risk.
- Physical activity. To maintain bone health we need stress on our bones from weight-bearing exercise that grows stronger muscles. The mechanical signals from exercise are stimulated by osteoblasts (the cells that build bone). The risk of falls can also be prevented by muscle strengthening and exercise to improve balance.
- Smoking. Smokers have lower peak bone mass and bone loss is accelerated, especially after menopause. An extra two percent of bone density is lost every ten years after menopause.

### ***How to Diagnose Osteoporosis***

This is done with a scan called a dual-energy x-ray absorptiometry or DXA. It measures bone density in the vertebra in the spine and the top of the femur (the thigh bone). This screening is recommended at least once for every woman aged 65, but if any woman has had a fragility fracture (a fracture without obvious trauma) then she should automatically be diagnosed with osteoporosis.

A result from a bone density test is reported as a T-score, which compares a woman's bone density with a typical reading for a 30-year-old woman and compares that result in standard deviations.

## **Brain Fog**



The brain is influenced significantly by estrogen, made both by the ovaries and in the brain itself. Some examples of the ways estrogen plays various roles in brain function are: It increases blood flow to the brain, it improves brain connectivity (how the different areas of the brain communicate), and it boosts the activity of serotonin.

Other changes can affect the brain during menopause, like inflammation from increased visceral fat and the rise in levels of follicle-stimulating hormone (FSH).

Brain fog refers to some kind of memory problem or forgetfulness, for example, losing one's car keys, or forgetting what a word should be in a sentence. Studies done on women's brain functioning during menopause have found issues like reduced speed in processing information, decrease in verbal episodic memory (the ability to remember a story or a list of words), and the ability to take in new information.

It has also been found that these changes are temporary and disappear once the menopause transition is over. Some of the changes in cognitive functioning are also due to aging and not due to menopause as such. There are also outside factors that could influence brain functioning like the effects of stress, and many women in midlife are under a lot of stress for various reasons.

## **Depression**

This is a medical condition that is considered going beyond mere sadness that won't go away, and there's an increased risk of it during menopause. It can affect thoughts, emotions, appetite, cognitive ability, sleep, energy, and physical health. It involves feelings of hopelessness, guilt, anxiety, and lack of interest in activities that once brought pleasure. (Read more on depression in Chapter 8)

## **Alzheimer's and Dementia**

Alzheimer's is a type of dementia and women are at higher risk for developing it and other kinds of dementia than men. Low estrogen levels are only one cause of dementia and other factors like genetics, diet, high blood pressure, smoking, lack of exercise, and diabetes can all play a part in its onset.

## **Genitourinary Symptoms of Menopause (GUSM)**

This refers to changes in the vagina, vulva, clitoris, and bladder during menopause, causing them to shrink and become thinner because of lower levels of estrogen. Up to 80% of women will eventually experience some symptoms and many don't get the care and advice they need.

These changes happen due to a reduction in blood flow to the tissues, a decrease in the production of collagen, and changes in the vaginal microbiome, with a shifting to different forms of bacteria.

The most common symptom is vaginal dryness, with others including vaginal itching and burning, pain and decreased lubrication during sex, and an increase in urinary infections and incontinence.

## **Urinary Problems**

These menopausal problems are rarely discussed but the incidence of urinary tract infections (UTIs) and incontinence increases with both age and menopause.

A UTI is an overgrowth of bacteria in the urine that causes inflammation and infection. The main symptoms are frequency and urgency of urination and pain. Recurrent UTIs are diagnosed when a woman has two infections or more during six months or three in twelve months.

The risk of UTIs increases after the age of 60 and is mainly related to low estrogen levels, which causes a reduction in blood flow to the tissue, increasing its fragility, and protective vaginal bacteria to be replaced with bacteria that cause infections. The immune system is also affected by the loss of estrogen and there are age-related changes in collagen that cause urinary problems.

Incontinence is the involuntary leakage of urine and stress urinary incontinence (SUI) happens with activities that put stress on the bladder. The reasons for this problem are multiple; genetics, in terms of tissue strength and support, loss of collagen and muscle mass including in the pelvic floor, obesity, smoking, and constipation (due to straining that could injure tissues).

## **Lack of Sexual Interest/Desire**

Sexual desire decreases with age and for some women in menopause, but it's a complicated issue, and levels of estrogen and testosterone don't play a role in this problem. Rather, it could be related to many factors other than hormones like health and social and relationship aspects. Medications for desire have shown to be only moderately effective and other measures like cognitive behavior therapy, mindfulness, and communication skills can be used instead.

## **Insomnia**

It has been found that 40 to 60% of women have sleeping difficulties during menopause, with many women especially having trouble staying asleep. The sleep issues in menopause increase and peak during the last few years before the final menstrual period, and the first year or so after it.

Insomnia is an important issue to address in menopause and at any other time because it's associated with potentially serious health risks like heart disease, stroke, obesity, and depression.

Areas of the brain that are influenced by estrogen and progesterone are also important in the regulation of sleep. They are involved in our circadian rhythm patterns, and progesterone also has a mild sedative effect.

The vasomotor symptoms in menopause (hot flashes and night sweats) are potentially major sleep disruptors, but age also negatively affects sleep. Insomnia may also be caused by depression so this should also be a consideration in treatment.

Sleep apnea (where breathing repeatedly stops and starts during the night) can increase in menopause because of a drop in progesterone levels and an increase in visceral fat. Risk factors for sleep apnea are an increased waist circumference and high blood pressure. It's very important to address sleep apnea because it can cause serious health problems like high blood pressure and heart disease.

## **What Are the Therapies?**

Menopause doesn't need any medical treatment as such. Instead, we can focus on relieving symptoms and preventing or managing chronic aging conditions. Treatments available in the medical realm prescribed by doctors may cover:

## **Treatment for Hot Flashes**

You already know by now that MHT is one therapy that can help relieve symptoms like hot flashes. You've learned that it can be a safe option for those women who have not had a history of breast or uterine cancer, it is the best treatment for hot flashes, it prevents bone loss, and it is prescribed for the shortest possible time frame in the lowest dose as it has risks of cardiovascular disease and cancers.

Women who are unable to take MHT, including those who have had certain types of cancer (breast or uterine), heart disease, strokes, blood clots, or liver disease are ideal candidates for holistic therapy, but there are still other conventional medical options available to them:

- Low-dose antidepressants, selective serotonin reuptake inhibitors (SSRIs) can be helpful for hot flashes and for women who need treatment for depression, because the chemical changes that cause hot flashes seem to involve the same neurotransmitters as depression.
- Gabapentin (also called Neurontin, Horizant, or Gralise) is a medication used to treat seizures that can be used for hot flashes, especially at night.
- Clonidine (also called Kapvay or Catapres) is a blood pressure medication that can also alleviate hot flashes, though it is not as effective as other nonhormonal therapies, has unpleasant side effects, and takes three months of use to see benefits.
- Fezolinetant is a new drug that has not been released yet but is undergoing final phases of testing. It has been shown so far to be a promising alternative to HRT for hot flashes, with an 80% reduction in them. It has the ability to calm the nerves that become overactive to temperature when estrogen levels are low.

## **Treatment for Osteoporosis**

## ***Exercise***

This is one of the best things you can do for your heart as well as your bones, and it can help to not only prevent bone loss but reverse it. Compound exercises (where major muscle groups are used at the same time, like pushups, lunges, and squats) and weight-bearing exercises are very effective and safe for women with even very low bone mass.

To prevent osteoporosis, balance and posture exercises are also recommended, starting them early as a preventative measure. This includes exercises like yoga, tai chi, and exercises to improve your core or abdominal strength like planking.

Women with osteoporosis should be aware of bending down and lifting objects (especially if they are heavy) with proper form, bending knees, and hinging at the hips. This puts less stress on the spine and lower back and will prevent fractures.

## ***Calcium and Vitamin D***

If we don't get enough calcium, it can lead to lower bone mass because there won't be enough to support bone that is constantly being replaced. Women over 51 years old need 1,200 mg of calcium per day and it can be found in dairy, soy, or almond milk, tinned salmon and sardines, tofu, turnip greens, bok choy, kale, figs, and chia seeds. A calcium supplement can be taken if there is not enough in a woman's diet, but care should be taken to not take too much as this could cause kidney stones.

Taking vitamin D is necessary for the proper absorption of calcium. It also helps with the flow of calcium in and out of bones. Daily recommended doses are 800 - 1000 IU per day. (Read more about vitamin D in Chapter 7)

## ***Medications to Reduce Bone Loss***

Estrogen, both oral and transdermal, is very effective at preventing bone loss. An alternative to MHT is using medications called bisphosphonates, which inhibit the action of osteoclasts that break down bone cells when bone is being remodeled.

