

THE

MENOPAUSE ANSWERBOOK™

**Practical Answers, Treatments, and
Solutions for Your Unique Symptoms**

- ▶ What tests should you have and how often should you have them?
- ▶ Are you at risk for osteoporosis, urogenital disorders, or breast or ovarian cancer?
- ▶ Are there lifestyle changes you should be making immediately to reduce your risks?
- ▶ Are your symptoms temporary, chronic, or life-threatening?



MARSHA LYNN SPELLER, MD

THE

MENOPAUSE ANSWERBOOKTM

Practical Answers, Treatments,
and Solutions
for Your Unique Symptoms

— MARSHA LYNN SPELLER, MD —



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To my children and
all women,
young and old,
to help you
prepare for the inevitable . . .

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Foreword

My editor, Deborah Werksman, asked me to expand and revise *The Menopause Answer Book* with an emphasis on things we can do to help ourselves through the “change of life.” In this revised edition, I’ve added practical treatments you can use and recommendations for remedies that you can get in your local pharmacies and vitamin stores. This book is written to help all of us to take more responsibility for our health, to become informed and knowledgeable about change of life issues, to help us inform our daughters about our experiences as women, and to help us embrace aging and become less fearful of its consequences.

As a result of doing this work, there’s been an effect on my life—those I love the most, my friends and family, are becoming more health conscious and are starting to make healthy changes in their habits (eating better foods, taking daily supplements, and even exercising regularly).

Let’s face it: Our own doctors are overwhelmed with trying to understand and learn new technologies and drugs and keeping pace with the time-consuming demands placed on our practices by medical insurers. We physicians have a lot less time to see our patients, learn from them, and teach them the things we know. Therefore, this book is bigger and, I hope, better.

After twenty-five years, I’m still passionate about my work and I see it as a partnership between my patients and myself with this goal: to learn how to live long and age well.

Introduction

Millions of women reach middle age every year. The current global population of women aged fifty years and greater is almost 600 million, and this number is estimated to double in the next twenty-five years. In the U.S., one out of three women is over the age of fifty, and each year almost two million American women turn fifty. The health risks of feminine midlife directly impact us, our families, our friends, and our employers. A failure to understand and anticipate our risks accounts for many of the health problems women are encountering as they age.

Good health and vitality depend on what we do to prevent problems as we age. A good health program can be developed at any age if we have information. My goal is to help you become an informed health-care consumer.

If you are struggling with medical problems, the advice in these pages can help you stabilize your conditions as well as help you and your doctor better manage your illness.

Why did I get interested in this aspect of women's health?

My specialty is psychiatry, which gives me an experienced advantage. Psychiatry is predominantly the study of women across the life cycle: all of the major psychiatric symptoms are many times more common in women than in men.

Most women approach menopause with a positive outlook. We've paid attention to our health and have gotten regular check-ups and kept up with routine screenings. But many of us haven't been paying much attention to the symptoms of perimenopause, which are the first signals that change—physical and emotional—is

coming. In my practice, I frequently see perimenopausal women who are experiencing early signs of future disease.

My husband calls my perimenopause “the fabulous 50s,” although he’s being sarcastic. In spite of all I knew about health in midlife, havoc broke out concerning my own health. I had more physical problems and symptoms at this time of my life than during the rest of my whole life put together. These symptoms disrupted my functioning. So I decided that I wanted to learn about the change of life, share my knowledge about this universal female phenomenon with other women, and teach them how to handle it.

This is a workbook, designed to help you assess yourself physically and emotionally during perimenopause, menopause, and postmenopause. Like my small group seminar, named “Change of Life,” its purpose is to get you to interact with the presented material and examine how it may or may not apply to you. This book may help you clarify which midlife issues are relevant to you. As I wrote, I imagined myself talking with you face-to-face in one of my groups, answering your questions and exchanging ideas. This book isn’t meant to be a substitute for medical evaluation, but it might be an adjunct to a meaningful discussion with your doctor.

The self-help and supplements product industry is a readily available multibillion dollar market. There is so much good information out there that we are flooded with it, can’t absorb it all, and have difficulty trying to figure out which information is personally relevant. Hence, I have included questions, screening tools, and fill-in charts. I’ve tried to be comprehensive and helpful in focusing on those issues that are personally relevant to you. I’ve also tried to help you formulate good questions for your doctors, and I’m encouraging you to design your own health plan. And for those of

you who have already logged in many hours researching and reading on your own, I hope this book can help you collate your research into one useful reference that's all about you.

The Menopause Action Plan, or MAP, is a questionnaire designed as a summary self-assessment that should accompany your midlife physical examination, but often doesn't. It is personal and private; you can choose to share your thoughts with your doctor or not. But it's your doctor who can best help you, if you are willing to talk about your problems, experiences, and concerns. Your MAP can help focus that discussion.

Most women I know approach this phase of their lives with trepidation and fear. The physical changes at this time of life are unwanted, and aging looms just around the corner. I believe that the more you know about yourself and how your body works, the more confidence you'll have and the more active a role you'll take in your own health care.

Hopefully, this book will have everything you need to know about managing your menopause and future health, and will help you make your quiet commitment to change the things you must.

Here's to your good health,

Marsha Lynn Speller, MD

Part I

How Hormones Work

Chapter 1

Getting Personal about Menopause

Hot Flashes

The heat creeps up my neck into my hairline and sweat trickles down my back. It wakes me up at night, every night. I throw off my covers (while my husband has learned to anchor his side down with both arms straight and extended). First the quilt, then the blanket, then the sheet, four or five times a night; off, on, off, on. So, by 6 a.m., I'm ready for a nap. My husband says I flash 'til I crash. My solution: fans, lots of them. I cradle their remote controls in my sleep and flip them off and on throughout the night. I'll beat this heat yet.

Forgetfulness

As I was making microwave sausage, I decided to start the car to warm it up. I locked myself out of the house and tried to use my car phone to call my husband, who was in bed upstairs. But I couldn't remember our new phone number, so I broke in through the back door. I finished making breakfast and ate it. Then, I went upstairs to dress for work. When I came back down, you guessed it—I was out of gas. I had forgotten I left the car engine running. Early Alzheimer's? No. CRS (Can't Remember Stuff).

Moodiness

Little things just set me off. I guess I've gotten short-tempered and impatient. I'm always criticizing everyone at home about everything. I need to shut up and bite my tongue, but the pressure to blurt out some sarcastic remark is just too great. Well, my husband and kids finally asked for a temporary separation during which I get to live at the office and come home for showers, a change of clothes, and (these are their terms) some Prozac. Now that's pressure...

Sex

It's not often that both our kids are out of the house and my husband and I are alone (and awake at the same time). He'll get that cute little smile and a twinkle in his eye, and we both say, "Yeah...". My heart is going thump, thump and I'm feeling warm and affectionate with him. Then, nothing. Dry as the Sahara. So I take out my shopping bag full of five herbal blends, four lubricating gels, three French creams, two soothing lotions, and a pint of petroleum jelly and, finally, we work it out. Somehow, it just doesn't seem the same...

Weight Gain

I look in the mirror and who do I see? A middle-aged woman who stares back at me. She looks suspiciously like my mother. And when I stand up and look down at my feet, the view is obstructed. You, too? Let's meet. I think if we talk we'll find ways to fight the flashes, the moods, and the cellulite.

So listen, ladies. Here it is; this is what we need:

- Something that will explain all of this and explain it more than once and keep it simple;

- Something to help kick the hormone habit—we can't take hormone replacements forever;
- Something to help us eat smart (without giving up chocolate);
- Something to help us with exercise (yes, we need it, and yes, it's supposed to feel that way);
- Something to help us get our problems and needs across to our doctors;
- And the answer to the question on everyone's mind: will these symptoms ever go away or am I headed for divorce?

We need a menopause map.

Chapter 2

In the Beginning...

Femaleness is the result of hormones, specifically, of estrogen. We are females because our bodies produce much higher levels of estrogen than males do.

Estrogen comes from our ovaries where our eggs are produced. We are born with about two million egg follicles (egg sacs) in our ovaries and, by our first period (sometime during puberty), we have four hundred to five hundred thousand follicles left. Egg follicles are fragile, susceptible to disintegration, injury, malnourishment, and loss. We lose about one thousand a month. But since we only ovulate four to five hundred times during our childbearing years, we have enough left to produce children.

Estrogen is important to a woman's health and plays an important role in every phase of her life because it exerts its influence across the life span.

During puberty, estrogen is responsible for our physical and emotional characteristics. During the young adult years, estrogen is responsible for our fertility. Throughout our lives, estrogen supports our immune system, protecting us from stress, from the effects of bad habits, and from disease. By the time we reach thirty-five, our estrogen levels have begun to decline and subtle changes

start to occur in our bodies. In our mature years, the change in estrogen production combines with risks for disease and has an enormous influence over our future health. And, unlike the women who came before us, we are living thirty to forty years beyond menopause.

In the last 150 years, our life span has doubled. We will encounter many health issues throughout this long life.

A woman's life span can be divided into four "seasons"—puberty, young adulthood, midlife, and maturity. For all women, hormonal output will change as time passes.

Puberty is a time when estrogen production in our bodies surges forward, sometimes unevenly. This is evidenced by the appearance of our sexual characteristics: pubic hair, breasts, a period, and fertility.

We have high levels of estrogen in our bodies during the young adult years. The life peak of estrogen production is reached when we are twenty-eight years old. The ovaries, which make estrogen, are endocrine organs; they produce hormones in sync with other hormone-producing glands, i.e., the pituitary, thyroid, thymus, and adrenal glands. Estrogen, like the hormones produced from the other glands, is protective and helps us weather sustained periods of stress. The high levels of estrogen present during the young adult years can mask the long-term effects of the bad habits we acquire (such as overeating, drinking, failing to exercise, eating poor-quality food, and smoking). Basically, it is estrogen that keeps us healthy when our health habits are not good.

Emotional health depends on estrogen, also. After the onset of puberty, all the major psychiatric disorders become more common in women than in men. This difference between men and women is due to our hormones.

At midlife, we experience the symptoms of perimenopause, that roller-coaster ride of physical and mental symptoms that occur as our estrogen levels fall and before our period actually stops.

When menopause finally occurs, many of us treat it like an uninvited guest because it is the sign of our aging and the beginning of our maturity. In our mature years, estrogen production changes: our ovaries produce less estrogen and our bodies utilize a different mechanism to produce a less potent form of estrogen. When combined with our risks for disease at this age, the impact on our future health is significant.

Chapter 3

The Normal Menstrual Cycle

Just what is the menstrual cycle? For many women, menstruation governs much of daily life. We have accustomed ourselves to an emerging cycle with its ebb and flow of physical and psychological effects, and have learned to plan our activities around our periods.

The hormones that choreograph the menstrual cycle are:

- Gonadotropin-releasing hormone (GnRH), which is found in the brain area known as the hypothalamus
- Follicle-stimulating hormone (FSH)
- Luteinizing hormone (LH), which is secreted by the pituitary gland in the brain
- Estrogen and progesterone, which are made in the ovaries and secreted to the uterus (the target tissue, where menstrual blood flow results)

The following figure graphs the menstrual cycle with its corresponding hormonal and biological changes.

A menstrual cycle consists of four phases that a woman goes through every month (every lunar month, averaging twenty-eight days).

The first phase of the menstrual cycle is the menstrual phase, which begins with the first day of bleeding and lasts from one to

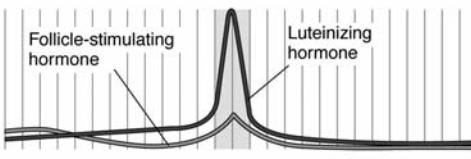
Changes During the Menstrual Cycle

A menstrual cycle is regulated by the complex interaction of hormones: luteinizing hormone and follicle-stimulating hormone, which are produced by the pituitary gland, and the female sex hormones estrogen and progesterone, which are produced by the ovaries.

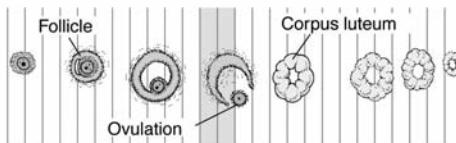
The menstrual cycle begins with menstrual bleeding (menstruation), which marks the first day of the follicular phase. Bleeding occurs when levels of estrogen and progesterone decrease, causing the thickened lining of the uterus (endometrium) to degenerate and be shed. During the first half of this phase, the follicle-stimulating hormone level increases slightly, stimulating the development of several follicles. Each follicle contains an egg. Later, as the follicle-stimulating hormone level decreases, only one follicle continues to develop. This follicle produces estrogen.

The ovulatory phase begins with a surge in luteinizing hormone and follicle-stimulating hormone levels. Luteinizing hormone stimulates egg release (ovulation), which usually occurs 16 to 32 hours after the surge begins. The estrogen level peaks during the surge, and the progesterone level starts to increase.

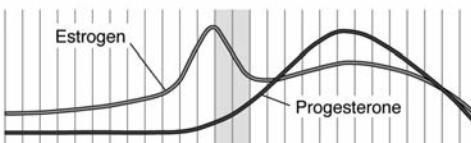
During the luteal phase, levels of luteinizing hormone and follicle-stimulating hormone decrease. The ruptured follicle closes after releasing the egg and forms a corpus luteum, which produces progesterone. Later in this phase, the level of estrogen increases. Progesterone and estrogen cause the lining of the uterus to thicken more. If the egg is not fertilized, the corpus luteum degenerates and no longer produces progesterone, the estrogen level decreases, the lining degenerates and is shed, and a new menstrual cycle begins.



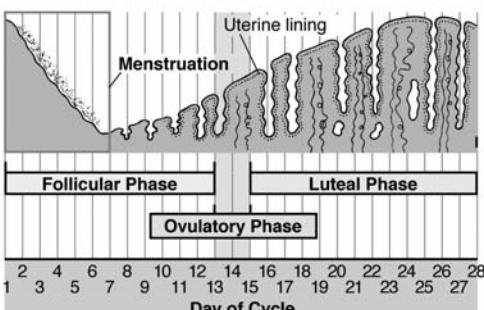
Pituitary Hormone Cycle



Ovarian Cycle



Sex Hormone Cycle



Endometrial Cycle

From the *Merck Manual of Medical Information – Second Home Edition*, p. 1347, edited by Mark H. Beers. Copyright 2003 by Merck & Co., Inc., Whitehouse Station, NJ.

five days. It is the sloughing off of the uterine lining. Both progesterone and estrogen are at their lowest points during this phase.

The second phase, the follicular or postmenstrual phase, begins approximately on day six. It is the most variable phase and can last five to ten days, depending on the length of a woman's cycle. During this phase, the hypothalamus generates gonadotropin-releasing hormone (GnRH) and the pituitary generates follicle-stimulating hormone (FSH), which stimulate cells within the ovaries, called follicles, to grow an egg. Luteinizing hormone (LH) is also produced, and this stimulates the egg follicle to produce estrogen. During this phase, estrogen levels are rising.

The third phase of the menstrual cycle, the ovulatory phase, lasts about two days. During this phase, the egg ruptures from the follicle under the stimulation of the pituitary's luteinizing hormone (LH). This mature egg is released into the fallopian tube and the remainder of the ruptured follicle develops into the corpus luteum, which produces high levels of estrogen and progesterone.

The fourth and final phase of the menstrual cycle, the luteal or premenstrual phase, lasts about fourteen days. If the egg is not fertilized within twenty-four hours of its release, progesterone production falls. After eleven to fourteen days, the blood supply to the uterine wall diminishes and the lining begins to slough off, so menstruation (blood flow) begins again.

THE FOUR PHASES OF THE MENSTRUAL CYCLE

I. The Menstrual Phase—lasts 1–5 days

Symptoms: Menstrual bleeding (your 1st day)

Bloating

Cramping

Tiredness

Back Pain

II. The Follicular (or Postmenstrual) Phase—lasts 5–10 days

Symptoms: Energetic

Confident

Sexy

III. The Ovulatory Phase—lasts 2 days

Symptoms: Occasional brief back pain when the egg ruptures from its sac

You are your most fertile at this time; plan ahead.

IV. The Luteal (or Premenstrual) Phase—lasts 14 days

Symptoms: Irritability

Bloating

Anger

Depression

In short, the infamous PMS symptoms

THE AVERAGE CYCLE

Days	1–6	6–12	12–14	14–28	
Phase	I	II	III	IV	

MY CYCLE

Keep a calendar for three consecutive months to record the days of each phase.

Month 1:

Days	———	———	———	———	———
Phase	I	II	III	IV	

Month 2:

Days	———	———	———	———	———
Phase	I	II	III	IV	

Month 3:

Days	———	———	———	———	———
Phase	I	II	III	IV	

CIRCLE YES OR NO

Do your periods fall within 28–31 days? Y N

Are you normally regular or irregular? Y N

Do you have PMS symptoms during Phase IV? Y N

If so, which ones? _____

PMS can continue all the way through to menopause, and it often intensifies perimenopausal symptoms.

During perimenopause and until menopause (the complete cessation of your normal menstrual cycle), the cardinal sign of the change of life is change in your menstrual cycle, its rhythm and its

flow. Subtle changes actually occur much earlier than you expect, starting in our mid-thirties. On the not-so-subtle side, if you have PMS, it usually gets worse during the perimenopause years so that you can experience an intense mix of both PMS and perimenopause symptoms.

Estrogen production and flow changes twice during our life span: during puberty and during perimenopause. In fact, I sometimes think of perimenopause as a kind of midlife reversal of adolescence. Susan Love, MD, has beautifully described these changes as a hormonal dance.

QUIZ

At what age did you have your first period?_____

How long did it take your periods to finally become regular?_____

If you are perimenopausal, when do you think your symptoms started?_____

Are they getting more intense?_____

If you are postmenopausal, when do you estimate you had your last period?_____

How many years has it been since your last period?_____

Chapter 4

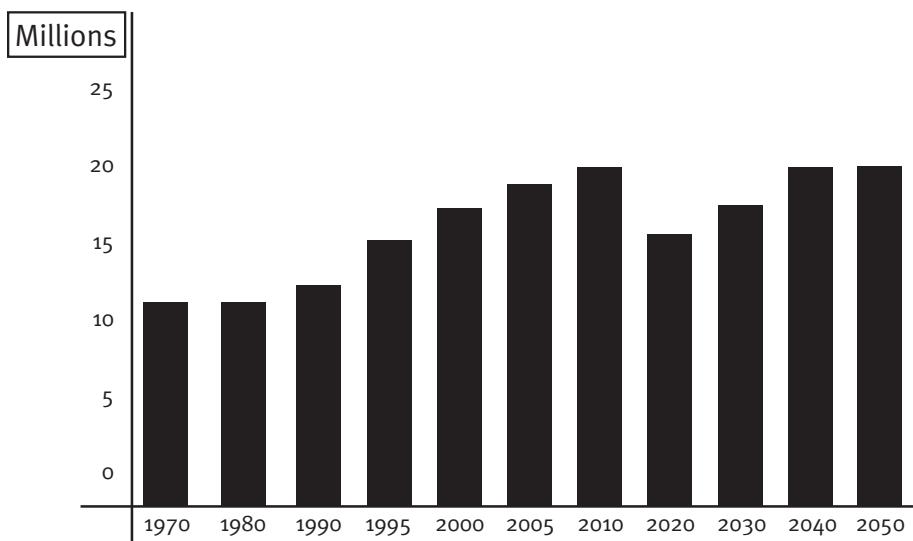
The Power of Estrogen

What's happening to my body?

Inevitably, for all of us, hormonal output changes as time passes. Males change in a steady, slow fashion with progressive hormonal decline. Females are rhythmic, and the midlife transition can be abrupt and jarring when that rhythm is disrupted. The only change comparable is puberty, when that rhythm began. Estrogen and progesterone are the female hormones that regulate change, and estrogen is the more influential. The life peak of estrogen production is reached by age twenty-eight (which coincides with our peak bone mass). Estrogen levels then plateau until age thirty-five, when they begin their linear decline. Midlife is just around the corner and the early, baffling signs of perimenopause begin. In America alone, thirty-one million women were born between 1946 and 1964 (during the post-World War II baby boom) and are now entering or passing through this stage of life.

The number of perimenopausal women in the United States has almost doubled in the past fifty years (see the figure below representing the U.S. Census Bureau statistics). And it is projected that the number of women in hormonal transition will remain high over the next fifty years.

NUMBER OF U.S. WOMEN IN TRANSITION (AGE 45-54 YEARS)



- Figures for 2000-2050 are projected.

The life expectancy of women in the United States has increased while the average age of menopause has remained the same. Today, an American woman's average life expectancy is eighty years. The average age of menopause is 51.4 years. This means that American women—and women in similarly industrialized societies—will be spending more than one-third of their lives beyond menopause. There will be many more of us thinking about how to stay healthy as we age.

Chapter 5

The Effect of Estrogen on the Body's Organs

We have high levels of estrogen in our bodies during the young adult years with beneficial effects on a number of organs. Estrogen exerts its influence on all the organs in our bodies and on all the other hormone glands. The ovaries, which produce estrogen, are hormone glands and function in sync with all of our other hormone glands, i.e., the pituitary, thyroid, thymus, and adrenal glands. Estrogen, like our other hormones, is protective and needed to maintain our health. It is widely dispersed throughout our bodies and estrogen levels affect our entire bodies. When estrogen levels fall, it changes the way we look and function. In my psychiatric practice, it's not unusual to have a woman referred for treatment for depression and insomnia without any recognition that these symptoms are linked to hormonal changes. More commonly, these symptoms are attributed to a busy lifestyle and a mass of personal responsibilities. The point here is that midlife is marked by a constellation of changes which we can identify if we know what to look for.

The following is a partial list of symptoms that many women may experience but a few may not. Are you experiencing any of these signs and symptoms of estrogen depletion? Check the ones that apply to you.

- _____ Irregular periods
- _____ Hot flashes
- _____ Mood swings
- _____ Fragmented sleep
- _____ Trouble concentrating
- _____ Short-term memory loss
- _____ Irritability
- _____ Anxiety
- _____ Depressed mood
- _____ Reduced stamina
- _____ Skin dryness
- _____ Vaginal dryness
- _____ Reduced sexual desire
- _____ Breast sag
- _____ Constipation
- _____ Urinary tract infections
- _____ Reduced muscle tone and weight gain
- _____ Eye dryness
- _____ Underactive thyroid, as shown by laboratory tests
- _____ Gum infections and loose teeth
- _____ Rise in cholesterol, as shown by laboratory tests
- _____ Migraine headaches and new allergies
- _____ Indigestion and bloating

Of interest is the fact that different symptoms are reported by different ethnic groups: for example, African-American women report hot flashes, night sweats, and forgetfulness as prominent symptoms; Caucasian women report sleeping problems and insomnia; Hispanic women report vaginal dryness, urine leakage, and pounding hearts as their most frequent symptoms; and

Asian-American women report their main symptom is memory loss (forgetfulness).

As you can see, we need our estrogen to keep us healthy, whether or not we're engaged in good health habits, and particularly in times of stress. The presence or absence of estrogen affects all the organs and organ systems.

Perimenopause, with its wildly fluctuating estrogen levels, is a transitional phase that has its own signs and symptoms. These are:

- Changes in the menstrual cycle: It can be heavier or lighter, longer or shorter, with bleeding between cycles.
- Hot flashes and night sweats while still menstruating: Studies report these in 25 to 33 percent of menstruating perimenopausal women; nonetheless, some physicians still mistakenly believe that hot flashes cannot occur in women who have sufficient estrogen to cause menstrual bleeding.
- Problems with sexual functioning due to vaginal changes: Symptoms include vaginal dryness, pain and bleeding on intercourse, and loss of desire for sex.
- Poor quality of sleep and/or insomnia: This is often due to night sweats interrupting the sleep pattern.
- Forgetfulness, nervousness, and irritability: These are the symptoms that make many women fearful that they are losing mental capacity.
- Intensification of any psychiatric symptoms that might be present: Depression and anxiety symptoms will often reemerge even if the woman hasn't been experiencing these for some time.

A woman can experience perimenopausal symptoms for eight to ten years prior to menopause. And, if the symptoms are multiple and severe enough, her quality of life can be seriously affected.

In addition, perimenopausal women with psychiatric disorders are prone to health problems in their postmenopause years. For example, the Johns Hopkins School of Public Health recently announced their findings from a study of clinically depressed women in hormonal transition. They found that these women had an increased risk of developing cancer in their first ten postmenopause years as compared to their nondepressed counterparts. Is there an as-yet-unexplained connection between chronic depression, declining estrogen levels, and cancer?

Chapter 6

Estrogen Withdrawal Symptoms

Sometime around the age of forty-five or fifty, we begin to experience the symptoms of lowered estrogen levels. The process of declining estrogen production can start much earlier for some and later for others.

There are three main forms of estrogen that occur naturally in women and are made in our ovaries:

- E1, or Estrone, is dominant in postmenopause and much less potent;
- E2, or Estradiol, which dominates during the reproductive years; and
- E3, or Estriol, which is dominant during pregnancy.

E1 and E2 can convert into each other. All three fluctuate wildly during perimenopause.

At midlife, the ovary doesn't stop producing estrogen. It goes through a shift, producing less potent estrogen with the aid of our fat cells and muscle tissue. The overall result is a continued production of estrogen by the ovaries, albeit at low maintenance levels. When a woman has both her ovaries removed, she loses this production capacity.

Some definitions:

Perimenopause—the period of time prior to the cessation of menstruation during which many symptoms related to fluctuating hormones appear (average age of onset is forty-seven to fifty-one).

Menopause—the last menstrual period (but we can't really identify this one for a year or so; average age is fifty-one).

Postmenopause—the time following menopause when the symptoms of estrogen absence appear (there are three stages: early, age fifty-one to fifty-five; intermediate, age fifty-five to sixty-five; and late, over age sixty-five).

What are the biological markers that menopause is coming? The most common are:

- Decline in fertility with increased risk of miscarriages, premature labor, and stillbirths.
- Change in the pattern of the menstrual cycle: Ninety percent of all women experience four to eight years of menstrual-cycle changes prior to menopause; irregular period is the most frequent symptom.
- Hot flashes/night sweats increase, affecting 85 percent of American women: For most women, they last three to five years, but for a few women, they can last ten to twenty years after menopause. They last longer and are more severe when menopause has been surgically induced. They are the second most frequently reported symptom.
- Insomnia is usually an inadequate amount or poor quality of sleep, which causes fatigue, concentration problems, and irritability.
- Urogenital changes: The vagina narrows and shortens, the lining thins and loses lubrication, and sexual stimulation

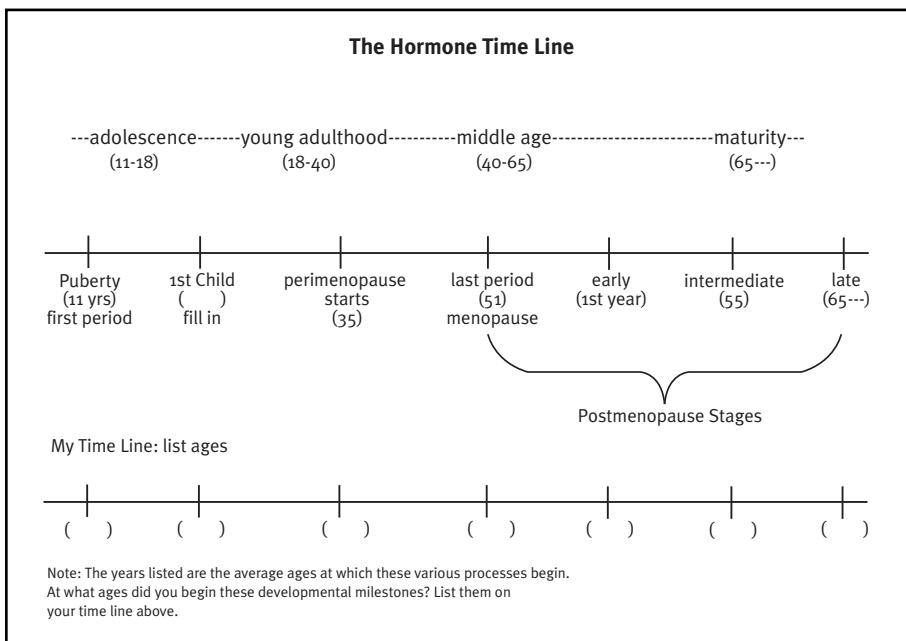
decreases. Within the first five postmenopause years, most women will have vaginal changes.

- Urinary problems: Leakage of urine, increased frequency of urination (especially at night), and increased frequency of urinary-tract infections occurs in 30 percent of American women past the age of fifty.
- Changes in skin, eyes, hair, and teeth occur: We experience thinning and wrinkling of the skin and dry skin, dry eyes, sensitivity to light and poorer vision, thinning scalp hair, and gum disease and tooth loss (these are the early signs of osteoporosis).
- Short-term memory problems and difficulty concentrating begin: There are no good studies as to why, but the theory is that it is due to the impact of estrogen depletion on neurotransmitters.
- Women with a history of psychiatric illness will have an exacerbation of that illness in menopause.
- There are other common symptoms experienced by midlife women, but these have not been proven to be caused by estrogen deficiency, but rather are believed to be caused by lifestyle and the process of aging aggravated by hormone deficiency. These are weight gain (experienced by 30-50 percent of American women), the joint pain of osteoarthritis, migraine headaches, and heart palpitations.

The majority of women have some perimenopause symptom and one in five of us have symptoms severe enough to disrupt our lives.

The best “test” for evaluating whether or not a woman is perimenopausal is the diagnostic interview. Many women are confused and upset by the complexity of the physical and emotional

symptoms that can abruptly occur at midlife. I find that symptom questionnaires help explain the range of problems that can occur and help initiate the discussion of the impact of estrogen loss on our bodies as a whole. The Greene Climacteric Scale, for instance, is a brief and useful self-administered questionnaire that describes and rates the severity of each woman's symptoms in the following areas: psychological (anxiety and depression symptoms), vasomotor (sweating and hot flashes), somatic (other physical symptoms), and change in sexual interest. Sharing this important information about change of life symptoms is reassuring and often therapeutic.



This is a daunting list of symptoms. Some women may experience a few or none of them. Estrogen is widely dispersed throughout the

body and estrogen levels affect the entire body. When estrogen levels fall, the way we look and operate changes. These symptoms are often attributed to a busy lifestyle and a mass of personal responsibilities and not recognized as being linked to hormonal changes. Again, the point here is that midlife is marked by a constellation of changes we can identify if we know what to look for.

Estrogen exerts beneficial actions in a number of tissues: It is a key hormone in the maintenance of the skeleton, of the brain, of cardiovascular integrity, in cancer prevention, in protection against tooth loss, and in protection from eye disease.

Midlife for both men and women is marked by high levels of stress (work, marital, and social). High levels of estrogen protect women from the physical damage that sustained periods of stress can cause. Stress coupled with hormonal changes will increase the intensity and severity of perimenopausal symptoms.

Many perimenopausal women I've seen in my practice come to me with complaints of fatigue, poor memory, problems concentrating, irritability, lack of enthusiasm, and moodiness, all of which are eroding their functioning at home, at work, and with friends. After getting medical checkups from their primary doctors which were negative for any serious health problems, some of these women were showing signs of depression, something they had never experienced before. They had no family history of depression, no personal history of depression, and no unusual life stressors. So, where were these symptoms coming from? Problems with their sleep: loss of quality and quantity of sleep.

THE CONNECTION BETWEEN PERIMENOPAUSE AND SLEEP

Women of all ages report more problems with sleep than men do. And the older women report more problems with sleep than the

younger women. Researchers have identified sleep disturbance (i.e., insomnia) as commonly recurring during change of life. Its characteristics include difficulty falling asleep, difficulty staying asleep, and awakening too early.

We don't know whether sleep problems during the menopause transition are the result of normal aging or of decreased sex hormone levels. However, we do know that our quality of sleep worsens with age, and that menopausal and postmenopausal women have a higher incidence of sleep problems than younger women. European studies of perimenopausal women report findings similar to the U.S. studies.

Many women are unaware of their sleep problems, so they don't report them. Many women assume that their sleep problems are due to the stresses in their lives, and that these problems will eventually correct themselves. In my practice, I've found that sleep problems develop in perimenopause, slowly evolve until they become persistent, and eventually cause functional impairment. Many perimenopausal women who seek my help are unaware of the fact that their mood symptoms might be primarily caused by longstanding insomnia. For some of you, a persistent change in the quality and quantity of your sleep might be an early sign that you are experiencing the menopausal transition.

If you're having insomnia, here are some things you can do to improve your sleep:

- Get yourself ready for sleep: Set regular bedtimes and get up at the same time every day, including weekends; establish a relaxing bedtime ritual.
- Get your room ready for sleep: Take distractions (e.g., the TV) out of your bedroom, dim the lights.

- Avoid eating, exercise, alcohol, caffeine, and smoking before going to sleep. Avoid daytime naps.

If sleep problems persist, discuss them with your doctor.

The following is a listing of the common symptoms that the majority of perimenopausal women will experience. One out of five women will have symptoms severe enough to adversely affect the quality of her relationships, work life, sexual functioning, and, eventually, her health. Unlike what we believed in the past, many perimenopausal symptoms can persist into our mature years.

Interestingly, medical research has learned more about the evolution of symptoms and physical change in women as we pass through this life phase because, in the last 150 years, our life expectancy has almost doubled. We no longer live into our early fifties but into our mid-eighties, yet the average age of menopause has not changed, remaining at fifty-one years. My point is this: Women used to die at the end of their reproductive life span, but not any longer. And since we are living thirty to forty years past the onset of perimenopause, medical researchers have been able to evaluate women for these many symptoms and emerging health problems. It is only since the 1980s that knowledge of estrogen action has become available to an interested public.

The following are checklists of symptoms to help you identify where you might be along the menopausal transition.

PERIMENOPAUSAL SYMPTOMS

Check all that describe you.

Menstrual Period

- I am missing periods.
 My cycle is irregular.

- My periods are closer/further apart.
- My bleeding is heavier/lighter than previously.
- I am spotting between periods.
- My PMS symptoms are worse.

Hot Flashes

- Once a day or less, and they're manageable.
- More than once a day, and they occasionally interfere with my life.
- Every fifteen minutes, and they're driving me crazy.

Night Sweats, Insomnia

- Occasionally, I throw the covers off.
- Most nights, I wake up once drenched in sweat.
- I don't sleep as well as I used to.
- I can't function unless I get a full night's sleep.

Mood Swings

- I am more irritable than I used to be.
- I am fine one minute and then suddenly angry or depressed and then fine again.
- I'm nervous.
- I feel depressed.
- I'm crying a lot over little things.
- I'm exhausted.

Vaginal Dryness

- Intercourse is a little uncomfortable, my vagina is dry.
- I am uncomfortable during intercourse but fine otherwise.

- My vaginal area itches.
- I'm getting a lot of vaginal infections.

Other Symptoms

- I have lost my interest in sex and that devastates me.
- My thinking seems fuzzy.
- I can't concentrate.
- My memory is poor.
- I have headaches.
- I am gaining weight.
- My skin is dry and wrinkly.
- I have heart palpitations and shortness of breath.
- I feel dizzy.
- My joints ache.

MENOPAUSAL AND POSTMENOPAUSAL SYMPTOMS

The difference between these symptoms and those of perimenopause is that these are persistent and more likely to be permanent.

Check all that describe you.

Early Stage (includes menopause and the first few postmenopause years)

- My period has completely stopped.
- I haven't had a period in twelve months.
- I have hot flashes and night sweats.
- I am unable to fall asleep or stay asleep as I used to.
- I am irritable and short-tempered.
- I am depressed.

Intermediate Stage (marked by physical changes)

- I can't even consider intercourse because of the pain/bleeding involved.
- I have cystitis.
- I urinate frequently.
- My urine leaks when I sneeze/cough/laugh/make love.
- I wear a pad to protect my underwear from urine spotting.
- My skin on my hands/face/neck (the areas where skin is exposed to the sun) is wrinkled.
- I've gained weight that I can't lose.
- I'm physically weaker.
- My eyesight has gotten worse.
- My hair is thinning/graying.
- My memory lapses are disturbing to me.
- I have gum disease and tooth loss.

Late Stage (diseases I have been diagnosed with)

- Coronary artery disease
- High blood pressure
- Osteopenia/Osteoporosis
- Thyroid disease
- Macular Degeneration of the eye
- Diabetes, Type II
- Osteoarthritis
- Cancer (breast, uterine, ovarian, or colon)
- Alzheimer's disease
- Hypercholesterolemia
(Elevated serum cholesterol/triglycerides)

Chapter 7

Postpartum Blues and PMS

The Other Significant Syndromes Caused by Hormone Dysfunction

There are two significant syndromes besides perimenopause/menopause that are caused by hormone dysfunction, and up to 80 percent of women will experience either or both. These are Postpartum Blues and PMS.

Postpartum Blues

Postpartum Blues is believed to be due to the rapid decline of estrogen immediately after giving birth and for up to two weeks thereafter. It usually begins on the third or fourth postpartum day and ends spontaneously by the end of the second week.

On the third day home from the hospital after delivering our firstborn, my husband came home to find me in tears, moaning, "I'm a bad mother." He tried to be sympathetic, but basically told me to remember my understanding of medicine. We are all anxious to be good mothers, but my collapse into tears and self-deprecation had a biological base: My estrogen levels had plummeted, and I was feeling it.

QUIZ

Did you have any of these symptoms after giving birth? Check those that apply:

- Depression
- Mood swings
- Anxiety
- Crying
- Sleep problems
- Poor concentration

CIRCLE YES OR NO

Did your symptoms interfere with taking care
of your child?

Y N

Were you ever treated for postpartum depression,
a more severe form of the blues, which can last
many months after delivery?

Y N

If you answered "yes" to either of the above questions, it is likely that depression will be one of your most debilitating peri-menopausal symptoms.

Postpartum Depression

Most women (80 to 85 percent) will experience mood changes after giving birth and they pass within a few days. Postpartum depression, however, is persistent depression with symptoms that occur after childbirth and last more than two weeks. One out of eight postpartum women experience this form of depression. We believe that those women most at risk for this form of depression are those with:

- A prior history of depression;
- A family history of depression and/or bipolar disorder;
- Poor social support, e.g., marital discord;
- A childhood history of neglect or loss of a parent;
- Depressed mood during pregnancy;
- Stressful life events; or
- A history of PMS.

Premenstrual Syndrome (PMS)

PMS is the most common health problem experienced by women, and it starts in puberty. We don't know its cause, but we know that estrogen fluctuation is a major factor. PMS symptoms can be severe enough to impair our functioning, and they can persist until menopause.

Student Lauren Avera has written an interesting, unpublished paper on PMS. It is the source of the discussion that follows.

There are three main hormones whose effects manifest themselves during a woman's menstrual cycle (see chapter 3). These hormones affect mood, energy level, thought processes, sexual desires, eating behavior, and quality of sleep. They also induce various physical symptoms. Each hormone has a corresponding receptor area in the brain and can affect the production of neurotransmitters that regulate mood and behavior. These hormones also have an effect on other mood-altering substances called neuropeptides. Having improper levels of these hormones can increase the intensity of a woman's premenstrual symptoms.

PMS refers to an array of emotional, cognitive, physical, and behavioral symptoms that occur during the premenstrual phase of a woman's cycle. Researchers have identified about 150 symptoms

that women experience during the menstrual cycle. They have isolated the most common, which produced a list of eighty-eight symptoms; and they put those symptoms into five categories: cognitive, emotional, physical, sexual, and behavioral.

The cognitive symptom grouping reflects the fact that PMS interferes, to one degree or another, with thinking, attentiveness, concentration, ability to plan ahead, and ability to reason in stressful situations.

The emotional grouping reflects the fact that PMS impacts emotional sensitivity: PMS heightens it. During the luteal phase of the menstrual cycle, a woman may experience noticeable emotional shifts, becoming irritable, then tense, then depressed, then something else.

The physical grouping reflects the fact that physical symptoms of varying intensity result from physiological changes that occur naturally during a woman's menstrual cycle.

The sexual grouping reflects the fact that there seems to be an increase in sexual desire, but often a decrease in sexual activity during the luteal phase.

The behavioral grouping reflects such things as the increases in eating and drinking and the cravings for sweet and salty foods that occur.

These symptoms differ in degree in terms of discomfort. There are generally three levels of discomfort. The first is termed "mild," which means that PMS symptoms are not interfering with ordinary daily activities. The second is termed "moderate," which means that PMS symptoms are interfering to a slight degree with ordinary daily activities. The third level of discomfort is termed "severe," which means that ordinary daily functioning is impaired.

It is the interaction among the pituitary and hypothalamus glands and the ovaries that governs the amount of hormones released into the bloodstream. This interaction is affected by a number of environmental factors such as stress, diet, socioeconomic status, emotional makeup, and physiological makeup.

One of the definitions of PMS is premenstrual stress. There are basically four categories of things that generate a stress reaction. These clusters of stressors require the body to perceive, process, and respond to changes.

The first category consists of situational stressors. This set includes sources of stress that are related to such things as work, home life, personal finances, relationships, stage of development, and extended family conditions.

The second category consists of psychological stressors. This category covers such phenomena as conflict within one's self or with others, difficult life decisions, personal illness or illness of loved ones, significant disappointments, falling in love, falling out of love, and perceived failures and successes.

The third category consists of physiological stressors. This category includes such things as temporary medical problems (such as allergic reactions), ongoing medical problems (such as diabetes), and changes in the level of hormones (thyroid, adrenal, or ovarian).

The fourth category consists of environmental stressors, such as workplace conditions, the temperature and noise level in your general environment, your personal safety, and time and performance pressures.

In general, stress adversely affects the neurotransmitters that in turn affect a woman's ovarian functioning, leading to lowered estrogen. This can make it more difficult for us to cope with stress.

If you are still menstruating and you suffer from PMS, complete the daily symptom checklist that follows. It is likely that the PMS symptoms you've experienced will persist throughout perimenopause, with the addition of a few more.

PMS AND PERIMENOPAUSE SYMPTOMS IN COMMON

Check all that apply to you.

PMS	Symptoms	Perimenopause
_____	Headaches	_____
_____	Fatigue	_____
_____	Heart palpitations	_____
_____	Anxiety	_____
_____	Depression	_____
_____	Anger	_____
_____	Moodiness	_____
_____	Irritability	_____
_____	Poor concentration	_____
_____	Insomnia	_____
_____	Decreased sex drive	_____

DAILY SYMPTOM CHECKLIST FOR PMS

Name _____

If you are still menstruating, start keeping this checklist on the first day of your menstrual period. Each evening, rate your symptoms according to the scale at right.

Make two copies of this checklist. Fill it out for two complete menstrual cycles.

Symptoms Ratings according to scale above

Take a moment now and turn to your Menopause Action Plan at the back of the book. Begin to complete the Plan, based on what we've looked at here in part I.

Part II

The Individual is the Context

Like many of you, I avoided seeing my doctor after our kids were born and before Change of Life symptoms, except for occasional ailments. And even though I was treating perimenopausal women in my practice, I was not yet having symptoms, so I kept putting off getting a medical check-up.

In the first six months of my fiftieth year, night sweats suddenly appeared and ruined my sleep, I developed a bad skin rash as a result of mixing too many over-the-counter remedies to cure my severe fatigue, I broke my right ankle stepping off a curb, and I lost my sex drive. Looking back, I wish I had had some early warning symptoms to push me out of my laziness and complacency.

Chapter 8

Your Medical History

Even though menopause is a natural event, some women need treatment for short-term symptoms and/or prevention of long-term disease. Some women who have severe symptoms are embarrassed to seek help and feel they've failed to control their health problems. Some women will choose no outside help, perhaps because they have no symptoms or they view the symptoms as temporary, minor discomforts. And some women treat their symptoms with over-the-counter products that they believe are safe, despite not having adequate, unbiased information.

Midlife can be an especially difficult time for so many women. As each woman experiences some menopause-related symptoms, there are several relevant issues:

- What is her view of menopause and aging?
- What is she experiencing, and what is her medical history?
- What have her female relatives experienced?
- Does she have any long-term health risk factors for cardiovascular disease, osteoporosis, or cancer?
- Does she need to modify her lifestyle and make some changes, such as in diet and exercise, or the addition of vitamin and mineral supplements?

- Does she have any special counseling needs in areas such as smoking cessation, sexual functioning, substance abuse, or symptom relief?
- Are there psychological and social needs, such as family relationships, job satisfaction, or financial concerns?

Each woman is unique—unique in her biological and psychological response to menopause and aging, in her tolerance for various symptoms, in her risk profile for disease as she matures, and in her attitudes about treatment for her symptoms.

The major source of information about menopause comes from consumer magazines, probably because they are more available than medical professionals who are perceived as more authoritative.

Surveys show that women have deficits and misunderstandings in their knowledge about menopause and in their knowledge about the health risks in the years after menopause. Other surveys indicate that women are divided in their views about menopause: half see it as a medical condition requiring treatment and half view it as a natural transition that should be managed by natural means.

There is a real need to clear up the misconceptions concerning the vast array of physical and emotional changes that occur during midlife. And, since the change of life is inevitable, it's not optional for any of us. Education, assessment, and risk management are essential; treatment may or may not be necessary.

The Visit to Your Doctor

When you go to your doctor's office for the first time, you'll have medical history forms to fill out. Some of the diseases we are at risk for in later life are genetic. You'll need to know if any family members have had any of these problems:

FAMILY HISTORY

Please indicate whether immediate relatives (parents, siblings, grandparents, aunts/uncles, cousins, or children) currently have or died from any of the following:

Cancer:

- Breast
- Ovarian
- Uterine
- Colon
- Cervical
- Other

Other Family Health History:

- High blood pressure
- Obesity
- Heart attack
- Stroke
- Diabetes
- Osteoporosis
- Alzheimer's
- Mental illness
- Other

Your personal history is also important, so let's review your health status, starting from just before puberty. Genetics can play a role here also, so find out if other family females have had similar problems.

Developmental Milestones Questionnaire

Instructions: In the Self column, check all that apply to you. In the Others column, enter M for mother, S for sister, A for aunt, and O for any other biologically related females.

PREPUBERTY AND PUBERTY**SELF OTHERS**

Stayed under normal weight

Menses had stopped

Went on eating binges

Purged self

Fasted

MENARCHE (STARTS WITH THE 1ST PERIOD)	SELF	OTHERS
Irritability	_____	_____
Depressed mood	_____	_____
Tension and anxiety	_____	_____
Increased carbohydrate craving	_____	_____

CIRCLE YES OR NO

Did any of these start at ovulation and end during bleeding? Y N

Were they severe enough to interfere with school,
work, social activities, or relationships? Y N**YOUNG ADULTHOOD**

Did/do you have any of the following medical problems?

	SELF	OTHERS
Hypoglycemia	_____	_____
Fibromyalgia	_____	_____
Chronic fatigue	_____	_____
Environmental allergies	_____	_____
Irritable bowel syndrome	_____	_____
Migraine headaches	_____	_____
Chronic pelvic pain	_____	_____
PMS	_____	_____

CHILDBEARING YEARS

	SELF	OTHERS
Treated for anxiety or depression	_____	_____
Postpartum blues	_____	_____
Medical complications during pregnancy and/or delivery	_____	_____

OLDER ADULT

	SELF	OTHERS
Overweight	_____	_____
Menopause began before the age of 45	_____	_____

Had or are undergoing steroid therapy	_____	_____
Fractures of the hip, spine, or wrist	_____	_____
Lost height	_____	_____
Urinary tract infections	_____	_____
Persistent joint pain	_____	_____
Hearing or memory loss	_____	_____

How each of us experiences the change of life and emerges through it is influenced by our past—our past health.

The following Midlife Health Assessment puts emphasis on family genetics that can put us at risk for future disease: menstrual cycle problems from puberty through adulthood because these can become intensified during perimenopause; and early signs of medical/psychiatric disorders that can emerge at menopause and continue into the postmenopause years.

The current status checklist describes the most common complaints of menopausal women in those domains that are of greatest concern to us as women—physical appearance, emotional well-being, sexual satisfaction, and close personal relationships.

Midlife Health Assessment

DEMOGRAPHICS

Date of Birth: _____

Ethnic Group: _____

Marital Status:

Never married Divorced

Married Widowed

Separated

Education:

Grade school or less Some high school

- HS diploma or GED Vocational/technical degree
 Some college College degree
 Some graduate study Graduate degree

Occupation:

- Full-time work Part-time work
 Retired Unemployed, looking
 Unemployed,
not looking for work for work

FAMILY HISTORY OF DISEASE

Does anyone in your family have a history of the following:

Hypertension	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Diabetes	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Heart disease	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Stroke	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Cancer		
Breast	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Cervix	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Colon	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Endometrial	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Lung	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Ovary	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Skin	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Osteoporosis	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Alzheimer's disease	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Arthritis	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Thyroid disease	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Kidney disease	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Blood clots	<input type="checkbox"/> No	<input type="checkbox"/> Yes

Bleeding disorders	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Venereal disease	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Clinical depression	<input type="checkbox"/> No	<input type="checkbox"/> Yes

DEVELOPMENTAL HISTORY (TEENAGE THROUGH MIDDLE AGE)**Teenage Years**

How old were you when your period started? _____

Around the time of your period, did you have any of these symptoms?

Irritability	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Moodiness	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Bloating	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Breast tenderness	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Binge eating	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Purgng	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Fasting	<input type="checkbox"/> No	<input type="checkbox"/> Yes

How were your early periods characterized?

Regular	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Irregular	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Light flow	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Heavy flow	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Cramps	<input type="checkbox"/> No	<input type="checkbox"/> Yes
No cramps	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Short duration	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Long duration	<input type="checkbox"/> No	<input type="checkbox"/> Yes

Habits:

Exercise	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Smoking	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Alcohol use	<input type="checkbox"/> No	<input type="checkbox"/> Yes

Other drug use _____ No _____ Yes

Sexually active _____ No _____ Yes

Hospitalizations and Surgeries:

Date: _____ Reason: _____

Date: _____ Reason: _____

Date: _____ Reason: _____

YOUNG ADULT/CHILDBEARING YEARS

Are you sexually active? _____ No _____ Yes

Do you use birth control? _____ No _____ Yes

Did/do you have any of the following medical problems?

Hypoglycemia _____ No _____ Yes

Fibromyalgia _____ No _____ Yes

Chronic fatigue _____ No _____ Yes

Environmental allergies _____ No _____ Yes

Irritable bowel syndrome _____ No _____ Yes

Migraine headache _____ No _____ Yes

Chronic pelvic pain _____ No _____ Yes

PMS _____ No _____ Yes

Genital warts, Herpes,

 Syphilis (STDs) _____ No _____ Yes

 Depression/anxiety _____ No _____ Yes

Pregnancies—How many? _____

Abortions—How many? _____

Miscarriages—How many? _____

Number of children _____

Medical complications during pregnancy or delivery? Describe:

Postpartum problems (depression? anxiety?) Describe:

Have there been any recent changes in your menstrual cycle?

Missed periods _____ No _____ Yes

Duration _____ No _____ Yes

Blood flow _____ No _____ Yes

Do you have any allergies? _____ No _____ Yes

Have you been treated for any medical/psychiatric disorders?

Date: _____ Reason: _____

Date: _____ Reason: _____

Date: _____ Reason: _____

Habits:

Exercise _____ No _____ Yes _____ Type

Smoking _____ No _____ Yes

Caffeine _____ No _____ Yes

How much coffee, tea, and soda do you drink daily?

Alcohol _____ No _____ Yes

How much do you drink in a week?

Other Drugs	Ever Used	Ever a Problem
-------------	-----------	----------------

Prescription	_____	_____
--------------	-------	-------

Narcotics	_____	_____
-----------	-------	-------

Cocaine	_____	_____
---------	-------	-------

Crack	_____	_____
-------	-------	-------

Heroin	_____	_____
--------	-------	-------

Methadone	_____	_____
-----------	-------	-------

Marijuana	_____	_____
-----------	-------	-------

Tranquilizers	_____	_____
Sleeping pills	_____	_____
Amphetamines	_____	_____
LSD	_____	_____
PCP	_____	_____

MIDDLE AGE AND MATURITY

Have your periods stopped? _____ No _____ Yes

If so, how old were you when you had your last period? _____

List all current medications:

Medication	Dosage	Reason
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

What is your current height? _____

What is your current weight? _____

Has there been a recent change in your height or weight?

_____ No _____ Yes

Do you take vitamins/supplements/herbals?

_____ No _____ Yes

Which exams do you have done yearly?

Pelvic	_____	No	_____	Yes
PAP	_____	No	_____	Yes
Mammogram	_____	No	_____	Yes
Eye	_____	No	_____	Yes
Blood pressure	_____	No	_____	Yes
Cholesterol	_____	No	_____	Yes

CURRENT STATUS CHECKLIST*Physical*

Are you experiencing:

Changes in weight	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Changes in energy	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Changes in bowel habits	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Changes in bladder functioning	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Changes in sleep patterns	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Frequent urinary infections	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Decrease in muscle strength	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Loss of muscle tone	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Joint/muscle pain	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Changes in eyesight	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Skin dryness and wrinkling	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Hair graying and thinning	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Elevated cholesterol levels	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Flushes of heat during the day	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Profuse sweating at night	<input type="checkbox"/> No	<input type="checkbox"/> Yes

Emotional

Are you experiencing:

Worries concerning your health	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Sudden appearance of physical complaints	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Mood swings	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Changes in memory and concentration	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Depression/anxiety	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Dissatisfaction with work/career	<input type="checkbox"/> No	<input type="checkbox"/> Yes

Dissatisfaction with your physical appearance	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Loss of confidence/feelings of inadequacy	<input type="checkbox"/> No	<input type="checkbox"/> Yes

Sexual

Are you experiencing:

Decreased interest in sex	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Decreased physical pleasure during intercourse	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Pain or dryness during intercourse	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Inability to achieve orgasm	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Decrease in sexual activity	<input type="checkbox"/> No	<input type="checkbox"/> Yes
Disappointment/anger toward your sexual partner	<input type="checkbox"/> No	<input type="checkbox"/> Yes

Social (Relationships)

What is your current living arrangement?

- Alone Family/Spouse
 Significant Other Caregiver
 Housemate(s) Parent/Guardian
 Other

List the members of your household besides yourself:

Name	Age	Relationship
------	-----	--------------

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

How long have you been with your current partner?

0-5 years 5-10 years 11+ years

Describe your satisfaction with your current relationship:

Extremely Satisfied

Fairly Satisfied

Fairly Dissatisfied

Not Satisfied

Are you involved in any community activities?

No Yes

If yes, explain: _____

Do you have any current, active religious affiliations?

No Yes

If yes, explain: _____

Do you participate in any hobbies or leisure activities?

No Yes

If yes, explain: _____

Do you have close friends or family with whom you can

discuss problems? _____ No _____ Yes

If yes, explain: _____

Chapter 9

Laboratory Tests and Screening Examinations

There is a persistent myth that since menopause is a natural, universal process, it must be healthy. This myth is very harmful. “Natural” does not mean that menopause has no serious health consequences. This may be so for some women, but not for all. Moreover, menopause is induced (by surgery, chemotherapy, irradiation, etc.) in a large number of women and therefore is not spontaneous or naturally occurring.

At menopause, our ovaries stop producing eggs and we have a dramatic decline in production of estrogen in our bodies. This results in an overall estrogen depletion. Estrogen affects every tissue in our bodies and there are receptor sites for estrogen on every organ in our bodies. It is essential to us. Specifically, we know that our own estrogen maintains our skeleton, improves cardiovascular functioning, gives us cancer protection (uterine and colon), helps with brain functioning, and protects us against tooth loss and eye disease. For some of us with high health risks and poor health habits, estrogen depletion can unmask early signs and symptoms of future disease.

The following are tests that you should have performed at the earliest appearance of change of life symptoms. Along with your

physical exam, these will give you an evaluation of your physical functioning and state of health as you enter menopause. Following this list is an explanation of these tests and those internal organs that are being evaluated.

Lab Tests and Screening Exams

In addition to a physical exam (including a pelvic exam), the following tests should be performed. Write in your results.

LABORATORY TESTS

	Date	Results
Serum Glucose	_____	_____
Hemoglobin A1C	_____	_____
Cholesterol	_____	_____
HDL	_____	_____
LDL	_____	_____
Triglycerides	_____	_____
FSH	_____	_____
TSH	_____	_____
Mammography	_____	_____
Densitometry	_____	_____
Urinalysis	_____	_____
PAP	_____	_____
*Fecal Occult Blood	_____	_____
*Sigmoidoscopy	_____	_____
*STDs	_____	_____
GC	_____	_____
Chlamydia	_____	_____
BV/Yeast	_____	_____

HIV _____

*CRP _____

*If necessary, after discussion with your doctor _____

Your height will be measured on your first visit, and your weight and blood pressure every visit.

_____ Height

_____ Weight

_____ Blood pressure

Your weight should be such that you maintain a body mass index under 25 to avoid obesity (below 22 is ideal). Refer to chapter 35 in part V for a discussion of weight and body mass index, which takes into account both your height and your weight.

Your blood pressure is a measure of the pumping action of the heart. The top number is the systolic pressure (when the heart contracts) and the bottom number is the diastolic pressure (when the heart relaxes).

BLOOD PRESSURE GUIDELINES

Classification:	Systolic:	Diastolic:
Optimal	<120 mmHg	<80 mmHg
Prehypertensive	120–140 mmHg	80–90 mmHg
Hypertensive	>140 mmHg	>90 mmHg

*mmHg=mm of mercury

A serum glucose test, or fasting blood sugar (FBS), is a blood test to detect diabetes. Normal FBS is below 126. A more sensitive blood test routinely administered to diabetics is the Hemoglobin A1C; a normal HgA1C is below 7 percent.

A serum cholesterol test is a blood test that measures the amount of fat circulating in your blood. HDL stands for high-density lipoprotein. HDL is called the “good” cholesterol because it helps remove fat from your bloodstream. LDL stands for low-density lipoprotein. LDL is called the “bad” cholesterol because it helps prevent fat from leaving your bloodstream, clogging your arteries. Triglycerides are other fats found in the bloodstream.

Optimal levels are:

Total cholesterol: under 200 mg/dl

(milligrams of fat per deciliter of blood)

HDL: over 40 mg/dl

LDL: under 100 mg/dl

Triglycerides: under 150 mg/dl

The follicle-stimulating hormone (FSH) test is used to diagnose menopause, although it is not a reliable test. If it is high, then ovarian functioning is believed to be low. It is not, however, reliable, because during perimenopause, false normal readings are common. Normal and postmenopause FSH levels in women are as follows:

Follicular Phase: 4.0–13.0 mcg/dl

(micrograms of FSH per deciliter of blood)

Ovulatory Phase: 5.0–22.0 mcg/dl

Luteal Phase: 2.0–13.0 mcg/dl

Postmenopause: 20.0–128.0 mcg/dl

The test for thyroid-stimulating hormone (TSH) is a sensitive test for thyroid functioning. TSH is high if your thyroid is underactive (hypothyroidism) and low if your thyroid is overactive

(hyperthyroidism). Complete thyroid testing is more extensive. Normal levels in women are:

Thyroxine: 4.5–12.0 mcg/dl

T3 Uptake: 20.0–47.0 percent

TSH 0.38–4.70 mIU/ml

(micro-International Units of TSH per milliliter of blood)

Thyroxine, free: 0.7–1.9 mg/dl

Mammography is an X-ray of the breasts to detect tumors too small to feel manually. The results will show any abnormal lumps or masses. It is effective but not infallible for early cancer detection. Breast self-exam is every woman's responsibility. The purpose is to detect lumps and changes in shape. The test is done by using your own hands; you will palpate your breasts in two positions; standing and lying down. Perform the test the same day every month. By performing the exam regularly, you'll get to know how your breasts are supposed to feel and be able to spot changes.

Densitometry is bone density measurement. It involves either an X-ray of the hip and spine or an ultrasound test of the heel or hand. It is used to detect bone loss as well as to measure the thickness and mineral content of bone (bone mineral density, or BMD). The ultrasound test gives a complete printout with results in two numbers: a Z-score comparing your bone mineral density to women in your age and ethnic group, and a T-score comparing your BMD to the average for Caucasian women between the ages of twenty-five and thirty-five, when bone density is at its peak. These scores are reported as standard deviations from the norm in each group; the norm is set at zero. You can be above or below the norm (plus or minus the mean). Norms have not yet been

developed for non-Caucasian women; until the studies are done, comparisons with Caucasian norms must suffice as approximations. The more important reading is the T-score.

The following interpretation is based on criteria set by the World Health Organization of the United Nations.

WHO CLASSIFICATION CRITERIA FOR T-SCORE RESULTS

Classification	T-Score
Normal	Greater than -1.0
Low Bone Mass (Osteopenia)	Between -1.0 and -2.5
Osteoporosis	Less than or equal to -2.5
Severe or Established Osteoporosis	Less than or equal to -2.5 with the incidence of one or more low trauma fractures

Urinalysis is a test of fresh urine for the presence of blood cells and infectious organisms (as well as for sugar and protein content, as seen in diabetes). Urinary tract infections are common in women, and the midlife and older woman becomes increasingly susceptible to these infections.

A PAP smear is done to detect cancerous and precancerous cells on the cervix. The test is performed as part of a routine pelvic exam. The results will show where within three categories your cervical cells fall: negative, mild dysplasia, or positive for cancer. The purpose of a pelvic exam is to check on the health of your pelvic organs by manual examination. The test is done by your physician using his or her hands to examine your pelvic organs. The results will show whether fibroids, cysts, or infections are present.

At the discretion of your doctor, the following examinations can be performed.

The purpose of an endometrial biopsy is to determine the health of the lining of the uterus. Endometrial biopsies are usually performed in your doctor's office without an anesthetic by taking a small piece of tissue from the inner uterine wall. The tissue is examined for the presence of abnormal cells. Physicians recommend this test be scheduled prior to prescribing hormone replacement therapy (HRT).

The fecal occult blood test is a prescreening, an examination of your stool, prior to the ordering of a sigmoidoscopy or colonoscopy. Sigmoidoscopy and colonoscopy are screening tests for colon cancer and can be used to remove and examine polyps in the large intestine. These are performed after extensive cleansing of the bowel and done under anesthesia. Flexible tubing is inserted into the rectum and threaded up through the sigmoid and colon, an uncomfortable but painless procedure.

The test for C-reactive protein (CRP) is a relatively new blood test used to detect signs of heart disease. CRP is a protein produced by the liver to counter inflammation caused by damage to the walls of the arteries. It is a more sensitive test for heart disease and prediction of heart attack and stroke than is the test for cholesterol levels. Two consecutive readings are recommended.

Reading	Risk
Below 1.0 mg/1	Low risk
Between 1.0 and 3.0 mg/1	Moderate risk
Above 3.0 mg/1	High risk

Diagnosing Menopause with Laboratory Tests

The American College of Obstetrics and Gynecology issued a Practice Bulletin (2000) that stated that assaying follicle-stimulating hormone (FSH) levels in menopausal women may be a misleading indicator for determining menopause status. FSH levels are not a reliable predictor of where a woman is in this process because FSH levels can be low, normal, or high in perimenopausal women. FSH levels, however, can be indicative: A finding greater than 40 mcg/dl is suggestive that menopause is occurring. An excellent and inexpensive urine test for FSH measurement is the Menocheck Test Kit, available without prescription at retail pharmacies.

Saliva hormone testing is now an available alternative to blood testing. It is a more accurate measure of the active hormones circulating in your body and available for use by your body. It is useful to check your hormone levels and to check on the effectiveness of your hormone replacement therapy. Like the blood test, it takes a week or two for the results to be available. It is expensive and not generally covered by insurance. You can ask your doctor about how to acquire a testing kit. I have seen them sold in product catalogues. One such kit is available at the following website: www.aswechange.com; the cost is \$79.00.

Can we predict when your menopause will occur? Not yet. As the rhythm of your cycle changes, you are getting close if you're averaging two or more months between periods. How close? Within one and a half to three years.

Chapter 10

Recommended Tests and Screenings—By the Decade

Most of us get our medical information from radio, TV, and consumer magazines. When we're in the doctor's office, we might see a listing of screenings and medical tests we should have done. Some physicians will send us notices and reminders. Many of us are inconsistent, even haphazard, in having tests and screenings performed, no matter what our doctors recommend.

This chapter highlights the important tests to get during each decade of your life. From perimenopause through the post-menopause years, we will need to screen for bone mineral loss, heart and blood vessel disease, cancers, and eye disease because we are increasingly susceptible to diseases of our organs as we age. These diseases are the major causes of physical disability in the older woman. Screening provides early detection and help in preventing the organ damage that limits life and living.

When You're Thirty-Something

In your mid-thirties, your estrogen levels will begin to fluctuate, or go outside the levels your body is accustomed to in its normal cycle. You may begin to have hot flashes, or your periods may

become heavy or irregular. You may begin to lose small amounts of bone mass. For some women, this is the onset of perimenopause.

- Get a physical every year that includes measurement of your blood pressure.
- Have your cholesterol levels tested at least every five years to look for warning signs of coronary artery disease.
- Have a PAP smear done to detect abnormalities. Have a pelvic exam annually to detect abnormalities of the uterus and ovaries.
- Examine your breasts monthly and get a mammogram, if you and your doctor feel it's necessary.
- If you are not committed to one sexual partner and he to you, get screened for Sexually Transmitted Diseases (STDs).

When You're Forty-Something

There is an increasing decline in estrogen levels and many women begin to have hot flashes, night sweats, irregular sleep, and irregular periods. The risk of heart disease increases, as does the loss of bone mineral density.

- Continue to have annual physical exams with blood-pressure readings.
- Have your cholesterol levels tested every three years.
- Get a pelvic exam and PAP smear annually.
- Have a mammogram done at least every two years.
- Continue monthly self-examination of your breasts.
- Begin colon cancer screening; have one done every three to five years.
- Screening for STDs is recommended.

When You're Fifty-Something

The average age of menopause today is fifty-one. Symptoms proliferate and include vaginal and urogenital problems. Bone loss is particularly rapid in the first seven years after menopause, and the risk of heart disease continues to increase.

- Continue your annual physicals with blood-pressure readings.
- Continue to have your cholesterol levels checked every three years, or get a CRP.
- Have a pelvic exam and PAP smear every year.
- Have a mammogram done every year.
- Get a bone mineral density (BMD) test done annually; the ultrasound screening is adequate.
- Continue to screen for colon cancer every three to five years.
- Have a sigmoidoscopy done every three to five years.

When You're Sixty-Something

There is an increase in vaginal dryness and related sexual problems. The incidence of osteoporosis, heart disease, and colon cancer increases.

- Continue your annual physicals with blood-pressure readings.
- Continue to have your cholesterol levels checked every three years, or get a CRP.
- Have a pelvic exam and PAP smear every year.
- Have a mammogram done every year.
- Continue your monthly self-examination of your breasts.
- Have a bone mineral density test done every three to five years.
- Begin having an eye exam and glaucoma screening every one to two years.

- Continue colon cancer screening every three to five years.
- Have a sigmoidoscopy every three to five years.

When You're Seventy-Something, or More

Eye conditions and cataracts become more common. This affects more women than men. The incidence of heart disease doubles, and your memory and cognitive functions may decline.

- Continue your annual physical with blood-pressure readings.
- Have your cholesterol levels checked at least every year, or get a CRP.
- Have a pelvic exam every one to three years.
- PAP smears are not needed if you are a woman older than sixty-five who historically has had normal results and are not at high risk for cervical cancer.
- Have a mammogram annually.
- Continue to examine your breasts monthly.
- Have a bone mineral density test done every three to five years.
- Continue eye examination and glaucoma screening every one to two years.
- Screen for colon cancer every one to two years.
- Have a sigmoidoscopy every three to five years.

Chapter 11

Early History Counts

Many medical and psychiatric disorders become reactivated or worsen during perimenopause. Moreover, they reinforce (read: aggravate) each other. The exception to this would be endometriosis, which actually improves with ovarian slowdown at menopause. Refer to “Your Medical History” in chapter 8. Have you had treatment for any medical/psychiatric problems in previous years? If so, list these conditions.

Adolescence: _____

Young Adulthood: _____

Childbearing Years: _____

Middle Age: _____

Over the years, I’ve had a lot of women referred to me who were experiencing midlife change and who were also diagnosed with a variety of psychiatric disorders. Let’s look at a woman’s life cycle from the point of view of our female reproductive milestones.

At puberty, whatever the age, girls become susceptible to eating disorders.

From adolescence through adulthood, we can experience depression, anxiety, premenstrual syndrome and its severe form, called

premenstrual dysphoric disorder (PMDD). For many women, PMS is experienced as an intense but brief time of depression and physical pain. About 80 percent of all women have mild or moderate symptoms, but only 5 percent have severe symptoms that actually interfere with or prevent daily functioning.

In the young adult years, there are conditions called somatoform disorders, so-called because of the predominance of physical symptoms. These are difficult to diagnose because physical examinations and laboratory studies and tests are usually negative. We have no effective treatment for these ailments. These conditions are hypoglycemia, fibromyalgia, chronic fatigue syndrome, environmental allergies, irritable bowel syndrome, atypical migraine headaches, and chronic pelvic pain.

During the childbearing years, women can also suffer from depression and anxiety. We are particularly susceptible to postpartum depression. Normally, up to 80 percent of postpartum women get "the maternity blues," which pass within two weeks.

The point is that, after puberty, all the major psychiatric disorders (mood disorders, anxiety disorders, somatoform disorders, and eating disorders) are common in women. In all these syndromes, the onset and severity of the symptoms are associated with times in the woman's hormonal cycle when the female hormones estrogen and progesterone are at low levels; that is, these conditions commonly occur in women with PMS, after childbirth, during the perimenopausal years, and in postmenopause. The wild fluctuations of our hormones during the perimenopause years can precipitate and intensify psychiatric symptoms. And, likewise, psychiatric disorders can trigger health problems in the maturing woman as hormone levels are rapidly depleted. If a woman has a

history of a psychiatric disorder, she will most likely experience an exacerbation of her symptoms at this time in her life. Conversely, the physical symptoms of perimenopause also have a domino effect; that is, untreated hot flashes and night sweats lead to sleeplessness and fatigue, resulting in irritability and an overall sense of loss of well-being, which, in turn, can precipitate symptoms of depression.

The number of symptoms that can occur is so large because estrogen is abundantly dispersed throughout our bodies and, during the menopausal years when our estrogen levels start to decline, all our organs are potentially affected.

Estrogen decline affects our other glands, i.e., the thyroid and the adrenal glands. At midlife, estrogen production declines, thyroid functioning can decrease, and adrenal functioning can increase, increasing the production of stress hormone (cortisol) in response to a barrage of physical and emotional symptoms during perimenopause. The following are the most common symptoms of declining ovarian function, low thyroid output, and increasing adrenal gland output:

Vasomotor

- increased sweating
- hot flashes
- night sweats

Physical

- headaches
- sleep disturbances
- heart palpitations
- joint aches and pains
- weight gain

- scalp hair loss
- skin thinning and wrinkling

Emotional

- depressed mood
- nervousness and irritability
- memory lapses
- low libido

My point is that there are a lot of hormonal changes occurring at midlife, and these changes are reflected in these vasomotor symptoms, physical changes, and emotional symptoms that are common with estrogen deficiency, low thyroid hormone, and increased stress hormone.

For some of us, this cascade of symptoms can be so rapid and intense that it scares us into seeing our doctors. Regardless of our motivation, getting a medical check-up during perimenopause (preferably when early changes develop) is a good idea. Among the hormone tests typically ordered by your doctor to assess your perimenopause status will be:

- Estradiol
- Estrone
- Testosterone
- Progesterone
- DHEA
- T3
- T4
- TSH

Part III

How's Your Health?

When I asked myself this question at fifty, I had a fountain of symptoms. I was moody and irritable and no fun to be around. My body felt like it was falling apart. I wasn't functioning very well at work. And I was calling my doctor's office with a lot of complaints. My health is pretty good, but not great. I have disease risks for hypertension, heart disease, osteoporosis, and cancer. I will no longer avoid yearly check-ups.

Chapter 12

Disease Risk Assessment

What makes up a disease risk assessment?

At midlife, many changes converge on us (and sometimes conspire against us): our bodies change, our families change, our social relationships change, and the sources of our emotional well-being change with them. Physically, our estrogen levels are declining; our ovaries are changing their function (explained in part I); we're losing estrogen's overall protective effect on our bodies; and the first early signs of future disease are emerging.

My own experience with perimenopause occurred over months with an accumulation of a variety of physical and emotional symptoms that became more intense as time went on. I thought my body was coming apart and, much worse, I thought I was developing medical illnesses over which I had no control. Thankfully, this crescendo of symptoms is mostly temporary; but these symptoms are signals to look more closely at our health status. This is the time of life when the accumulated years of bad habits and neglect begin to catch up with us. Some of our symptoms are not transient and are actually early signs of disease because they are tied to permanently diminished estrogen levels. Some of our symptoms are "silent" and are discovered as "accidental findings" on physical

examination and screening tests: hence the importance of these evaluations at the first signs of perimenopause (see part II).