Candidates for therapy are: women who have had a fragility fracture or a diagnosis of high fracture risk based on FRAX scoring (an estimation of a woman getting a fracture/s in the

next ten years), or who have osteoporosis on BMD testing (bone density) and get a score of -2.5.

## **Treatment for Brain Fog**

- Be reassured and know that these symptoms will pass once you are out of the menopause transition. It is not a sign of dementia unless you are genetically at risk for early-onset Alzheimer's disease.
- Get assessed for depression, anxiety, and insomnia. These, if treated, may improve brain fog.
- Have a medical evaluation to rule out issues like thyroid disease, sleep apnea, and diabetes. Also, review any medication that you may be taking that could be causing cognitive problems.
- Exercise is one of the best things you can do for brain health.
- Consider how much stress you may be under and get support for it.
- Formal memory testing can be done, but only if memory or other cognitive issues are getting worse with no explanation or impacting your life.

## **Treatment of Dementia**

MHT may be a preventative treatment for dementia especially if a woman starts it under the age of 60, although there is no hard evidence to support going on MHT to reduce the risk of dementia, with studies to date being too small and too short. There is, however, definitive evidence that lifestyle factors play a vital role in its prevention like a healthy diet, regular exercise, and not smoking.

## **Treatment for Symptoms of GUSM**

The most effective treatment is vaginal estrogen and DHEA (another hormone). These hormones increase blood flow, restore lubrication, rebalance the vaginal microbiome, and reverse the fragility of tissues. These medications come in a variety of doses and

application methods like tablets, cream, suppositories, and vaginal rings. There are none of the associated risks of MHT with these vaginal hormone treatments, like the increase in the risks of strokes, heart disease, breast, ovarian, and uterine cancers. There are non-hormonal treatments for GUSM like Ospemifene (Osphena), a selective estrogen receptor modulator, that acts both like estrogen on some tissues (in this case, vaginal) and as a non-estrogen on others.

Aside from medical treatments, some lifestyle recommendations for managing symptoms of GUSM include:

- Avoid using regular soap or wipes and use a natural product without chemicals instead so that the pH of the vaginal area and microbiome is not affected.
- Use incontinence pads if necessary and not sanitary pads, which can't handle the moisture volume, leading to irritation of tissues.
- Moisturize using coconut or olive oil and use a lubricant during sex that doesn't have chemicals in it.
- Do Kegel exercises regularly to keep tissues healthy and increase the strength of the pelvic floor.
- Stop smoking if you do, as this stops blood flow to all areas of the body, and has anti-estrogenic effects.

## **Treatment for Urinary Problems**

Vaginal estrogen or DHEA hormonal treatment can be used, or antibiotics (although use should be as limited as possible because of the side effects and health risks). Methenamine Hippurate is a non-hormonal oral medication that prevents bacteria from growing, or D-Mannose, which is a sugar that inhibits how bacteria bind with the tissue of the bladder and inhibits them from sticking to the bladder wall. It is found in many fruits and occurs naturally in the human body.

For incontinence, vaginal estrogen can also be prescribed, as well as Kegel exercises, or having surgery in severe cases with a mid-urethral sling operation being done where a strip of mesh is placed beneath the urethra.

## **Treatment for Insomnia**

Sleep hygiene and cognitive behavior therapy (CBT) are modifications in your behavior that help to set yourself up for sleep and train you to sleep through the night. CBT-1 is designed specifically to treat insomnia and it involves changing cognitive distortions about sleep, such as thinking that you will never be able to get to sleep. It is more effective than sleeping tablets, which only give you about an extra 30 minutes of sleep at night.

Instead of doing CBT-1 on your own, it is more effective to do a course (often lasting 8 weeks or more) or to have sessions with a trained therapist. A few of the guidelines for CBT-1 are as follows:

- Sticking to the same sleep schedule, so going to bed and waking up at the same time each day.
- Limiting stimulating or anxiety-provoking activities like watching a horror movie before bed.
- Limiting screen time (phone, tv, or laptop) for a few hours before bed to minimize exposure to blue light, which affects our circadian rhythms.
- Avoiding napping during the day.

Medical therapies, such as the ones already mentioned for hot flushes, can also help with insomnia. MHT may produce a small improvement for insomnia, especially for vasomotor symptoms. Progesterone, usually about 300 mg, is another hormone that can be used to help sleep issues. For a non-hormonal medication that can be used for hot flushes at night to improve sleep, Gabapentin is sometimes recommended.

## **An Evaluation of What Works**

Some women will get away with only implementing lifestyle changes like exercise and changes to their diet to cope with menopausal symptoms. Others who have more serious symptoms that are impacting the quality of their lives may need to take MHT. Hormone therapy is undoubtedly the most effective treatment for vasomotor symptoms and if risks and benefits are properly assessed, it can be used safely for a limited period. Women have many alternatives to consider in the form of natural treatments like aromatherapy and sound healing. There are also other conventional treatments like cognitive behavior therapy and psychotherapy. Often a symptom can be addressed using different modalities. For example, osteoporosis can be treated with MHT, vitamin D, K, and calcium supplements and bisphosphonate medication, with lifestyle remedies like a healthy diet to boost the gut microbiome, and exercise to improve bone density.

The most important thing a woman can do is inform herself on what works and what doesn't, discuss this information with her doctor and other health professionals, and choose which treatments will benefit her based on those facts and her needs. Menopause



is a complex transition to go through with many potential physical and emotional symptoms to navigate and treatment is necessarily diverse, with no one modality suiting everyone, and in most cases, a combination of treatments will be needed.

## Chapter 6: Stress Relief

Stress refers to any type of change that causes physical, psychological, or emotional strain. It is your body's response to something that needs attention or action. Stress is a normal and inevitable part of life but the way you respond to it makes a difference to your overall well-being.

There are two main ways of resolving stress. The first is to change your situation or circumstances (like leaving a relationship that is making you miserable) or finding out the best way to manage stress (like feeling that you have control in the relationship and taking positive steps to put it right).

Common signs of stress are feeling anxious, changes in mood, clammy or sweaty palms, diarrhea, decreased libido, frequent sickness, insomnia, headaches, teeth grinding, low energy, frequent aches and pains, racing heartbeat, trembling, and muscle tension, especially in the neck and shoulders.

Physical signs of stress are frequent colds or infections, high blood pressure, weight changes, hyperventilation, restlessness, changes in the menstrual cycle, and libido.

Behavioral signs are poor self-care, not having time to do things you enjoy, and relying on alcohol and drugs to cope.

Psychological signs include: Worrying, anxiety, having difficulty concentrating, and trouble remembering things.

Emotional signs: Being irritated, moody, angry, frustrated, thoughts of hurting yourself or others, and depression.

So many things in life cause stress. Apart from the day-to-day inconveniences, some of the main sources are work, relationships, finances, and parenting.

Stress triggers the fight-or-flight response where hormones like adrenaline and cortisol are released, speeding up heart rate, shunting blood flow to major muscle groups, slowing digestion, and changing other autonomic nervous system functions so that the body has a burst of strength and energy. The fight-or-flight response is a response to danger and in our modern world is activated in situations where it is not appropriate, like in a traffic jam.

The relaxation response is designed to kick in after the stress response has been registered by the body, but with chronic stress, this doesn't happen often enough and can damage the body.

Although the exact mechanism is not known, menopausal symptoms like hot flashes seem to get worse with stress. It may be that symptoms that result from being stressed, like a racing heart and flushed cheeks, are similar to menopausal symptoms, or that stress hormones make menopausal symptoms themselves worse. Research has shown that hormones produced during menopause and the imbalance of them can cause stress, anxiety, and depression, but women who have previously experienced high levels of stress or have struggled to adapt to stressors in their lives are more predisposed to symptoms during menopause.

Ideally, a woman should avoid all stress during the menopause transition, but this is obviously not practical. It can be said that stress around menopause is inevitable, with the average woman experiencing particularly stressful events from the time of perimenopause, with divorce rates increasing, parents becoming ill and dying, children leaving home, etc. Even the idea of losing fertility can be its own stressor for some women.

Research has found that stress resilience is important for the relief of hot flashes, and the psychological reaction to hot flashes determines how easy or difficult they seem. One woman may be able to deal with them more easily, and she may have more ability to face challenges in life generally.