It's commonly agreed that women should get certain disease assessments at the change of life. Each assessment presented here is made up of those risk factors that can't be changed and those risk factors that can be changed. All significant factors are marked with a star. This is important because we can do a lot to influence our future health by making some simple lifestyle changes. Also of importance is the fact that many risk factors for these diseases overlap and, as we try to modify our risks for one disease, we can positively influence our risks for other diseases, as well. I've presented a rating system for use with the assessments, and I've also added a checklist of early signs and symptoms you should know about for many of these diseases.

The rating system has been devised to help you identify the importance and relevance to you of each assessment. The assessments don't rule in or rule out any physical illnesses. They do suggest further action you can take and point you in the direction of more evaluation. The ratings are not to be used as a substitute for a thorough medical evaluation and discussion with your doctor. They can help you focus on important medical issues and, used in combination with your medical history (see part II), you can focus your prevention strategies on current or future medical problems.

This is how the rating system works:

- *Insignificant Risk* means no action is necessary.
- *Low to Moderate Risk* means you have a combination of risks and possibly early symptoms of illness; you'll need to look closely at factors you can change and, if you are developing future problems, you should talk to your doctor.

- *Significant Risk* means you must act on this self-assessment by talking with your doctor and getting medical advice as soon as possible.

The following medical illnesses commonly occur in women, particularly as we age. Each is given its own chapter to make it easier to explain them, some in more detail than others. This is the list:

- Obesity
- Heart disease
- Hypertension and hypercholesterolemia
- Urogenital dysfunction
- Osteopenia and osteoporosis
- Thyroid disease
- Adult-onset diabetes
- Osteoarthritis
- Cancer (lung, breast, colon, uterine, cervical, and ovarian)
- Alzheimer's disease
- Depression and anxiety

There are risks for future health problems as we age. All women, young and old, need to know what these health problems are and what their risk factors for them are. Prevention can and should start early.

Years of neglect and putting off investigating subtle changes also start early. It is very easy to engage in the complexities of one's life and ignore or put off instituting good health habits. All of these medical conditions have specific risk factors, some of which are preventable and some of which aren't. It is important for women to find out what their individual risk factors are and to find out early enough in their lives so that they can take them into account as they plan for their future.

Even though these health problems express themselves in later life (in the fifties and beyond), the stage is set for the onset of these diseases much earlier in a woman's life. Knowledge about individual risks and education about prevention should start in the younger years. During the approximately fifteen years of perimenopause, a woman has a good opportunity to avert the adverse changes these conditions can wreak on her body in later life.

We are all aging, but the standards of normal aging have been revised. It is no longer the norm to accept the traditional concept of aging as gradually diminishing function (fading eyesight and hearing, impaired mental functioning, decreased strength and stamina). The new scenario of life after menopause is one of health and vigor. This book is aimed at just that. An evaluation of your quality of life and assessments of your current health and risks for future disease are the starting points.

In our thirties, we often take our quality of life for granted, but quality of life is a very real issue for women as we navigate the menopause transition. The quality of life we seek really means a sense of well-being in a variety of domains. As the first physical signs of menopause occur, many women are also experiencing change in other aspects of their lives. How well we navigate menopause and endure the physical symptoms of change of life has a lot to do with a sense of well-being in our overall health, our occupation, our emotional life, our sexual life, and in the quality of our relationships.

The Utian Quality of Life Scale was developed by researchers and perimenopausal women together. It is valid, reliable, and practical to use. This is a good assessment to take at any time in your life even though it was developed for use through and beyond menopause.

Here's how you use it.

Circle the number (1-5) that best describes you after each statement. Selection of the number 1 means the statement is not true of you; selection of the number 3 means the statement is moderately true of you; selection of the number 5 means the statement is very true of you. Total your scores within each factor (domain). Then, total your factor (domain) scores for an overall QOL score.

The factor total scores and overall scores have been computed five times to demonstrate how various factor total scores and overall scores are obtained.

THE UTIAN QUALITY OF LIFE SCALE

Factor 1. Occupational Quality of Life

I feel challenged in my work. 1 2 3 4 5

I believe my work benefits society. 1 2 3 4 5

I have gotten a lot of personal
recognition at my job. 1 2 3 4 5

I am proud of my occupational
accomplishments. 1 2 3 4 5

I consider my life stimulating. 1 2 3 4 5

I continue to set new personal
goals for myself. 1 2 3 4 5

I continue to set new professional
goals for myself. 1 2 3 4 5

Factor 2. Health Quality of Life

I am unhappy with my appearance. 1 2 3 4 5

My diet is not nutritionally sound. 1 2 3 4 5

I feel in control of my eating behavior.	1	2	3	4	5
Routinely, I engage in active exercise three or more times each week.	1	2	3	4	5
I believe I have no control over my physical health.	1	2	3	4	5
I feel physically well.	1	2	3	4	5
I feel physically fit.	1	2	3	4	5

Factor 3. Emotional Quality of Life

I am able to control things in my life that are important to me.	1	2	3	4	5
My mood is generally depressed.	1	2	3	4	5
I frequently experience anxiety.	1	2	3	4	5
Most things that happen to me are out of my control.	1	2	3	4	5
I expect that good things will happen in my life.	1	2	3	4	5

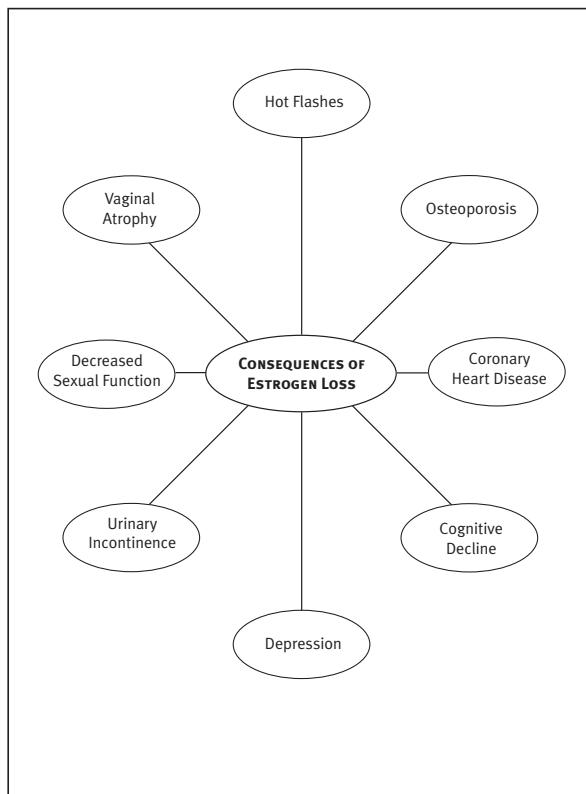
Factor 4. Sexual Quality of Life

I currently experience physical discomfort or pain during sexual activity.	1	2	3	4	5
I am not content with my sexual life.	1	2	3	4	5
I am content with my romantic life.	1	2	3	4	5
I am content with the frequency of my sexual interactions with a partner.	1	2	3	4	5

TOTALS

	Low	Moderate		High
Occupational QOL	7	14	21	28
Health QOL	7	14	21	28
Emotional QOL	6	12	18	24
Sexual QOL	3	6	9	12
Total QOL	23	46	69	92
				115

There are many medical consequences of estrogen loss for women. The following is a brief discussion.



The major health concern for postmenopausal women is actually cardiovascular disease. While the cardiovascular death rates for men have decreased, they have increased for women.

Heart disease, coronary artery disease, and stroke are all rare in young women, but are the most frequent causes of death in women over age fifty. Most women, however, still believe that their major health concern is cancer. More women will eventually die of heart disease than of all the cancers combined. In fact, after the age of fifty, there is a sharp increase in occurrence of heart disease; one in two women will be affected.

**LEADING CAUSES OF FEMALE DEATH
UNITED STATES, 2000**

Cause of Death	Percent*
1. HEART DISEASE	29.9
2. CANCER	21.8
3. STROKE	8.4
4. CHRONIC LOWER RESPIRATORY DISEASES	5.1
5. DIABETES	3.1
6. INFLUENZA AND PNEUMONIA	3.0
7. ALZHEIMER'S DISEASE	2.9
8. UNINTENTIONAL INJURIES	2.8
9. KIDNEY DISEASE	1.6
10. SEPTICEMIA	1.4

*Percent of total deaths due to the cause indicated.

Table reproduced from www.cdc.gov/od/spotlight/nwhw/lcod.htm.

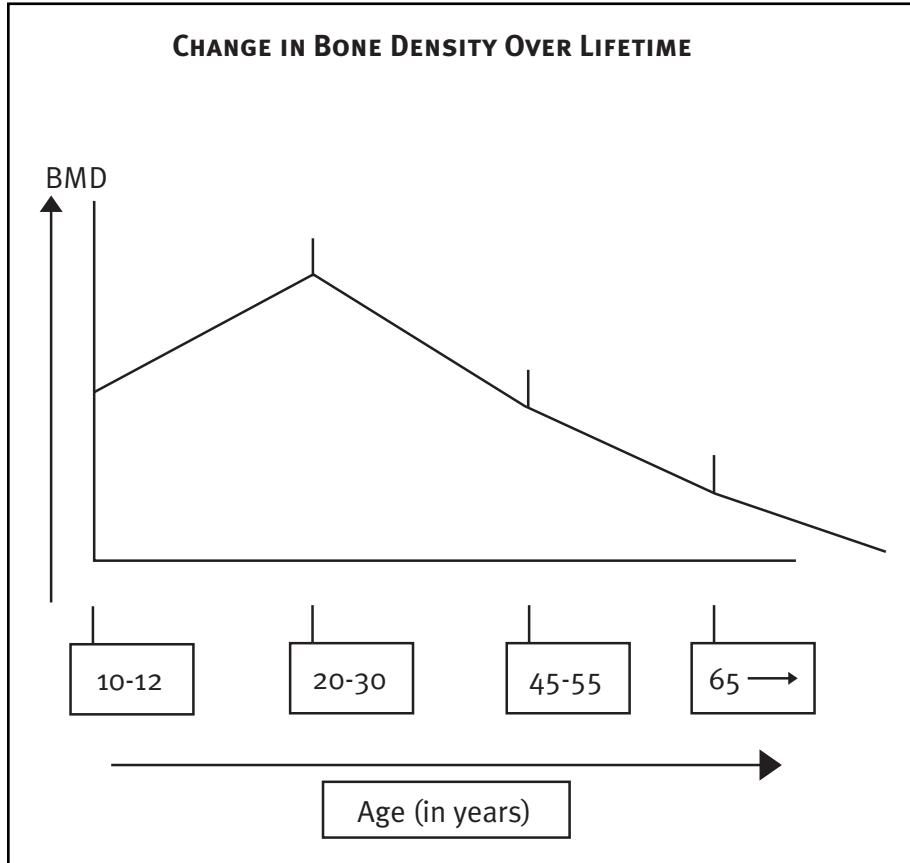
The signs and symptoms of heart attacks (and of heart disease) in women are as follows:

- A tightness, squeezing, or pressure felt in the chest, upper abdomen, neck, throat, or jaw; may radiate down your left arm and cause a sensation of numbness or tingling
- Nausea or feelings of indigestion, including heartburn, sickness in the stomach, or general uneasiness
- Breathing difficulties without exertion
- Fatigue or an overall feeling of weakness and lack of energy

The genito-urinary changes after menopause are caused by genito-urinary atrophy, which in turn affects urinary and sexual functioning. It is a condition characterized by changes in the vagina and skin outside the vaginal opening, including vaginal dryness and shrinkage. In postmenopausal women, it is caused by loss of the estrogen previously produced by the ovaries. It is usually treated with estrogen replacement therapy. Externally applied creams have proven to produce good symptom control. All menopausal women will experience genito-urinary atrophy and most will have urinary or sexual dysfunction. In my psychiatric practice, this is the least discussed consequence of change of life. The most common vaginal symptoms are burning, itching, pain, and decreased vaginal lubrication and elasticity. The most common urinary tract symptoms are urine leakage (incontinence) and frequent urination, especially at night.

Bone density in women also changes with age: it peaks in our twenties and starts to decline in our forties with rapid bone loss in our fifties. There is typically a 20 percent loss from the peak density by the age of sixty. Our bone density in our mature years is determined by how much bone was accumulated in our youth and the

amount of bone loss during our middle years (see graph below). Bone loss in women who have undergone surgically induced menopause (from hysterectomies and oophorectomies) is an under-recognized and significant risk for osteoporosis.



Cognitive decline, or slow and progressive loss of mental functioning, is not one of the leading disease risks faced by post-menopausal women. However, it is much more prevalent in women than in men and is a leading cause of institutionalization of

women after the age of seventy. You may wish to screen yourself or someone you know.

Mild cognitive impairments can be detected early. Simple testing can reveal it. For example, counting backwards from 100 by 7s; spelling the word “world” backwards; or naming as many animals as you can in sixty seconds (eighteen or more is excellent; fewer than twelve is poor, as is naming something other than an animal); engaging another in conversation by asking: How are you? What do you like to do? and What did you do yesterday? (The inability to answer these questions implies cognitive impairment.) The Draw-a-Clock test asks that you draw a clock; those with cognitive impairment struggle to position the numbers around the clock face. Those with cognitive impairment asked to place the clock hands so as to indicate a specific time (for example, 9:25) will often misplace the hands on the clock.

Unlike cognitive impairments, forgetfulness is a normal part of aging. For a good explanation of memory and forgetfulness, refer to the following Harvard Health Publication: *Improving Memory: Understanding and Preventing Age-Related Memory Loss* (2000).

Depression is one of the conditions for which postmenopausal women are statistically at risk. I specialize in treating mood disorders, and I use several screening tools to assess depression symptoms in my patients. The one at the end of the chapter is self-administered. Scoring is done by adding all the points together. A score greater than one hundred is significant and suggests you should consider talking to a therapist.

DEPRESSION SCALE, PATIENT VERSION

Please rate how you have been feeling Date _____
 during the past week, including today. Your Name _____

Key: 0-Absent 1-Mild 2-Moderate 3-Marked 4-Severe

1. Depressed, sad	0	1	2	3	4
2. I am so depressed that not even good news would cheer me up	0	1	2	3	4
3. Angry, irritable, hostile	0	1	2	3	4
4. Decreased self-esteem or self-confidence, low thoughts about myself	0	1	2	3	4
5. Guilt feelings, feeling like a burden to family and society	0	1	2	3	4
6. Hopelessness, things will not get better	0	1	2	3	4
7. Helplessness, I can't change things	0	1	2	3	4
8. Trouble falling asleep	0	1	2	3	4
9. Waking up in the middle of the night	0	1	2	3	4
10. Waking up in the morning 1-2 hours before I need to	0	1	2	3	4
11. Sleeping more than usual	0	1	2	3	4
12. Drowsy during the day	0	1	2	3	4
13. Fatigue, low energy, hard to get going	0	1	2	3	4
14. Decreased appetite	0	1	2	3	4
15. Increased appetite	0	1	2	3	4
16. Decreased weight	0	1	2	3	4
17. Increased weight	0	1	2	3	4
18. Decreased sexual interest	0	1	2	3	4
19. Increased sexual interest	0	1	2	3	4
20. Decreased interest in usual activities	0	1	2	3	4
21. Decreased involvement in usual activities - withdrawn	0	1	2	3	4
22. Decreased pleasure or less enjoyment of usual activities	0	1	2	3	4
23. Decreased memory	0	1	2	3	4
24. Decreased concentration	0	1	2	3	4
25. Indecisiveness - unable to make decisions	0	1	2	3	4

26. I move slower; sit in one place for long periods	0	1	2	3	4
27. So restless I can't sit still or relax	0	1	2	3	4
28. Thoughts slowed down	0	1	2	3	4
29. Racing thoughts	0	1	2	3	4
30. Mood worse in morning	0	1	2	3	4
31. Mood worse in evening	0	1	2	3	4
32. My mood changes very rapidly	0	1	2	3	4
33. Thoughts of suicide, wishing I were dead, not caring if I live	0	1	2	3	4
34. Intent to kill myself	0	1	2	3	4
35. Wanting to hurt or punish myself (not suicide)	0	1	2	3	4
36. Anxious, nervous, worried	0	1	2	3	4
37. Physical anxiety symptoms like my heart beating oddly, short of breath, tremors, butterflies in my stomach, frequent urination, sweating, muscle tension, numbness in my hands or feet	0	1	2	3	4
38. So afraid of certain things or situations that I avoid them	0	1	2	3	4
39. Sudden, severe feelings that something is going to happen, like I will die, go crazy, or pass out	0	1	2	3	4
40. Hearing voices or seeing things that are not there	0	1	2	3	4
41. Believing things that others do not believe	0	1	2	3	4
42. Feeling suspicious of others, that others want to hurt me or are against me	0	1	2	3	4
43. Unpleasant, unrealistic thoughts go over and over in my mind and I can't stop them	0	1	2	3	4
44. Feeling compelled to do senseless things over and over	0	1	2	3	4
45. Feeling I am some other person or am outside my body	0	1	2	3	4
46. Feeling things are not real, like in a fog or dream world	0	1	2	3	4
47. Worried about my physical health	0	1	2	3	4
48. Feeling rejected by others	0	1	2	3	4
49. Unable to control my impulses	0	1	2	3	4
50. Drinking alcohol or using recreational drugs	0	1	2	3	4

Reproduced courtesy of the Feighner Research Institute.

The Women's Health Initiative is studying the impact of estrogen loss on the eyes. Age-related macular degeneration (AMD), though not one of the leading disease risks faced by post-menopausal women, is the leading cause of blindness in the United States among men and women alike. The common eye symptoms associated with menopause are deterioration in vision and dryness. Other age-related conditions are cataracts and glaucoma. The findings of the WHI are expected to greatly expand our knowledge of the impact of estrogen loss on such diseases of the eye.

Chapter 13

Obesity

Obesity is defined as a body mass index (see part V, chapter 35) equal to or greater than 30.

Most women gain weight during the perimenopause and early menopause years due to increased fat storage as a result of metabolic change at this age. Have you noticed the new areas of fat pads on your back, arms, waist, and hips?

Two-thirds of women aged fifty and older are overweight (BMI of 25 or more) and half of these are obese. Weight gain is pervasive and occurs during perimenopause exclusively in Western societies. This is due to our four-decade-long habit of overeating, coupled with the metabolic change that occurs at this age. It is a slow, insidious process, and it shouldn't be ignored. A BMI at 30 or greater maintained for three years can cause increased blood pressure, increased blood sugar, and lipid abnormalities; after ten years, coronary artery disease will develop. Most importantly, obesity is either a major causative factor or a significant symptom in each of the diseases listed, except for Alzheimer's disease.

OBESITY RISK ASSESSMENT

Non-Changeable Risk Factors

Check each factor that describes you.

- You have polycystic ovarian syndrome.*
- You have hypothyroidism.*
- You are age fifty or older.
- You have a family history of obesity.
- Your body fat is distributed primarily throughout your abdomen, hips, and buttocks.

Risk Rating

No checks: Insignificant risk, no action needed at this time

One or more checks: Low to moderate risk, discuss with doctor
at next exam

*Significant risk, discuss with doctor immediately

OBESITY RISK ASSESSMENT

Changeable Risk Factors

Check each factor that describes you.

- You are physically inactive (a couch potato).*
- You overeat and eat oversized portions.*
- You have more than two alcoholic drinks a day.*
- You are taking medications such as: antidepressants, anti-histamines, beta-blockers, analgesics, chemotherapy drugs, sulfonylureas for diabetes, steroids, anti-epileptic drugs, or contraceptives.*
- You frequently diet and skip meals.
- You eat few dairy products (and may have a calcium deficiency).
- You eat carbohydrate-rich foods (starches and sweets) daily.

- Body fat has accumulated in your abdomen (you have an apple-shaped body) or in your hips (you have a pear-shaped body).
- You were overweight prior to menopause.
- You smoke.

Risk Rating

Fewer than three checks: Insignificant risk, no action needed at this time

Three or more checks: Low to moderate risk, discuss with doctor at next exam

*Significant risk, discuss with doctor immediately

EARLY SIGNS OF OBESITY

Check each factor that describes you.

- Your appetite has been increasing.*
- You have been gaining more than five pounds of weight each year.*
- Your physical activity has been decreasing.*
- You drink more soda than water.
- You have increased your snacking on “junk foods,” (potato chips, cookies, candy, cake).
- You eat fast food.
- You are unable to lose weight by dieting.

Risk Rating

Less than three checks: Insignificant risk, no action needed at this time

Three or more checks: Low to moderate risk, discuss with doctor at next exam

*Significant risk, discuss with doctor immediately

Chapter 14

Heart Disease, Hypertension, and Cholesterol

First, some definitions.

CVD stands for cardiovascular disease and refers to those processes that damage the heart and blood vessels. CHD stands for coronary heart disease and is often used interchangeably with CAD, which stands for coronary artery disease. CHD and CAD refer to diffuse build-up of plaque in your arteries, causing inflammation, hardening of the arteries, and atherosclerosis. CVD, CHD, and CAD stand for vascular and heart disease, and they mean their proud owner has a future risk of angina, TIAs (transient ischemic attacks), myocardial infarction (MI, or heart attack), and stroke. If we don't die from these conditions, we will probably need blood-thinners, bypass surgery, or other high-tech medical procedures to save our lives.

Our ovarian estrogen has many important functions (refer to part I): It acts as an antioxidant and prevents the build-up of "bad cholesterol" (LDL) in the blood vessel walls; it keeps the "good cholesterol" (HDL) at high levels, which delays hardening of the arteries; and it strengthens the heart muscle—all of which help to delay the onset of cardiovascular disease. Because women at menopause have a significant reduction in estrogen levels, our risk

of heart disease increases dramatically in the postmenopause years (two to three times more so than in men). Therefore, one woman in nine between the ages of forty-five and sixty-four is estimated to have CHD; after age sixty-five this increases to one in three women. The loss of ovarian function for any reason (e.g., surgery, chemotherapy, early menopause) will also increase our risk for heart disease. Thus, for women between age fifty and seventy-five, heart disease is the leading cause of death (five times more common than death from breast cancer). Stroke is the second-leading cause of death and the most common cause of long-term disability in women in this age group.

The hardening of our arteries is a normal part of aging (but high cholesterol levels are not), and it leads to high blood pressure, which is the most common chronic condition in the United States. The combination of hardening arteries, fatty buildup in the walls of the arteries, and inflammation of the artery walls causes heart attack and stroke. Hypertension develops insidiously over time. It is estimated that one in four adults have it, and most of these people are women. If you're over the age of fifty-five, your risk of developing high blood pressure is 90 percent. And it's usually discovered by accident at routine physical exams. Hypertension doesn't make you feel sick the way high blood sugar does. Therefore, it's called the "silent disease." But if left untreated, it can kill you suddenly, without warning.

More than 50 percent of women over the age of fifty-five have high cholesterol. Even if you are not overweight, you can still have abnormal cholesterol levels. HDL ("good cholesterol") levels tend to decrease in the postmenopause years. Therefore, low levels of HDL are a much better indicator of heart disease risk in women

than high levels of LDL (which is a more useful indicator of risk in men). Our bodies can make all the cholesterol we need. Some of us have a genetic predisposition to overproduction of cholesterol, but most of us get high levels of cholesterol from diets high in starches and fats.

Current Concepts

Hypertension is a chronic condition that affects one in four American adults, most of them women. The National Heart, Lung, and Blood Institute has issued new guidelines (2003) that will affect millions of us. A blood pressure reading of 120 systolic over 80 diastolic used to be considered ideal; now, it is considered borderline hypertensive. In other words, this blood pressure level isn't low enough. Most people don't know that they have high blood pressure until they develop symptoms. This usually means some damage has already occurred to the heart, kidneys, eyes, and brain.

The following are the new guidelines for detecting hypertension:

Pressure	Normal	Pre-Hypertensive	Stage I	Stage II
Systolic	<120	120–139	140–159	>160
Diastolic	<80	80–89	90–99	>100

Recommended **treatment** regimens are:

Healthy	None	Lose weight Exercise Avoid Salt and Alcohol	Diuretics	Diuretic + Another Drug
With Disease	None	Medically Treat	Multiple Meds	Multiple Meds

The relevant diseases here are heart disease, diabetes, and kidney disease.

Have your blood pressure checked at least twice yearly. Two or more consecutive high readings may indicate a problem is developing.

HEART DISEASE RISK ASSESSMENT

Non-Changeable Risk Factors

Check each factor that describes you.

- You have had a hysterectomy, chemotherapy, or early menopause.*
- You have had a heart attack.*
- You have had a stroke or transient ischemic attack (TIA).*
- You have diabetes.*
- You have kidney disease.*
- You are age fifty or older.
- You have a family history of heart disease.
- You have a family history of stroke.
- You have sickle cell anemia.

Risk Rating

No checks: Insignificant risk, no action needed at this time

One or more checks: Low to moderate risk, discuss with doctor
at next exam

*Significant risk, discuss with doctor immediately

HEART DISEASE RISK ASSESSMENT

Changeable Risk Factors

Check each factor that describes you.

- You have high blood pressure, as shown by two or more consecutive elevated readings.*

- You have high cholesterol, as shown by laboratory testing.*
- You are twenty pounds or more overweight.*
- You are physically inactive.
- You drink more than two alcoholic beverages a day.
- You smoke.
- You suffer from depression.

Risk Rating

Less than two checks: Insignificant risk, no action needed at this time

Two or more checks: Low to moderate risk, discuss with doctor at next exam

*Significant risk, discuss with doctor immediately

EARLY SIGNS OF HEART DISEASE

Check each factor that describes you.

- You have had an angina attack (pain in abdomen, back, neck, jaw, or throat).*
- You suffer from nausea, indigestion, and heartburn.*
- You experience shortness of breath without exertion.*
- You have a lack of energy and feel weak and fatigued.*

*These all represent significant risk. Please note that they differ from typical signs such as chest pain radiating down the arm, often seen in men.

HYPERTENSION RISK ASSESSMENT

Non-Changeable Risk Factors

Check each factor that describes you.

- You are age sixty-five or older.*
- You have a family history of hypertension.*

- You have a family history of high cholesterol.*
- You have diabetes.*
- You have asthma.
- You are African-American.

Risk Rating

No checks: Insignificant risk, no action needed at this time

One check: Low to moderate risk, discuss with doctor at next exam

*Significant risk, discuss with doctor immediately

HYPERTENSION RISK ASSESSMENT

Changeable Risk Factors

Check each factor that describes you.

- You have a diet high in salt and fat (low in fruits and vegetables).*
- Your diet is poor in calcium-rich foods (see part V, chapter 32).*
- You are physically inactive.*
- You smoke.*
- You are obese.*
- You drink more than four cups of caffeinated coffee or other caffeinated beverages each day.
- You drink more than two alcoholic beverages a day.
- You use oral contraceptives.
- You are under chronic stress.

Risk Rating

Less than three checks: Insignificant risk, no action needed at this time

Three or more checks: Low to moderate risk, discuss with doctor at next exam

*Significant risk, discuss with doctor immediately

EARLY SIGNS OF HYPERTENSION

There are no early signs of hypertension. It is usually “discovered” by blood pressure readings taken on physical examination. Two or more consecutive high readings are needed to confirm the diagnosis.

HYPERCHOLESTEROLEMIA RISK ASSESSMENT

Non-Changeable Risk Factors

Check each factor that describes you.

- You have reached menopause, naturally or induced.*
- You are at least two years postmenopause.*
- You have diabetes.*
- You have a family history of high cholesterol.*

*Significant risk, discuss with doctor immediately

HYPERCHOLESTEROLEMIA RISK ASSESSMENT

Changeable Risk Factors

Check each factor that describes you.

- You are obese.*

*Significant risk, discuss with doctor immediately

EARLY SIGNS OF HYPERCHOLESTEROLEMIA

There are no early signs of high cholesterol. It is usually “discovered” by blood tests of cholesterol levels ordered by your doctor as part of a physical examination.

Chapter 15

Urogenital Dysfunction

Seventy-five percent of postmenopausal women have experienced changes in the functioning of their urinary tract as well as changes in their sexual functioning, but only one out of ten women will seek medical attention. And three out of ten will have permanent problems. Estrogen deficiency in the postmenopausal years causes the following impairments in the genito-urinary tract:

- Vaginal dryness, shrinkage, and proneness to infection (known as atrophy)
- Urinary tract loss of elasticity and tissue shrinkage with proneness to infection and incontinence (known as atrophy)
- Sexual dysfunction due to pain and bleeding on intercourse, with loss of libido

Men and women are embarrassed and ashamed to admit to having any problems with sexual functioning. But women differ from men in how we handle these problems when they arise.

Rarely does a woman initiate discussion of these problems. In my psychiatric practice, I am usually the one to bring out these issues during the interview. Women tend to assume that sexual dysfunction is an emotional impairment; men tend to assume that it's a physical problem.

Women usually attribute problems with sex to stress in their lives; men usually attribute these problems to their sexual partners (they blame the partner).

Even though sexual dysfunction is one of the most common symptoms of menopause, women rarely recognize it as such, whereas in men, sexual dysfunction is often a sign of medical illness, for example, diabetes or prostate disease.

Women rarely seek medical help for sexual dysfunction unless the symptoms significantly interfere with their sexual functioning, whereas men tend to consult doctors earlier about signs of difficulties.

The key to treating these symptoms is early recognition of the problem. Please note that under the listing of vaginal signs, all are starred, meaning that if you are experiencing any of these symptoms, you will need to discuss the matter with your doctor.

UROGENITAL DYSFUNCTION RISK ASSESSMENT

Non-Changeable Risk Factors

Check each factor that describes you.

- You have been postmenopausal for at least one year, or are older than fifty.*
- You have had an injury to your pelvic nerves due to surgery, chemotherapy, or irradiation.*
- You have Crohn's inflammatory bowel disease.*
- You have allergies to soaps and deodorants.
- You suffer from skin disorders (for example, eczema).
- A sexually transmitted disease (for example, HIV) is present in your body.

Risk Rating

Less than two checks: Insignificant risk, no action needed at this time

Two or more checks: Low to moderate risk, discuss with doctor at next exam

*Significant risk, discuss with doctor immediately

UROGENITAL DYSFUNCTION RISK ASSESSMENT

Changeable Risk Factors

Check each factor that describes you.

- You are taking blood pressure medication, antidepressants, or antibiotics regularly.*
- You are obese.*
- You do not have a sexual partner.*
- You have low androgen levels as measured by blood testing for hormone levels.*
- You have seen the emergence of health problems, for example, high blood pressure, diabetes, and thyroid dysfunction.*
- You suffer from sleep disturbances.
- You suffer from depression.
- You smoke.

Risk Rating

Less than two checks: Insignificant risk, no action needed at this time

Two or more checks: Low to moderate risk, discuss with doctor at next exam

*Significant risk, discuss with doctor immediately

EARLY SIGNS OF UROGENITAL DYSFUNCTION

Vaginal Signs

Check each factor that describes you.

- You suffer from pain during intercourse.*
- You have decreased vaginal lubrication.*
- You have itching or burning in the vaginal area.*
- You have vaginal discharge regularly.*
- You have vaginal infections and urinary tract infections.*
- You suffer vaginal pain or dryness in the absence of sexual activity.*

Risk Rating

*Significant risk, discuss with doctor immediately

Urinary Signs

Check each factor that describes you.

- You leak urine when coughing, laughing, sneezing, or lifting.*
- You have strong urges to urinate, with leaking of urine before getting to the bathroom.*
- You urinate frequently during the day.*
- You urinate frequently at night.*
- You leak urine during sex.*
- You wear pads to protect your clothing from urine leakage.*
- You feel pain on urination.*
- You are unable to empty your bladder completely.*

Risk Rating

*Significant risk, discuss with doctor immediately

Sexual Signs

Check each factor that describes you.

- You are generally dissatisfied with your sex life.*

- You have noticed a sexual problem.*
- Your interest in having sex has decreased.*
- You have sex less frequently than you used to.*
- You feel less pleasure from sexual experience than you used to.*
- Your orgasm is less pleasurable.*
- You feel pain during intercourse.*
- You are unable to achieve orgasm.*

The best indicator of sexual dysfunction is the occurrence of change from previous sexual functioning.

Risk Rating

*Significant risk, discuss with doctor immediately

Besides hormonal factors, there are many other recognized causes of diminished sexual functioning in menopausal women. A few of the most common reasons for midlife women to experience loss of libido are:

- Aging: If a woman has had a low sex drive prior to menopause, it will diminish more during and after menopause.
- Medications: Many drugs prescribed for psychiatric and general medical illness significantly interfere with sexual functioning.
- Life stressors: Being overwhelmed by a mass of personal and professional responsibilities causes stress, anxiety, and depression, all of which diminish the ability to find pleasure in much of anything.
- Substance abuse: Taking many drugs for a variety of symptoms, increasing dosages of prescribed medications without medical supervision, ingesting multiple over-the-counter medications simultaneously, and drinking alcohol are all on the rise in women. Interestingly, alcohol consumption increases a woman's

risk for promiscuity (and sexually transmitted diseases), but decreases the experience of pleasure during sexual activity.

Most women realize that the experience of pleasure in sexual activities is mostly due to feelings of emotional well-being and pleasure with our partners and less due to the physical pleasure of the act itself. One woman described her orgasms to me as "90 percent my mood and 10 percent my body's response."

How do you feel? Is the overall quality of your life affecting your sexual functioning?

Chapter 16

Osteopenia and Osteoporosis

Osteopenia is low bone mass and osteoporosis is severely reduced bone mass with deterioration of the skeleton and significantly increased risk of fractures.

For women, bone loss begins in our thirties and continues throughout the rest of our lives. By age fifty, half of all women have low bone mass (osteopenia). Even though osteoporosis rates will vary with age, nearly half of all Caucasian women over age fifty will suffer a fracture due to osteoporosis over the course of their lifetime; we don't yet know the prevalence of osteoporotic fractures in non-Caucasian women. Twenty-five million Americans are affected with osteoporosis and 80 percent of them are women. Fractures are often the first sign that the disease has progressed; these fractures cause little pain, so the disease progresses quietly. The fractures that result from this disease are a major cause of disability in women older than fifty. Our most rapid bone loss occurs within the first two to three years before menopause and three to four years after menopause, representing a 5 to 10 percent loss of our bone mass.

During menopause, the greatest bone loss occurs in the spine, hips, and ribs (our weight-bearing bones). Calcium loss in these bones ultimately leads to fractures and pain. The incidence of falls

and hip fractures in older women has been steadily increasing every year for the past twenty years, in part due to accelerated bone loss in sedentary older females.

Preventing bone loss involves more than just taking calcium supplements. It involves:

- exercising at least three hours weekly (which can actually increase bone mass);
- eliminating soda from your diet (the phosphates in sodas leach calcium out of the bones);
- adding vitamin and mineral supplements daily (because dietary calcium needs magnesium and other vitamins to be absorbed); and
- starting to take calcium supplements prior to menopause (the higher your bone density prior to menopause, the lower your risk for osteoporosis). The prevention dosage is 600–1,200 mg of calcium per day.

Even in combination with HRT, calcium supplements only reduce the rate of bone loss (prevent thinning). More specific medical treatments are needed if osteoporosis has already occurred.

Even though osteoporosis is more prevalent in Caucasian and Asian women, African-American women are not immune to it and have a delayed onset due normally to larger bones and a tendency to be overweight rather than underweight.

OSTEOPENIA AND OSTEOPOROSIS RISK ASSESSMENT

Non-Changeable Risk Factors

Check each factor that describes you.

You are older than fifty.*

You have a family history of osteoporosis.*

- You are thin and have a small frame.*
- You had an early menopause (before the age of forty).*
- You have had a fracture after age fifty.*
- You are already being treated for thyroid disease.*
- You have had small bowel surgery with resection.*
- You have never been pregnant.*

Risk Rating

*Significant risk, discuss with doctor immediately

OSTEOPENIA AND OSTEOPOROSIS RISK ASSESSMENT

Changeable Risk Factors

Check each factor that describes you.

- You are an African-American woman who is sixty or older, obese, and you have a poor diet.*
- Your diet is low in calcium.*
- You are taking medications such as steroids, anticonvulsants, or tranquilizers.*
- You are physically inactive.*
- You have anorexia or bulimia.
- You weigh less now than you did at age twenty-five.
- You have more than three caffeinated drinks a day.
- You smoke.
- You have more than two alcoholic beverages a day.

Risk Rating

Less than three checks: Insignificant risk, no action needed at this time

Three or more checks: Low to moderate risk, discuss with doctor at next exam

*Significant risk, discuss with doctor immediately

EARLY SIGNS OF OSTEOPOROSIS

Check each factor that describes you.

- You have lost more than 1.5 inches of height during the postmenopause years.*
- You have had a fracture of your wrist, spine, or hip after age fifty.*
- Your upper back is curved forward.*
- You have chronic pain in the middle of the back (between vertebrae T12 and L1).*
- You have osteopenia verified by an ultrasound bone density screening test.*

Risk Rating

*Significant risk, discuss with doctor immediately

Because this disease is painless, fractures discovered on X-ray are often the first indicators of the presence of this disease.

Chapter 17

Thyroid Disease

The thyroid gland is important because it controls and regulates all the chemical and physical changes in our bodies. The thyroid gland needs estrogen to function, and abnormal functioning occurs with estrogen deficiency; it is commonly misdiagnosed as other medical problems. Thyroid disorders are seen predominantly in women, affecting 10 percent of all women over the age of fifty. Currently, twenty million women are being treated for thyroid problems and an estimated two million more are undiagnosed. Thyroid disease is known as “the great imitator.” The symptoms are very similar to perimenopause symptoms, and the symptoms usually develop early in life. They are often overlooked during the change of life and can go untreated for many years. Thyroid disease can imitate many illnesses, such as major depression, heart disease, arthritis, and even cancer.

There are many common symptoms suffered by women who are perimenopausal or depressed or have low-functioning thyroid glands (and, occasionally, I've met women with all three disorders occurring simultaneously). Some of these overlapping symptoms are irregular periods, moodiness and irritability, trouble sleeping, fatigue, decreased concentration, short-term memory loss, lack of sexual desire, and weight gain.

There are several thyroid disorders: hyperthyroidism involves an overactive gland and affects 2 percent of all women with thyroid dysfunction; hypothyroidism involves an underactive gland and affects the majority of women with this disorder; and, lastly, thyroid cancer, which is very rare but affects fourteen thousand women yearly.

Current Concepts

Hypothyroidism is the condition resulting from an underactive thyroid.

Thyroid disease is commonly overlooked in perimenopausal women experiencing symptoms of moodiness, sleep disturbance, excessive sweating, and change in the menstrual cycle. This is because so many of the symptoms of perimenopause and thyroid dysfunction overlap with each other (as well as with the symptoms of depression). Sometimes the blood tests for thyroid functioning are borderline normal in women experiencing what are symptoms of thyroid dysfunction. Hence, in practice, if a woman is not responding well to medications for her mood disorder (depression), I will recommend a trial of low-dose thyroid medication to try to determine if the thyroid is the underlying problem.

The thyroid gland needs estrogen to function properly and, during the change of life, borderline thyroid functioning can develop into full-blown thyroid disease. Routine thyroid testing of women being treated for persistent perimenopausal symptoms or depression (and perhaps a trial of low-dose thyroid medication) would help pinpoint the problem.

THYROID DISEASE RISK ASSESSMENT

Non-Changeable Risk Factors

Check each factor that describes you.

- You are over fifty years of age.*
- You have Type I diabetes (juvenile).*
- You have immune system abnormalities (for example, rheumatoid arthritis, lupus, chronic fatigue syndrome, fibromyalgia, or endometriosis).*
- You have a family history of thyroid disease.*
- You have vitiligo (loss of skin pigmentation).
- You have pernicious anemia.
- You have prematurely graying hair.
- You have been exposed to head and neck irradiation.

Risk Rating

Less than three checks: Insignificant risk, no action needed at this time

Three or more checks: Low to moderate risk, discuss with doctor at next exam

*Significant risk, discuss with doctor immediately

THYROID DISEASE RISK ASSESSMENT

Changeable Risk Factors

Check each factor that describes you.

- You are pregnant and have immune system abnormalities.*
- Your blood chemistry testing shows an iodine deficiency.*
- Your diet is poor in foods rich with vitamins A, C, or E (see part V).*
- You take thyroid medication to lose weight (not for thyroid disease).*

- You frequently suffer from viral infections.
- You are being treated with lithium.
- You smoke.

Risk Rating

Less than three checks: Insignificant risk, no action needed at this time

Three or more checks: Low to moderate risk, discuss with doctor at next exam

*Significant risk, discuss with doctor immediately

EARLY SIGNS OF THYROID DISEASE

Hyperthyroidism

Check each factor that describes you.

- You have unintentionally lost weight recently.*
- You are bothered by heart palpitations and periods of racing heartbeat.*
- Your neck has become enlarged.*
- You have insomnia.
- You get hot flashes.
- You have lost your sex drive (this occurs in 50 percent of affected women).
- You suffer from chronic diarrhea.

Risk Rating

Less than three checks: Insignificant risk, no action needed at this time

Three or more checks: Low to moderate risk, discuss with doctor at next exam

*Significant risk, discuss with doctor immediately

EARLY SIGNS OF THYROID DISEASE

Hypothyroidism

Check each factor that describes you.

- You suffer from fatigue and weakness.*
- You have menstrual irregularities.*
- You are infertile.*
- You have lost your sex drive (this occurs in 90 percent of affected women).*
- You have elevated cholesterol, as shown by laboratory testing.*
- You are gaining weight.
- You have thinning hair.
- You are irritable.
- You have trouble concentrating.
- You suffer from constipation.
- You suffer from depression.

Risk Rating

Less than four checks: Insignificant risk, no action needed at this time

Four or more checks: Low to moderate risk, discuss with doctor at next exam

*Significant risk, discuss with doctor immediately

Chapter 18

Diabetes

There are two types of diabetes. Type I is a genetic disorder that appears in childhood and is known as juvenile diabetes. Type II is a metabolic disorder of adulthood resulting from the body's inability to properly use its insulin; 95 percent of all diabetics are Type II.

The increasing number of new diabetics is becoming an epidemic: More than half of all adult women are overweight; eight million women have diabetes already; and nine out of ten of these women could have prevented the disease with weight loss and lifestyle changes. Unfortunately, most women with this disease don't know they have it because there are no early warning signs, only signs of established disease. Steady, chronic weight gain is a precursor but not an early warning sign.

Diabetes is a serious problem. The medical community now considers it a symptom of cardiovascular disease, which means that heart disease, heart attack, and stroke are inevitable consequences of diabetes if it is not controlled. Kidney disease, blindness, and amputation are also disabling consequences of diabetes.

Current Concepts

Insulin resistance syndrome (IRS) is a disease process with abnormal fasting blood glucose test results in middle-aged women. Women of color have a high risk for developing this disease throughout adulthood. It can progress silently into Type II diabetes in the perimenopause years. All overweight women at the onset of perimenopause should be tested for pre-diabetes status, but you don't have to be overweight to have elevated blood sugar levels. Type II diabetes can lead to heart attack, stroke, and kidney disease. Therefore, it's important to know your risk factors. These are (by physical examination and laboratory tests):

- BMI over 25
- Blood pressure over 130/85
- Fasting glucose over 110 mg/dl
- HDL cholesterol less than 50 mg/dl
- Triglycerides over 150 mg/dl

The American Diabetes Association has published the following warning signs of diabetes:

- Frequent urination
- Excessive thirst
- Weight loss
- Fatigue
- Blurred vision
- Leg pains
- Chronic yeast infections

Visit the website of the American Diabetes Association for more information: www.diabetes.org.

TYPE II DIABETES RISK ASSESSMENT

Non-Changeable Risk Factors

Check each factor that describes you.

- You are over forty-five years old.*
- You have a family history of diabetes.*
- You have polycystic ovarian syndrome.*
- You have suffered from gestational diabetes.
- One or more of your babies weighed more than nine pounds at birth.

Risk Rating

No checks: Insignificant risk, no action needed at this time

One or more checks: Low to moderate risk, discuss with doctor
at next exam

*Significant risk, discuss with doctor immediately

TYPE II DIABETES RISK ASSESSMENT

Changeable Risk Factors

Check each factor that describes you.

- You have impaired glucose tolerance, as shown by laboratory testing.*
- You have elevated blood sugar, as shown by screening or laboratory testing.*
- You are overweight.*
- You are physically inactive.*
- You have elevated cholesterol and triglycerides, as shown by laboratory testing.*
- You have hypertension, as shown by two or more elevated blood pressure readings.*

- You have a poor diet, high in starches and sugars.*
 You smoke.

Risk Rating

No checks: Insignificant risk, no action needed at this time

One check: Low to moderate risk, discuss with doctor at next exam

*Significant risk, discuss with doctor immediately

SIGNS OF ESTABLISHED TYPE II DIABETES

Check each factor that describes you.

- You have frequent urination.*
 You have excessive thirst.*
 You have had recent unintentional weight loss and muscle wasting.*
 You have blurred vision.
 You suffer from fatigue.
 You have leg pain and itching.
 You have numbness and tingling in your hands and feet.
 You have slow healing of cuts and bruises.
 You have chronic vaginal yeast infections.

Risk Rating

Less than three checks: Insignificant risk, no action needed at this time

Three or more checks: Low to moderate risk, discuss with doctor at next exam

*Significant risk, discuss with doctor immediately

Chapter 19

Osteoarthritis

Osteoarthritis is a degenerative disease of joint cartilage with breakdown of the cartilage causing pain, limited movement, and bone spurs. Twenty-one million Americans have it, which includes 25 percent of all perimenopausal and postmenopausal women. By the age of sixty-five, two-thirds of women will have X-ray evidence of it whether or not we have symptoms. Therefore, this is a chronic disease of aging. For many of us, it is a source of daily chronic pain. The joints most affected are hands, knees, feet, hips, and spine. Joint pain increases with physical activity, thereby causing most of the disability experienced with this disorder. With pain, our risks increase for depression, agitation, decreased physical activity, and poor sleep and diet. Overall, the disabling pain of osteoarthritis often decreases the quality of one's life.

OSTEOARTHRITIS RISK ASSESSMENT

Non-Changeable Risk Factors

Check each factor that describes you.

- You are forty years of age or more.*
- You have been overweight for ten or more years.*
- You have a family history of diabetes.*

- You have a family history of osteoarthritis.*
- You have had a joint injury to your knee, hip, or spine.*
- You have had infections in your joints.
- You have congenital hip disease(s).
- You have poor circulation in your hands and feet.

Risk Rating

One check: Insignificant risk, no action needed at this time

Two or more checks: Low to moderate risk, discuss with doctor
at next exam

*Significant risk, discuss with doctor immediately

OSTEOARTHRITIS RISK ASSESSMENT

Changeable Risk Factors

Check each factor that describes you.

- You are physically inactive.
- Your diet is poor.
- You drink less than eight 8-ounce glasses of water daily.

Risk Rating

One check: Insignificant risk, no action needed at this time

Two or more checks: Low to moderate risk, discuss with doctor
at next exam

*Significant risk, discuss with doctor immediately

EARLY SIGNS OF OSTEOARTHRITIS

Check each factor that describes you.

- You have morning pain and stiffness in the affected joints.*
- Your pain worsens with use of your joints.*
- You have limited motion in the affected joints.*
- You have tenderness and swelling in the affected joints.

You have a grating sensation of bone rubbing on bone.

There is a formation of bony knobs at the affected joints.

Risk Rating

One check: Insignificant risk, no action needed at this time

Two or more checks: Low to moderate risk, discuss with doctor
at next exam

*Significant risk, discuss with doctor immediately

Chapter 20

Cancer

Women in the transitional years are afraid of getting cancer. Luckily, the risks aren't high for cancer during these years.

The most common cancers in women are lung, breast, colon, and uterine. Less common are two other uniquely female cancers, cervical and ovarian. Cervical cancer is common but rarely causes death. Ovarian cancer is one of the rarest forms of all cancers, but it almost always causes death. Cancers of the breast, uterus, cervix, and ovaries (the female genital organs) strike fear in the hearts of women because these organs, especially the breast, are a feature of femininity and part of our sexual identity.

The most important issues about cancer are:

- Cancer is not a high-risk disease in perimenopause, but it can't be ignored as a possibility.
- Many of the risk factors for cancer can be altered, but it is best to start changing in your younger years while there is still plenty of time.
- Many cancers have screening techniques for early detection.
- Certain body signs and symptoms can tip you off to a potential problem, and knowing these can save your life.

These six cancers are the ones of greatest concern for women. Following is a brief review of them, their detection methods, and their current treatments.

Lung cancer is the number one cause of cancer death in women. More women die of it than all the other cancers combined. There are no early signs; a means of early detection is being researched currently. There is no effective treatment for this disease and it almost always results in death. The Surgeon General has determined that smoking can be hazardous to your health. Need I say more?

Breast cancer is the second most common cancer in women. Your odds of developing it have been reported as one in eight. This is an average figure, and is true if you are older than eighty-five and have a life expectancy of ninety. See the chart following this discussion. Generally, the odds of developing breast cancer increase as you age. There is a genetic form that comprises 10 percent of all breast cancer. This can be detected by the presence of two cancer genes (BRCA1 and BRCA2) and suspected if your mother or sister has had breast cancer. However, 90 percent of all breast cancer is not genetic and is due to other risk factors. Early detection is the major key to surviving breast cancer, and the breast lumps you find on self-examination can be an early symptom. Breast cancer screening is done by mammography, ultrasound, and magnetic resonance imaging (MRI). You should start having mammograms yearly at age forty. There are many treatments for breast cancer. One is Tamoxifen, a weak estrogen, which is used as a follow-up treatment in women after they have undergone surgery and/or chemotherapy. Tamoxifen is preventive and it lowers the risk of your cancer reappearing.

Women fear breast cancer more than any other cancer. It is more common in women fifty-nine years and older than in younger

women. Also, there are forms of breast cancer that are estrogen-sensitive and stimulated by our bodies' production of estrogen metabolites and by estrogen replacement. There is a great deal of breast cancer research going on, and newer treatments are proving very successful. Much information about breast cancer and its specific forms can be found by researching books and websites listed in part III at the end of this book, or through your local Breast Cancer Foundation.

Colon cancer is the third most common cancer killer of women. While the overall risk of developing this disease is not high, it occurs most commonly in the postmenopausal years. It sometimes develops in thirty- to forty-year-old women with a family history of it. Early detection is made by colonoscopy, which you should have done at age fifty and repeated every five years thereafter. Prevention is accomplished by dietary changes, exercise, and a daily dose of one aspirin.

Colon cancer is more common in women than in men and peaks in incidence between the ages of sixty and seventy-five years. The death rate from this cancer has fallen in the last twenty years because of better and earlier detection, but it remains the third leading cause of cancer deaths in women.

Uterine cancer is the fourth most common cancer in women. It is primarily a disease of postmenopausal women. Detection is by ultrasound and tissue sampling of the uterine lining. Any abnormal uterine bleeding is a trigger for screening for uterine cancer, particularly in the postmenopausal woman. If present, it is always treated with surgery.

Cervical cancer is a young woman's disease and in most cases occurs prior to menopause. The best early detection method is the

PAP smear; you should start having one every year at age eighteen. Treatment is cauterization or surgical removal of the cancerous lesion.

Ovarian cancer is the least common of all cancers (only fifteen women out of one hundred thousand will develop it). And it's also the most deadly, with no early warning signs and no early means of detection. It occurs predominantly in women in their sixties and our risks for getting it decrease with advancing age.

Medical research considers both non-modifiable and modifiable risk factors equally important in cancer risk and prevention. If you have any risk factors for a cancer type, you are at risk for that cancer as you age. Therefore, all risk factors in the risk assessments that follow are starred because both individually and as a group they are significant. Only if you have no risk factors is your disease risk insignificant.

ODDS OF DEVELOPING BREAST CANCER BY AGE

By age 25	1 in 19,608
By age 30	1 in 2,525
By age 35	1 in 622
By age 40	1 in 217
By age 45	1 in 93
By age 50	1 in 50
By age 55	1 in 33
By age 60	1 in 24
By age 65	1 in 17
By age 70	1 in 14
By age 75	1 in 11
By age 80	1 in 10
By age 85	1 in 9
Lifetime	1 in 8

LUNG CANCER RISK ASSESSMENT

Check each factor that describes you.

Non-Changeable Risk Factors

- You have a chronic lung disease, for example, emphysema, asthma, chronic bronchitis.*

Changeable Risk Factors

- You smoke.*
- You are regularly exposed to secondhand smoke.*
- You have a diet high in fats.*
- You are exposed to a lot of pollutants and carcinogens.*

Risk Rating

No checks: Insignificant risk, no action needed at this time

*Significant risk, discuss with doctor immediately

BREAST CANCER RISK ASSESSMENT

Check each factor that describes you.

Non-Changeable Risk Factors

- You have a family history of breast cancer.*
- You carry the cancer gene, as shown by genetic screening.*
- You have had an abnormal breast biopsy.*
- You began to menstruate prior to age thirteen.*
- You delivered your first live birth after age thirty.*
- Your menopause occurred after age fifty-five.*
- You have been receiving estrogen replacement therapy for more than ten years.*

Changeable Risk Factors

- You smoke.*
- You are obese.*
- You have more than two alcoholic beverages a day.*

- You are physically inactive.*
- You have never been pregnant.*

Risk Rating

No checks: Insignificant risk, no action needed at this time

*Significant risk, discuss with doctor immediately

COLON CANCER RISK ASSESSMENT

Check each factor that describes you.

Non-Changeable Risk Factors

- You have a family history of colon cancer.*
- You have had a colonoscopy that revealed colon polyps.*

Changeable Risk Factors

- You have a diet high in animal fat and low in fiber.*
- You are physically inactive.*
- You are exposed to a lot of environmental pollutants and carcinogens.*

Risk Rating

No checks: Insignificant risk, no action needed at this time

*Significant risk, discuss with doctor immediately

UTERINE CANCER RISK ASSESSMENT

Check each factor that describes you.

Non-Changeable Risk Factors

- You have polycystic ovarian syndrome.*
- You have a family history of uterine cancer.*
- You have diabetes.*
- You have hypertension.*

Changeable Risk Factors

- You are receiving estrogen replacement therapy without the addition of progesterone.*

You are obese.*

You smoke.*

Risk Rating

No checks: Insignificant risk, no action needed at this time

*Significant risk, discuss with doctor immediately

CERVICAL CANCER RISK ASSESSMENT

Check each factor that describes you.

Non-Changeable Risk Factors

You are not yet forty years old.*

You have had several abnormal PAP smears.*

You have a family history of cervical cancer.*

Changeable Risk Factors

A sexually transmitted disease, for example, HIV or human papillomavirus, is present in your body.*

You have many sexual partners.*

You engage in unprotected sex.*

Risk Rating

No checks: Insignificant risk, no action needed at this time

*Significant risk, discuss with doctor immediately

OVARIAN CANCER RISK ASSESSMENT

Check each factor that describes you.

Non-Changeable Risk Factors

You have a family history of ovarian cancer.*

You carry the cancer gene, as shown by genetic screening.*

Changeable Risk Factors

You have a uterus and are taking estrogen without progesterone.*

Risk Rating

No checks: Insignificant risk, no action needed at this time

*Significant risk, discuss with doctor immediately

EARLY SIGNS OF CANCER

Check each factor that describes you.

- You have discovered breast lumps on self-examination (breast cancer).*
- You have had positive findings on a mammography (breast cancer).*
- You have had changes in your bowel habits (colon cancer and ovarian cancer).*
- You have had blood in your stool (colon cancer).*
- You have had polyps found on colonoscopy (colon cancer).*
- You have had abnormal vaginal bleeding during your post-menopausal years (uterine cancer and ovarian cancer).*
- You have had positive findings on a PAP smear (cervical cancer).*
- You have had a positive finding for BRCA1 and BRCA2 on genetic testing (breast cancer).*
- You have pelvic pain and/or abdominal pain, bloating, or swelling (uterine cancer and ovarian cancer).*

*Significant risk, discuss with doctor immediately

Chapter 21

Alzheimer's Disease

Alzheimer's disease is a form of dementia. Dementia is a degenerative process of the brain causing slow, progressive loss of mental function, specifically: deterioration in thinking, behavior, mood, and physical and social functioning. It is the most common dementia in the elderly. Alzheimer's is three times more prevalent in women than in men. More than 10 percent of sixty-five-year-old women and more than 50 percent of women older than eighty-five have it. Yet this condition is underdiagnosed and undertreated. The multiple factors that cause this condition are largely unknown.

Memory loss and forgetfulness are a normal part of aging. Alzheimer's involves more than memory problems. It involves the presence of mild cognitive impairments (MCIs). Mild cognitive impairment and memory problems can be detected in your early fifties, and 30 percent to 50 percent of all people who have these symptoms at that age will eventually develop Alzheimer's disease.

ALZHEIMER'S DISEASE RISK ASSESSMENT

Non-Changeable Risk Factors

Check each factor that describes you.

You have a family history of Alzheimer's disease.*

- You have had a stroke.*
- You have been diagnosed with atherosclerosis (you have cholesterol plaque in your arteries).*
- You are sixty-five or older.*
- You have had a head injury.*
- You have hypertension.*
- You have diabetes.*

Risk Rating

No checks: Insignificant risk, no action needed at this time

*Significant risk, discuss with doctor immediately

ALZHEIMER'S DISEASE RISK ASSESSMENT

Changeable Risk Factors

Check each factor that describes you.

- You have high cholesterol, as shown by laboratory testing.*
- You are obese.*
- You smoke.*
- You suffer from depression.*
- You are physically inactive.
- You are mentally inactive.
- You are socially isolated.

Risk Rating

No checks: Insignificant risk, no action needed at this time

One to three checks: Low to moderate risk, discuss with doctor
at next exam

*Significant risk, discuss with doctor immediately

EARLY SIGNS OF ALZHEIMER'S DISEASE

Check each factor that describes you.

- You find it hard to cook meals, pay bills, or use the VCR or DVD player.*
- You misplace things and find them in unusual places.*
- You are unable to balance your checkbook.*
- You are more suspicious and anxious than usual.*
- You forget what day it is or often get lost.*
- You have lost interest in things you used to enjoy.*
- You are usually agitated when making choices and decisions.*
- You have become more forgetful of appointments, names, and phone numbers.
- You lose your train of thought while talking and forget common words.
- You lose your concentration while reading.

Risk Rating

No Checks: Insignificant risk, no action needed at this time

One to three checks: Low to moderate risk, discuss with doctor at next exam

*Significant risk, discuss with doctor immediately

Current Concepts

Many perimenopausal women become fearful that they might have dementia when they experience increasing forgetfulness. I know that I pride myself on being a multitasker, and in the mornings while getting ready for work, my forgetfulness was seriously slowing me down and raising my anxiety about my health.

Researchers from Harvard's School of Public Health tell us that forgetting is normal and that there are several types of forgetfulness,

all of which occur with aging but none of which are signs of dementia. These are:

- Transient: forgetting unused facts and events over time
- Absentminded: misplacing something or forgetting to do something as the result of not paying attention and not focusing on the task at hand
- Blockage: the inability to recall a name or date, usually due to an overload of other kinds of mental activity, such as thinking about several things at the same time
- Misattribution: the misplacement or growing inaccuracy of facts because memories grow old as we grow old

I'm still at my forgetful worst in the morning, but now I don't think I'm losing it. I use notes and reminders to trigger my memory and lots of humor to minimize my frustration.

Chapter 22

Stress and Depression

Depression is twice as prevalent in women as in men, and women are most vulnerable to the onset of depression during their child-bearing years. There is an increased prevalence of depression during perimenopause (ages thirty-five to fifty-two). Perimenopause is also likely to be a precipitant for the recurrence of other, pre-existing psychiatric illnesses, such as anxiety disorders.

Since depression and anxiety are the most common of all the psychiatric disorders, they are widely researched. Even so, we still don't know why women are twice as susceptible to these disorders as men. Many risk factors have been identified and studied. Stress stands out as the single most important risk factor for developing these disorders.

How many stress symptoms are you experiencing? Use the Stress Symptom Inventory that follows. Pay particular attention to the mental and emotional symptoms because these are the precursors to depression and anxiety disorders. Stress symptoms are intense but brief; they are the reactions to the things we can't control in our lives. However, if the stressors become persistent and chronic, so do the symptoms, and mental illness can develop.

In this chapter, we will handle your risk assessment a little bit differently. First, identify your stress triggers by assessing your current level of satisfaction. Use the form following the Stress Symptom Inventory and score yourself. Then, on the next form, list your current specific stressors and rate each as either positive, negative, or a combination of the two. If you score at medium to low level of satisfaction, you are at risk for developing depression symptoms or, at the very least, your life is unhappy.

I specialize in depression in my psychiatric practice. I've never met a depressed woman who wasn't experiencing life stressors. When I ask my patients what they think caused their psychiatric symptoms, they cite a variety of stressors in their lives as contributing factors. These stress assessments are available on the internet—I didn't invent them. I've reproduced them for this book to place them in context as indicating precursors of those psychiatric illnesses that are so common in women.

How can you tell the difference between being depressed and just being sad? A list of some distinguishing features follows the list of current specific stressors. Do you have any of these? Are you sad or depressed?

Finally, there are lists of signs and symptoms of the psychiatric syndromes of anxiety and depression. Are you symptomatic?

Stress Symptom Inventory

Think of several times when you have experienced excessive stress and check any of the symptoms you experienced during those times of high stress.

PHYSICAL SYMPTOMS

- | | | |
|---|---|---|
| <input type="checkbox"/> Appetite change | <input type="checkbox"/> Teeth grinding | <input type="checkbox"/> Weight change |
| <input type="checkbox"/> Increase of accidents | <input type="checkbox"/> Fatigue | <input type="checkbox"/> Pounding heart |
| <input type="checkbox"/> Rash | <input type="checkbox"/> Insomnia | <input type="checkbox"/> Frequent sighing |
| <input type="checkbox"/> Colds/flu | <input type="checkbox"/> Tension | <input type="checkbox"/> Muscle aches |
| <input type="checkbox"/> Increased alcohol, drug,
or tobacco use | <input type="checkbox"/> Finger-drumming,
foot-tapping, etc. | <input type="checkbox"/> Yawning |
| <input type="checkbox"/> Restlessness | <input type="checkbox"/> Irregular breathing,
hyperventilation | <input type="checkbox"/> Headaches |
| <input type="checkbox"/> Digestive upsets | | <input type="checkbox"/> Others: _____ |

MENTAL SYMPTOMS

- | | | |
|--|--|--|
| <input type="checkbox"/> Boredom | <input type="checkbox"/> Difficulty in thinking
clearly | <input type="checkbox"/> Reduced ability to
concentrate |
| <input type="checkbox"/> Lethargy | <input type="checkbox"/> Negative attitude | <input type="checkbox"/> Forgetfulness |
| <input type="checkbox"/> "Weird" or morbid
thoughts | <input type="checkbox"/> Whirling mind | <input type="checkbox"/> Others: _____ |
| <input type="checkbox"/> Confusion | <input type="checkbox"/> Poor memory | |
| <input type="checkbox"/> Low productivity | <input type="checkbox"/> Dull senses | |

EMOTIONAL SYMPTOMS

- | | | |
|--|--|---|
| <input type="checkbox"/> Anxiety | <input type="checkbox"/> Mood swings | <input type="checkbox"/> Depression |
| <input type="checkbox"/> Increased use
of profanity, put-downs,
or sarcasm | <input type="checkbox"/> Increased
emotionalism | <input type="checkbox"/> Little joy |
| <input type="checkbox"/> Pessimism | <input type="checkbox"/> Nervous laugh | <input type="checkbox"/> The "blues" |
| <input type="checkbox"/> Bad dreams or
nightmares | <input type="checkbox"/> Crying spells | <input type="checkbox"/> Discouragement |
| | <input type="checkbox"/> Irritability | <input type="checkbox"/> Others: _____ |
| | <input type="checkbox"/> Short temper | |

SPIRITUAL SYMPTOMS

- | | | |
|--|---|---|
| <input type="checkbox"/> Apathy | <input type="checkbox"/> Doubt | <input type="checkbox"/> "No one cares"
attitude |
| <input type="checkbox"/> Loss of faith | <input type="checkbox"/> Martyrdom | <input type="checkbox"/> Loss of direction |
| <input type="checkbox"/> Lowered sex drive | <input type="checkbox"/> Resentment | <input type="checkbox"/> Others: _____ |
| <input type="checkbox"/> Cynicism | <input type="checkbox"/> Emptiness | |
| <input type="checkbox"/> Loss of meaning | <input type="checkbox"/> Need to "prove" self | |
| <input type="checkbox"/> Nagging | <input type="checkbox"/> Inability to forgive | |

RELATIONAL SYMPTOMS

- | | | |
|--|---|---|
| <input type="checkbox"/> Avoidance of people | <input type="checkbox"/> Intolerance | <input type="checkbox"/> Fewer contacts with
friends |
| <input type="checkbox"/> Increased arguing/
disagreements | <input type="checkbox"/> Distrust | <input type="checkbox"/> Lashing out |
| <input type="checkbox"/> Blaming | <input type="checkbox"/> Lack of intimacy | <input type="checkbox"/> Less loving and trusting |

ASSESSING YOUR CURRENT LEVEL OF STRESS

Rate your current level of satisfaction

4=Definitely True 3=Somewhat True 2=Neutral or Unsure

1=Mostly Untrue 0=Definitely Untrue

Work/Career

- The work I do is challenging.
- I have adequate responsibility.
- The work I do suits my ability and skills.
- The people I work with are supportive.
- I have reasonable authority to make decisions.

Money

- My job/career meets my financial needs.
- My lifestyle is comfortable.
- I am able to save a reasonable amount of money.
- My spouse/partner is comfortable with our income level.
- I am preparing adequately for retirement.
- I am comfortable with my/our current level of spending.

Personal

- There is someone in my life in whom I can confide almost anything.
- I enjoy my social life.
- I have friends outside my immediate family with whom I occasionally socialize.
- My friends and I sometimes share our problems with one another.
- I have a relationship of mutual respect with my friends.
- I feel comfortable with members of the opposite sex as friends.

- _____ I enjoy sex with my partner.
- _____ I am satisfied with my marital status (single, married, living with someone).
- _____ My partner frequently lets me know s/he cares.
- _____ I feel safe disagreeing with my partner.
- _____ My partner and I are able to talk through our differences and resolve most of them.
- _____ My partner and I share interests and have fun together.
- _____ I feel comfortable with my body (size, shape, color).

Home

- _____ I enjoy spending a quiet evening at home.
- _____ My home is a place where I can relax and be myself.
- _____ I have a hobby I enjoy.
- _____ My home is a place of serenity and beauty; it nurtures me.
- _____ I take pride in my home.

Levity and Quality of Life

- _____ I laugh frequently.
- _____ I attend movies, plays, or comedy clubs fairly often.
- _____ I can and do laugh at myself.
- _____ My sense of humor helps me get through difficult times.
- _____ I believe I am making a valuable contribution to the world in some way.
- _____ I feel needed and appreciated by those who matter to me.
- _____ I have a plan for my life and I am following it.
- _____ I am usually able to focus on the positives in life, rather than the negatives.
- _____ I've lived my life so that if I died tomorrow, I'd feel fulfilled.

Now add all the points together.

Scale:

124+ High level of satisfaction.

78–123 Medium level of satisfaction.

0–77 Lower level of satisfaction. This may be a good time to take a look at ways of raising your level of happiness and harmony.

WHERE DOES OUR STRESS COME FROM?

My Current Specific Stressors

Personal**Environmental****Job/Career**

Although we can cite many different sources of stress, we would probably choose to totally eliminate only a small number of them. Some of our stressors are positive. Did you list your positive ones, too? In addition to those we acknowledge as completely positive, others have positive aspects to them. How many of your stressors are combinations (sometimes positive, sometimes negative)? Take a moment to go back and put a (+) next to those that are completely positive and a (-) next to the negative ones. Put both signs next to the combination ones. Many people find that the majority of items on their list are combination stressors.

DIFFERENCES BETWEEN DEPRESSION AND NORMAL SADNESS

Features	Normal Sadness	Depression
Recent difficult or tragic life event	Common	Unusual
Family history of depression	Absent	Present
Mood variation	Depression worse late in the day	Depression worse in the morning
Sleep disturbances	Difficulty in falling asleep but remains asleep	Middle of the night or early morning insomnia
Appetite	May be increased or decreased; mild or no rapid weight loss	Little interest in food; weight loss
Physical ailments	Fewer and less severe	Many and more severe
Physical and mental activity	Mild slowing or, more rarely, agitation	Moderate to severe slowing
Attitude	Self-pity, pessimism, but no loss of self-esteem	Self-blame, remorse, guilt, complete loss of self-esteem
Interest	Mild to moderate loss, but usually able to work	Pervasive loss of interest or pleasure in everything

Source: Reprinted from *Health and Nutrition Newsletter*, (Columbia University School of Public Health) vol. 2, no. 10.

SIGNS OF ANXIETY

Check each factor that describes you.

- You are often nervous.*
- You have difficulty concentrating.*
- You are often afraid.*
- You are restless.
- You don't sleep well.
- You have lost your energy.
- You shake, tremble, or wring your hands.
- Your heart races or your breathing is fast.
- You have chest pains.
- You have stomach-aches or diarrhea.
- Your muscles are tense or painful.
- You constantly worry.

Risk Rating

Less than four checks: Insignificant risk, no action needed at this time

Four or more checks: Low to moderate risk, discuss with doctor at next exam

*Significant risk, discuss with doctor immediately

SIGNS OF DEPRESSION

Check each factor that describes you.

- You have insomnia or excessive sleeplessness.*
- You no longer enjoy activities that once brought you pleasure.*
- You have a sense of helplessness and gloom.*
- You have recurrent thoughts of suicide and death.*

- You have lost your appetite and some weight.
- Your energy level is low.
- You have lost some of your self-esteem.
- Your productivity has fallen.
- Your attention span has decreased or you are more frequently confused.
- You have withdrawn from social interaction.
- You are frequently irritable or angry.
- You constantly reproach yourself or feel an inappropriate amount of guilt.

Risk Rating

Less than four checks: Insignificant risk, no action needed at this time

Four or more checks: Low to moderate risk, discuss with doctor at next exam

*Significant risk, discuss with doctor immediately

Now that you have completed part III, go to part III of the MAP and complete it, reflecting your work here.

Part IV

To Be or Not To Be on HRT

I can't take HRT because (as you'll read) they are contraindicated for me due to some of my disease risks. Some of you have told me that you can't take them because the side effects are as bad as the menopause symptoms you're trying to treat. Some of you have gotten symptom relief with these products, but your doctors abruptly stopped your use of them because they were worried about your long-term health risks. And some of you take these products and feel just fine.

Like a lot of you, I've been educated to believe that there's a pharmaceutical solution that can manage my symptoms. As I've grown older, I've changed my thinking. I now rely less than I did on prescribed medications and have become more self-reliant, and this is a product of my own self-education.

At the end of chapter 27, I've included a basic food plan that will help us all nourish our bodies and reduce our symptoms. And, especially for those of you who take HRT, I strongly recommend this diet as a necessary addition to your treatment.

Chapter 23

First Thoughts

Hormone replacement therapy isn't a new idea. Researchers have been developing products for the past forty years. In the 1950s and 1960s, estrogen-based drugs were prescribed to prevent miscarriages. In the 1970s and 1980s, oral contraceptives were developed. In the 1990s, safer, more effective, lower-dose birth control pills were developed.

What are the so-called "natural" products we hear about? "Natural" means to exist in nature and "synthetic" means put together or custom-designed. There are no human-derived products. Some, like Premarin, are made from the urine of pregnant horses. Others, like estradiol, are made from soy and Mexican yam. All these products started from the same animal or plant materials and were custom-designed in the laboratory.

Hormone replacement therapy (HRT) and estrogen replacement therapy (ERT) have traditionally been prescribed to provide symptom relief during perimenopause, menopause, and surgically induced menopause; to treat physical changes due to permanently low estrogen levels; and to protect against diseases common to women in the postmenopause years. Relief? Treatment? Protection? Sounds good. You may have noticed, however, that not every

woman over forty-five is on HRT. That's because all women are not the same and each woman must be evaluated individually. Some of the issues to consider are the kind of symptoms or changes you present, your future disease risk, the form of treatment you prefer, the likely efficacy of HRT for you, as well as your own history and health status.

So, how do you know if it's right for you? Start figuring it out by answering the following questions. We will look at the implications of your answers in the context of your issues, and I want you to raise them with your doctor when you discuss HRT.

CIRCLE YES OR NO

Have you had a total or partial hysterectomy? Y N

Have you had chemotherapy or irradiation therapy? Y N

Do you have any of these symptoms?

Irregular periods or cessation of periods Y N

Hot flashes and/or night sweats Y N

Insomnia Y N

Heart palpitations Y N

Irritability Y N

Decreased sexual libido Y N

Depression Y N

Memory loss Y N

These are common symptoms that midlife women seek treatment for, and all of these can continue into the postmenopause years. In fact, one in five of us continue to have symptoms after menopause. The FDA has approved the use of HRT to treat menopausal symptoms.