In most cases, symptoms of stress are minor and don't last long, but if they do last or become more severe, seek medical help, try alternative remedies to deal with them, or try a combination of the two.

## **Methods Recommended by the Medical Profession**

Stress is not a distinct medical diagnosis as it is a reaction to what is happening in your life and there is no specific single treatment for it. Treatment focuses on changing the situation, learning relaxation techniques and stress coping skills, and treating symptoms or conditions that have been caused by chronic stress.

There is also no specific medication for stress but there are some that can help to alleviate and manage the signs of stress. Sleeping tablets and minor tranquilizers can be used for insomnia and anxiety. They are sedatives that slow down your body and brain's functions like breathing, heartbeat, and thought processes.

These medications don't cure anxiety or insomnia and cannot address the underlying causes of these issues, but they do help people to feel calmer and more relaxed in the short

term. Sleeping pills should be taken for no longer than three weeks, and anti-anxiety drugs for no longer than four weeks, otherwise dependence on the drugs can occur.

However, there are several other therapies and techniques apart from drug therapies that can help manage stress and relieve some of the symptoms of a stressful lifestyle.

### ***Cognitive Behavior Therapy (CBT)***

As discussed in Chapter 4, Cognitive Behavior Therapy is a kind of talk therapy that helps you understand your thought patterns. It can be used to manage stress by helping you get an understanding of what triggers your stress and discover positive solutions.

## **Alternative Therapies**

### ***Meditation***

Meditating daily or a few times a week can relieve chronic stress by boosting alpha brain waves that are linked to calm, focus, and happiness. It also allows us to uncover negative brain loops caused by trauma and to rewire our responses.

In 2011, research done on mindfulness meditation at Harvard University showed that it can change the brain's structure, with the parts of the brain involved in emotional integration and attention becoming thickened. Another study done by the Max Planck Institute for Human Cognitive and Brain Science in Germany showed cortical thickening of the brain from MRI scans done on subjects that were trained in meditation techniques, compared to subjects that had not had the training. In other studies meditation has been shown to have positive effects on the body like lowering blood pressure, reducing inflammation, and boosting the immune system.

We can see that meditation supports parts of the brain that contribute to its well-being. It is best done every day, but the benefits will be felt if it's done even a minimum of three times a week. There are several different kinds of meditation with different goals, focuses, and techniques. A few of them are listed below.

### ***Mindfulness Meditation***

This involves letting go of any judgment about your state of mind or circumstances, and just observing your thoughts and feelings as they arise.

### ***Transcendental Meditation***

Here you are given a personal mantra that could be a word, short phrase or sound that is repeated in a specific pattern as you meditate. The goal is to allow you to reach deep relaxation without too much concentration or effort, thereby achieving inner peace.

### ***Guided Meditation***

With this type of meditation, mental pictures or situations are imagined with guided imagery that helps you to feel relaxed.

### ***Vipassana Meditation***

The goal of this type of meditation is to accept things as they are without changing them, gaining transformation through establishing a connection between mind and body and self-observation.

### ***Loving Kindness/Metta Meditation***

Here you direct good thoughts and wishes towards yourself and others, such as family members, friends, and even people with whom you have had difficulty.

## ***Chakra Meditation***

Chakras are the seven energy or spiritual centers in the body, each positioned in different areas and having a corresponding color. During this type of meditation, each chakra is visualized while practicing relaxation techniques that bring balance and well-being to specific areas of the body.

## ***Yoga Meditation***

This requires the practice of poses or postures that involve concentration and balance while doing controlled breathing exercises. Flexibility and strength of the body are increased while calming the mind and being in the moment.

With the complex lives we lead today there is a place for each type of meditation and all methods can be used, or one kind of practice may be done exclusively, depending on what resonates with a person, or what their needs are at any time.

## ***Forest Bathing or “Shinrin - Yoka”***

Walking in a forest and experiencing it with your five senses: listening to the sounds of the leaves rustling, smelling the fresh air, seeing the sunlight shining through the leaves, and feeling the bark of the trees can be very therapeutic for easing stress, restoring energy and vitality, and rejuvenating us. This idea is referred to as forest bathing, which started in Japan in the 1980s and is similar to meditation.

It doesn't involve any particular type of exercise apart from walking slowly and aimlessly and taking in the forest through your senses, connecting to the natural world. So many of us live away from these kinds of environments in big cities, and we are disconnected from nature, with 93% of Americans spending most of their time indoors. Fortunately, even a small amount of forest bathing can improve our health, and we don't even need to be in a forest to do it. It can be done anywhere where there are trees, like a park or garden, and it can be done in any kind of weather.

How to do it: Find a spot in nature and give yourself about two hours to get the most benefit from it. Switch off your phone and don't aim to get anywhere or achieve anything, letting your body be your guide.

Forest bathing involves resetting an overactive mind and switching off from technology. It allows us to trust our senses more and let go of the need to constantly be achieving something. The benefits of it are: It decreases stress and depression, reduces blood pressure, boosts immunity, and accelerates recovery from illness, also increasing energy levels and helping with insomnia.

## ***Grounding***

This is a powerful way to deepen your forest bathing experience. The skin supposedly takes in negatively charged electrons from the earth when it comes into contact with the ground, causing beneficial effects on our physiology and health. There are different ways to achieve grounding.

Different types of grounding include:

1. Walking barefoot on grass, sand, mud, the forest floor, or any natural ground.
2. Lying on the ground on grass or sand.
3. Submerging in water by, for example, wading into a lake or swimming in the ocean.
4. Using grounding equipment if you don't have enough access to the outdoors, like grounding mats, blankets, socks, and bands.

## ***Benefits of grounding***

The benefits of grounding can often be felt even within 10 minutes of practice: It improves our immunity, balances the nervous system and decreases stress, depression, and insomnia, neutralizes free radicals, decreases chronic fatigue and pain, and reduces high blood pressure, and inflammation.

It is especially useful for hot flushes as during menopause there is a powerful connection between the thyroid (which often changes in function with sleeping problems during menopause), the pituitary, and stress hormones. Our temperature balance is affected when one of these organs is out of balance. Our blood pressure may also increase and sore joints get worse, as do hot flushes and night sweats. Grounding helps to recharge our ancient cooling mechanism and decrease inflammation in the blood vessels.

## ***Breathwork***

We have gotten most of our knowledge about conscious breathing from ancient Eastern philosophies and it has been used as a way of becoming spiritually enlightened for centuries. But recently the wellness community and science have proven that there is a strong link with breathing between the mind and body. It benefits us on all levels; mental, physical, emotional, and spiritual.

Most people are not using their respiratory systems to full capacity and are breathing incorrectly. It is easy to fall into unhealthy breathing patterns like shallow breathing and holding our breath. Many people overuse the chest, shoulder, and neck muscles while constricting their diaphragms and not fully using their bellies to breathe. We can consciously change this by changing the depth, rhythm, and rate of our breathing.

Babies and animals breathe as we are supposed to, with no restrictions between the lower abdominals, midsection, and chest. As we develop emotionally from the ages of three to seven, we become aware of what makes people happy, sad, fearful, and angry. We may then control our emotions through the breath to prevent ourselves from crying, showing anger, or other emotions not deemed acceptable by our parents, peers, and culture.

We continue to do this throughout our lives by often holding our breath, contracting our muscles, and maybe shutting down parts of ourselves that don't feel safe or adapting to our surroundings. By doing this we suppress feelings of grief, guilt, shame, and sadness and this stops us from showing our true feelings.

Breathwork is useful for issues like anxiety, burnout, and panic attacks. The effectiveness of two sessions of breathwork has been compared to two years of talk therapy as we release physical and emotional tension from the body.

We also release 70% of toxins in the body when we exhale. Apart from CO<sub>2</sub>, 3,500 different compounds have been found in exhalations. Examples are phthalates from fragrances, metals, acids, nitrates, and organic chemicals from pollution, limonene from cola and thymol, and eucalyptol from mouthwash.

Breathwork helps increase our lung capacity and increases oxygen levels in the blood, which relaxes the body and energizes the mind. We are constantly triggered by our thoughts throughout the day (50,000 of them, not all of which are supportive) as well as other people at work and in our relationships. This causes us to fall into dysfunctional patterns, leading to a build-up of frustration and resentment.

Stress can cause us to hold our breath and create surges of cortisol and adrenaline in our bodies as we go into fight or flight mode. Conscious breathing can activate the



parasympathetic nervous system and raise levels of serotonin and endorphins in our bodies. It can also improve our sleep patterns and digestive systems and reduce inflammation in the body. Breathing correctly can increase our emotional health by clearing blocked energy centers and past traumas.

To benefit from breathwork we can think about how we breathe every day, control it to our advantage, and start a daily breathwork practice. If we are anxious we breathe too fast and take in too many breaths. We can become more relaxed if we consciously slow down our breath.

We can also become aware of breathing only through our noses and not our mouths. We have better quality breathing when we practice nasal breathing in our everyday lives, and we can train ourselves to do this while we are exercising, even at maximum effort. If we do this we cut exertion by half and increase endurance.

According to Partick McKeown, an authority on breathwork and author of the book: *The Oxygen Advantage*, most of us constantly over breathe, and our breaths are too shallow, causing stress and other health problems. If we breathe like this we don't have enough carbon dioxide in our blood to trigger the red blood cells to release oxygen.

The correct way to breathe is as follows: Breathe from your chest and not your diaphragm, taking air in through the nose and expanding the belly, then exhaling first with the belly. The only thing that should be moving is your tummy, not your chest, and before taking the next exhalation there should be a pause before you exhale.

### ***Breathwork Methods***

There are many different techniques and a few are as follows:

The Wim Hof Method, designed by Dutch extreme athlete and motivational speaker, involves cycles of breathing for 30 or 40 breaths followed by exhaling and breath-holding for one or two minutes, followed by breathing in and holding for 10 to 15 seconds. This is repeated for three or four rounds.

Buteyko breathwork involves slowing down your breathing and taking more shallow breaths. (Most of us are breathing too quickly and too much.)

The yogic pranayama breathwork technique of alternate nostril breathing is done by alternatively blocking each nostril with a finger on top of the nose with light pressure while breathing for a few cycles. It is said to lower heart rate and blood pressure, improve lung function, lower stress, and balance the right and left hemispheres of the brain. When

they are working together without one being dominant, life tends to be easier and the strengths of both hemispheres are used equally.

Navy Seal box breathing is designed for calming down in stressful situations and can be done anywhere. It involves inhaling to the count of 4, holding the breath for another count of 4, exhaling for 6 counts, and then holding for a count of 2. It can be repeated 6 times or more if necessary.

4-7-8 breathing, made famous by Dr. Andrew Weil, causes the body to become deeply relaxed. You inhale for four counts, hold for seven, and release for the count of eight.

These techniques (one or a combination of them) can be used every day as part of a wellness program, for example, before meditation or after exercise.

### ***Sound Healing***

Sound healing is a tool for healing, also called a sound bath, that balances the mind by causing shifts in our brainwave state by using entrainment (interactions between brain rhythms and sounds). Using sounds, the brain can attune to a stable frequency and we can slow down our normal waking consciousness (our beta state) to relaxed (or alpha state) to reach theta (the meditative state) and delta (which is sleep, where internal healing happens). Everything has a vibrational frequency, including us, so it makes sense that sound frequencies influence how we feel.

The tools used in sound healing are voice, tuning forks, drumming, and Himalayan singing bowls, which have tonal frequencies to bring the body into a state of vibrational balance. The person receiving sound healing therapy lies down, relaxes, and slows their breath getting to a calm place of stillness where they become aware of each sound that arrives in their consciousness.

Our lives are constantly full of noise and we don't dedicate enough time to ourselves which prevents us from achieving balance. Sound therapy can help us to get to a feeling of inner peace and is said to give results for many issues like sleep disorders, depression, anxiety, stress management, clearing energy blockages, lowering blood pressure, and preventing heart disease.

## ***Lymphatic Drainage Massage***

Lymphatic Drainage Massage is a form of gentle massage that moves lymph fluid around the body. The lymphatic system is part of the immune system and the normal flow of lymph fluid (which removes toxin and waste) can be interrupted with health conditions where lymph builds up in a particular area of the body.

This massage can reduce swelling and improve lymphatic circulation which uses the movement of smooth muscles to move fluids through lymph vessels all over the body. There are different types of lymphatic drainage massage used by massage therapists, physical therapists, and doctors, who use light, rhythmic movements in a particular sequence, using a few techniques like compressing, stretching, cupping, and gliding motions.

It can help to alleviate stress, insomnia, fatigue, depression, migraines, and digestive problems, amongst other things.

There are ways of taking care of your lymphatic system yourself, without having to go to an (often) pricey massage therapist. You can do gentle exercise like a fast walk or slow run, where you concentrate on taking deep belly breaths.

You can also do dry skin brushing where you take a brush (with firm natural bristles) and use it to gently massage your body in an upward motion. This can boost circulation, help with lymphatic drainage. Toxins and pathogens are removed from your body more quickly and it exfoliates dead skin resulting in increased cell turnover and more radiant, smooth skin.

Tips on how to do it:

1. It's best done when your skin is absolutely dry and just before you shower so that you can wash off the dead skin cells.
2. Start at the soles of your feet and move up in long circular motions towards the heart, maintaining slightly firm pressure.
3. Do it once or twice a week.
4. Proceed with caution if you have any cuts or open wounds as you don't want to introduce bacteria into your body or if you have any skin condition like eczema as it could worsen the condition.

Swimming is also good for lymphatic movement as the pressure of the water against the body is a built-in compressive force. Contrast hydrotherapy can also be done where you alternate between hot and cold showers, improving blood movement through the arteries.

Tapping your chest, especially the part of your torso just above the collarbone with a cupped hand stimulates lymph capillaries below the skin.

### ***Float Therapy***

Float therapy, also called sensory deprivation therapy, involves floating in lukewarm (body temperature) water with magnesium sulfate (or Epsom salts) in it. Magnesium sulfate is anti-inflammatory, good for joint repair, and helps your muscles to relax.

Float therapy helps your body to get into a deeply relaxed state, which in turn causes your brain to repair and rest.

Float therapy potentially alleviates stress, anxiety, and depression, and is a way to reach mindfulness states, resetting the nervous system. The goal of the therapy is to minimize any outside sensations so the room, or tank, is dark and silent, and the person is left to focus on what they're feeling in the present moment (breathing, their heartbeat, being alive, etc).

The full effects of the relaxation of float therapy only set in an hour after the treatment is done, and can last for 24 hours afterward.

### ***Exercise for Stress***

We've already spoken about exercise as an important lifestyle factor in reducing menopausal symptoms. Exercise is also a very effective anti-anxiety treatment. It releases tension, enhances well-being through the release of endorphins, and boosts mental and physical energy. Adding a mindfulness element while exercising is particularly useful. For example, feeling the sensation of your feet hitting the ground, or the wind blowing against your skin, or the rhythm of your breathing. This will interrupt the flow of worries going through your head and is a way of breaking the pattern of the physical effects of stress like headaches and tightness in the chest.

# **Chapter 7: Supplements for Menopausal Symptoms**

There is an incredible array of supplements that are promoted for the relief of menopausal symptoms with many remarkable claims attached to them. The supplement industry makes billions and billions of dollars every year, is unregulated, and not studied sufficiently. Women can't rely on the lay press to educate them about trusting these claims and the quality of information they get about them is often questionable. Both the gaps in medical knowledge and the fact that fear sells allow the supplement and natural product industry to exploit the public. Often the risks of conventional medicine are overamplified and alternative solutions are not unbiased. We need to be skeptical of "new therapies," or "special vitamins for menopause" or other claims like this and of taking advice on menopause from people who have online stores with products aimed at menopause, as they will have a financially vested interest. They can act as your store or your care provider, but not both.

Supplement sellers have exploited the fears that women have about hormones and market their products as "natural." But we can argue that they are not natural and the only natural way to get micronutrients is from eating food. Vitamins and minerals are absorbed better this way because they are combined with fiber, and there are other positive influences on absorption if taken in by food and not supplements.

Although wasting money on supplements is annoying and exasperating, it's more than this. Taking the wrong supplements can also cause serious health complications like liver failure, due to the actual substance or to the contaminants in them. Many supplements have useless fillers in them, apart from harmful additives, and many don't do what they claim to do. Companies don't legally have to prove that if their label says something that the product is going to work, or that it actually contains what it says it does. All it has to have on the label is: "These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease."

## **What Does Research Say About Supplements?**

In this section we will critically examine all the supplements that are suggested for menopausal symptoms and see what science says:

### ***Black Cohosh (Cimicifuga racemosa)***

This North American plant has been widely used as an indigenous treatment for menopause for many years. It is a member of the buttercup family, and the rhizome (rootstalk) is used in fresh and dried forms. It is used for vasomotor symptoms of hot flashes and night sweats, heart palpitations, tinnitus, vertigo, vaginal dryness, insomnia, anxiety, and irritability. There are claims that it reduces hormonal imbalances caused by diabetes or fibroids.