CIRCLE YES OR NO

- Are your symptoms worsening? Y N
- Have your symptoms persisted after menopause? Y N
- Did you get your symptoms suddenly after
gynecological surgery? Y N
- Are your symptoms interfering with the quality
of your life? Y N
- If so, jot down how: _____

Are you experiencing any of these physical changes?

- Vaginal dryness Y N
- Pain or bleeding during intercourse Y N
- Urine leakage (when sneezing, coughing, bending,
or lifting) Y N
- Recurring urinary tract infections Y N
- Wrinkling skin Y N
- Weight gain (with fat accumulation at your waist,
hips, and thighs) Y N
- Impaired vision (night blindness, increasing
far-sightedness) Y N
- Are these changes worsening? Y N
- Are any of these changes interfering with the quality
of your life? Y N
- If so, jot down how: _____

**Are you at risk for any of these diseases in your later years
(refer to part III)?**

- Osteoporosis (the FDA has approved the use
of HRT for the prevention of osteoporosis) Y N

Cardiovascular disease	Y	N
Alzheimer's disease	Y	N
Colon cancer	Y	N
Uterine cancer	Y	N
Breast cancer	Y	N

Is prescription medication the way you prefer to cope with physical and/or emotional problems? Women are strongly divided in their preference for treatment. Some prefer prescription medications and management of their symptoms by their doctor. Others prefer nonprescription alternatives. However, all women are concerned about the health implications of long-term use of any product for symptom relief.

Chapter 24

Is It Safe for Me?

HRT can have long-term health risks. If you are going to take HRT, you need to embrace a healthy lifestyle. There are reasons why you shouldn't take it.

Before taking HRT, you should find out the following:

Your blood pressure	
Your resting pulse rate	
Your height	
Your weight	
Your current body mass index (BMI)	
Your blood glucose level	
Your blood cholesterol levels	
Total cholesterol	
HDL	
LDL	
Triglycerides	
The results of your PAP smear	Normal/ Abnormal
The results of your mammogram	Normal/ Abnormal
Your estrogen level	Normal/ Low
The result of your bone density screening	

Your doctor will prescribe the appropriate screenings/tests if you ask. Ask!

Do you know how to do a breast self-examination? Learn. I'll tell you why in the next chapter. You will examine yourself using your sense of touch, familiarizing yourself with your body, and looking for changes.

Are you willing to make some lifestyle changes? I'm referring to stopping smoking, taking vitamins, beginning to exercise, and developing a healthy diet. We'll look at why in part V.

Now we come to what doctors call "contraindications," or reasons to be cautious in prescribing HRT, or not to prescribe it at all.

HRT should be taken with caution, and by non-oral routes (by injection, by skin patch, etc.), if you have any of the following:

- Elevated blood cholesterol and/or triglycerides
- Endometriosis
- Uterine fibroids
- Gallbladder disease
- Seizures
- Migraine headaches

HRT is not safe to take if you have any of these problems:

- Breast cancer, past or present
- Endometrial cancer in the past five years
- Unexplained vaginal bleeding
- Liver disease
- A history of blood clots
- A blood coagulation disorder, such as sickle-cell trait

Chapter 25

Recent Research Findings and Controversies

The Women's Health Initiative (WHI) is a study of 16,600 healthy women in postmenopause. They have participated in the study for up to five years. The women were divided into two groups: one received HRT and the other received a placebo. The Heart and Estrogen/Progestin Replacement Study (HERS) is a study of twenty-seven hundred postmenopausal women, all of whom had or have Coronary Heart Disease. These women have participated in this study for up to six years. They were also divided into HRT and placebo groups.

Most women who use HRT start at perimenopause or early menopause. In these studies, however, the average age was sixty-five, so the women had been in postmenopause for at least ten years. Menopause/postmenopause can be divided into three stages: early (the first one to three years), intermediate (the next five to ten years), and late (beyond ten years). Each stage is characterized by its physical symptoms and physical changes. Below is an indication of the usefulness of HRT during each stage.

EARLY STAGE

Vasomotor symptoms:	Hot flashes Night sweats Sleep deprivation Heart palpitations
Mood disorders:	Irritability Depressed mood
Urogenital symptoms:	Urinary incontinence
Memory:	Short-term memory loss

The physical symptoms of the early stage of menopause/postmenopause are usually temporary.

INTERMEDIATE STAGE

Urogenital changes:	Uterine fibroids Urinary tract infections	Can increase their growth
Sexual dysfunction:	Vaginal dryness Vaginal infections Pain/bleeding on intercourse	HRT reverses the atrophy that underlies these four changes, reducing severity
Skin atrophy:	Thinning/drying skin Wrinkles Hair loss	HRT can reduce and delay these skin and hair changes
Metabolic changes:	Weight gain High cholesterol Gallstones Osteopenia Liver disease Blood clotting	Oral HRT can cause weight gain Can cause increase in LDLs Can increase incidence Can reduce bone thinning Can elevate liver enzymes Can increase risk of clotting in those with a history
Teeth:	Tooth Loss Gum disease	HRT can eliminate these changes

The intermediate stage can include any or all of the early stage physical symptoms as well as those included above.

USEFULNESS OF HRT

HRT can eliminate or significantly reduce all symptoms except urinary incontinence, which it can worsen; it can also cause resumption of vaginal bleeding.

LATE STAGE		USEFULNESS OF HRT
Bone	Osteoporosis Fractures of the hip and spine Loss of height	HRT reduces bone thinning and the risk of fractures
Heart	Cardiovascular disease Hypertension Atherosclerosis Adult-onset diabetes	HRT in the first year of use can increase risk in women who have established disease of the arteries
Colon	Gastrointestinal disease Colon polyps Colon cancer	Not studied HRT can decrease this risk
Breast	Benign breast tumors Breast cancer	Increase in abnormal mammograms in the first year of use Oral HRT use greater than five years can increase risk
Uterus/Bladder/Ovary	Urogenital disease Prolapsed bladder Uterine cancer	Not studied Estrogen replacement therapy taken alone can cause cancer in women who have a uterus
	Ovarian cancer	Long-term use increases risk
Brain	Macular degeneration (retinal disease) Alzheimer's disease	Not studied Does not protect against dementia and may increase risk

The late stage is characterized by the development of disease.

Most women who take and continue to take HRT have menopausal symptoms that interfere with their quality of life. These two studies did not evaluate whether or not quality of life was improved by HRT.

If you use HRT, the benefits (symptom relief) must outweigh your risks. You should know all your potential risks, and you should use HRT under strict medical supervision.

Recommendations

- Before starting HRT, every woman should have a disease risk assessment for breast cancer, heart disease, blood coagulation disorders, colorectal cancer, osteoporosis, ovarian cancer, and liver and gallbladder disease.
- Consider taking HRT for less than five years to control hot flashes and vaginal dryness.
- All women with a uterus who take estrogen must also have adequate progesterone prescribed to prevent development of uterine cancer.
- HRT should not be prescribed for the prevention of heart disease.
- HRT should not be prescribed as the first choice for prevention of osteoporosis because of its risks with long-term use, i.e., breast cancer, gallbladder disease, exacerbation of heart disease, but it is a good second choice if other treatment has not worked.
- Be prepared to make some lifestyle changes in order to take HRT as safely as possible.

I am cautious about prescribing any medication for an indefinite period of time. Taking medication alone is not a substitute for adopting good health habits. In practice, I try hard to get my patients to institute lifestyle changes in addition to taking medication.

If you are already using HRT medications or are seriously considering using these prescription products, you must be prepared to stop smoking, limit alcohol consumption to one drink a day, and maintain a normal body weight.

Smoking affects the blood vessels in the heart and lungs and, in combination with HRT, which can raise your cholesterol levels, the risk of heart disease goes up dramatically.

Alcohol consumption decreases the functioning of the immune system, can worsen the symptoms of fibrocystic breast disease, and increase your risk for breast cancer by damaging breast cells. And alcohol triggers hot flashes, the very symptom we're trying to treat with HRT. Alcohol consumption also encourages weight gain and it interferes with the absorption of nutrients from our food.

Are you overweight? If you are, I would advise against taking HRT for the following reasons:

- HRT can increase your risks for heart disease and breast cancer if you are susceptible to these.
- Excess body fat increases your susceptibility to these diseases in the postmenopause years.
- Weight gain often leads to obesity, which is a sign of overeating and malnutrition.

Obese women are at risk for osteoporosis because poor nutrition can lead to accelerated bone thinning and bone loss during

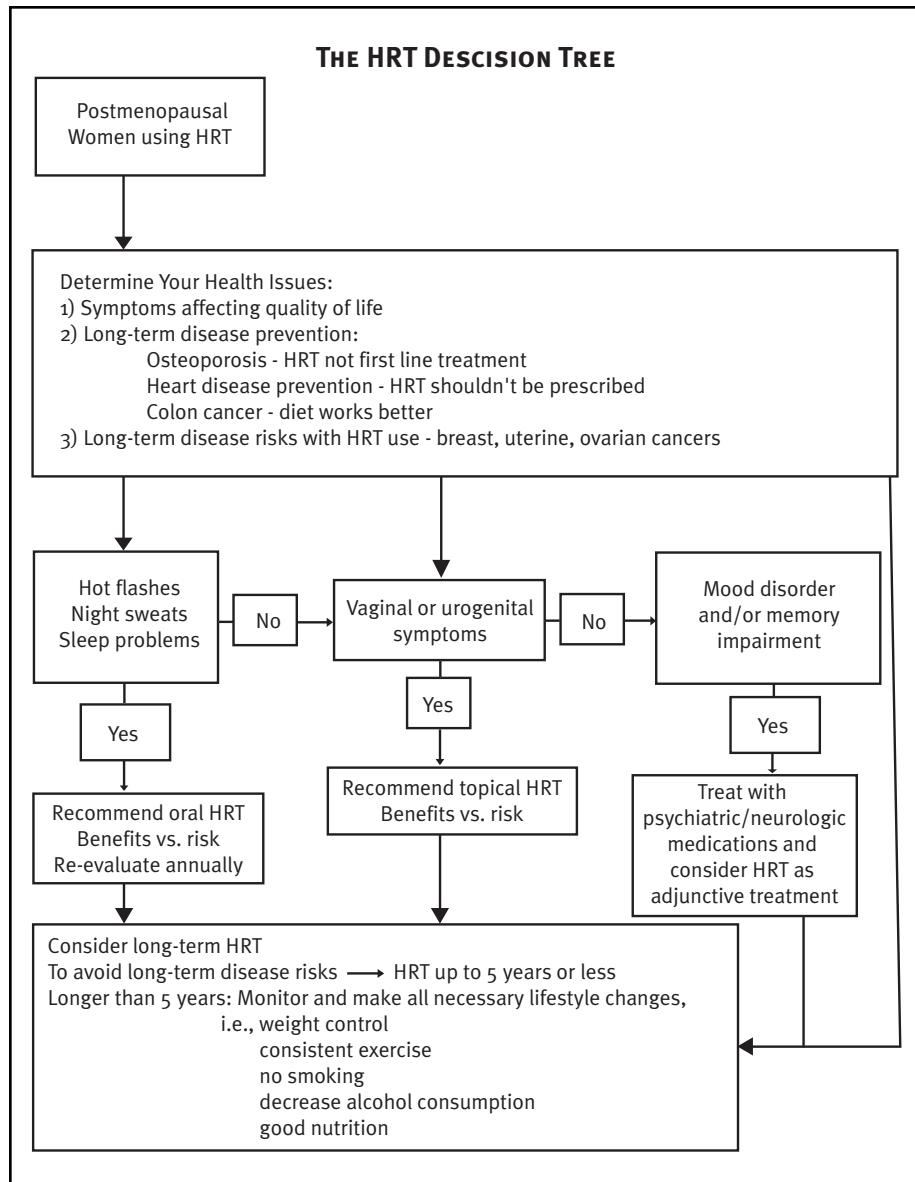
perimenopause; HRT by itself will not overcome the deleterious effects of poor nutrition on bone mass.

Even short-term use of HRT is under intense scrutiny. HRT has had FDA approval to treat moderate to severe menopausal symptoms such as hot flashes and night sweats. However, changes in breast tissue and abnormal mammograms show up frequently in the first year of HRT use, and HRT has been shown to stimulate the growth of breast cancer cells during short-term use. Overall, studies with estrogen/progestin combination therapies revealed that participating women had an increased risk of breast cancer, heart attacks, blood clots, and strokes after five years of use as compared to women who did not use HRT. Most of these findings apply to combination drugs—those containing both estrogen and progestin. Studies of drugs with estrogen alone are still going on.

If you have been taking HRT and decide to stop taking it, wean yourself off the medication slowly, giving yourself progressively lower doses over several weeks until you reach the zero point. Some of you will get your symptoms back as you stop your medication—vaginal changes, skin changes, hair thinning, and resumption of hot flashes. And, in some of you, these symptoms won't go away.

Overall, HRT is no longer considered the first choice and best treatment for menopause symptoms and prevention of post-menopause disease. If you are taking HRT and want to consider stopping, the following algorithm (decision tree) may help you clarify the issues and options.

Can you treat these symptoms in other ways? Can you take other preventive measures? Chapter 28 will present alternative treatments, as will part V.



Chapter 26

What Products Are out There?

Hormone replacement therapy (HRT) was invented in the U.S. more than sixty years ago, when the FDA first approved synthetic estrogen. The estrogen/progesterone combination was developed later for treating menopause symptoms.

There is a wide range of products and a number of routes of administration of these products available to individualize these treatments for women.

Sublingual tablets, placed under the tongue, and gels, spread over the skin and absorbed into circulation, are used once or twice daily and tend to produce a constant hormone level over a twenty-four hour period. Pellets inserted under the skin every three to six months also provide constant hormone levels between applications. Injections (IM every two to three weeks), do not maintain constant blood levels of hormones between applications. Bioidentical formulations and non-oral administration are designed to avoid the problems commonly experienced with oral products. Oral products have to pass through the liver for metabolism, which can cause the formation of byproducts that may be harmful. These medications, which are taken daily, first raise the hormone levels, which peak before falling to a constant level, so that blood levels are often fluctuating.

These hormones are not made from human sources; there are no human-derived hormone products. All are made in a laboratory from non-human sources. The early products, Premarin (estrogen replacement) and Provera (progesterone replacement), are not structurally similar to our internally-made human hormones, but function similarly. Over the years, these synthetic formulations have been thoroughly studied and comprise the large product line of prescription medications approved by the FDA as hormone replacement therapy.

Another group of synthetic hormones are known and marketed as biologically identical hormones. These are synthesized from plants and formulated in a laboratory to mimic the molecular structure of those hormones produced by the human body. These products were developed to match the molecular structure and produce the same physiological responses as our human hormones. Theoretically, they metabolize more safely, with fewer side effects and allergic reactions.

In addition to increasing your risk for certain diseases such as cancer, these products can cause side effects when taken for either short-term or long-term use. Here's a partial listing of side effects that women most commonly complain about:

- Weight gain, fluid retention, bloating, PMS-like symptoms
- Restarting of the menstrual cycle, breakthrough bleeding, spotting
- Vaginal yeast infections
- Breast enlargement, tenderness, and cystic disease
- Headaches, dizziness, increased migraine attacks
- Fatigue, moodiness, nervousness

The following list is meant to indicate that there are many products available and that you have a range of choices and routes of

administration to choose from. If you have a uterus, you must take a progestin with estrogen replacement. For convenience, here are the combination products in oral form. If you've had a hysterectomy, I would recommend you try estrogen replacement in forms other than oral; side effects are more common with oral dosing. Biologically identical hormones have not been studied as extensively as the synthetic hormones. Some have been reviewed by the FDA. Others, prepared by compounding pharmacies, have not been FDA reviewed.

AVAILABLE HORMONE PRODUCTS*

- Alora (estrogen patch)
- Androgel (testosterone)
- Amen (progestin/progesterone)
- Aygestin (progestin/progesterone)
- Biestrogen (oral estrogen)
- Climara (estrogen patch)
- CombiPatch (combination estrogen and progesterone)
- Crinone (progestin/progesterone)
- Cycrin (progestin/progesterone)
- Estrace (oral estrogen)
- Estrace cream (vaginal estrogen)
- Estraderm (estrogen patch)
- Estradiol with Progesterone (combination estrogen and progesterone)
- Estratab (oral estrogen)
- Estratest (testosterone)
- Estriol cream (vaginal estrogen)
- Estring (vaginal estrogen)
- Evista (SERM)

FemHRT (combination estrogen and progesterone)
FemPatch (estrogen patch)
Menest (oral estrogen)
Methyltestosterone (testosterone)
Micronor (progestin/progesterone)
Natural Micronized Progesterone (progestin/progesterone)
Natural Progesterone Cream (transdermal cream)
Nor-QD (progestin/progesterone)
Ogen (oral estrogen)
Ogen (vaginal estrogen)
Ortho-Est (oral estrogen)
Premarin (oral estrogen)
Premarin (vaginal estrogen)
Premphase (combination estrogen and progesterone)
Prempro (combination estrogen and progesterone)
Pro-Gest body cream (transdermal cream)
Progestasert (vaginal progesterone)
Prometrium (progestin/progesterone)
Provera (progestin/progesterone)
Testosterone capsules (testosterone)
Testosterone cream (transdermal cream)
Triestrogen (oral estrogen)
Vivelle (estrogen patch)

*This is a partial listing as of this writing; the pharmaceutical companies continually develop new products and refine methods of delivery.

The following lists the bioidentical hormones by type and route of administration. They are all made from soybeans or wild yams.

Estrogens:

Biest—a combination of two bioidentical estrogens; forms are oral, sublingual, vaginal, and transdermal

Estriol—one bioidentical estrogen; forms are oral, sublingual, vaginal, and transdermal

Triest—a combination of three bioidentical estrogens; forms are oral, sublingual, vaginal, and transdermal

Progesterone:

Micronized bioidentical progesterone; forms are oral, sublingual, vaginal, and transdermal

Androgen:

Bioidentical testosterone; forms are oral, sublingual, vaginal, and transdermal

The custom-made products, even those which may use FDA-approved ingredients, have no guidelines for their use. This means that the purity of the product, the safety of the dose, and any studies showing how well they work have not been regulated by the FDA.

The hormone chart has been reproduced by permission from a supplement to *Health Forum for Midlife Women*, vol. 3, no. 2, Spring 1997, quarterly newsletter of the Oregon Menopause Network.

Disclaimer: this chart has been compiled as a public service and in no way represents a recommendation of any product or method of use. The accuracy of the information is not guaranteed. Product prices vary even within the same region of the country. Those who compiled this chart are not responsible for the use of any product listed which should only be used with the advice of a trusted, licensed healthcare provider. It is important to monitor drug levels and therapeutic response since individuals vary. "Isomolecular" notes a hormone with a chemical structure matching humans.

ORAL ESTROGENS			
Product Name	Company	Doses	Source
Premarin (Conjugated estrogens)	Wyeth-Ayerst	0.3 mg, 0.9 mg 0.625 mg, 1.25 mg 2.5 mg/day	Pregnant mare's urine
Estrace Isomolecular estradiol	Mead-Johnson is a division of Bristol- Myers Squibb	0.5 mg, 2.0 mg, 1.0 mg/day	Plant-derived
Ortho-Est Isomolecular estrone sulfate (aka estropipate)	Ortho Pharmaceuticals	0.625 mg or 1.25 mg/day	Plant-derived
Ogen Isomolecular estrone sulfate (aka estropipate)	Pharmacia Upjohn	0.625 mg or 1.25 mg/day	Plant-derived
Menest (esterified estrogens which are 75-85% isomolecular sodium sulfates—not a human estrogen)	Monarch Pharmaceuticals	0.3 mg, 0.625 mg, 1.25, or 2.5 mg/day	Plant-derived
Triestrogen Isomolecular estrone, estradiol, estriol	Compounding Pharmacies	1.25 mg 2x day Commonly prescribed for one in A.M. and one in P.M.	Plant-derived
Biestrogen Isomolecular estradiol, estriol	Compounding Pharmacies	1.25 mg 2x day Commonly prescribed for one in A.M. and one in P.M.	Plant-derived

ESTROGEN PATCHES

Product Name	Company	Doses	Source
Estraderm	Ciba-Geigy	.05 or 0.1 mg/day	Plant-derived
Vivelle	Ciba-Geigy	.035, .05, .075, or 0.1 mg/day	Plant-derived
Alora	Proctor & Gamble	.05, .075, or 0.1 mg/day	Plant-derived
Climara	Berlex Laboratories	0.5 or 0.1 mg/day	Plant-derived
FemPatch	Parke-Davis	0.02 mg/day	Plant-derived

PROGESTINS/PROGESTERONE					
Product Name	Company	Doses	Source	Equiv. Doses	Comments
Nor-QD (Norethindone)	Syntex	0.35 mg tabs in a 42-day pack	Synthetic	0.70 mg	A progestational birth control pill; continuous treatment causes upset stomach, nausea, and headaches
Micronor (Norethindone)	Ortho Pharmaceuticals	0.35 mg tabs in a 28-day pack	Synthetic	0.70 mg	See above
Aygestin (Norethindone)	Wyeth-Ayerst	0.5 mg	Synthetic	0.625 mg	Potentially up to 10 mg may be used daily for 5-10 days
Provera (medroxy-progesterone acetate abbreviated as MPA)	Pharmacia Upjohn	Continuous: 2.5 mg; Cycled 5.0, or 10.0 mg	Synthetic	Gold standard for comparison 2.5 mg	Provera is Medroxy-progesterone; effects in some women are dose dependent
Cycrin (MPA)	Wyeth-Ayerst	Continuous: 2.5 mg; Cycled 5.0, or 10.0 mg		See Provera	See Provera comments
Amen (MPA)	Carnick Laboratories	5.0 or 10.0 mg	Synthetic	See Provera	See Provera comments

HORMONE THERAPY OPTIONS FOR MENOPAUSE					
Product Name	Company	Doses	Source	Equiv. Doses	Comments
Natural micronized isomolecular progesterone (NMP) in oil	Compounding Pharmacies	100 mg 2x daily on days 14–28 or 100–300 mg daily for continuous dosing given in divided doses	Plant-derived	Continuous dose equivalent to approx. 2.5 mg Provera; cycled dose equiv. to approx. 5–10 mg of Provera	PMS Symptoms
Prometrium Isomolecular NMP	Solvay	100 mg daily for continuous dosing given in divided doses	Plant-derived	Unknown	Used in Europe and Orient; contraindicated for women with allergy to peanuts
Crinone Isomolecular Progesterone	Wyeth-Ayerst	4% gel delivering 45 mg/applicator 8% gel delivering 90 mg/applicator	Plant-derived	Unknown	Natural progesterone used beginning 15th day of cycle
Progestasert	_____	IUD	Micronyld progesterone		Slight risk of perforation

COMBINATION ESTROGEN WITH PROGESTIN OR PROGESTERONE			
Product Name	Company	Doses	Source
Prempro	Wyeth	Daily doses of Premarin .625 mg MPA 2.5 or 5.0 mg	Pregnant Mare's Urine/ Synthetic
Premphase	Wyeth	Premarin .625 mg for days 1-28 MPA 5.0 mg for days 14-28	Pregnant Mare's Urine/ Synthetic
Estradiol with natural micronized isomolecular progesterone	Compounding Pharmacies	Estradiol 0.5 mg NMP 100 mg 2x daily	Plant-derived
CombiPatch (The only combination product with a transdermal patch delivery. Other combination products are administered orally.)	Rhone-Poulenc Rorer	Patch contains Estradiol 0.5 mg and 0.25 mg Norethindrone acetate	Estrogen is plant-derived and isomolecular, progestin is synthetic
FemHRT	Parke-Davis	Estradiol .05 mg Northindrone 1 mg	Estrogen and progestin

VAGINAL ESTROGENS					
Product Name	Company	Doses	Source	Equiv. Doses	Comments
Estrace cream Isomolecular estradiol	Mead-Johnson (a division of Bristol-Myer)	2 gm every night for 2 weeks then 1 gm 3x week	Plant-derived	0.1 mg estradiol per gram	Lower pH than Premarin
Premarin Conjugated estrogens	Wyeth-Ayerst	0.5 to 2 gm daily for 3 wks w/ 1 wk off	Pregnant mare's urine	0.625 mg per gram	
Esteriol cream Isomolecular estriol	Compounding Pharmacies	0.5 mg vaginally for 21 days then 0.5 mg 2x week	Plant-derived	0.5 per gram	
Ogen Estropipate	Pharmacia Upjohn	2.0 to 4.0 gms daily for 3 weeks with 1 week off	Plant-derived	1.5 mg per gram	
Estring vaginal silicone ring isomolecular estradiol	Pharmacia Upjohn	2 mg delivered over 90 days	Plant-derived	Not applicable	Placed in vagina like a diaphragm

TESTOSTERONE			
Product Name	Company	Doses	Source
Estratest Esterified estrogens with methyltestosterone Estratest HS	Solvay	1.25 mg estrogen with 2.5 mg testosterone, 0.625 mg estrogen with 1.25 mg testosterone	Plant-derived/synthetic
Testosterone capsules in oil Isomolecular testosterone	Compounding Pharmacy	1.25 mg to 5.0 mg with A.M. dosing	Plant-derived
Methyltestosterone	Compounding Pharmacy	0.125 to 0.8 mg/day	Synthetic

TRANSDERMAL CREAMS			
Product Name	Company	Doses	Source
Estradiol cream Isomolecular estradol	Compounding Pharmacy	0.05 mg/gm to 0.1 mg/gm (1/8 tsp 2x daily)	Plant-derived
Natural progesterone cream Isomolecular progesterone	Compounding Pharmacy	10 to 20 mg of progesterone 2x daily	Plant-derived
*Pro-Gest Body Cream Isomolecular progesterone *Included because of widespread nonprescriptive use. Progesterone levels verified by independent laboratory.	Transitions For Health, Inc. Portland, OR 800-888-6814 7A.M.–5P.M. Pacific Time	There are 450 mg of natural progesterone in one ounce of cream— contact company for usage	Plant-derived
Testosterone cream Isomolecular testosterone	Compounding Pharmacy	0.1 to 0.5 mg/gm	Plant-derived
SELECTIVE ESTROGEN RECEPTOR MODULATOR (SERM)			
Product Name	Company	Doses	Source
Evista Raloxifene	Eli Lilly	60 mg daily	Synthetic
©1997 Revised November 1998 by Marla Ahlgren, RPh (Women's Health America, Madison, WI); Susan Doughty, CNP (New England Women's Center, Portland, ME); Chris Groth, RPh (St. Luke's Medical Center, Milwaukee, WI); Kayt Klein Havens, MD (U of WI Medical School, Milwaukee, WI), and Ann Kopel, MS (Oregon Menopause Network, Portland, OR); Sarah Ray, PharmD (St. Luke's Medical Center Medical Center). May be reproduced for educational purposes only. First printed as a supplement to <i>Health Forum Midlife Women</i> , vol. 3 no. 2 Spring 1997, quarterly newsletter of the Oregon Menopause Network (2607 SE Hawthorne Blvd. Portland, OR 97214 503-232-9446).			

Your Initial Evaluation and Follow-Up for HRT

The physician guidelines for prescribing HRT are applied inconsistently. I commonly see women who receive a year's prescription for HRT with little scheduled follow-up, if any, during that year. I suppose the assumption is that we'll complain if we see a problem. But women want to use HRT under the safest possible circumstances and feel confident that it's actually meeting their individual needs. I believe a workup and follow-up for prescribing HRT should look like this:

Initial Evaluation

- Screen for disease risks
- Screen for contraindications to use
- Choose reasons for prescribing HRT
- Select a drug
- Emphasize that healthy lifestyle changes must accompany HRT, i.e., weight control, exercise, smoking cessation

Get Baselines

- Body mass index
- Blood pressure

- Blood glucose
- Blood cholesterol
- Routine gynecological examination
- Hormone panel
- Bone mineral density

30-Day Follow-Up

- Assess for changes in body mass index
- Assess for changes in blood pressure
- Assess for changes in blood glucose
- Assess for changes in blood cholesterol after six weeks
- Teach patient how to perform a breast self-examination
- Assess for side effects
- Assess for effectiveness

90-Day Follow-Up

- Assess for changes in body mass index
- Assess for changes in blood pressure
- Assess for changes in blood glucose
- Assess for changes in blood cholesterol
- Ask if patient is performing breast self-examinations
- Ask if patient has modified her diet, begun to exercise, or quit smoking

6-Month Follow-Up

- Repeat 90-Day Follow-Up

1-Year Follow-Up

- Repeat initial work-up
- Repeat the initial work-up at yearly intervals up to five years, then slowly wean the patient off medication.

ALTERNATIVES FOR SYMPTOM RELIEF, PHYSICAL CHANGES, AND DISEASE PREVENTION			
Herbals and Vitamins	Symptoms: Hot Flashes	Vaginal Dryness	Mood Swings/ Insomnia
Bioflavonoids	✓	✓	
Black Cohosh	✓	✓	✓
Calcium			
Chamomile Tea			✓
Chickweed	✓		
Dandelion	✓		✓
Dong Quai	✓	✓	✓
Elderflower	✓		
Flaxseed		✓	✓
Garden Sage	✓	✓	✓
Ginko Biloba			✓
Ginseng			
Hops	✓		✓
Licorice	✓	✓	✓
Magnesium			
Melatonin			✓
Mexican Wild Yam	✓	✓	✓
Mother Wort	✓	✓	✓
Cat Straw			✓
Phosphorus			
Red Clover	✓		✓
St. John's Wort			✓
Soy	✓	✓	✓
SAMe			✓
Valerian			✓
Ipriflavone			
Vitamin A			
Vitamin B6			✓
Vitamin C			
Vitamin D			
Vitamin E	✓	✓	
Vitamin K			
Zinc			

Herbals and Vitamins	Sexual Dysfunction	Prevention	
		Osteo	CVD
Bioflavinoids			
Black Cohosh			
Calcium		✓	✓
Chamomile Tea			
Chickweed			
Dandelion			
Dong Quai			
Elderflower			
Flaxseed			
Garden Sage	✓		
Ginko Biloba			
Ginseng	✓		
Hops			
Licorice			
Magnesium		✓	
Melatonin			
Mexican Wild Yam			
Mother Wort			
Cat Straw			
Phosphorus		✓	
Red Clover			
St. John's Wort			
Soy			
SAMe			✓
Valerian			
Ipriflavone		✓	
Vitamin A		✓	
Vitamin B6		✓	
Vitamin C		✓	
Vitamin D		✓	
Vitamin E			
Vitamin K		✓	
Zinc		✓	

ALTERNATIVES FOR SYMPTOM RELIEF, PHYSICAL CHANGES, AND DISEASE PREVENTION			
Pharmaceuticals	Symptoms: Hot Flashes	Vaginal Dryness	Mood Swings
Antidepressants: Prozac Dosage: 10–20 mg daily	✓ ✓		✓ ✓
Paxil CR Dosage: 12.5–25 mg daily	✓		✓
Effevor XR Dosage: 37.5–75 mg daily	✓		✓
Cadiovascular Drugs: Catopress Norvasec	✓ ✓		
Vaginal Lubricants Astroglide, Reptens		✓	
Cholesterol Drugs* (Statin Drugs): Mevacor Zocor Lipotor Lescol Pravochol			
Antihypertension Drugs (Beta Blockers) (Ace Inhibitors) Zasotec			
K-Y Jelly		✓	
Fosomax (Bisphosphonates) (Also Actonel)			
Evista (SERM)			
ASA			
Bellergal	✓		✓
Clonidine	✓		
Lofexidine	✓		
Megace	✓		
Birth Control Pills	✓	✓	✓

ALTERNATIVES FOR SYMPTOM RELIEF, PHYSICAL CHANGES, AND DISEASE PREVENTION			
Pharmaceuticals	Sexual Dysfunction	Prevention	
		Osteo	CVD
Antidepressants: Prozac Dosage: 10–20 mg daily			
Paxil CR Dosage: 12.5–25 mg daily			
Effevor XR Dosage: 37.5–75 mg daily			
Cadiovascular Drugs: Catopress Norvasec			
Vaginal Lubricants Astroglide, Reptens	✓		
Cholesterol Drugs* (Statin Drugs): Mevacor Zocor Lipotor Lescol Pravochol		✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓
Antihypertension Drugs (Beta Blockers) (Ace Inhibitors) Zasotec			✓
K-Y Jelly	✓		
Fosomax (Bisphosphonates) (Also Actonel)		✓	
Evista (SERM)		✓	
ASA			✓
Bellergal			
Clonidine			
Lofexidene			
Megace			
Birth Control Pills		✓	

ALTERNATIVES FOR SYMPTOM RELIEF, PHYSICAL CHANGES, AND DISEASE PREVENTION			
Lifestyles	Symptoms: Hot Flashes	Vaginal Dryness	Mood Swings
Exercise Aerobic			✓
Weight Training			
Yoga			✓
Dress in Layers	✓		
Habits:			
Avoid Alcohol	✓		
Avoid Caffeine	✓	✓	
Cessation of Smoking		✓	
Diet:			
Animal Protein			
Plant Protein			
High Fiber			
Phytoestrogens (See listing part V, chapter 34)	✓		✓

Here are some tips for creating a hormone-balancing diet to help reduce menopausal symptoms and minimize the physical signs of aging. See part V for discussions of vitamins, minerals, foods, and phytoestrogens.

To reduce your calorie intake without dieting, you'll need to eat regularly. Have three meals a day and start with breakfast. You burn more calories during the day than at night, so have a pre-dinner snack to avoid night-time overeating. Cut down the size of your meal portions rather than restricting your calories—"starvation" diets only lead to future weight gain. Eat a protein with each meal and with your snack for energy that lasts for hours. Change most of your carbs from cereals, breads, and pasta to fruits and veggies. Try to eat five servings of each every day, $\frac{1}{2}$ cup per serving; you

ALTERNATIVES FOR SYMPTOM RELIEF, PHYSICAL CHANGES, AND DISEASE PREVENTION			
Lifestyles	Sexual Dysfunction	Prevention	
		Osteo	CVD
Exercise Aerobic	✓		✓
Weight Training		✓	
Yoga		✓	
Dress in Layers			
Habits:			
Avoid Alcohol		✓	
Avoid Caffeine		✓	
Cessation of Smoking		✓	✓
Diet:			
Animal Protein		✓	
Plant Protein		✓	✓
High Fiber			✓
Phytoestrogens (See listing part V, chapter 34)		Not Studied	Not Studied

can substitute some of one for the other, if you like. You can eat fats, but reduce red meat consumption and substitute fish, fowl, beans, nuts, and grains (these are high in healthy fats) and avoid fried foods. Drink plenty of fluids, buy unsweetened fruit juices, and use artificial sweeteners to help cut down your sugar cravings (the government has found that they are not harmful). Take a multivitamin daily with foods high in nutrients. Your high-vitamin foods are veggies and fruit, the more colorful, the better. Make an effort to eat something from the list of phytoestrogens daily (chapter 34). And for relief of specific symptoms, try an over-the-counter herbal product.

Chapter 28

A First Look at Alternatives to HRT

Herbals and vitamins have emotional appeal, but they haven't been rigorously studied scientifically. They are not Food and Drug Administration (FDA) controlled, and the benefits listed on the packaging are derived mostly from reports of clinical usage and anecdotes. You should look these up in the resources listed to get details regarding dosage and adverse effects. Information about herbals is available in the resources listed following part V of this workbook and in the appendix to this chapter. The additional information in the appendix comes from some investigative studies of herbals reviewed and collated by the German "E" Commission, the European equivalent of our FDA. A good way to use this chapter is to locate, by symptom relief, those herbals you are interested in and then look them up below or in the resources recommended in part V.

Now that you have completed part IV, go to part IV of the MAP and fill it out, reflecting your work here.