Studies have shown no benefits with Black cohosh compared to placebos and it has been shown to cause liver damage, especially if one is already taking other medication that may have effects on the liver. One study that researched 35 different brands of the supplement actually found that 25% of them contained no Black cohosh at all! So in light of these facts, it's probably wise to avoid these supplements.

### ***Wild Yam (Dioscorea)***

This is a tuber that has been used in traditional Chinese medicine to reduce symptoms of menopause and improve levels of estrogen and progesterone by converting a plant steroid called diosgenin. It is most often made into a topical cream, but despite many health claims, there is little evidence that it is effective in treating menopause.

### ***Dong Quai (Angelica Sinensis)***

This is another traditional Chinese herb, also known as the "Female Ginseng." It is used in combination with other herbs in preparations and is extracted from the root.

Although it has been used for over 2,000 years in traditional Chinese medicine and is said to be effective in reducing hot flashes, there is not enough scientific evidence to support this. It also has confirmed side effects like insomnia, stomach upset, and difficulty breathing. Research hasn't shown benefits for hot flashes and night sweats for Dong Quai and this product could be dangerous if taken with blood thinners because of potential

interactions with these drugs. There is also an increased risk of cancer with this supplement. It doesn't appear safe and should be avoided.

### ***Maca (Lepidium meyenii)***

This is a South American plant that has been used for centuries in Peru to treat female hormonal imbalance. It has been found to help with hot flushes and interrupted sleep and helps to protect bone health. It may also help with improving sexual function and desire.

It's an adaptogenic herb that is said to decrease cortisol levels and improve energy levels. It lowers the effects of stress and aging on the body. Other adaptogenic herbs are ashwagandha, medicinal mushrooms, holy basil, and Rhodiola. They are said to protect us against stress, improve thyroid function, lower cholesterol, stabilize blood sugar and insulin levels, and reduce anxiety and depression.

There have been very few rigorous trials on Maca and this supplement and further studies are recommended before its safety and efficacy can be established.

### ***Evening Primrose Oil (Oenothera biennis)***

This is extracted from the evening primrose plant that grows in North and South America. It comes in a gel, capsule, or bottled oil form and has essential omega 6 fatty acids called Gamma-linoleic acids that are said to treat many inflammatory diseases. It is also claimed to have benefits in increasing bone mineral density. It has vitamin E and is also said to treat hot flushes, anxiety, insomnia, hair loss, and joint pain. Evening Primrose Oil is widely used but there is no reliable data to support its efficiency.

### ***Vitex/Chasteberry***

Some clinical trials have proven the effectiveness of vitex for hot flushes. It balances hormones and helps to regulate sleep, prevent fibroids, and regulate irregular periods and skin changes.

It increases luteinizing hormones, balances prolactin, and helps to inhibit the release of follicle-stimulating hormones. This helps to balance the ratio of progesterone to estrogen.

Some small studies have shown some benefits of Vitex or Chasteberry alleviating menopausal symptoms but more research is needed before it can be recommended.

### ***Ashwagandha***

This is an ancient Ayurvedic medicinal herb that is an adaptogen, meaning that it helps the body deal with stress. It can help to lower cortisol levels in chronically stressed people, as well as reduce anxiety and depression. It may improve brain function including memory as it promotes antioxidant activity that protects nerve cells from free radicals.

It has many other benefits that apply to menopause as well and a few studies have shown that it can regulate blood sugar levels by increasing insulin sensitivity.

It is used to improve muscle mass and strength, reduce fat, and improve body composition.

It may have anticancer properties due to a compound called withaferin that disrupts the function of cancer cells by promoting the formation of reactive oxygen species. It can be used to treat several types of cancers like breast and ovarian cancer.

Although Ashwaganda's long-term effects are not known, this is a safe supplement for most people. People with autoimmune disorders and type 1 diabetes should take care though, as should those taking thyroid medication.

### ***Ginseng***

This can supposedly relieve hot flashes, depression, fatigue, vaginal dryness, and cognitive impairments. There have been very few studies on ginseng and long-term effects on the body are not known.

### ***St. John's Wort***

This herb is said to lower depression, anxiety, and insomnia and stabilize moods and reduce inflammation. St. John's Wort can be helpful for mild depression, and some people use it for insomnia and anxiety, but there is no solid evidence that it works, and it can



interfere with other medications like antidepressants, blood thinners, and HIV medications and cause serious side effects.

### ***Phytoestrogens***

These are non-steroidal plant compounds from soy, red clover, hops, and flaxseed. They act either estrogenically or anti-estrogenically on our bodies. Red clover and soy have isoflavones that produce estrogen-like effects and hops have other isoflavones that can help alleviate menopausal symptoms. It is claimed that bone density loss can be prevented with red clover, and the risk of heart disease is lowered. It has isoflavones that could reduce symptoms like hot flashes, weight gain, insomnia, osteoporosis, inflammation of the joints, and cardiovascular problems.

Phytoestrogens are plant compounds that either mimic estrogen or block its activity. A diet high in phytoestrogens does have health benefits as plants have vital antioxidants, vitamins, and minerals, but it is unlikely that phytoestrogen supplements will help menopausal symptoms or reduce the risk of breast cancer, as has been claimed. The relationship between hormones and food is very complex and the information around them is confusing. Humans can also only make hormones from cholesterol, not plants. It has been recommended that further studies need to be done to draw conclusions about the benefits of phytoestrogens, but they do seem to be safe.

### ***Pollen Extract or Bee Pollen***

This is a mixture of pollen and nectar from flowers, wax, honey, and other bee secretions and enzymes. It has many nutrients and antioxidants like flavonoids, carotenoids, and quercetin. It has phytoestrogens that supposedly help with sleeplessness and hot flashes. The only studies that have been done on Flower or Bee Pollen Extract have been short term and they have shown benefits but more long-term studies need to be done.

### ***Himalayan Salt***

A pure form of salt that actually comes from an ancient sea in Pakistan that left massive deposits of pure salt. It has over 80 trace minerals that occur in our bodies including magnesium, calcium, potassium, phosphorus, and iron. Claimed benefits include;

maintains a healthy heart, prevents migraines, alleviates depression and ADHD, maintains a healthy weight and promotes the absorption of nutrients, increases energy, balances hormones and pH levels, and decreases signs of aging,

### ***Sea Moss/Irish Moss***

A superfood and type of macroalgae seaweed that contains 92 trace minerals out of the 102 that the body needs. It has calcium, potassium chloride, sulfur, iron, iodine, vitamins A, D, E, F, and K, and has antiviral and antibacterial properties. Benefits include improving thyroid function, boosting immunity, increasing energy levels, lowering blood pressure and blood sugar levels, nourishing the skin, improving sexual function, increasing emotional and mental health and clarity, reducing inflammation, stimulating metabolism and aiding with weight loss, improving gut health and digestion, managing cholesterol levels, and easing menopausal symptoms.

### ***Cannabis***

There is anecdotal evidence that cannabinoids, both CBD and THC, help with hot flushes, anxiety, and sleep disorders, and aids in both getting to sleep and staying asleep. Research into cannabis has been challenging, partly because it remains illegal in many parts of the world. The potential for the effectiveness of cannabis exists because it is a known endocrine disruptor, but there have been no peer-reviewed clinical studies done on it and further research is recommended before women try it as a solution for hot flushes, anxiety, and insomnia.

### ***Vitamin E***

A fat-soluble vitamin that is also an antioxidant, some studies confirm that it is said to help with hot flushes, night sweats, bladder urgency, sleep disruption, and mental clarity. It is also claimed to lower stress and depression because the antioxidants reduce oxidative stress and inflammation. Antioxidants fight free radicals that damage cells, so they lower inflammation in the body. Arterial blood flow is stabilized and arteries work better leading to less hot flushes. It helps to stabilize estrogen levels in the body and can enhance the benefits of even low levels of estrogen. It supports our heart, brain, and hormones. It can also be used for vaginal dryness as a vaginal lubricant by breaking open a capsule and also

taken internally for this. If there are any benefits of vitamin E they are mild, and the high doses recommended can be harmful and increase the risk of mortality.

### ***Vitamin D***

This is more than a vitamin as it is a hormone that acts on the insulin levels in our bodies. It has many benefits like weight control, it controls insulin sensitivity and inflammation, reduces anxiety and depression, boosts immunity by restoring telomere length, increases gut health, increases bone health by causing better absorption of calcium, and controls estrogen levels.

The best way to get Vitamin D is exposure to UVB rays from the sun, where it is converted in our skin. This is not always practical as we don't get enough time to do this. Some of us also live in climates where there isn't much sunlight. People with dark skin who have a high amount of melanin also aren't able to absorb Vitamin D as effectively (especially if they live in cold climates and are spending little time outdoors).

70 % of the US population is deficient in it and we can all safely take 4,000 to 5,000 international units of Vitamin D daily. To improve absorption of Vitamin D you need to also take Vitamin K2.

### ***Vitamin C***

This can help alleviate symptoms of fatigue that can be common in menopause. This vitamin is necessary for mitochondrial health, the immune system, the adrenals, and the hypothalamic-pituitary-adrenal axis (our central stress response system).

### ***Magnesium***

Most people are deficient in magnesium but it's needed for many functions of the body. It supports estrogen detoxification, glutathione production, adrenal and thyroid health, and the production of neurotransmitters like serotonin.

If you have low magnesium you may have the following symptoms: Insomnia, anxiety, feelings of weakness, muscle spasms, and poor appetite.

Good forms of magnesium to take are magnesium oil and glycinate.

## ***B Vitamins***

These are essential for energy, cognitive function, and mood. All the B vitamins are niacin (Vit B1), pantothenic acid (B5), B6, folate (B9), and vitamin B12.

## ***Bioidentical Hormone Therapy (BHT)***

Bioidentical Hormone Therapy (BHT) is similar to HRT but the hormones are sourced from plants. Women who use BHT often swear by it but there is a lot of debate about its safety and this is likely to remain until long-term trials have been done. There is good data to show that they are not any different from HRT, and there is no standardization of the products.

How is BHT Different From HRT?

- More and more women are looking for “natural” holistic health solutions for many things, not only menopausal symptoms as they become skeptical or give up on medical solutions. Some claim that the “natural” tag is used as a marketing tool to differentiate bioidentical hormones from HRT. There is a competitive market for hormone replacement products and the idea of using natural products that more closely mimics the functioning of our own bodies can be persuasive.
- The hormones are phytoestrogens (sourced from plants) and are said to be identical on a molecular level to chemicals produced by our bodies. Hence the term “bioidentical.” The hormones are estrogen in different forms, progesterone, and sometimes testosterone.
- The BHT preparation is worked out according to a woman’s individual hormone levels at the time that the levels are tested. So each time you have a new prescription your hormone levels need to be tested and you need to have a new blood test.

The Case For BHT:

- BHT hormones are identical to the hormone molecules that occur naturally in our bodies. They are made from precursor molecules in soybeans and yams.

- There is less stress on the liver with BHT because of the way it is administered. It bypasses the digestive system as it is either applied to the skin in creams, patches, or gels or taken as lozenges.
- The hormones are mainly customized to suit the individual woman's hormonal needs.
- Proponents argue that it is possible to monitor levels of estrogen more accurately than with MHT and to adjust levels if need be.
- The US FDA has approved some prescription BHT.

#### The Case Against BHT:

- BHT hormones are manufactured synthetically by a process that is similar to most hormones, so using the term "natural" is a misnomer.
- As they are customized to suit each individual it makes it difficult for them to be approved by bodies like the FDA as each prescription is unique. Testing for whether ingredients are absorbed properly or if they react as they are expected to in a woman's blood and body is not possible.
- Testing hormones through blood and saliva can be hit and miss because the levels vary from day to day as well as throughout a given day.
- It carries the same health risks as other hormone therapy, like blood clots, breast, and uterine cancer, heart problems, etc.
- In some cases, hormone doses in BHT are ten times greater than hormone doses in other comparable products.
- Compounding pharmacists are not required to report side effects from the bioidentical hormones that they dispense.

#### ***What the Research Says***

Food science and supplement studies can be difficult to do for many reasons with a huge volume of, (often contradictory) data produced, and bias because of funding for studies. Diet and dietary patterns are also often difficult to study in societies. An example is a correlation between less or no hot flushes amongst women in Asia and their diets which are often high in soy. Women in the West experience more hot flushes and don't eat soy as a rule. However, to conclude that soy is preventing hot flushes could be problematic because there are so many factors involved. If a woman is eating a diet high in soy then she could also be eating other healthy foods like a range of vegetables that could be reducing hot flushes. People who live in Asia might also have developed intestinal bacteria or have genetic features that allow them to absorb soy more effectively in their bodies.

It is difficult to break down what we eat and how our bodies use the nutrients from one food or supplement, and it is very complex to analyze. The data from observational studies is often not enough to make definite conclusions. Although it's a slow, painstaking task, the only guidance we should be relying on about supplements should be coming from careful, objective medical studies that go beyond anecdotal evidence.

Scientific studies on supplements often start with simple observational studies where the health of people who take a supplement is compared with that of a group that isn't taking it. Results aren't always consistent with these studies though and the next step is to do a randomized clinical trial/s where subjects are divided randomly into two groups with one group taking the supplement and the other group a placebo (with neither group being aware of what they are taking) while their health is monitored.

Unfortunately in most cases, studies have failed to prove that supplements work, with a few exceptions. According to Dr, Jen Gunter in her book: *The Menopause Manifesto* some supplements have proven benefits for menopausal women that they should consider taking. They are vitamin D, vitamin B12, and Omega-3.

Vitamin D has many important health benefits, an important one in menopause being the absorption of calcium. We are often not getting enough sunshine to make vitamin D as most of us aren't getting outdoors daily, and when we do, we are covered in sunscreen, which blocks vitamin D absorption. It's also harder to absorb vitamin D from the sun as we age, and sometimes difficult to get enough vitamin D from our diets with oily fish and fortified dairy products being the most important sources.

Vitamin B12 is important for the nervous system, making red blood cells, synthesis of DNA, and influencing many metabolic processes. Women over 50 and vegans (it is only found in meat) should take care that they are getting enough, (2.4 mcg per day) especially as the absorption of vitamin B12 is a complicated process, and may be impaired with age.

Other vitamin B supplements have not been shown to decrease heart disease or protect the brain, as has been suggested.

A large clinical trial found that taking a good-quality omega-3 supplement reduced heart disease and stroke. It can also reduce triglyceride levels at very high doses (under medical supervision) and symptoms of diabetes. But other claimed benefits like treating depression, bowel inflammation, and alleviating arthritis, are still unvalidated.

It is suggested that oily fish is eaten twice a week or 1000 mg of a good quality omega-3 supplement is taken daily.

Calcium supplements for healthy bones can be taken in the form of calcium citrate or calcium carbonate, but deposits can build up in joints with an excess, especially if we lack

vitamin K to break it down. Research has also pointed to calcium supplements causing an increased risk of heart disease.

Antioxidants (vitamins C, A, E, and beta carotene) have been studied with many careful, randomized trials that showed no benefits against cancer, heart disease, and other illnesses. Some have even been shown to be harmful with high doses of vitamin A possibly increasing the risk of hip fractures, prostate cancer, and an increase in heart failure, respiratory infections, and increased mortality.

From research we can see that only a few supplements are likely to help with menopause, some may be expensive disappointments, and some may cause more harm than good.

# **Chapter 8: Mental and Emotional Health**

## **Menopause As an Emotional Rollercoaster**

A study has shown that women are two to four times more likely to have a major depressive episode during menopause than at any other time in their lives. Those who have suffered from depression in the past may also have a recurrence in symptoms. From 19 to 36% of menopausal women can experience depression, and some women find it more difficult to adjust to the hormonal chaos.

Due to these fluctuating hormones, we can experience many mood changes like irritability and sadness, which are the most common emotions experienced at menopause.

We also feel fatigue, difficulty concentrating, aggressiveness, tension, anxiety, and lack of motivation. Some women experience problems with these feelings for the first time in their lives as all women are vulnerable to depression during menopause.

Multiple factors can cause stress in a woman's life around menopause, like caring for children or having them leave home and experiencing the "empty nest syndrome," caring for aging parents, and navigating life's changes. It is characterized by low mood, apathy, and loss of confidence.

Although hormones can cause these mood changes, menopause can come with great life costs. Some women mourn the loss of their fertility, and the fact that they can never experience the joy and excitement of pregnancy again.

Some women feel the loss of their sexuality, feeling less attractive and less sexual desire, and are concerned that they will become invisible. Women need to feel these losses deeply and honestly and then pass on to the next stage of their lives. They should be allowed to mourn menopause as a loss in their lives, and then focus on things so that they can find new expressions of themselves.