HERBALS				
Name	Source	Form/Dosage	Notes	Contra-Indications
Bioflavonoids	Inner peel of citrus fruits, greens, bourbon	Capsules/250 mg 5–6 times daily	A diuretic; take with Vitamin C	None known
Black cohosh, Black snakeroot, bugbane, squawroot, cimicifuga racemosa	Plant of buttercup family	*Tincture: 10–15 drops daily; powder: 150–500 g daily; pills: 2 tabs twice daily (20 mg each)	For incontinence, 10–60 drops in a cup of tea daily; acts in the body like estrogen	Headaches, dizziness, nausea, visual disturbances; avoid if bleeding heavily, do not exceed 6 months
Calcium (fumarate, malate citrate succinate, aspartate, carbonate forms only)	Mineral found in milk, calcium carbonate, calcium citrate (best)	Premenopause: 600–1000 mg daily, menopause and postmenopause: 1200–1500 daily	Requires magnesium, B6 & D for absorption	Absorption is decreased by diets high in fiber, protein, caffeine & salt plus phosphates (sodas)
Chamomile Tea	Plant (flower)	Dried for tea tincture 3 times daily		
Chickweed, <i>Stellaria media</i>	Plant	Tincture 25–40 drops 1–2 times/day	Takes 1–2 weeks to work	
Dandelion, <i>Taraxacum officinale</i> , Pu gong ying	Garden Weed	Capsules: 1000–3000 mg daily; Tea leaf: 2–3 cups daily; Tincture: 2 tsp 3 times daily		A diuretic: too much may cause dehydration

*Tinctures are the most effective methods of taking herbs; made by soaking the herb in alcohol; dispensed in stopper bottles.

HERBALS (CONTINUED)

Name	Source	Form/Dosage	Notes	Contra-Indications
Dang qui, Dong quai, Angelica sinensis	Plant	Tincture: 10–40 drops 1–3 times daily; Dried root for tea: 4 to 8 oz. daily	Enhances E; Not a plant estrogen	Causes skin sun sensitivity; avoid if fibroids, bloating, diarrhea, or blood thinning drugs present
Elderflower, Sambucus	Plant	Tincture: 25–30 drops 2–3 times daily	Sets body's thermostat; get results in several days	
Flaxseed, Linum Usitatissimum	Plant	Oil: 1–3 tsps in AM Seeds: grind on food or soak in PM and drink in AM	Store oil in refrigerator; benefit ceases if discontinued	Cramping
Garden Sage, Salvia Officinalis	Plant	Tincture: 15–40 drops 1–3 times daily; Dry Leaf: 1–2 tsps in tea 8 times daily	Use as spice in cooking or drink as tea; acts in body like estrogen and progesterone	High doses harm kidney and liver; avoid if breast cancer present, can cause seizures
Gingko biloba	Extract from tree	Pills: 80 mg 3 times daily (up to 480 mg daily)	Aids memory, improves blood flow to brain, use of brain glucose, transmission of nerve messages	Headaches, GI upset; cannot take with aspirin, causes hemorrhaging

HERBALS (CONTINUED)				
Name	Source	Form/Dosage	Notes	Contra-Indications
Ginseng (Siberian & Korean) Eleutherococcus Senticosus	Plant	Tincture: 5–40 drops hourly; 500 mg capsules 1–3x daily	Aids memory, mental abilities; enhanced with E or flaxseed	Side effects: jitters, postmenopausal bleeding, high blood pressure, insomnia, skin eruptions, diarrhea; do not take with Vitamin C
Hops, Humulus, Lupulus	Plant			
Ipriflavone	Plant pigment flavored	Pill: 200 mg 3x daily with calcium	May halt bone loss	
Lady's mantle, Alchemilla vulgaris	Plant	Tincture: 5–10 drops 3 times daily; up to 2 wk/m	Take 1–2 weeks before period	
Licorice, Glycyrrhiza glabra	Plant: No relation to candy	Fluid: 1 tsp; Solid 250–500 mg; Powder for tea: 1–2 gm	Helps adrenal hormones make body produce estrogen from stored fat	Do not take if hypertension or heart problems present
Magnesium	Mineral found in nuts, seeds, whole grains, vegetables, chocolate	Pills: often combined with calcium, up to 450 mg daily (gluconate or citrate)	Third most prevalent mineral in bone	Diarrhea; deficiency results in no bone building and calcium deposit in soft tissue
Melatonin	Hormone available as a supplement	Pills: 3–10 mg 2 daily	Doesn't cause a hangover	Some pills have harmful impurities

HERBALS (CONTINUED)

Name	Source	Form/Dosage	Notes	Contra-Indications
Mexican Wild Yam, <i>Dioscorea villosa</i>	Plant		Close to bodily estrogen; source of chemical used to produce first contraceptive	
Motherwort, <i>Leonurus Cardioca</i>	Plant	See each use Tincture: 20 drops 3 times daily		Do not use with other heart meds; avoid if heavy menstrual bleed or if at risk for breast cancer
Phosphorus	Mineral found in red meat, sodas; supplements not needed	Ratio of phosphorus to calcium should be 1.5 to 1	Second most prevalent mineral in bone	Excess causes bone loss
Red Clover, <i>Trifolium Praetense</i>	Plant	One tbsp. in tea daily		
Saint John's Wort, <i>Hypericum Perforatum</i>	Plant	300–500 mg tabs Tincture 3x daily		Takes 4–8 wks to take effect
Soybeans/ Soy products	Plant Beans, tofu, miso soy milk	Avoid pills 50–100 mg isoflavones daily	Active ingredients genestein and daizedin	

HERBALS & VITAMINS				
Name	Source	Form/Dosage	Notes	Contra-Indications
Valerian, <i>Valeriana officinalis</i>	Plant	Tincture: 20–30 drops at bedtime		Can be habit-forming
Violet, <i>Viola</i>	Plant	Dried leaves in tea; 1 cup daily		
Vitamin A	Meat, fish, eggs, carrots, spinach, canteloupe melon	5000 to 25000 IU beta-carotene with 5–15 mg zinc	Found as precursor, beta-carotene; needs zinc to convert it to usable form	High doses can yellow skin
Vitamin B6, Pyridoxine	Bananas, beans, freshwater fish, poultry	Pills: 50 mg twice daily	A coenzyme in production of progesterone; helps breast tenderness	B vitamins should be taken together to get better absorption
Vitamin C, Ascorbic acid	Citrus fruits	Pills: 1–2 g daily		
Vitamin D	Produced by skin under sunlight	Pills: 300–400 IU daily	Required for absorption of calcium	Deficiency leads to rickets
Vitamin E	Aloe	Caps: 1 g daily	Also good for dry skin; a building block to estrogen	Tends to interfere with treatment of breast cancer; excess interferes with blood clotting

HERBALS & VITAMINS				
Name	Source	Form/Dosage	Notes	Contra-Indications
Vitamin K	Synthesized by colon bacteria	No supplement required	Necessary for bone building and blood clotting	Deficiency can result from prolonged use of antibiotics
Vitex, Chaste tree; Angus castii (chaste berry)	Plant	Tincture: 20 drops twice daily; Caps: 3 daily; Tea: 1 cup/day; All = 30–40 mg	Shrinks fibroids Relieves PMS with 6–13 month regular use	None known
Wild yam root	Plant	400 mg/oz topical creams plus gels	All prescribed hormones except Premarin are synthesized from this plant	
Zinc	Cod, Turkey, Kidney beans	Pill: 15–30 mg/day	Sold bound to other minerals	

There are many products marketed as treatments for menopausal symptoms. The most bothersome symptoms and the symptoms we most seek treatment for are hot flashes, night sweats, insomnia, and mood swings. The following herbals are most frequently used for relief of these symptoms and can be found individually or in combination with each other at many pharmacies and vitamin specialty stores:

- Black cohosh (for hot flashes and night sweats);
- Chasteberry (for mood swings);
- Dong quai (for hot flashes and night sweats);
- Evening primrose oil (for mood swings);
- Ginseng (for hot flashes and night sweats);
- Licorice root (for hot flashes and night sweats; mixed with ginseng);
- Red clover (for hot flashes and night sweats); and
- Wild yam.

Three over-the-counter herbal products are:

- Remifemin (black cohosh);
- Promensil (red clover); and
- Estroven (black cohosh).

Unlike most of the products currently available, these three products have been inspected by the FDA to assure quality of manufacture and standardization of dosage in each product.

Part V

Alternatives

This is my favorite section of this book because many of the things I've written about here are things I do for myself. And yes, I admit it, I'm vain, but I like to think that this trait is a "woman's thing." For me, using alternative products and committing to lifestyle changes is my effort to delay the onset of disease (I have a genetic predisposition to high blood pressure, high cholesterol, and cancer) and to delay the physical changes of aging as long as I can. When I turned forty-two, my hair went completely gray due to genes I inherited from my father (and living with teenage children). Today, I'm fifty-plus, and my physical appearance has changed very little. In fact, the skin on my face and hands is still smooth and barely wrinkled. As I've aged, I've become more protective of my skin and body. I'm careful to cover up to avoid overexposure to the sun and I'm careful to nourish my body with good,

simple foods and supplements. I heed my own advice and I hope some of it will help you.

At the end of this book, there is an extensive listing of resources for part V. And I've also added several more books and websites at the end of chapter 37 which I found easy to comprehend and very useful.

Enjoy!

Chapter 29

What Is Meant by “Alternatives”?

Women ask me frequently, “What can I do for myself?” By now, you’ve gotten my message that menopause is universal; we can live 40 percent of our lives in the postmenopause years; and, viewed positively, menopause can be the starting point for healthy change.

We rely a great deal on prescription medications for treating symptoms and disease. I think this is because we’re not taught how to evaluate change of life symptoms (some are time-limited, some aren’t, and most are not indicators of future health problems). Also, modern medicine is slanted toward treating illnesses after they have occurred, while more and more of us are seeking professional advice about prevention and wellness. This means that we’ll have to take part of the responsibility for our health by addressing lifestyle changes we’ll need to make. This is hard to do, and a little scary, because we don’t have specific answers to the question, “Is what I’m doing now going to protect me from getting sick later?” Instead, we’re used to medicine doing the work for us.

I was in the lady’s lounge in one of my favorite restaurants (in the stall, actually) when I overheard this conversation between a mother and her daughter.

"Now, tell me again, how much of the bread, potatoes, and ice cream do you think you had?" said the mother.

Her daughter replied, "I can add another unit of insulin to this dose now, and maybe more later."

They were trying to calculate how much more medication would be needed to compensate for all the extra starches and sugars the diabetic daughter had eaten. They were planning to use the medication to try to keep her from becoming hyperglycemic and sick due to overeating. See what I mean: their focus was on suppressing symptoms with medication; it wasn't on self-regulation, advance planning for eating out, and making better food choices.

Menopause is not a chronic and potentially debilitating disease like diabetes. Most women do not require specific medical management for menopause. But all women require maintaining a healthy lifestyle and most women need to make lifestyle changes.

QUIZ

Answer the following questions:

How's your health right now? Circle your answer:

Excellent Good Fair Poor

Are you being treated for any medical problems? Circle your answer: Yes No

If your answer was "Yes," list these problems:

Is your current treatment working? Circle your answer:

Yes No

If your answer was "No," have you been advised to make some lifestyle changes? Circle your answer: Yes No

Are you experiencing hormone-related symptoms (perimenopausal, menopausal, or postmenopausal symptoms)?
Circle your answer: Yes No

If your answer was "Yes," list them and grade them (1) mild, (2) moderate, or (3) severe.

Symptom	Rating

Which lifestyle changes have you made in the last year?

- Weight loss
 - Smoking cessation
 - Vitamin and mineral supplementation
 - Physical activity (exercise)
 - Prescription therapies
 - Nonprescription therapies
 - Stress management therapies

Which ones are you considering making in the coming year?

Please write a brief explanation of why you want to make these lifestyle changes: _____

How much time can you devote to your lifestyle changes...

Daily? _____

Weekly? _____

Monthly? _____

Quarterly? _____

Yearly? _____

Complementary and alternative medicines (CAMs) are often referred to as "natural therapies." Treatment with these therapies is based on influencing the body's recuperative functions and preventing disease. Many CAM treatments have not been investigated or proven effective by rigorous scientific study, and much of what we know about how they work is based on observation. What we do know is that many of these therapies have been used for thousands of years.

Many of us are already using alternative treatments for our menopausal symptoms. In 1997, the North American Menopause Society (NAMS) conducted a survey that reported that 80 percent of their respondents were using such treatments as diet, vitamin and mineral supplements, herbals, yoga, and lifestyle changes rather than prescription medications. There is the general perception that CAM therapies focus on the body as a whole and emphasize wellness rather than illness.

There is no one treatment that can be used for all women in treating menopause symptoms. But the goals of these therapies apply to all women: to optimize health during and after menopause.

CIRCLE YOUR ANSWERS

Are you getting an annual physical exam? Yes No

Are you getting treatment for psychological problems?

Yes No

Are you getting treatment for acute perimenopause symptoms?

Yes No

Are you getting counseling for potential chronic disease?

Yes No

The most important functions of CAM therapies sought by women are to provide symptom relief, to aid in hormone output in the body, and to prevent disease in the postmenopausal years.

In 1992, the National Institutes of Health (NIH) established an Office of Alternative Medicine, which was renamed in 1998 as the National Center for Complementary and Alternative Medicine.

There are more than three hundred types of CAM therapies. The National Center for Complementary and Alternative Medicine has classified CAM therapies into categories. The following are therapies most commonly used by women to treat their menopausal symptoms:

- *Mind-Body Medicine.* Mind-body medicine involves behavioral and spiritual approaches to health. Examples include yoga, hypnosis, and meditation.
- *Alternative Medical Systems.* Examples include acupuncture, Oriental medicine, naturopathy, and homeopathy.
- *Lifestyle Change and Disease Prevention.* These are accomplished through general nutritional intervention and naturopathy.
- *Biologically Based Therapies.* Examples include herbs, vitamins, and minerals.

- *Manipulative and Body-Based Systems.* Examples include chiropractic medicine and massage.

QUIZ

Have you been using any of these CAM therapies? What might your reasons be for choosing CAM therapies (check all that apply)?

- Dissatisfaction with prescription medicine
- Concerns about HRT side effects and long-term effects
- To gain more personal control over your own health

CAM therapies, as an “ideal” alternative to HRT, would have the following properties:

- Prevent heart disease
- Prevent osteoporosis
- Protect the uterus and breasts from cancer
- Relieve the symptoms of menopause without restarting the menstrual cycle (the most common reason women stop taking HRT)
- Produce no side effects such as those experienced with prescription medications (the second most common reason women stop taking HRT)

We know these therapies are highly effective for symptom relief. Intensive research, however, is going on to assess their ability to enhance hormone output and prevent future disease.

Women are using nontraditional medical approaches to treat their symptoms. These alternative medical systems are not taught in medical school or covered by insurance plans. It is beyond the scope of this chapter to explain them in detail but, briefly, these include:

Naturopathy

Naturopathy blends centuries-old nontoxic therapies with current health advances and is considered a class of effective menopause therapies. It is primary health care performed by a doctor of naturopathy who has completed four years of graduate training in natural therapies applied to family health care. Write down the name, address, and phone number of a naturopathic physician in your area:

Homeopathy

Homeopathy describes illnesses as physiologic imbalances that can be corrected. It focuses on plant-derived remedies in small doses to combat symptoms and address imbalances associated with menopause. Write down the name, address, and phone number of a homeopathic health-care provider or pharmacist in your area:

Acupuncture

Acupuncture is a component of Chinese medical care dating back more than twenty-five hundred years. Acupuncture involves stimulation of anatomical locations on the skin. It is used for pain relief, prevention of illness, and performance enhancement. In the field of psychiatry, acupuncture is effective for the treatment of depression, anxiety, insomnia, pain, alcoholism, and drug and tobacco abuse. Write down the name, address, and phone number of a practitioner in your area:

Biofeedback

Biofeedback techniques have been used to control hot flashes and reduce the frequency of incontinence. Write down the name, address, and phone number of a PhD-level psychologist practicing these techniques in your area:

Later chapters will focus on the forces of good: nutrition, herbal medicines, and exercise; but first, the forces of evil: tobacco and alcohol.

Chapter 30

Smoking

Why do we do it?

Quiz

If you smoke, answer the following questions:

When did you start? _____

Who first introduced you to cigarettes? _____

Do you smoke throughout the day? _____

Do you smoke primarily during certain activities? _____

If your answer was "Yes," what activities are they? _____

Check all that apply:

You smoke to control your nerves.

You smoke to reduce weight.

You smoke to calm frustration.

You smoke to relieve boredom.

You smoke to decrease anxiety in social situations.

Check all that apply:

You smoke a lot at home.

You smoke a lot in the car.

You smoke a lot at work.

You smoke a lot with friends.

How much do you smoke in a week? _____

How much do you spend on cigarettes weekly? _____

If you're smoking, you know you should stop, but I never responded to fear tactics and threats, and neither will you. So, here are some benefits from becoming a nonsmoker:

- Your kids will think well of you. Smoking is time-consuming. When I smoked, I spent a lot of time lighting up instead of playing with my kids.
- You can really reduce your risks for future disease, such as heart attack and cancer. Women who smoke have a four times greater chance of dying from a heart attack than women who don't smoke. Lung cancer is strongly associated with smoking. Overall, 35 percent of smokers will die of heart disease or lung cancer. If you stop smoking, in ten years your risk of heart disease and cancer diminishes to the same level as for nonsmokers.
- Bone loss is much less rapid and the risk of hip fracture is reduced. In the postmenopause years, women have a tendency to lose bone calcium, and our risks of getting osteoporosis increase with age.
- Dental health improves. For some women, estrogen depletion affects their gums and teeth, and smoking increases the risk of infection and tooth loss.
- You can delay the skin changes that are the early signs of aging. Smoking causes early skin wrinkling; the typical smokers' wrinkles are deep smile lines around the eyes and mouth. Smoking damages the small blood vessels in the skin, damages skin collagen, and delays skin healing. A forty-year old woman who smokes can age her skin by twenty years! (This isn't a fear tactic, it's an appeal to your vanity . . .)

Quiz

Are you considering quitting? Circle your answer: Yes No

Write down the date you intend to quit: _____

Do you need help? Circle your answer: Yes No

If your answer was "Yes," check your preferences:

- Medication
- Biofeedback
- Hypnosis
- Group therapy

Tips on How to Quit

Prepare to quit. Get out a sheet of paper. List all of the reasons why you want to quit smoking. Write down your previous practice sessions (times you tried to quit) and what made you go back to smoking. Identify the times, places, activities, and people that trigger you to smoke. Think of ways to deal with those and write them down.

Choose the date you will quit. Pick a date and stick to it. Choose a date that will give you enough time to prepare. Pick a date that may be special, such as an anniversary, a holiday, the Great American Smokeout, etc. Write the date down and place it somewhere so that you can see it every day.

Learn about recovery (withdrawal) symptoms and how to cope with them. Have your support person or system ready to go. You may (or may not) experience recovery (withdrawal) symptoms such as:

- Feeling irritable
- Having cravings
- Having headaches or feeling dizzy
- Having a dry mouth
- Having insomnia and/or vivid dreams
- Having an upset stomach

- Coughing
- Feeling fatigued
- Having difficulty concentrating
- Feeling restless

Help yourself recover: drink plenty of water, walk, exercise (see your doctor first), relax, eat low-calorie snacks, and avoid caffeine.

Don't be discouraged by relapse. If you smoke a cigarette and still want to quit, try again. Everyone has practice sessions. Smoking is one of the hardest behaviors you will ever have to give up. You can do it. Be prepared and remember the benefits: quitting will make you a happier and healthier person.

And ladies, quit after your period. Withdrawal symptoms are aggravated by PMS. Check with your doctor about an appropriate level of exercise for you, and exercise regularly while quitting. Exercise relieves the symptoms of withdrawal. Unless you are overeating or drinking, weight gain after quitting is usually five to seven pounds. If you exercise while quitting, you can actually lose weight.

Chapter 31

Alcohol, Soda, and Caffeine

Men and women differ a lot when it comes to handling alcohol. I noticed this when I was in college and graduate school (my heavy drinking years). We weigh less, we have less stomach enzyme to break down alcohol before it gets into the bloodstream, and we have more body fat. Therefore, when men and women drink the same amount of alcohol, it breaks down more slowly so more of it is circulating in our bloodstream, and it gets concentrated in our body fat. Those organs that are damaged by high concentrations of alcohol are the liver, brain, and breast tissue. Men metabolize alcohol more quickly and pass it more quickly.

Here's a quiz to test your general knowledge about alcohol.

QUIZ

True or False—Circle your answer.

T F Moderate alcohol consumption at bedtime can help you sleep. F: Studies have shown that bedtime alcohol consumption causes insomnia and, even worse, it can trigger hot flashes and night sweats.

T F Drinking can make you look older. T: Even moderate drinking affects the skin and hair; it worsens acne and

dandruff through dehydration of your cells and dilation of tiny blood vessels in the face and nose; and it causes collagen and elastin damage, causing brown spots.

- T F Moderate amounts of alcohol are good for you. F: Even though there's still controversy over the health benefits of alcohol, most studies indicate that alcohol has no real nutritional value; furthermore, alcohol contains seven calories per gram, as compared to four calories per gram of protein and carbohydrate and nine calories per gram of fat. Since metabolic rate declines during perimenopause, most of these calories are stored as fat; weight gain is common in drinkers. Heavy drinkers have low bone mass because they have poor diets often deficient in calcium and vitamin D; moreover, alcohol interferes with calcium and vitamin D absorption into the bone tissue—this combination increases the risk of osteoporosis.
- T F Drinking can increase your breast-cancer risk. T: Perimenopausal women who drink are increasing their risk of breast cancer by 11 percent if they have one drink per day, by 24 percent if they have two drinks per day, and by 38 percent if they have three drinks per day; it is speculated that alcohol causes damage to the DNA in breast cells and interferes with your immune system's ability to resist infection and destroy precancerous cells.
- T F Excess drinking is getting drunk. F: Excess, for women, means more than two drinks a day.
- T F Alcohol enhances sexual feelings. F: Alcohol can both lower inhibitions and increase promiscuity (thereby increasing the risk of contracting sexually transmitted disease) while suppressing orgasms.

How much is too much? One drink is defined as twelve ounces of beer, five ounces of wine, or one and one-half ounces of liquor (these contain 5 percent, 10 percent, and 40 percent alcohol, respectively). Moderate drinking is not more than one drink a day. Heavy drinking is two drinks a day. More than this is excessive.

How do you know if you have a serious problem with alcohol? To determine whether you might be abusing alcohol, answer and score the following questions:

QUIZ

- _____ Tolerance—How many drinks does it take to make you feel high? If the answer is more than two drinks, score yourself 2 points.
- _____ Annoyed—Have people annoyed you by criticizing your drinking? Score 1 for yes.
- _____ Cut down—Have you felt you ought to cut down on your drinking? Score 1 for yes.
- _____ Eye opener—Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover? Score 1 for yes.
- _____ Total—if the total of the scores for your answers to these questions is 2 or more, you may be abusing alcohol.

Alcohol consumption can be habit forming, so be careful not to let it sneak up on you. Consider the following and circle your answers.

- | | | |
|---|---|---|
| Do you come from a family of heavy drinkers? | Y | N |
| Do any of your close relatives have a drinking problem? | Y | N |
| Do you use diet pills, painkillers, or tranquilizers? | Y | N |

If you drink, did you start as a teenager
(or younger)? Y N

Do you skip meals when you drink? Y N

When you drink, do you eat a lot of high-fat foods? Y N

These are some of the factors that can increase your chances for abusing alcohol.

Here are some tips to help you drink safely and to help protect you from alcohol's toxic effects.

- Limit yourself to one drink a day or less.
- Drink beer, or dilute wine and spirits in other beverages.
- Alternate alcoholic with nonalcoholic beverages.
- Be aware that alcohol stimulates your appetite for fatty foods.
- When you drink alcohol, drink two to three glasses of other fluids afterward.
- If you don't drink, don't start; there are better ways to enjoy yourself without relying on alcohol.

The Food and Drug Administration reports that excessive intake of alcohol, soda, and caffeine are the major causes of malnutrition in adult Americans.

- Are you drinking more than ten ounces of soda daily?
- Are you drinking more than three cups of caffeinated coffee daily?
- Are you at risk for thinning bones?

Both caffeine and phosphates in soda are suspected of increasing dehydration and calcium loss from bones. Even mild dehydration will slow down your metabolism as much as 3 percent, and almost 2 percent of Americans are chronically dehydrated. Dehydration is

the number one trigger of daytime fatigue. Calcium loss puts you at risk for osteopenia and osteoporosis.

Finally, some sodas have unadvertised (but not unpublicized) benefits. Cruising the internet, I found, for example,

- To clean a toilet, pour a can of Coca-Cola into the toilet bowl and let it sit for one hour, then flush clean; the citric acid in Coke removes stains from vitreous china.
- To clean corrosion from car battery terminals, pour a can of Coca-Cola over the terminals to bubble away corrosion.
- To loosen a rusted bolt, apply a cloth soaked in Coca-Cola to the rusted bolt for several minutes.
- The distributors of Coke have been using it to clean the engines of their trucks for about twenty years!

Whether the above is credible or not, there is a growing suspicion among nutrition research scientists that excessive soda consumption is partly responsible for the increased prevalence of gastrointestinal disorders (gastric reflux problems) and osteopenia (low bone density) in middle-aged women.

Try this experiment. Take a six-week break from drinking any carbonated beverage. What do you notice?

First, can you stop your soda intake for this long? Sugar and caffeine together in soda make a powerful addictive stimulant and, if you're having trouble temporarily eliminating soda, you are probably hooked on the habit of drinking it.

Have you switched from regular to diet sodas to lose or avoid gaining weight? You're probably not getting the weight loss you thought you would. The colorings and flavorings in sodas are sugar-based, and you're not completely eliminating sugar with diet

varieties. If you have diabetes, you'll need to eliminate soda completely from your diet.

Have you noticed more belching, burping, mild gastric pain, and indigestion when drinking soda, particularly with a meal? Soda can overstimulate gastric acid production and, in some of us, aggravate gastric conditions.

Does soda satisfy your thirst? Drinking soda usually increases the thirst sensation, encouraging you to drink more of it. Soda also increases hunger, so that you consume snacks (mostly carbohydrates) while drinking it.

Here's my point: soda isn't really nutritious, but it does have a place in a food plan. Instead of consuming it as a dietary staple, drink it as a treat, infrequently and in small quantities.

Here's a review of a variety of the beverages we consume and how they rate as health drinks, with recommended daily amounts.

Alcoholic beverages: These are treats. The health benefit (some small reduction in heart disease risk) is not worth the increased risks of alcohol abuse and breast cancer as we age. Recommendation: up to one drink a day, but not every day!

Sweetened fruit juices and carbonated drinks: These are high in sugar and corn syrup and have no nutritional value. Recommendation: do not consume at all, but if you are hooked, limit yourself to no more than 8 ounces a day.

Sports drinks: These are high in calories but do have some usefulness for athletes in training. Recommendation: moderate exercisers should not consume these drinks; very active exercisers may consume up to 16 ounces a day.

Whole milk: Whole milk contains saturated fats which are a health risk. Recommendation: do not consume.

Unsweetened fruit juices and vegetable juices: While not harmful, they are not a substitute for whole fruits or vegetables. They lack fiber and other nutrients, and the vegetable juices are high in sodium. Recommendation: up to 8 ounces a day.

Low-fat and non-fat milk and soy drinks: All three are sources of calcium and vitamin D. Soy milk is a good substitute for cow's milk. Recommendation: up to 16 ounces a day.

Diet sodas and non-carbonated diet drinks: The FDA has proven that sugar substitutes are safe, though most have no valuable nutrients. Recommendation: up to 32 ounces a day.

Coffee and tea (unsweetened): These do not carry health risks as long as your caffeine consumption is low to moderate (less than 400 mg daily), and tea does contain some nutrients and antioxidants. Recommendation: coffee up to 32 ounces a day and tea up to 40 ounces a day (coffee has twice as much caffeine as tea).

Water: This is the best drink of all. I know women who drink only water. It really is all we need. Recommendation: drink 20–50 ounces of water every day (see chapter 33).

Chapter 32

Vitamin and Mineral Supplements

If you've never really taken supplements before, why do you need them now?

This chapter is about nutrition. The science of nutrition is about an underlying belief in the body's ability to heal itself and prevent disease, and the emphasis of nutrition is on influencing these processes. Many midlife women are nutritionally impaired, meaning that our bodies have lost much of their ability to heal, protect against, and prevent disease.

QUIZ

Are you one of the 50 percent of women between the ages of forty-five and sixty who have one or more of the following health problems? Circle all that apply.

- Obesity
- Hypertension
- Diabetes
- Thyroid disease
- High cholesterol
- Low bone density
- Heart disease

Good nutrition is important at any age, but crucial at midlife because we're losing the protective effects of estrogen and because all the years of accumulated bad habits are slowly but surely catching up to us.

QUIZ

Which of these is important to you? Rank them in order of importance, 1 to 6. I want to improve my nutrition:

- To support and protect my health for the last half of my life, even though I've always taken my health for granted.
- To minimize emerging health problems and/or stabilize current health problems.
- To control and eliminate weight gain.
- To boost my overall hormone output from all my glands (pituitary, thyroid, adrenals, and ovaries).
- To lessen menopause symptoms.
- To delay the appearance of aging.

The human body requires forty-five or more vitamins and minerals to maintain health. Researchers from the United States and Canada working with the Institute of Medicine and the National Academy of Sciences have established the recommended dietary allowance (RDA) of these nutrients. Vitamins and minerals are substances that your body requires to help regulate metabolic functions within cells and only very tiny amounts of them are required, usually less than one gram a day for the entire body.

The following is a sample list of vitamins and some of their functions. In general,

- Vitamins A, E, and K help repair cells in organ tissues;
- Vitamin B-complex is used by the nervous system;

- Vitamin C helps in the repair of blood vessels;
- Vitamin D with calcium and magnesium is involved in bone and muscle health and in the regulation of our body water.

Is it true or false that you can meet most of your daily requirements by eating properly?

False: Here are some examples of the quantity of food it would take to get the recommended daily requirement of some common vitamins/minerals:

- 1,500 mg of calcium daily is equal to one quart of low-fat milk, one quart of low-fat yogurt, or ten cups of cottage cheese;
- 2,000 mg of vitamin C is equal to twenty-eight oranges;
- 30 IU of vitamin E is equal to three ounces of wheat germ;
- 5,000 IU of vitamin A is equal to seven mangos.

Now, no one eats twenty-eight oranges a day. And yes, there are other foods containing vitamin C, which could be eaten daily, along with that orange. You could have grapefruit and a salad with tomatoes and peppers along with lunch, and broccoli and potatoes along with dinner with strawberries for dessert. Almost every food has nutrients in it if it hasn't been overly processed or filled up with additives or overcooked. Where will you get your food from, and how will it be prepared? You will probably have to eat a lot of food and consume a lot of calories (and spend a lot of money) to get what you need.

There are two things to remember about vitamins:

- Our bodies absorb and use vitamins in food better than those in vitamin supplements.
- Vitamin-rich food increases the absorption of the supplement so that less of it becomes a waste product in the bowel or urine.

Without overeating, the best and easiest way to get these nutrients is with supplements, and the best way to take these supplements is with vitamin-rich food.

I was asked recently what I thought of the specially packed supplements advertised as the High Energy Complexes, which are usually specific vitamin combinations with a limited number of vitamins (such as B-complex only). My experience with these is that I don't absorb them well and my urine turns bright yellow as they are, for the most part, eliminated. It makes more sense to me to take multivitamin formulations since vitamins and minerals actually need each other for absorption and utilization. Therefore, I think your multivitamin supplement is a better "high energy" supplement than a supplement that's limited in vitamin and mineral content.

How nutritious is your diet? Use the Diet Log that follows to record your food and drink intake for a week. Following the Diet Log is a chart of essential nutrients and their sources. Check the nutrient if you eat or drink one or more of its source foods daily. Are you eating your way into good health daily?

DIET LOG

MEAL	Sunday	Monday	Tuesday	Wednesday
Breakfast				
Lunch				
Dinner				
Bedtime Snack				

Nutritional Supplement

Multivitamin____Calcium____

Antioxidants____Other_____

Protein Supplement:_____

Midmorning____Afternoon____Evening____

DIET LOG

MEAL	Thursday	Friday	Saturday
Breakfast			
Lunch			
Dinner			
Bedtime Snack			

Nutritional Supplement

Multivitamin ____ Calcium ____

Antioxidants ____ Other _____

Protein Supplement: _____

Midmorning ____ Afternoon ____ Evening ____

NUTRIENTS AND THEIR SOURCES

Nutrient	Sources	Eat Daily
Vitamin A	Orange and yellow fruits, vegetables, liver, egg yolks, fortified milk	_____
Or Beta-carotene (vitamin A precursor)	Orange and yellow fruits, vegetables	_____
Vitamin D	Fortified milk, sardines, sunlight	_____
Vitamin E	Whole grains, nuts, vegetable oils	_____
Vitamin C	Citrus fruits, broccoli, green and red peppers, brussels sprouts, tomatoes, strawberries, cabbage, potatoes	_____
Folic Acid	Green leafy vegetables, enriched cereals, legumes	_____
Thiamine	Whole and enriched grains, beans, pork	_____
Riboflavin	Milk, cheese, eggs, green leafy vegetables, whole and enriched grains	_____
Niacin	Meats, poultry, fish, whole and enriched grains	_____
Vitamin B6	Green leafy vegetables, meats, poultry, fish	_____
Vitamin B12	Meats, fish, milk, eggs, yogurt	_____
Calcium	Milk, cheese, yogurt, tofu, sardines, green vegetables	_____
Selenium	Water, shellfish, nuts, legumes	_____
Iron	Meats, fish, poultry, legumes, whole and enriched grains	_____
Zinc	Meats, whole grains, legumes, nuts	_____
Chromium	Whole grains	_____
Essential Fatty Acids (Omega-3 Fatty Acids)	Fish, fish oils, flaxseed, canola oil	_____

It may be helpful to be even more specific. If grains are a good source of iron, what grains are particularly high in iron? If fish are a good source of essential fatty acids, which fish are particularly

good? Here's a list of food groupings and those foods in each grouping that are particularly high in nutrients.

Plant

Grains—whole wheat, brown rice, buckwheat, millet, cornmeal, oatmeal, whole grain pastas

Beans—navy, black, adzuki, chickpeas, lentils, kidney, pinto, soy

Vegetables—(above and below ground) dark leafy greens, asparagus, potatoes, yams, mushrooms, napa cabbage, bok choy, cabbage, beets, garlic, butternut squash, artichokes, seaweed

Fruits—berries, citrus, figs, black currants, avocados, apples, plantains, apricots

Nuts and seeds—almonds, walnuts, chestnuts, hazelnuts, cashews; sunflower, sesame, pumpkin seeds

Animal

Fish—salmon, mackerel, herring, tuna, trout, oysters, shrimp, clams

Meats and poultry—chicken, beef, lamb, game, organic liver, pork

Dairy

Milk, cheese, yogurt

Other

Fats and oils—extra virgin olive oil, flaxseed oil, unrefined sesame oil, unsalted butter

Whole grains top the list because they are full of fiber, vitamins, minerals, and other nutrients. If you have an allergy to wheat (which is more common than you think), you'll need to avoid whole grains but, from the listing, there are plenty of other highly nutritious foods

that can replace these. If you're not already eating some of these foods, I encourage you to incorporate them into your diet.

QUIZ

What three foods do you eat all the time?

What are your three favorite foods?

What groups are these from?

Pick from the food list at least three substitutes you would like to try.

Variety will help you get the nutrients you need and make your diet interesting.

Recent studies from across the United States and around the world have focused on the antioxidant properties of certain vitamins, particularly vitamins C, E, and beta-carotene (the precursor of vitamin A). Antioxidants destroy certain molecules in the body called free radicals, which are known to contribute to many diseases, including heart disease and many types of cancer. Does this mean we should take megadoses of vitamins? No. You risk an overdose, or waste your money on a measure that may or may not prove to be successful in the long run. You should try to get your vitamins and minerals first from foods (without overeating) and second from supplements, and remain within the guidelines set forth by the U.S. Food and Drug Administration.

The following is a list of supplements recommended for midlife women by many researchers and clinicians working in the field. Do you take supplements? If so, list their quantities on the appropriate

lines. How do your supplements measure up? They should provide the minimum recommendations. Circle the deficiencies. Do they add up to three or more? If so, you need to consider changing your supplements and/or adding to them. If you don't take supplements, you should consider it.