But depression is a real thing and often very difficult to cope with on your own, so if you are struggling with it, and can't seem to uplift yourself, it is vital that you seek professional help, as there are many options available to help you cope.

## **Treatment Modalities**



# Medical Treatment of Depression

Estradiol in HRT can be effective at treating mild to moderate depression which could arrive in early menopause, but moderate or severe depression may need antidepressant medication and/or psychological therapy.

## *Antidepressants*

There are many different kinds of antidepressants available for women struggling with menopause:

- Selective serotonin reuptake inhibitors (SSRIs)
- Serotonin-norepinephrine reuptake inhibitors (SNRIs)
- Tricyclic antidepressants
- Monoamine oxidase inhibitors (MAOIs)
- Atypical antidepressants that don't fit neatly into any of the categories

Sometimes two kinds of antidepressants can be combined, and other medications may be added to an antidepressant to enhance its effects like mood stabilizers, antipsychotics, anti-anxiety, and stimulant medications.

Finding the right antidepressant medication may take time and a few kinds may be tried before you find the one that works best. Most antidepressants take a few weeks to start working at their full effect and you may feel worse during this time as your body adjusts. Treatment takes commitment and although it can seem slow at times, it has its ups and downs.

Medication shouldn't be relied on alone and it's important to make healthy lifestyle choices at the same time like exercise and therapy. Even if the decision is made to take antidepressants, applying these changes will speed up recovery from depression and skills to prevent relapse are learned. It is also not always the most effective treatment for some women, and it can often be more than chemical or hormonal imbalances in the body. Antidepressants have side effects and safety concerns, and withdrawal from them can be challenging.

## ***Psychotherapy***

During menopause, there are so many changes to cope with that many women find it helpful to see a therapist and enter into “talk therapy” done with a mental health professional like a psychologist or psychiatrist.

One of the major signs of depression is having trouble focusing and feeling overwhelmed. Therapy can help you step back, see what might be causing it, and how you can make changes.

Different types of psychotherapy are useful for depression, like interpersonal therapy, cognitive behavior therapy, psychoanalysis, and humanistic therapy.

Psychotherapy can help to:

- Get back a sense of control and satisfaction in your life.
- Find ways to solve problems and cope with them.
- Set realistic goals for your new stage of life to help cope with all the changes and symptoms of menopause.
- Use healthier behaviors to develop the ability to tolerate and accept distress.
- Replace negative behaviors and beliefs with more positive ones.
- Adjust to a crisis or any other difficulty.
- Develop positive interactions with others by exploring experiences and relationships.
- Setting healthy boundaries and learning to say no in relationships and work. Helping you identify and validate these boundaries.

## ***Group Therapy***

In individual therapy, you build a strong relationship with one person and it may feel more comfortable to share some kinds of information with one person than a group. You also get individualized attention.

In a group setting, you are listening to peers going through similar issues. This can validate your experiences and help build self-esteem. Group members can get ideas from each other, especially if they are at different points in their depression. It can also help to increase a social network and it is invaluable for women to share their experiences of menopause.

# **Holistic Mental Health Treatments**

For people struggling with anxiety, depression, stress, or other mental health issues, there are also holistic mental health treatments that can help.

## ***Neurofeedback***

Here you have electrodes connected to your head that show you your brain activity in real-time. Using this information, you can train yourself to have higher alpha waves, like the calm and focused ones you get during meditation.

## ***Transcranial Magnetic Stimulation (TMS)***

This is a non-invasive treatment that passes magnetic pulses painlessly through the skull to stimulate brain cells that improve communication between different parts of the brain to ease depressive symptoms.

## ***EMDR Therapy (Eye Movement Desensitisation and Reprocessing Therapy)***

This helps you find triggers that cause a traumatic pattern or loop in your brain activity, and trains you to recalibrate your brain and process the event that caused the trigger. In a session you watch light move from left to right at specific speeds with a therapist guiding you through uncovering and facing distressing events you recall, processing them, and rewiring your brain.

## ***Mental Health Apps: The Switch App***

This is an app for both Android and iPhones and is a routine of mental self-care designed to detox your brain. It was designed by Dr. Caroline Leaf, a communication pathologist and cognitive neuroscientist, who has researched the mind-brain connection since the

1980s as well as the nature of mental health and the formation of memory. In this program, you learn mind management skills that help you overcome stress, anxiety, depression, and toxic thinking in a 5-step daily process. With this process, you find the root of your toxic thoughts and habits which are causing your mental health issues. You then eliminate the root and rebuild a healthy new thought pattern and habit.

Dr. Leaf says that proteins, which are actual structures, are built into our brains during neuroplasticity (change in thinking patterns and new neural pathways in the brain). The process involves becoming comfortable with feeling uncomfortable and doing “brain surgery” on yourself. We build what she calls “toxic trees” in our brains, which we can change, literally by changing the physical matter of the brain. This is done in 21-day cycles to grow and reinforce these new branches in our brains.

The app takes you beyond mindfulness and gives scientifically proven tools to change your brain and build up stress resilience. It takes roughly 15 to 20 minutes daily to go through the program.

### ***Relaxation Techniques***

Including meditation, progressive muscle relaxation, yoga, and breathwork. (See Chapter 6)

### ***Acupuncture***

Just as acupuncture is used as an alternative therapy for other menopausal symptoms, it is also used as an alternative therapy for depression sometimes. There are very mixed reports on the effectiveness of this therapy but some research studies are showing promising results. It is essential to find a practitioner who is licensed and qualified and one should not expect immediate results with depressive symptoms eased after only a few sessions.

## ***Exercise***

When someone is depressed, the level of some of their brain chemicals is low and exercise stimulates their release, promotes different changes in the brain including neural growth, reduced inflammation, and new activity patterns causing feelings of well-being and calm.

Even a modest amount of exercise can have a profound effect on anxiety and depression, and it relieves stress, helps you to sleep better, improves memory, and boosts overall mood. It can be used as a powerful tool to overcome mental health problems and get more out of life.

A study found that running for 15 minutes a day, or walking for an hour reduces risks of depression by 26% and can be as effective as an antidepressant. People can get an incredible feeling of well-being with exercise. They feel more relaxed and positive about their lives, have more energy throughout the day, and have sharper memories.

## ***Improve Gut Health***

There is a strong connection between the gut and the brain. The gut, like the brain, has many nerves called the enteric nervous system (ENS), also called the second brain. The nervous system has the same kinds of neurotransmitters and neurons that are found in the central nervous system and has more than 100 million nerve cells that line your digestive system.

In depression there is an imbalance of neurotransmitters in the brain and when our neurons get less than the expected levels of neurotransmitters they start to deteriorate and brain cells start to become unhealthy and die off, making the symptoms of depression worse. There is cross-talk between the gut-brain axis with changes in our gut like microbiota abnormalities influencing our behavior and mood.

The brain-gut connection affects digestion, mood, and the way you think. The gut, known as the second brain controls and manages digestion, breaks down food into small particles, and controls blood flow so that we can absorb nutrients and eliminate them, and the food that we eat can enhance the content of our microbiomes. In the past, it was thought that depression and anxiety caused irritable bowel syndrome (IBS) in some people, but current research shows that it could be the other way round, with the ENS affecting the brain. Information is exchanged between the brain and the ENS through hormones and the nervous system, and between the gut and the immune system, influencing overall mental health by affecting each other's functions.

If there is inflammation in the gut caused by opportunistic gut bacteria that take over causing gut dysbiosis, it can cause psychological distress as these bacteria interfere with signals sent to the brain. Reducing gut inflammation can improve its influence on the central nervous system, all by stabilizing the gut ecosystem.

Our body releases chemicals and hormones when we are anxious or stressed which affects micro bacteria in the gut that help to decrease antibodies and help digestion. This causes a chemical imbalance possibly resulting in indigestion, diarrhea, constipation, IBS, nausea, and loss of appetite or unusual hunger.

(See more on gut health and how to improve it in Chapter 2)

### ***Lifestyle Mental Health Tips***

Life can be difficult for everyone at times and we often don't learn coping skills to help us navigate difficulties, or we forget about our own strengths to overcome them. Here are some important things to remember during this transition to the next part of your life.