SAFE LIMITS FOR VITAMINS AND MINERALS

Vitamins	Daily Value	Upper Level	Your Supplement
Vitamin A	5,000 IU	10,000 IU	_____*
Vitamin B1 (thiamine)	1.5 mg	None Set	_____*
Vitamin B2 (riboflavin)	1.7 mg	None Set	_____*
Vitamin B3 (niacin)	20 mg	35 mg	_____*
Vitamin B6 (pyridoxine)	2 mg	100 mg	_____*
Vitamin B12	6 mcg	300 mcg	_____*
Folate (folic acid)	400 mcg	1,000 mcg	_____*
Vitamin C	2,000 mg	10,000 mg	_____*
Vitamin D	400 IU	2,000 IU	_____*
Vitamin E (natural only, "d" form)	30 IU	800 IU	_____*
Vitamin K	80 mcg	80 mcg	_____

Minerals	Daily Value	Upper Level	Your Supplement
Calcium	1,500 mg	2,500 mg	_____*
Chromium	120 mcg	400 mcg	_____*
Copper	2 mg	10 mg	_____
Iron	18 mg	45 mg (only if deficient)	_____
Magnesium	750 mg	1,200 mg	_____*
(The RDA ratio for women of calcium to magnesium is 2 to 1)			
Phosphorus	1,000 mg	4,000 mg	_____
Potassium	1,800 mg	6,000 mg	_____
Selenium	70 mcg	400 mcg	_____
Zinc	15 mg	40 mg	_____*
Other	Daily Value	Upper Level	Your Supplement
Boron (needs calcium for absorption)	3 mg	20 mg	_____
Iodine	150 mcg	1,100 mcg	_____
Manganese	2 mg	11 mg	_____
Molybdenum	75 mcg	2,000 mcg	_____
Nickel	5 mcg	1,000 mcg	_____
Vanadium	10 mcg	1,800 mcg	_____
Essential Fatty Acids (Omega 3, 6, 9 from fish, beans, soy, or plant oils)	7 mg weekly	None Set	_____

It is very important that the starred (*) nutrients not be deficient.

You'll notice that some of my vitamin ranges are higher than the product you're currently using. Should you increase specific vitamin amounts by adding to them? No. Don't supplement your supplement with more pills. These supplements are not a substitute for eating nutritious foods. Use food to boost your vitamin intake. In this way, you won't run the risk of exceeding the recommended daily limits, you'll have better absorption of your supplement, you won't inadvertently starve your body of necessary nutrients, and you will eat well.

In order to take supplements safely, you should be able to answer "yes" to the following questions.

- Are you taking a multivitamin rather than megadoses of single vitamins?
- Are you taking your vitamins with food rather than as a substitute for a meal?
- Does the meal contain some fat to aid in absorption?
- Have you checked the expiration date on your bottle to make sure your vitamins are still potent?
- Do you buy your supplements from a national brand or major chain store to assure quality? The letters "USP," for United States Pharmacopoeia, are a sign of quality.
- Have you checked with your doctor about possible good and bad interactions with medications you are taking?
- Is your diet well-rounded (meaning you eat a variety of foods) and your first source of vitamins and minerals?
- And, for the safety of your pocketbook, are you spending more than 20 cents a day for supplements? Paying more doesn't mean better quality.

In case you're not familiar with product labeling practices, here's a diagram on how to read a supplement label.

HOW TO READ A SUPPLEMENT LABEL

Serving size is the manufacturer's suggested serving. It can be stated per tablet, capsule, softgel, packet, or teaspoonful.

International unit (IU) is the unit of measurement for vitamins A, D, and E. It is often used instead of micrograms. For example, 400 IU of vitamin D equals 1 mca.

A list of all ingredients used in the product may appear outside the Nutrition Facts box. The nutrients are listed in decreasing order by weight.

Brand Name Tablets USP

Nutrition Facts	
Serving Size 1 tablet	
Amount Per Serving	Daily Value
Vitamin A 5,000 I.U.	100%
Vitamin C 90 mg	100%
Vitamin D 400 I.U.	100%
Vitamin E 30 I.U.	100%
Thiamin 1.5 mg	100%
Riboflavin 1.7 mg	100%
Niacin 20 mg	100%
Vitamin B5 2 mg	100%
Folate 0.4 mg	100%
Vitamin B12 6 ug	100%
Calcium 1,000 mg	100%
Iron 18 mg	100%
Iodine 150 ug	100%
Magnesium 400 mg	100%
Zinc 15 mg	100%
Boron 5 mg	*
Copper 2 mg	100%

*Daily value not established

USP means the product meets U.S. Pharmacopeia Standards for quality, strength, purity, packaging, and labeling.

Daily Value (DV) is the percent of recommended daily amount of each nutrient provided in a serving.

Milligrams (mg) and micrograms (mcg or ug) are units of measurement for B complex and C vitamins and minerals. A milligram is one-thousandth of a gram. A microgram is one-millionth of a gram.

Ingredients: Vitamin A acetate, lactose, magnesium stearate, talc, starch, ascorbic acid, ergocalciferol, d-alpha tocopherol acetate, tyamine hydrochloride, riboflavin, niacinamide, pyridoxine hydrochloride, folic acid, vitamin B12, calcium gluconate, ferrous sulfate, sodium iodide, magnesium sulfate, zinc chloride, sodium metaborate, copper.

DIRECTIONS: Take one tablet daily with a meal.

A product should be used before the expiration date to assure full potency.

Note: This is a sample label and is not intended to describe a particular drug.
Adopted from information provided by the USP; by permission.

What You Need to Know, Nutrient by Nutrient

Vitamin A (or beta-carotene) may be taken in doses of 5,000 IU daily. Vitamins A, C, and E are antioxidants. They bind up oxygen-free radicals and keep them from causing the kind of damage that speeds up the aging process in all the cells of the body. The best sources of vitamin A in plants are carrots, sweet potatoes, spinach, and cantaloupe; in animals, beef liver, fish, and fish liver oil. Vitamin A is essential for bone growth and repair, healthy skin, and night vision. It's fat-soluble (can only be absorbed in the presence of fat) and, in large doses, can be toxic. ALERT: Overdose can cause fetal malformations in pregnant women, and liver damage. A 1996 study suggested that very large doses can worsen heart disease and lung cancer. Newer studies indicate that the current recommended daily value may be too high, and that 2,500 IU is a safer guideline.

Vitamin C (Ascorbic Acid) can be taken in doses of 2,000 mg daily in divided doses. Most of this is excreted in the urine three to four hours after having been taken, so ingesting several doses through the day is optimal. Sources are most fruits and vegetables, particularly orange juice, kiwi fruit, broccoli, and raw tomatoes. Well-researched, it has been proven that vitamin C reduces LDL (bad) cholesterol in heart disease; increases collagen formation in the skin and prevents skin aging; assists the absorption of dietary calcium from the intestine for use by the bones; prevents some toxic effects of alcohol (it helps avoid hangovers); inhibits the formation of cancer-promoting free radicals taken in when eating foods such as hot dogs, bacon, and processed meats; reduces the risk of death from all cancers by 14 percent by influencing the immune system to respond to the cancer cells; prevents cataracts; helps absorb dietary iron from the intestines; and plays a role in the formation of adrenaline, our

stress reaction hormone. It enhances the effectiveness of echinacea in fighting infection. ALERT: Fever, high stress, smoking, and taking aspirin, antibiotics, and steroids all deplete the body's stores of vitamin C. In these situations, take more vitamin C (up to 10,000 mg daily; excess will be eliminated in the stool). The signal that you are taking more than you need is loose stools.

Vitamin E (d-alpha tocopherol) may be taken in doses of 400 to 800 IU daily. If you are taking large doses, split them up throughout the day; vitamin E is best absorbed in increments of 400 IU or less. It is fat-soluble and should be taken with food containing fat. Its absorption is helped by the presence of selenium (a mineral). Sources are bran, wheat, nuts, seeds, fish, crab, vegetable oils, and sweet potatoes. Vitamin A and beta-carotene can reduce blood levels of vitamin E, so increase your intake of E if you are taking more than 5,000 IU of vitamin A daily. Vitamin E has a blood-thinning effect; caution is advised when taking it with anticoagulants and aspirin. It is contraindicated if you are being treated for breast cancer or diabetes because it can interfere with absorption of medication. Vitamin E is useful orally and topically for treating dry skin, orally for treating hot flashes, and via internal application for vaginal dryness. An antioxidant like vitamins A and C, it helps prevent cell damage and plays a positive role in the prevention of stroke and death in coronary artery disease. ALERT: Avoid synthetic vitamin E. Natural vitamin E is produced from vegetable oils, mostly soybean oil; synthetic vitamin E is produced from petrochemicals. Recent studies confirm that synthetic vitamin E is useless. This is how to tell the difference between them: natural vitamin E is labeled as "d-alpha tocopherol"; synthetic vitamin E is labeled as "dl-alpha tocopherol." Be careful. Overdose can be toxic.

The B-Complex is made up of vitamin B1 (thiamine), B2 (riboflavin), B3 (niacin), B6 (pyridoxine), and B12 (folate, or folic acid). They are all water-soluble, and they all help convert carbohydrates into glucose for immediate energy. Midlife women use B vitamins to relieve PMS symptoms and dryness of skin and hair.

Vitamin B6 is particularly important for midlife women. It prevents coronary heart disease and helps form serotonin, which helps decrease PMS symptoms. It is also useful in treating insomnia and irritability in depressed women. ALERT: Large doses (more than 200 mg daily) should be avoided because of the possibility of occurrence of abnormal neurological symptoms.

Vitamin B12 is needed to make red blood cells. A deficiency causes pernicious anemia, a common condition in older adults because of lower production of stomach acid to help absorb this vitamin from food. Sources are all animal foods. Supplements are well absorbed in older adults.

Folate (folic acid) is needed in the formation of red blood cells. It reduces the risk of heart attacks, and it helps in the prevention of colon cancer. Sources are green leafy vegetables and oranges. Some foods have been fortified with a folic acid supplement, but it needs the other B vitamins for absorption.

Vitamin D may be taken in doses of 400 IU daily. Sources are canned tuna and salmon, fish liver oils, whole milk, butter, beef liver, egg yolk, and exposure to the sun for fifteen minutes daily (ultraviolet rays convert cholesterol molecules in the skin to vitamin D). Note: Dietary vitamin D must have vitamin A present for absorption in the intestine. Vitamin D helps absorption of dietary calcium by the bones, reduces the risk for colon cancer, and, research indicates, may help prevent breast cancer. Without

vitamin D, absorption of dietary calcium is impaired and the risk of osteoporosis goes up.

Calcium (calcium citrate) may be taken in doses of 1,000 to 1,500 mg daily. As a matter of interest, this is the equivalent of five eight-ounce glasses of milk. Our bones are not inert objects, but living tissue that receives and releases calcium daily. Calcium is necessary for bone density and, after menopause, it is estimated that women lose 5 percent of their bone density every year. Calcium deficiency is hard to detect because calcium levels in the blood may appear normal: When the body needs calcium for normal muscular functioning, bone strength, blood clotting, and nervous system integrity, it will "steal" calcium from teeth and bones to raise low blood levels. Only 10 to 20 percent of calcium found in foods is actually utilized. Supplements can be taken with and without meals so long as other nutrients are present for absorption. To be absorbed, calcium needs an acid environment in the stomach, vitamins A and D, amino acids (such as leucine, arginine, and serine), magnesium, and phosphorus. Our bodies prefer calcium supplements in small doses of 500 mg, taken with a multivitamin to aid absorption. ALERT: Calcium carbonate has the highest calcium content of any supplement but is an antacid; calcium needs stomach acid to be absorbed and, as we age, we produce less stomach acid. For the older adult, calcium supplements made from calcium citrate offer better absorption. Calcium absorption is decreased in diets high in alcohol, caffeine, fruit, fiber, protein, and salt, or low in vitamin D. Calcium is useful for the replacement of bone mineral mass and has a mild sedative effect when taken at night. A frequent problem with taking calcium supplements is constipation. The National Academy of

Sciences and the National Institutes of Health recommend the following daily intake by age:

- Age 19–30: 1,000 mg
- Age 31–50: 1,000 mg
- Age 51–65: 1,200 mg
- Age 65 and older: 1,500 mg

Magnesium may be taken in doses of 500 to 750 mg daily. Sources are wheat bran, nuts, seeds, fish, milk, grains, and green vegetables. Magnesium's functions are similar to those of calcium in the body, and it is needed to absorb dietary calcium. For optimal effectiveness, take a dose of magnesium equal to half the dose of your calcium citrate supplement. ALERT: Excesses of protein, dark green leafy vegetables, and alcohol deplete magnesium. Magnesium plays a role in the prevention of hypertension and osteoporosis. It maintains the heartbeat (low levels lead to arrhythmias), and it reduces the buildup of fatty deposits in the blood vessels. Magnesium also provides relief from migraine headaches. Diuretics, antibiotics, and alcohol decrease its absorption. Diabetes contributes to magnesium deficiency. Signs of deficiency are heartbeat irregularities, muscle weakness, dizziness, and tremors. Chronic deficiency may lead to increased risk of diabetes.

Potassium may be taken in doses of 1,800 to 6,000 mg daily. It is found in most foods but is especially concentrated in apricots, avocados, bananas, brown rice, dried fruit, garlic, nuts, wheat bran, and yams. Potassium maintains a regular heartbeat and stabilizes blood pressure by controlling the body's water balance and sodium content, and by assisting in proper muscle contraction. ALERT: Stress, diuretics, and laxatives deplete potassium levels in the body.

Chromium helps insulin regulate blood sugar. Sources are grains and mushrooms. Chromium picolinate is a heavy metal taken for weight loss. At 200 to 400 mcg daily, it can increase the burning of calories and induce weight loss, but its safety is in question, even at recommended doses.

Iron may be taken in doses of 10 to 18 mg daily only if you have been proven to be iron-deficient. All cells in the body contain iron. It is an especially crucial element in hemoglobin, the oxygen-carrying protein that gives blood its red color, and in certain muscle tissue. However, recent studies indicate that many Americans may be suffering from iron overdoses. Scientists believe that iron may well act as an oxidant in the blood, promoting a reaction between LDLs and oxygen that results in atherosclerosis and coronary artery disease. This means that unless you are suffering from excessive abnormal bleeding, you should not take iron supplements. ALERT: Women have fewer heart attacks before menopause because they maintain relatively low iron stores during the menstrual years. Women do lose iron every month with their menstrual period, but most seem to get enough iron in their food to forestall anemia. When the menstrual periods stop, iron levels rise in postmenopause and so does heart attack risk. All the iron we need is supplied in our diets; don't supplement unless you are iron deficient.

Zinc may be taken in doses of 15 to 30 mg daily. It is a trace element found in many foods. Sources particularly high in zinc are pumpkin seeds, oysters, herbs (especially sage), and Mexican wild yam. Zinc is needed for the functioning of the immune system. ALERT: Large doses (more than 2,000 mg daily) are toxic.

Omega-3 Fatty Acids are not vitamins or minerals, but polyunsaturated fats. I've included them with vitamins and minerals

because they are essential. This supplement lowers the risk for coronary heart disease. The best source is fish: the fatter the fish, the higher their omega-3 fatty acid content. The American Heart Association recommends getting 7 grams of omega-3 fatty acids per week; as little as four servings of fish every week can significantly lower a woman's risk for heart disease. Here's what you'll get in a four-ounce cooked serving of different types of fish:

Type of Fish	Grams of Omega-3s
Herring	2.4 g
Pacific Mackerel	2.1 g
Atlantic Salmon	2.1 g
Sablefish	2.0 g
Whitefish	1.9 g
Pink Salmon (canned)	1.9 g
Atlantic Sturgeon	1.5 g
Tuna (albacore)	1.5 g
Red (sockeye) Salmon	1.4 g
Bluefish	1.2 g
Eastern Oysters	1.0 g
Whiting (hake)	1.0 g
Bass (freshwater)	0.9 g
Swordfish	0.9 g
Tuna (white, canned)	0.8 g
Sardines (canned)	0.7 g

Other sources of Omega-3 fatty acids include flaxseed oil, soybeans, and canola oil.

Food & Fitness Advisor, June 2002, Volume 5, Number 11.

Some vitamin supplements have been found in animal studies to directly affect estrogen production and are hypothesized to be

useful in our bodies. These are vitamin E and magnesium, which help to relieve PMS, possibly by reducing estrogen levels. The B vitamins (folate, B6, B12) help repair damage to cells and may also lessen cell damage caused by excess estrogen. Calcium lowers estrogen levels and therefore might help to inhibit the formation of estrogen-sensitive cancer cells.

These areas of research are exciting and might prove to be of future benefit.

What You Need to Know about Foods, Drugs, and Metabolic Conditions That Deplete Vitamin and Mineral Levels

Protein—If you eat more protein than required for nutritional purposes, it is not stored by the body, but must be excreted. Excess protein waste products are excreted in the urine. The excretion of protein waste products through the kidneys increases the urinary excretion of calcium. A high intake of protein creates a negative calcium balance (more is lost than ingested). A negative calcium balance will cause calcium to be pulled from the bones and teeth.

Diuretics—Some diuretics cause increased urinary excretion of minerals such as calcium and potassium. Furosemide (Lasix) promotes the greatest loss of calcium. Others, such as thiazides, do not promote such loss.

Antibiotics—Broad-spectrum antibiotics kill friendly intestinal bacteria that make vitamin K for us. Vitamin K is a bone-building factor. Long-term or frequent courses of antibiotics result in low vitamin K levels and thereby interfere with bone building. If antibiotics must be used long-term or frequently, it is wise to supplement vitamin K and replenish friendly colon bacteria such as

L. acidophilus. Take both as long as you are taking antibiotics, and for two to four weeks afterward.

Flouride—A potent enzyme inhibitor, fluoride causes pathological changes in bone, leading to increased risk of fracture. Fluoride in all forms, including toothpaste, should be avoided by everyone. Fluoridation is associated with increased incidence of hip fractures. Humans can tolerate a low level of fluoride in their drinking water, but it is now generally acknowledged by scientists that the supposed dental benefits of higher fluoride levels to children's teeth have been false, as fostered by early fluoride studies.

Cortisone—People placed on long-term use of large doses of glucocorticoids will develop osteoporosis. These medications are prednisolone, triamcinolone, methylprednisolone, and dexamethasone.

Anticoagulants—If you are taking blood thinners, you should not take large amounts of vitamins A, E, and K because they increase the blood-thinning effect, which can result in excessive bleeding.

Metabolic Acidosis (as in fad diets)—One of the body's responses to high acidity is to buffer the excess acid with calcium, usually taken from bone for the purpose. This weakens the bones.

Hyperthyroidism—accelerates bone loss and thus promotes osteoporosis.

Well, that's it on supplements. On to food itself.

Chapter 33

Food Basics: Protein, Carbs, Fats, Fiber, and Water

Dietary fiber, carbohydrates, fats, and proteins have beneficial effects on estrogen production and metabolism in our bodies, helping to maintain estrogen balance and reduce excessive estrogen exposure, which is a causative factor in the development of some cancers, such as estrogen-dependent breast cancer. Fibers found in flaxseed, grains, beans, and seeds help by binding and excreting estrogen in the digestive tract, and they can also increase blood proteins that bind estrogen, reducing the levels of free estrogen available for use in our bodies. Complex carbohydrates, proteins, and omega-3 fatty acids are thought to influence estrogen metabolism by decreasing the production of estrogens and maintaining low blood sugar and insulin levels.

This is what you need to know about carbs, fats, proteins, fiber (a type of carbohydrate), and water—the basics of food.

Carbohydrates circulate through the bloodstream in the form of glucose and are our primary energy source. Excess is stored as glycogen in the liver or converted to fat and deposited in fat cells around the body.

There are three types of carbohydrates: simple sugars and refined carbohydrates; complex carbohydrates; and fiber.

The simple sugars are honey and fruits. Refined carbohydrates are, for example, white flour, refined sugar, and white rice. Sugar is a great source of instant energy because it doesn't need to be digested to be absorbed. However, it is low in vitamins and contains no fiber, so has little nutritional value. High blood sugar causes high amounts of insulin to circulate in the bloodstream, and insulin converts sugar into fat and stores it. The result? Obesity.

Complex carbohydrates are so called because they need to be digested to be absorbed. These are chiefly starches such as potatoes, corn, beans, and vegetables. They are high in nutritional value. Vegetables, grains, and fruits are full of fiber, which is the indigestible portion of these foods, as well as vitamins and minerals.

The FDA now requires that foods labeled "whole grain" must contain all three ingredients of the grain: the outer bran, the inner endosperm, and the germ center. The following are whole grains because they have this complete structure: barley, buckwheat, corn, quick oats, brown rice, rye, oats, wheat, and wild rice. Soybeans, sunflower seeds, and arrowroot do not have this composition and therefore are not whole grains.

Fiber is actually a complex carbohydrate found in most vegetables and fruits. There are two kinds: insoluble, which increases bulk in stool, for example, whole grains; and soluble, which traps and removes cholesterol from the intestine, for example, vegetables, beans, and fruit. The recommended allowance is 30 to 40 grams daily. ALERT: High fiber can cause constipation, gas, and bloating. Add it to your diet gradually.

QUIZ

What kind of carbohydrates do you eat?

Are most of your carbohydrates simple or complex?

List three complex carbohydrates.

What high fiber carbohydrates do you eat? List two.

"Above ground" vegetables have a lot of vitamins and minerals; which do you eat? List three.

Do you eat beans and whole grains? Circle one:

Daily Weekly Monthly

Do you eat potatoes/pasta/white rice? Circle one:

Daily Weekly Monthly

Most Recommended

Grains and beans

"Above ground" vegetables

Fresh fruit

Least Recommended

Sugar, flour, white rice

"Below ground" vegetables

Peeled or canned fruit

Fats (also called lipids) make up a large category of compounds. The dietary fats are saturated fats, hydrogenated fats, polyunsaturated fats, and monounsaturated fats, as well as cholesterol, triglycerides, and omega fatty acids.

Fats are overrepresented in the American diet. Are they solely the cause of our high rates of cardiovascular disease? We used to think so, but there's mounting evidence that excessive amounts of carbohydrates and fats together are the culprits. We don't yet know enough about fat metabolism. Several research questions are currently under rigorous study. Are saturated fats truly a dietary enemy? Does dietary fat consumption alone affect blood cholesterol

levels? Does it do so directly or indirectly? How much dietary fat is too much?

This is what we do know.

Fat is actually one component of a broad category of substances called lipids. Lipids include fats, fatty acids, sterols, and other compounds that are not soluble in water. Although not all lipids are fats, the terms are often used interchangeably. Cholesterol, for instance, is categorized as fat when, actually, it is a lipid. We do need fat to provide our bodies with essential fatty acids, which are the raw material for several body functions, including proper cell growth and blood pressure control.

There are several kinds of dietary fat, each with its own distinctive properties.

Saturated fats are found in animal foods and dairy products. Most of these fats are solid at room temperature. Examples are butter, cheese, lard, and chocolate.

Hydrogenated fats are the fats in oils, processed foods, margarine, and shortenings.

Polyunsaturated fats are liquid at room temperature. Examples are vegetable oils such as corn and soybean oil.

Monounsaturated fats are found in olive oil, peanut oil, and canola oil, and these are helpful because they reduce the tendency for cholesterol to be deposited in the arteries.

Fish oils are beneficial because they lower triglyceride levels and help blood clotting. Omega-3 fatty acids are found in high concentration in sardines, salmon, tuna, mackerel, and herring. Note: Fish oil capsules can raise LDL cholesterol levels; it is best to get fish oil by eating fish once or twice a week.

Triglycerides are found in most fatty foods. For women, high levels of this fatty acid put them at high risk for coronary heart disease.

Cholesterol is a lipid (waxy substance) found in animal foods and dairy products. Cholesterol is vital to our existence: It builds cell membranes and it is the basic building block for hormones. The body can manufacture all the cholesterol it needs; it's not necessary for us to ingest it, yet the average American consumes anywhere from 600 to 1,500 mg of cholesterol every day. It comes in two forms; low-density lipoproteins (LDLs), which carry lipids into the bloodstream, and high-density lipoproteins (HDLs), which tend to carry lipids out. Cholesterol is found in a wide variety of foods.

QUIZ

Which categories of fat make up most of your dietary fat?

List them: _____

How often do you use vegetable oils in preparing your meals?

Circle one: Daily Weekly Monthly

Where does most of your cholesterol come from? Circle one:

Animal foods Dairy products

Do you eat fish? Circle one: Daily Weekly Monthly

Do you have any of the following? Check all that apply.

Obesity

Hypertension

High cholesterol

Diabetes

Are you under a doctor's care? Circle one: Yes No

Are you on a diet? Circle one: Yes No

Is your diet helping you

Lose weight?

Lower blood pressure?

Lower cholesterol?

Lower blood sugar?

Most of us believe that if we cut out our dietary fat, we will be healthier. Research is finding out that low fat consumption alone is not the remedy we used to think it was.

Protein forms the structure of all the parts of the body. Our bodies make protein by assembling amino acids into chains; eight essential amino acids cannot be manufactured by our bodies and must be supplied by the food we eat. Meat, fish, and poultry contain all eight essential amino acids; fruit and vegetables do not. Too much protein in your diet causes calcium loss and too little protein leads to malnutrition and, eventually, starvation. To maintain our supply of essential amino acids, we need daily protein, but not in large quantities. There are two sources of protein, animal and plant. The animal proteins require calcium for digestion and therefore cause a steady depletion of bone calcium over time, unless we get it in our diet. Plant proteins do not deplete bone calcium.

QUIZ

What kinds of proteins do you eat predominantly, plant or animal?

List a few: _____

How often do you eat protein? Circle one:

Daily Weekly Monthly

Do you eat red meat (a source of high-fat protein)? List three sources:

Do you eat fish or poultry (sources of low-fat protein)? List three sources: _____

Protein does not have to be high in fat content to be nutritious.

Do you use protein supplements?

Does your protein supplement contain all the essential amino acids? (The label will tell you.) _____

Water is the most abundant substance in our bodies and every cell is flooded with it. You probably didn't know that dehydration will cause death much more quickly than starvation. We actually need more water as we age, and most of us don't drink enough of it. Besides the water in our food, we need eight additional eight-ounce glasses daily. Caffeinated and carbonated drinks all contain water, but they also leach calcium out of our bones. Caffeine is a diuretic (which is why coffee and tea seem to move right through you) and, of course, alcohol is also dehydrating.

QUIZ

Circle Yes or No:

- | | |
|--|-------|
| Do you get hunger pains less than two hours
after eating? | Y N |
| Do you snack when you're feeling irritable? | Y N |
| Do you get sleepy during the middle of the afternoon? | Y N |
| Do you start your day with coffee or tea? | Y N |
| Does it take an hour or two to feel awake in
the morning? | Y N |
| Do you get tired too easily with just moderate
exercise? | Y N |
| Do you get frequent mild headaches during the day? | Y N |
| Has it been hard to lose weight past a certain point? | Y N |
| Do you feel bloated after meals and have gas pains? | Y N |
| Are you constipated even though you get enough fiber? | Y N |
| Are you drinking fewer than eight glasses of
water a day? | Y N |

If you answered "Yes" to any of these questions you might be dehydrated. Liquids other than plain water ideally should be

unsweetened (unflavored teas or coffees) or artificially sweetened, decaffeinated, and noncarbonated.

A more accurate calculation of the daily amount of water you need is this:

.04 x current weight in pounds x 2 = ____cups per day.

How much water should you be ingesting? ____cups per day.

As we age, we physically decline, but we're also physically bombarded with environmental pollution, toxins, pesticides, chemicals, radiation, sunlight, non-nourishing foods and drinks, and damaging byproducts of chemical processes in our own bodies. These conditions form the basis of rapid aging, disease development, and organ malfunction because they give birth to free radicals in our bodies. Free radicals are molecules that damage living tissue and overtax our immune systems by causing oxidation of living cells (which results in damage or death of the cells). Antioxidant molecules seek out and destroy free radicals and terminate the oxidation process. Biologists and biochemists have identified thousand of antioxidants in plants, in the form of molecular phytonutrients such as bioflavonoids, polyphenols, and carotenoids.

The following antioxidant supplements are mostly derived from plants:

1. Alpha lipoic acid – taken to reduce the physical impairments caused by diabetes; typical dosage is 600 mg orally daily
2. Lycopene – taken to reduce cancer risk; typical dosage is 10 mg orally daily
3. Alpha-tocopherol – also known as vitamin E; taken as supplemental treatment for many chronic diseases; for typical dosage see chapter 32

4. Vitamin C—taken as supplemental treatment for many chronic diseases and to enhance immune system activity; for typical dosage see chapter 32
5. Vitamin A—taken as a supplemental treatment for many chronic diseases and to enhance immune system activity; for typical dosage see chapter 32
6. Beta carotene—taken as a dietary source of vitamin A; typical dosage is up to 300 mg orally daily
7. Lutein—taken for eye health, to prevent macular degeneration; typical dosage is 6 mg orally daily
8. NAC (N-acetyl cysteine)—taken as a precursor to production of antioxidants in the liver; typical dosage is 1 gm orally daily (in combination with selenium, a trace mineral essential for liver production of antioxidants)

Fruits, vegetables, and green tea are antioxidant-rich, as discovered by the groundbreaking research of Dr. Ronald Prior and his team at the USDA Human Center for Aging at Tufts University in Boston. They are studying the capacity of certain fruits and vegetables to aggressively destroy free radicals circulating in our bodies and the effectiveness of these food sources in preventing cell damage. Their power as antioxidants is measured in ORAC units (Oxygen Radical Absorbance Capacity); eventually, our fruits and vegetables will be given effectiveness ratings measured in these units. We should be eating five servings of fruits and vegetables a day. The following are excellent sources of antioxidant protection, so be sure to include some of them in your diet: kale, spinach, beets, red peppers, garlic, onions, prunes, grape juice, cranberry juice, strawberries, oranges, cherries, and green tea.

Recommendations

Select unprocessed foods high in vitamins and minerals, i.e., fresh fruits and vegetables, not canned or prepared. Eat complex carbohydrates rather than simple or refined carbohydrates, i.e., fruits and vegetables, not sugar, white bread, white rice, or pasta. Eat more fruits and vegetables for their antioxidant content, too. Eat more fish, olive oil, and low-fat substitutes instead of red meat and whole milk dairy products. Increase your intake of fiber; eat lightly cooked fruits and vegetables and add beans (but be sure to drink plenty of water to avoid constipation). Nutritional supplements to consider are a multivitamin, calcium, and fiber. Antioxidant and protein supplements are optional. Eating from all the following food groups will give you variety as well as most of your vitamins and minerals. Most foods contain protein, carbohydrates, and some fat; the Xs in the chart on page 246 show which are predominate in each food.

A NOTE ABOUT GRAINS

Whole grains have so many nutritional benefits that it's recommended that we consume about five 4-ounce servings daily, each equal to 1 slice of whole grain bread, 1 cup of whole grain cereal, $\frac{1}{2}$ cup of brown rice, or $\frac{1}{2}$ cup of whole wheat pasta.

Here's the scoop on USDA organic labeling: 100 percent organic foods must be produced without using pesticides, fertilizers, antibiotics, hormones, or radiation. Products labeled "organic" must be at least 95 percent organic as described above and can carry the USDA seal. Products made with organic ingredients must be at least 70 percent organic, products less than 70 percent organic cannot use the term "organic," and neither of these can carry the USDA seal.

We buy a lot of fruits and veggies from our supermarkets because they are readily available year round. Organic foods are

expensive, and I recommend that you focus on these bestsellers (which are still less expensive than organic meat, fish, and poultry):

1. Fruits—apples, cherries, grapes, peaches, pears, and strawberries
2. Vegetables—peppers, celery, potatoes, and spinach

A Suggested Food Plan for the Perimenopausal Woman

Complex Carbohydrates (five servings per day)

1. Grains

- ½ cup cooked rice, oatmeal, or wheat
- 1 slice bread
- 1 cup cold cereal
- ½ English muffin

2. Fruits and Veggies

- 1 cup raw veggies
- ½ cup cooked veggies
- 1 medium apple, orange, or banana
- ½ cup chopped fruit

Simple Carbohydrates (these have very few vitamins and minerals, just quick energy, so eat sparingly as treats)

- sugar, honey, jam, soda, sweets, sports drinks

Protein

- Eat protein-rich food at every meal
- Animal proteins contain all the essential amino acids (meat, fish, eggs, milk)
- Plant proteins lack one or more of the essential amino acids

Iron

- Supplemental iron is not necessary unless you have iron deficiency anemia
- Found in whole grains, animal proteins, and plant proteins

- Premenopause: 18 mg/day as a supplement
- Postmenopause: 8 mg/day as a supplement

Plant	Protein	Fat	Carbohydrate
Grains	X		X
Beans	X		X
Above-ground vegetables	X		X
Below-ground vegetables	X		X
Fruits			X
Nuts and seeds	X	X	
Fats and oils		X	

Animal	Protein	Fat	Carbohydrate
Fish	X	X	
Meat and poultry	X	X	
Dairy	X	X	
Fats and oils		X	

SOURCES OF ESTROGEN

Our bodies can acquire estrogen in three ways:

1. by internal human manufacture (the creation of an endogenous supply);
2. via intake of manufactured products and additive in our food; and
3. by eating plants that have estrogenic compounds known as phytoestrogens (isoflavones, lignans, flavonoids).

Endogenous sources include the ovaries as well as chemical processes in our fat cells, adrenal glands, and other tissues. From menopause onward, our bodies change, or retool: we continue estrogen production from sources other than our ovaries and we produce much less estradiol than we did during our childbearing years and much more estrone.

Chapter 34

Phytoestrogens

Are you looking for alternatives to prescription medications for relief of your symptoms?

Are you unable to take prescription medications for your symptoms?

Do you think that nonprescription remedies are better for you than prescription remedies?

Have you heard of phytoestrogens?

Phytoestrogens are a large and varied group of plant-derived compounds that act like a weak form of estrogen in the body. There are many foods that contain phytoestrogens. Isoflavones are one class of phytoestrogens, lignans are another. The most well-known foods among isoflavones are soybeans and soy products, and the best-known herbs in this class are black cohosh and red clover. The best-known plant in the lignan class is flaxseed. Many women use isoflavones for relief of perimenopausal symptoms.

Here's a partial listing of these foods and herbs:

PHYTOESTROGEN-CONTAINING FOODS, HERBS, AND PLANTS

Alfalfa	Apples	Barley	Basil
Beans (red, green)	Black Cohosh	Buckwheat	Cabbage

Caraway	Cherries	Chervil	Chickpeas
Citrus Rinds	Clover	Corn	Dill
Flaxseed	Garlic	Ginko Biloba	Ginseng
Green Tea	Licorice	Oats	Parsley
Peas	Pomegranate	Primrose Oil	Red Clover
Red Sage	Rice Bran	Sarsparilla	Sesame Seeds
Soybeans	Soybean Shoots	Sprouts	Sunflower Seeds
Tofu	Wheat Bran	Wheat Germ	

These are all available at local markets and health food stores. Because there is such a wide variety of phytoestrogens, it is very easy to put them into your diet on a daily basis.

Many plant foods contain phytoestrogens, but none have as many estrogen benefits as soy. Soy is almost a "wonder food." It is one of the best sources of isoflavones; it contains high-quality protein (supplying most of the eight essential amino acids); and it is lactose-free, cholesterol-free, and a source of omega-3 fatty acids. And soy also contains calcium.

QUIZ

Phytoestrogens are reported to help alleviate the following peri-menopause and postmenopause symptoms. Check the ones you are experiencing:

- | | |
|---|---|
| <input type="checkbox"/> Hot flashes | <input type="checkbox"/> Heavy bleeding |
| <input type="checkbox"/> Insomnia | <input type="checkbox"/> Irritability |
| <input type="checkbox"/> Mood swings | <input type="checkbox"/> Memory lapses |
| <input type="checkbox"/> Urinary incontinence | <input type="checkbox"/> Vaginal dryness |
| <input type="checkbox"/> Wrinkles | <input type="checkbox"/> Increased cholesterol levels |

Are you taking phytoestrogens for these symptoms? What's your experience been? Are you getting symptom relief? Side effects? No results?

There has been some research conducted on soy. The recommended daily dose of soy isoflavones is the following: To reduce cholesterol, you will need about 20 grams of soy protein daily (the equivalent of 40 milligrams/day of isoflavones); to benefit bone health, you will need about 40 grams of soy (the equivalent of 80 milligrams/day of isoflavones); to relieve hot flashes, you will need 60 grams of soy (equivalent to 120 milligrams of isoflavones daily). These equivalencies are high. Moreover, as you might expect, some foods contain more isoflavones than others. Here is a list of foods and the average number of milligrams of isoflavones per 100 grams of that food.

ISOFLAVONE CONTENT OF FOODS

Food	Mg Isoflavones/100 g of Food
Soybeans, green, raw	151.17
Soy flour	148.61
Soy protein concentrate (water-washed)	102.07
Soy protein isolate	92.43
Miso soup, dry	60.39
Tempeh	43.52
Soybeans, sprouted, raw	40.71
Soybean curd (fermented)	39.00
Soy cheese, unspecified	31.32
Tofu (Mori-Nu), silken, firm	27.91
Tofu (Azumaya), extra firm, steamed	22.70

Tofu yogurt	16.30
Soy hot dog, unprepared	15.00
Soy protein concentrate (alcohol extraction)	12.47
Soy milk	9.65
Soy noodles, flat	8.50
Vegetable burgers, prepared (Green Giant, Harvest)	8.22
Soylinks, cooked (Morning Star Breakfast)	3.75
Frankfurters, canned, meatless (Worthington, Loma Linda, Big Franks)	3.35
Split peas, raw	2.42
Soy sauce (shoyu, made from soy and wheat)	1.64

Courtesy of the USDA-Iowa State University.