- Understand that “real life” may be different from what you wanted or expected. Practice gratitude, acceptance, and optimism.
- Go easy on yourself and be flexible without setting unrealistically high expectations for yourself. Allow your life to unfold to discover an outcome instead of striving to get to the end goal.
- Break barriers in your mind and start seeing things in a new way. For example, anxiety is addictive and often people fall into feeling anxious as a default, instead of developing calmness or positivity in a situation. Be flexible when these feelings come up and try to connect to new thought patterns.
- Connect to your inner self to gain peace and tranquility from inside instead of attaching yourself to superficial things like possessions or beauty. Practice meditation or breathwork regularly to help you with this.
- Stop worrying about what other people think of you and focus on freeing yourself from this limitation by doing what feels right to you.
- Get rid of physical possessions that you don't want or need, as well as toxic relationships or people who don't inspire you.
- Enjoy life! Laugh often and stop taking life so seriously.
- Knowing what we do about what causes depression we can take measures like working at getting enough sleep, stopping smoking, and having a support network.

It's impossible to be happy all the time, and many would argue that this is not a “healthy” goal to strive for, but there are many ways to increase our mental health and lead a better

life. Changing our habitual thought patterns and using the tools mentioned above can lead to a more satisfying life.

## ***Support Groups***

Many more women discuss their experiences and concerns about menopause with friends, female relatives, and colleagues than they used to, but it can still be an invisible, unmentionable topic for some. This means that they don't get enough support and facts to help them with their challenges with menopause.

Support groups are different from group therapy and involve groups of like-minded people sharing what they have in common. They are there to give awareness and reassurance to women via organized support groups, internet forums, and social media support groups, like on Facebook and Instagram.

An example of an online support network is Red Hot Mamas, which is part of the Hormone Health Network in North America. They aim to support and guide women going through menopause and into their postmenopausal years. Their website has reliable, current, and comprehensive information, and women can ask any questions and have them answered. They also have a free monthly menopause education program in local communities.

Menopause forums can feel more comfortable for some women who don't feel like talking to others face to face about their issues as there is a degree of anonymity. Menopause chat rooms can also give support but they can be varied with some misinformation at times.

Some women prefer in-person contact and the "Menopause Cafe" can be one way to do this. Groups of women (and sometimes their husbands, children, and colleagues) meet up for coffee and talk about any aspects of menopause that they want to, with groups taking place around the country on different dates of the year.

A study done in China following 700 women found that the more family support they got, the fewer menopausal symptoms they experienced. Other research done in Iran established that women placed in a support group experienced fewer vasomotor and sexual symptoms, and had a better quality of life than those getting no support.

Talking about our well-being in menopause with all the challenges that it brings is very useful. Like any problem, getting it out in the open is often the first step in managing it. It can feel awkward talking about menopausal symptoms sometimes, but it's vital for many reasons. Talking to other women who are going through the same thing can be very helpful because many women feel isolated from their families and friends while they are

going through menopausal symptoms and can feel very alone. If they get support from other women they will realize that they aren't alone and that some women may be having even more severe symptoms and problems, so they can gain a sense of perspective. They can also learn more about what works and what doesn't, and feel more empowered to cope with what they're going through.

A blog in [Lisahealth.com](http://Lisahealth.com) suggests having a menopause party to celebrate the good aspects of it and laugh together, spending quality time with other women who are also going through the menopause transition. She suggests creating a safe space to talk about feelings and speaking openly. A fun theme for the party can be chosen or women can decide to have an elegant dinner party at a restaurant or at home.



## **Conclusion**

There are many taboos in society, and menopause is one of them. There is often a conspiracy of silence around it, even more so than other topics of women's health. We need to change this and consider that we spend a third of our lives in menopause (and if you include the menopause transition phase, then it's half of our lifetimes). It can be a liberating and rewarding stage of life for women who learn wisdom and creativity and find freedom and empowerment in many areas of their lives.

Knowledge is power and it is so useful to get this when we are going through menopause especially as it can be disconcerting to go through the uncertainty about the changes that are happening in our bodies.

We can take control of this stage of our lives and view it positively. We can choose to feel confident, enthusiastic, and optimistic, knowing that there are treatment options and support, and this will make a big difference to our physical and mental well-being.

## **Using the Information You Got From This Book**

Celebrate menopause as the start of something great, be gentle with yourselves, and move forward with grace. Know that as we reach the midlife stage, our bodies, minds, and environments send a message that it is time to transform so that we can maximize the years ahead. We can see menopause as this natural response of changing us physically so that we can carry on living healthy and satisfying lives.

Even if we feel uncertain about the changes, we can give ourselves permission to focus on the positives of menopause and the fact that there is so much we can do to prevent or alleviate symptoms. We can feel this way even though we have every right to feel some discomfort or be vulnerable and frustrated. As long as we have the power of knowledge, we can approach menopause with an open mind, and this kind of knowledge is medicine in itself.

Becoming informed is the best way to go into menopause, not only to achieve the best quality of life and health but to establish what we are experiencing is as a result of menopause and what could be as a result of aging. It is also useful to understand your genetic risks for diseases, and how to balance your goals for well-being against possible

risks. We can only get this kind of knowledge with accurate information that is not influenced by society's patriarchal views on women and menopause.

It is possible to get relief and improve the quality of our lives by using conventional medical therapies (and be aware of the risks) as well as alternative, holistic remedies. We can be aware of which therapies and supplements work and which do not, by looking at the research on them, although much more needs to be done. We also need to be more critical of what is provided to us and demand better quality control.

It is clear from the research that how we live our lives plays a major role in what our menopause experience is going to be like. Lifestyle measures are so easy to implement, often with a bit of discipline and dedication involved. We can all eat healthy diets, exercise every day, and be aware of the impacts of certain habits and practices on our health.

The three things a woman can do to increase chances of having a healthy and positive menopause are to have a healthy diet, to exercise regularly, and to abstain from smoking.

Gut health and its effects on the body and mind during menopause are also crucial and there are many ways to increase the health of the gut microbiome, making a big difference in the way we feel and how we cope with menopausal changes.

There are various hormones that play different roles in menopause and cause havoc when they become unbalanced at this time, estrogen in its various forms being the main one.

The various stages of menopause and what to expect from them were examined in this book as well as all the possible symptoms and the therapies available to treat them. It is clear that there is no one solution for all of its complexities, but we are fortunate to have so much information and so many solutions available to us and this is growing.

### ***The Intricate Relationship Between the Biological, Psychological, and Social Aspects of Menopause in a Woman's Life***

Biologically menopause is neither a disease, a pathology, an illness, or not being well, but a physiological response to aging where a woman transitions in her reproductive life to no longer being able to reproduce.

Menopause is a completely normal transition for women to go through, but it doesn't come without its challenges. The physical symptoms have an impact on our mental health, with unbalanced hormones playing a role in both aspects.

Society and the medical profession have long undervalued women when they are past their reproductive years. A woman's fertility ends in her late forties and then she often has 30 or 40 years to do something else. Many women have a lot of energy combined with workplace experience at this phase of their lives, many refuse to accept society's view that they have an expiration date, and remain productive, even becoming leaders in their communities, and historically they have contributed much to their communities because of their age and their knowledge.

However menopause has traditionally not been mentioned much in popular culture, and when it is, it is portrayed as shameful and alarming, shows little understanding of what it's really like, and can instill fear. Fortunately, this has started to change over the past two decades and we are seeing more being depicted about menopause that is more empowering and realistic. This leads to women feeling less disposable and useless, and they can start to view menopause as a time of renewal and energy.

It has been suggested that menopause is an evolutionary feature of women who live the extra years to provide food for their families, and it can explain the success of our species. In hunter-gatherer societies, they could bring more food from foraging into their communities without adding to the population. They also provide a much-needed function—that of childcare for their grandchildren and other children in the community.

If we extrapolate this knowledge to the present day, even if women no longer function in the hunter-gatherer role providing for their families, women today have a purpose, strength, energy, and resilience that is used in other ways. Older women continue to nurture their communities, have an economic purpose and the end of fertility does not mark the beginning of declining strength and power.

In societies that value and revere age where older is seen as wiser and better, menopausal symptoms are experienced as less troublesome, and where older is not seen as better, symptoms can be more devastating. Studies have found that menopausal symptoms across cultures are all acknowledged, like vasomotor symptoms, vaginal dryness, and sleeping difficulties, but the severity of the symptoms, or how they are perceived, varies.

We can address all aspects of menopause, making conscious choices, and breaking through the barriers on this taboo subject in our society. It's a complex issue with so many considerations; physical, mental, emotional, social, and cultural. To have a positive experience a woman can consider how every aspect impacts her life, and see a solution for it, accepting each change as part of her life experience.

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