Whole foods are preferable to protein supplements as good sources of isoflavones. You can buy these products at natural food stores and specialty counters in some supermarkets.

Studies are going on right now to determine whether or not phytoestrogens can actually be used to treat menopause symptoms and protect against bone loss, heart disease, brain deterioration, and cancer. Soy products and red clover have been studied the most. Some results so far:

- On hot flashes and vaginal dryness—results similar to placebo, inadequate data so far
- On heart disease—whole soy foods daily seem to decrease total cholesterol and LDL (bad) cholesterol
- On bone loss—no findings, too few human studies
- On brain deterioration—no findings, too few human studies
- On cancer—soy has both protective and stimulatory effects on breast cancer, not enough research about uterine cancer or any other cancers

Phytoestrogen-Containing Herbs

There is no regulation of herbs and, thus, there's great variation in quality. Herbs can be taken in a number of forms: as a tea, an infusion, or as tinctures or fluid extracts. Tinctures are generally the most effective method of taking herbs. Pills are a grab bag: Many are good, but others contain so little active herb that they're virtually worthless. If you're taking an herb in capsule form and it appears to be having no effect, consider trying a tincture or tea before abandoning it entirely. Stick to one herb, or wait until you have used one herb for a period of time before adding a second. Side effects from herbs are usually milder than those from drugs, but they do occur, as do allergic reactions. Most herbs are perfectly safe and the risk of toxicity is low, but never assume that if a little is good, more is better.

Chapter 28 has a listing of herbals and vitamins that are recommended for symptom treatment; please review it.

QUIZ

Circle Yes or No:

Is HRT contraindicated for your use? Y N

Has HRT been ineffective in giving you
symptom relief? Y N

Has HRT given you unwanted side effects? Y N

Do you prefer to use nonprescription therapies
for symptom treatment? Y N

If the answer to any question is "yes," you may want to consider using herbals. They are available in vitamin stores and at pharmacies specializing in compounding herbal remedies.

The terms phytoestrogens, phytochemicals, and isoflavones are all used interchangeably (and are sometimes confusing). Phytochemicals are all plant chemicals and include a subgroup known as phytoestrogens. Phytoestrogens have two subgroups: isoflavones and lignans. Isoflavones have been studied: the biologically active chemicals in these are daidzein and genistein.

When you are evaluating a soy product, for example, you want to know what its isoflavone content is per serving, since this is the biologically active part of the soy product. The higher the isoflavone content, the more likely it is to be beneficial in treating your symptoms.

For example, if you want to treat hot flashes, you will need to consume approximately 120 milligrams of isoflavones/day. Products whose isoflavone content / serving is spelled out on the label are the easiest to evaluate. Without such labeling, I'm afraid you'll have to carry with you the list of average isoflavone content per 100 grams of food, or just learn those numbers for the foods you prefer. Serving size is usually given in grams or ounces. For ease of doing math in your head while standing in the market, assume 4 ounces equals 100 milligrams. A product such as raw green soybeans may be labeled as containing 150 milligrams isoflavones per 100 grams (4 ounce) serving, so you know you'll have to consume 3 to 4 ounces (one serving) of this product daily to get the results you want. Similarly, if fermented soybean curd is labeled as containing 40 milligrams of isoflavones per 100 grams (4 ounce) serving, you'll know that you need to consume 12 ounces (three servings) of this product daily. You would have to drink 48 ounces of soy milk every day to reach isoflavone levels recommended as beneficial for hot flashes.

I don't recommend that you consume large quantities of soy products on a daily basis. I do recommend that you add some soy to your food plan as a staple along with green vegetables and fresh fruit.

Not all soy products are healthy. Even though more than 80 percent of vegetable cooking oil comes from soybeans, it has to be hydrogenated. This process produces trans-fatty acids in the cooking oil. These are the fatty acids that researchers have implicated in the development of coronary heart disease.

The FDA now requires the listing of trans-fatty acids on food nutrition labels.

Chapter 35

Weight Gain and Muscle Loss

Weight gain is usually an insidious problem that develops over time. We feel like we're getting older when, without changing any of our habits of the past twenty years, we put on weight. Some of us try dieting, which doesn't seem to work anymore. Some of us stop paying attention to eating: We eat what we want when we want and put off worrying about it. Suddenly, we realize that we're heavier than we've ever been in our lives. And, no matter what we try to do about it, we can't seem to get control over it. Do you have a weight problem? There's more than one kind. Refer to the BMI chart at the end of this chapter for normal weight ranges.

QUIZ

Circle Yes or No:

- | | | |
|---|---|---|
| Are you underweight (less than 19 on the BMI chart)? | Y | N |
| Do you fear getting fat? | Y | N |
| Are you frequently on a food-restrictive diet? | Y | N |
| Do you eat less than 1,200 calories a day? | Y | N |
| Do you "binge out" on certain foods? | Y | N |
| Do you exercise more than eight hours/week? | Y | N |
| Do you force yourself to throw up and/or use laxatives? | Y | N |

If you have answered "yes" to three or more of these questions, you might have an eating disorder, which is a psychological problem that usually requires professional help.

If you're experiencing weight gain, is this the first time you've had a weight problem? If no:

At what age did you notice the problem?_____

Is there a family pattern of overweight/obesity? Y N

How old are you now?_____

Have you been struggling with losing weight? Y N

Using the BMI chart, find the row for your height in inches. Your ideal BMI ranges from 19 to 24. Your ideal weight range is between the weight corresponding to a BMI of 19 and the weight corresponding to a BMI of 24. If you are 66 inches tall, your ideal weight range is 118 pounds to 148 pounds. What is your ideal weight range?_____

What weight would you like to be?_____

Are your weight loss goals realistic compared to the weight ranges on the BMI chart?_____

We normally gain weight as we age. As an adult, what is the lowest you've ever weighed and how old were you?

As an adult, what is the most you've ever weighed and how old were you?_____

What's the midpoint between these two extremes of weight?_____

This is probably what most of us should weigh comfortably by middle age.

If the difference between your lowest adult weight and highest adult weight is more than fifty pounds, let's take a closer look at your habits to identify the causes.

QUIZ

Circle Yes or No:

- | | |
|--|----------|
| Are you inactive? | Y N |
| Do you smoke more than five cigarettes a day? | Y N |
| Do you repeatedly start and stop diets? | Y N |
| Are you taking three or more medications daily? | Y N |
| Have you lost muscle definition in your arms
and legs? | Y N |
| Have you added fat on old and new areas on your
body (back, arms, waist, hips, and thighs)? | Y N |

Half of all women between the ages of thirty-five and fifty-five are overweight. What causes this problem? Here is a list of causes, those we can't influence and those we can. Check those that apply to you.

QUIZ

- I am a woman. Because we are female, we store more fat than men. Sex makes a difference.
- Obesity runs in my family. Yes, there is a fat gene.
- I have body fat accumulating on my arms, back, and chest (in addition to my hips, buttocks, and abdomen). Body fat distribution is genetically determined.
- I have polycystic ovaries or hypothyroidism. These medical problems are known to cause weight gain and we suspect other problems, such as diabetes.

- _____ I am at least forty years old and have been inactive for the last five to ten years. Muscle mass decreases with age and, with less muscle, we burn fewer calories.
- _____ I overeat. For forty years, we have steadily increased the size of our food portions in the United States, so that most of us are eating too much.
- _____ I prepare few fresh foods and eat mostly packaged, processed, or fast foods. Prepared foods have less nutrient value and, as we age, the rate at which we can absorb vitamins and minerals from our foods falls.
- _____ I have reached menopause and am physically inactive. After menopause, loss of lean body mass accelerates. A particular weight gain of ten pounds may actually be a loss of five pounds of muscle and a gain of fifteen pounds of fat!
- _____ I take antidepressants, antihistamines, beta-blockers, insulin, amaryl, glucatrol, glucovance, chemotherapy, steroids, lithium, tranquilizers, antipsychotic medications, or birth control pills. All of these are known to cause weight gain.
- _____ I have more than one alcoholic drink per day. Alcohol gets metabolized as sugar and more than two drinks a day is considered excess for women.
- _____ I smoke. In the short-term, smoking suppresses the appetite, but it eventually accelerates the loss of lean body mass.

The three most common causes of weight gain in women are use of medications, physical inactivity, and alcohol consumption. All three of these causes can be changed to eliminate weight gain.

How do you know if you have lost muscle mass? Here are a few simple tests.

- Stand straight and, without holding on to anything, bend one leg up and behind you; hold for a count of 5. Repeat, using the other leg.
- Stand up, without leaning against anything, and put on your slacks.
- Stand straight; rise on tiptoe slowly and hold for a count of 10 without holding on to anything.
- Lie flat on your back on the floor; get up to a standing position without using your hands.

Muscle strength is key to balance and coordination. When these falter, you've lost muscle mass and strength. Therefore, with the simplest activities, we can feel weakness and fatigue.

To set realistic weight-loss goals, refer to the BMI chart at the end of the chapter. Look down the left column until you find your height in inches. Then look across that row until you find your weight in pounds ($A = \underline{\hspace{2cm}}$). Move back along the same row until you find the weight of a healthy person your height whose BMI is 24 ($B = \underline{\hspace{2cm}}$). Move further back along the same row until you find the weight of a healthy person whose BMI is 19 ($C = \underline{\hspace{2cm}}$). Subtract the weight of a person whose BMI is 24 from your body weight ($A - B = D \underline{\hspace{2cm}}$). Subtract the weight of a person whose BMI is 19 from your weight ($A - C = E \underline{\hspace{2cm}}$). A realistic range of pounds for you to lose is from D to E.

Finally, when might you need medical management, i.e., medications and/or surgery, for obesity? If your BMI is at least 27 and you have elevated cholesterol and triglycerides, hypertension,

atherosclerosis and heart disease, diabetes, arthritis, breast or uterine cancer, sleep apnea, or depression and anxiety, you need medical help. If your BMI is 30 or greater with no health problems, lifestyle changes alone will probably not be enough, and you will also need medical management.

The Body Mass Index Chart follows.

BODY MASS INDEX CHART

BMI	19	20	21	22	23	24	25	26	27	28	29	30	35	40
HEALTHY								OVERWEIGHT				OBESE		
Height in Inches	Body Weight in pounds													
58	91	96	100	105	110	115	119	124	129	134	138	143	167	191
59	94	99	104	109	114	119	124	128	133	138	143	148	173	198
60	97	102	107	112	118	123	128	133	138	143	148	153	179	204
61	100	106	111	116	122	127	132	137	143	148	153	158	185	211
62	104	109	115	120	126	131	136	142	147	153	158	164	191	218
63	107	113	116	124	130	135	141	146	152	158	163	169	197	225
64	110	116	122	128	134	140	145	151	157	163	169	174	204	232
65	114	120	126	132	136	144	150	156	162	168	171	180	210	240
66	118	124	130	136	142	148	155	161	167	173	179	186	215	247
67	121	127	134	140	146	153	159	166	172	178	185	198	223	255
68	125	131	138	144	151	158	164	171	177	184	190	197	230	262
69	128	135	142	149	155	162	169	176	182	189	196	203	236	270
70	132	139	146	153	160	167	174	181	188	195	202	207	243	278
71	136	143	150	157	165	172	179	186	193	200	208	215	250	286
72	140	147	154	162	169	177	184	191	199	206	213	221	258	294
73	144	151	159	166	174	182	189	197	204	212	219	227	265	302
74	148	155	163	171	179	186	194	202	210	218	225	233	272	311
75	152	160	168	176	184	192	200	208	216	224	232	240	279	319
76	156	164	172	180	189	197	205	213	221	230	238	246	287	328

DAILY CALORIC NEEDS FOR WOMEN

General Activity Level	Daily Caloric Intake
Sedentary	Ideal Weight x 11
Moderately Active	Ideal Weight x 14
Active	Ideal Weight x 18

A word of explanation of the activity levels referred to:

Sedentary means you have no scheduled physical activity; most of your physical activity is the result of working or performing household chores.

Moderately Active means you have a regularly scheduled program of aerobics/muscle strengthening performed at least four times/week (or two hours/week).

Active means you are an athlete and train for your sport daily.

Current Concepts and Practices

The body mass index (BMI) is now the standard for evaluating whether your weight is healthy for your height. I've included the BMI chart or you can use this formula to calculate your BMI:

Weight = A. _____ pounds

Height = B. _____ inches

BMI = [A divided by (B x B)] x 704.5 = _____

Sample calculation:

Weight = 160 pounds

Height = 66 inches

BMI = [160/(66 x 66)] x 704.5 = 25.88

If your BMI is lower than 19, you are underweight and might have muscle atrophy which can put you at serious risk for osteoporosis. If your BMI is 25 or more, you are overweight with an increased risk for developing diabetes, high blood pressure, high cholesterol, heart disease, and breast and colon cancer.

Research studies have shown that the configuration of your excess body fat is also important: An apple-shaped configuration (mostly fat around the waist) is associated with heart disease, and a pear-shaped configuration (mostly fat around the hips) is associated with breast and colon cancer.

The old USDA guideline for healthy weight ranges is flawed: It makes the assumption that weight gain is a normal process of aging and that older women should weigh more than younger women. The weight ranges are misleading: For the younger woman, these ranges correspond to a BMI between 19 and 25 (which is healthy to mildly overweight), but for older women, the BMI ranges between 21 and 27 (which may reflect reality but is not a guideline for health). Now we know that a sustained BMI of 25 or more for any woman is a risk factor for future disease.

There are medical guidelines for treating obesity. These are listed below. Please note that lifestyle changes are the cornerstone of any weight-loss program. If you have any of the diseases listed under *Comorbidities*, lifestyle changes alone will not be enough. There are prescription medications that can help, but without the prerequisite lifestyle changes, their effectiveness is minimal.

INTERVENTION BY BMI CATEGORY

BMI	Intervention
< 24.9	no treatment needed
25–26.9	lifestyle changes,* if comorbidities present
27–29.9	lifestyle changes plus drug therapy, if comorbidities present
30–35.1	lifestyle changes plus drug therapy
35–39.9	lifestyle changes plus drug therapy; surgery needed if comorbidities present
40	lifestyle changes, drug therapy, and surgery needed

*Lifestyle changes = diet, exercise, and behavior therapy

Bruck, L. "Weight Gain During Perimenopause: The Case for Early Intervention." *Menopause Management*, 1999, 8(6): 6–11.

Because our metabolic rate decreases as we age, we need to consume fewer daily calories if we are going to maintain a constant body weight. Every decade, from age twenty on, we need to reduce our daily intake by 100 calories. Here's how to calculate your caloric reduction from the level of a twenty-year-old.

First, subtract 20 from your age.

Then divide that number by 10.

Third, multiply the result by 100.

This results in the number of daily calories you need to reduce with each decade beyond age twenty.

The following BMI chart allows a higher BMI as we age; for the elderly, a slightly higher BMI seems to be protective. Use this chart to find your BMI and look up your height and ideal weight on the Body Mass Index Chart above.

IDEAL BMI

Age Range	Male	Female
20–29	21.4	19.5
30–39	21.6	23.4
40–49	22.9	23.2
50–59	25.8	25.2
60–69	26.6	27.3
70–79	27.0	27.8

To determine your daily caloric need, multiply the ideal weight that corresponds to your ideal BMI by either 11 (if you are sedentary), 14 (if you are moderately active), or 18 (if you are active). Subtract your age-determined daily caloric reduction from the result to derive a more accurate caloric assessment based on your age.

Obesity is considered a causative factor for each of the following medical conditions (comorbidities):

- Elevated cholesterol and triglycerides
- Hypertension
- Atherosclerosis and heart disease
- Adult-onset diabetes
- Arthritis
- Breast and colon cancer
- Sleep apnea
- Depression and anxiety

Medications prescribed for obesity:

- Meridia, which makes one feel full
- Xenical, which blocks absorption of dietary fat

Both are used long-term.

Many of us as physicians admonish you to lose weight, cut down on what you eat, and exercise, but fail to provide you with enough useful information on just how to do this. The next chapter is an effort to give you the information you need and teach you how to use it to lose excess weight and maintain a healthy weight.

Surveys indicate that 50 percent of women in the United States between the ages of thirty-five and fifty-five are overweight. The reasons for this are varied. We eat a lot of snack foods. We frequently diet so that our bodies become resistant to dieting. We use a lot of medications, many of which induce weight gain. We are low in muscle mass because of our inactivity. And our bodies are very efficient at storing excess fat (on the arms, back, buttocks, and thighs).

If you haven't developed cellulite before, this is the time in your life when you'll first notice it. Every woman develops it at some point in her life. It's a female phenomenon, and where it develops on your body is predetermined by your genes. Even thin women develop it. Its presence, however, is usually aggravated by being overweight.

What is cellulite? Anatomically, it's the superficial layer of fat just under the skin that encircles our bodies from the waist to the knees. This fat is held down under the skin as though it were trapped by a fishnet and it pushes up through the spaces in the netting, giving that telltale puckered appearance on the skin surface.

Don't be fooled by product hype. There is no cure for cellulite. But there are treatments that can improve the appearance of cellulite areas. The treatments are two-fold. One is to moisturize the skin and infuse the fatty layer below the skin with fluid. This can be done with skin creams and moisturizers, drinking plenty of water every day, and using treatments that massage the top layer of skin to bring more fluid into the fat tissue. The second is to reduce your body fat. Most women who have cellulite also have fatty excess. If you are overweight, you'll need to reduce your deep fat stores by exercise and dietary changes; some women prefer liposuction. If you are not overweight, you can improve the appearance of cellulite with exercises that target those areas of cellulite buildup; try resistance exercises for the hips, buttocks, and thighs. You can still have fats in your diet, but stick to poly- and monounsaturated foods. Avoid caffeine because it is a diuretic and you don't want to get dehydrated.

There are many treatments advertised for cellulite control. Many work, but the beneficial effects will disappear when you stop the treatments.

Cellulite isn't considered a medical problem, but weight gain is. A BMI of 25 or more is considered a medical problem. Obesity peaks for 50 percent of women during their fifties in Western societies, which is just around menopause. But gaining weight at menopause is not inevitable because many women don't.

How much weight gain is a problem? In postmenopausal women, if your BMI is consistently over 27, in three years' time you'll be at risk for hypertension, diabetes, and high cholesterol; after ten years, you could develop heart disease. We don't have enough studies yet on younger women, but there is some indication that in obese young women, estrogen conveys some measure of protection against developing these chronic diseases. However, after menopause, that protection could very well be lost. And remember: where your excess body fat accumulates is also important. Apple-shaped weight gain is associated with an increased risk of heart disease and pear-shaped weight gain is associated with an increased risk of breast and colon cancer.

Why are so many of us overweight, and what causes obesity?

I've made two lists of the factors we know about (reflected in the risk assessment for obesity you took earlier). There are factors we can't change and there are those we can.

Those factors we can't change are:

Sex—All women are more efficient than men at storing fat.

Family genetics—There is a fat gene; where on our bodies our fat is stored is also genetically determined.

Medical diagnosis—Thyroid conditions and polycystic ovaries are known to cause obesity; other medical conditions are being studied.

Age—Fat metabolism changes around menopause; we don't know what triggers this (maybe lowered estrogen plays a role).

According to a study conducted at the University of Maryland and published in the 2002 *Fall Journal of Endocrinology and Metabolism*, these are the processes that change: lipolysis (the process whereby fat is released from fat cells for energy) is reduced by 75 percent, fat stores are maintained, and dietary fat uptake is increased so that fat storage expands; bone mass and muscle decrease with age (so we have less muscle to burn calories with); and our basal metabolic rate decreases with age, which means as we age we burn fewer calories in a resting state. The overall result for a middle-aged, inactive female is this: your ten-pound weight gain is probably an actual loss of five pounds of muscle and a gain of fifteen pounds of body fat.

We gain weight in our forties because as we approach menopause our metabolism slows down and we burn fewer calories but continue to eat the same old diet of too many sugars and fats. We also become a lot less active as we age. Our hormones also play a part: Estrogen loss decreases the metabolic rate, and testosterone reduction causes loss of muscle tissue and buildup of fat. We develop new fat storage sites on our upper arms, back, waist, and upper thighs. If we don't pay attention to these changes, they will continue throughout perimenopause and beyond.

Those factors we can change are:

Smoking—Many women smoke to suppress their appetite, but this becomes less and less efficient for weight control because it accelerates the loss of muscle mass; eventually, there is a lot less muscle to burn calories.

Poor diet—We eat too many foods of poor quality and, due to a decrease in our production of gastric acid as we age, we absorb fewer vitamins and minerals. The result is a deficiency in essential

vitamins and minerals as we age, while at the same time ingesting empty calories which are stored as fat.

Medications—Many medications cause weight gain as a side effect; medication groupings which are known to cause weight gain are antidepressants and lithium, antihistamines, beta-blockers, steroids, chemotherapy drugs, diabetic medications, and some contraceptives. Check with your doctor to see if you're taking any of these and to see if substitutions can be made to less offending agents.

Alcohol consumption—Alcohol is a sugar and it gets metabolized as excess dietary sugar; too much alcohol (more than two drinks a day for women) causes vitamin and mineral deficiency and increased loss of muscle mass.

Overeating—Many studies indicate that over the past forty years, all of us in Western culture have increased our food portions to megasized meals.

Lack of exercise—Let's face it, many of us have had years of decreased physical activity prior to reaching menopause. Prior to my menopause, the last time I really ran hard and long was when playing college sports. As couch potatoes, we are at risk for rapid loss of muscle mass in our postmenopause years.

Do you have a weight problem? Are you at risk for obesity?

Use the Managing My Weight Daily Log on the next page for a few weeks. It will give you a closer look at your habits and behaviors, and it will help you identify the factors that could be contributing to your weight problem. And, after you've identified what your causative factors are, you can decide on strategies for change.

My point is this: Obesity at any age is a serious problem, and weight gain is a serious problem at midlife. It is too easily ignored by women and their physicians as a natural consequence of aging.

More usually, weight gain in healthy women in Westernized societies is due to poor diet, eating and drinking too much of the wrong things, and inactivity. Over time, an extra fifty calories a day (one chocolate chip cookie) can cause five pounds of weight gain in one year and fifty pounds of gain in ten years. So, don't ignore it and don't let your physician minimize it.

Another misconception is that after menopause our weight gain is permanent. It is true that after menopause our body metabolism slows down, our body fat gets redistributed to the abdomen, hips, and buttocks, and our fat tissue becomes a major source of estrogen production for us. But we can still lose weight. The fundamental things apply . . . we've got to burn more calories than we eat. At any age, controlled caloric intake and physical activity are necessary for women to lose weight and maintain a healthy body weight.

MANAGING MY WEIGHT DAILY LOG				
Date	Start (Current)	Monday	Tuesday	Wednesday
Weight (once weekly)				
Medications (list them) _____ _____ _____				
Habits: Exercise (list type) _____ _____ _____				
Smoking Alcohol (# of drinks)				
Food & Drink Water (glasses per day) Soda/juices (oz. per day) Fast foods Cookies/cake/ snacks (high-fat food) Fruits/vegetables				
Appetite Increased portion size Decreased portion size Ate more often (during day) Ate less often No change				

MANAGING MY WEIGHT DAILY LOG				
Date	Thursday	Friday	Saturday	Sunday
Weight (once weekly)				
Medications (list them) _____ _____ _____				
Habits: Exercise (list type) _____ _____ _____				
Smoking Alcohol (# of drinks)				
Food & Drink Water (glasses per day) Soda/juices (oz. per day) Fast foods Cookies/cake/snacks (high-fat food) Fruits/vegetables				
Appetite Increased portion size Decreased portion size Ate more often (during day) Ate less often No change				

Chapter 36

Dieting and Exercise

Diet

Deciding what kind of diet is best for you is largely a matter of trial and error. What do you like to eat? List those foods you eat frequently and circle the ones you like most.

Category A

Meat, poultry,
fish, dairy

Category B

Grains, pasta,
rice

Category C

Below-ground
vegetables

Category D

Above-ground
vegetables

Rank: _____

Rank: _____

Rank: _____

Rank: _____

Rank each category: 1 – eat very often

2 – eat often

3 – eat sometimes

4 – eat rarely

Eating any kind of food, including fruits and vegetables, can cause you to gain weight if you consume more calories than you burn off. How many calories do you need a day? Refer to the BMI chart at the end of chapter 35. Find the most you could weigh for your height and still be described as healthy. If you are 5'6" tall, you can weigh as much as 148 pounds. If you are inactive, to reach and maintain this weight, you need to consume 11 calories/pound daily, or $11 \times 148 = 1,628$ calories daily. If you limit yourself to 1,628 calories daily, you will lose weight until you reach 148 pounds, and then you will plateau. If you are moderately active, you need 14 calories/pound daily, or $14 \times 148 = 2,072$ calories daily. If you limit yourself to 2,072 calories daily and get aerobic exercise three days a week, you will lose weight until you reach 148 pounds, and then you will plateau. So you can eat a little more and still lose weight if you exercise. The weight of 148 pounds is not an ideal weight, but a weight at which you can still be described as healthy. Plain talk, this means that at 5'6" with a medium build, you will have to live with being a size 12 instead of a size 10.

If you are overweight and just beginning an exercise program, the following chart may help you. It is suggested that you begin dieting at the lowest calorie level for the weight you wish to attain and increase your intake as your activity level increases. So, if you want to weigh 150 pounds, start your diet at 1,800 calories daily and go up to 1,950 calories daily if you get 30 minutes of aerobic exercise five days a week. This is a bit stricter than the formulation in the previous paragraph and may produce results a bit more quickly.

How MANY CALORIES Do You NEED A DAY?

If you are overweight and just beginning an exercise program, it is suggested you begin with the lowest calorie level for your weight. It is not recommended to go below 1,200 calories daily.

Activity Levels:

Beginning—No formal exercise routine (just starting out)

Low Activity—Aerobic exercise, 30 minutes 5 times weekly

Active—Aerobic exercise, 60 minutes 5 times weekly

Very Active—Aerobic exercise, 120 minutes 5 times weekly

Calorie Maintenance Levels				
Weight	Beginning	Low Activity	Active	Very Active
100	1200	1300	1400	1500
110	1320	1430	1540	1650
120	1440	1560	1680	1800
130	1560	1690	1820	1950
140	1680	1820	1960	2100
150	1800	1950	2100	2250
160	1920	2080	2240	2400
170	2040	2210	2380	2500
180	2160	2340	2500	2500
190	2280	2470	2500	2500
200	2400	2500	2500	2500
200+	2500	2500	2500	2500

Comparison of activity levels between the chart on the previous page and the BMI chart:

Calorie Maintenance Levels	BMI Chart
Beginning and Low Activity	equivalent to Sedentary
Active	equivalent to Moderately Active
Very Active	equivalent to Active

It is not recommended that you consume fewer than 1,200 calories a day. If you are being treated for any medical condition, check with your doctor before starting any diet. If you are over forty, check with your doctor before starting an exercise program.

Eating is only a habit, and your focus should be on changing your eating habits for life. Since there is no single diet that is right for all women, here are six plans that work.

Pyramid Plans (USDA and Others)

You can access these plans on the USDA Food and Nutrition Information Center website: www.nal.usda.gov/fnic. These are good plans for those who:

- Refuse to eliminate any foods from their diets
- Believe all foods have a place in a healthy diet
- Pay attention to portion sizes (keep them small)
- Make exercise a priority

The USDA Pyramid emphasizes a diet in which 60 percent of all calories come from carbohydrates, 25 percent of all calories come from protein, and 15 percent of all calories come from fat. To convert this into grams per food group, multiply total daily calories by each percentage and then divide your results by 4 for carbohydrates and proteins, and by 9 for fats. If you're 5'6" tall and are getting aerobic

exercise three times a week, following the USDA guidelines you have a 1,700 calorie daily limit. On this diet, this means you should be consuming 1,020 calories from 255 grams of carbohydrates (multiply 1,700 by 60 percent, then divide by 4), 425 calories from 106 grams of protein, and 255 calories from 28 grams of fat daily.

Reducing fat intake will not produce weight loss. In fact, the most popular and successful diet plans involve manipulating carbohydrate intake.

Carbohydrates are sources of quick energy, and evaluating foods according to their glycemic index has gained popularity. The glycemic index is a rating system that measures how quickly carbs enter the bloodstream as sugar. The higher the number assigned to any particular carbohydrate, the quicker the rise in blood sugar, causing increased cravings, more hunger pangs, increased food intake, and increased weight. While useful for research, glycemic index is not practical to use for counting carbs because we eat a lot of prepared foods that combine foods with high and low indices.

WEIGHT WATCHERS

This is a good plan for those who:

- Want the benefits of a pyramid plan
- Don't want to eliminate any foods
- Want to eat from all the food groups
- Prefer low-fat foods
- Enjoy peer activities and peer support

MACROBIOTICS

This is a good plan for those who:

- Are already vegetarians
- Do not eat meat or dairy

- Like organic vegetables and whole grains
- Avoid refined sugars
- Favor beans, lentils, and tofu

THE ZONE

This is a good plan for those who:

- Prefer a rigid division of calories among carbs, protein, and fat
- Don't need variety in their menu
- Choose to eliminate most saturated fats (meats)
- Choose to eliminate most refined carbohydrates (bread, pasta, rice)

CARBOHYDRATE ADDICTS

This is a good plan for those who:

- Don't want to count calories
- Instead, will count the grams of carbohydrate in food
- Prefer high-protein, low-fat foods
- Can limit their fruit consumption

THE ATKINS DIET

This is a good plan for those who:

- Prefer to eat large quantities of animal fat (bacon, eggs, steak, cheese)
- Can severely limit fruit and vegetables
- Can give up pasta, bread, rice, and potatoes

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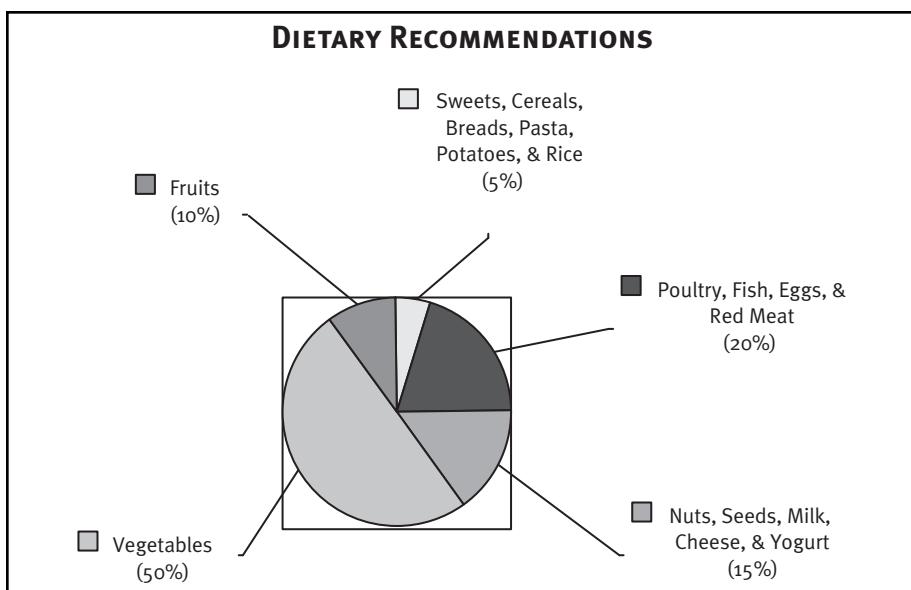
The IOM released new nutrition and exercise guidelines for healthy Americans in September 2002. These are flexible diets with

approximately one hour/day of exercise. Everyone requires different amounts of exercise to prevent weight gain.

Now that you know something about these diets, are you interested in trying one of them? I deliberately did not mention my personal preferences because I want you to experiment with some of them until you find one that suits you. Remember, no single diet or eating plan is right for all women. Focus on changing your eating habits for life.

These are my dietary recommendations for minimizing weight gain and enhancing hormone production:

Veggies	50%
Poultry, fish, eggs, red meat	20%
Nuts, seeds, milk, cheese, yogurt	15%
Fruits	10%
Sweets, cereals, breads, pasta, potatoes, rice	5%



Eat at least two meals per day, focusing on portion size rather than calories, and include a protein with each meal and snack. A snack around 4 p.m. can keep you from overeating at night.

Eat at least five servings of fruits and vegetables per day (1 serving = 4 ounces or $\frac{1}{2}$ cup). L-glutamine (1gm/day with lunch) can help with sugar cravings, as can artificial sweeteners. Water helps the body eliminate the byproducts of fat breakdown; other options are iced tea, decaf green tea, and diluted fruit juices.

Some supplements help burn fat. Fatty acids cannot get into the mitochondrial furnace without L-carnitine (500–2000 mg/day), which also prevents toxic fatty acid metabolites from building up in the heart. Some individuals do not make enough L-carnitine to burn their fat effectively. Chromium helps make insulin receptors more sensitive, helping burn carbs more effectively (200–400 mcg/day).

As we age, restricting calories alone becomes inefficient at achieving weight loss. So, I offer the following list of things to pay close attention to when dieting.

- Cut back on starches and sweets; we tend to store these calories as fat.
- Downsize your serving portions; avoid “megameals.”
- Take vitamin supplements with vitamin-rich food for optimal absorption of these supplements.
- Protein is crucial if you are exercising (it’s muscle food).
- Added fiber helps lower your cholesterol.
- Bone loss is our major problem, and we can’t get enough calcium from food alone; take a supplement.
- Going completely fat-free isn’t healthy; small amounts of dietary fats (unsaturated) and omega fatty acids are good for our hearts and blood vessels.

- Avoid dietary cholesterol; our bodies can make what we need and our cholesterol levels tend to rise after menopause.
- Reduce your consumption of processed foods, refined sugars, and flour; these put us at risk for diabetes.
- Drink up; we tend to become more easily dehydrated as we age—soda, coffee, and tea don't count. Drink water, too.
- Don't starve yourself back into the dress size you wore when you were twenty; instead, exercise. This will help you regain your shape.

Current Concepts and Practices

The August 2005 issue of the *New England Journal of Medicine* offered some comments on exercise and its usefulness: Fat and fit is better than thin and unfit. Moderate exercise (twenty minutes per day) works. While you add exercise, be sure to also control your calorie intake. As few as 12 calories extra each day equals 4 pounds of weight gain per year, but as few as 25 calories less per day equals 20 pounds of weight loss per year. Don't smoke. Light cigar smoking increases the risk of heart disease by a factor of 5. Stress works by delivering glucose to muscle, increasing the heart rate, and increasing the output of cortisone by the adrenal glands, resulting in unregulated blood sugar, elevated blood pressure, and depressed mood. So use exercise as a stress buster, daily and consistently.

As we age, we must avoid obesity because it is the major risk factor in many of the diseases that postmenopausal women acquire (see chapters 13–22 for disease risks). Many women enter midlife with bone mass depletion, muscle loss, and increased body fat. It doesn't really matter whether you are slender or fat, you can still have these conditions and not know it because they are relatively silent until they begin to cause symptoms of medical illness.

Our diets are carbohydrate-rich and we are just beginning to understand that the quantity of carbohydrates as well as their quality are implicated in obesity. With aging, our bodies are less efficient at metabolizing carbohydrates, at absorbing vitamins and minerals from our food (for example, B12 and calcium), and using calories for energy. Our metabolism does get slower with age. Some researchers estimate that we'll need to subtract ten to fifty calories from our daily caloric requirement for each postmenopause year up to age seventy. We can reverse the trend to lower, slower metabolism with consistent exercise. And as long as we don't increase our food intake as we exercise, we can keep our metabolic rate up and maintain a healthy weight range.

Here's how to roughly calculate your basal metabolic rate (BMR), or the number of calories your body burns at rest:

Weight in pounds × 4.4 = _____	= A	For example, 160 × 4.4 = 704.0
Height in inches × 4.7 = _____	= B	66 × 4.7 = 310.2
A + B = _____	= C	A + B = 1,014.2
Age in years × 4.7 = _____	= D	55 × 4.7 = 258.5
C - D = _____	= E	C - D = 755.7
E + 655 = the number of calories you burn at rest daily: 755.7 + 655 = 1,410.7		

This is a rough estimate because the calculation does not take into account individual muscle mass.

If you substitute different ages in the calculation, you will see that BMR decreases as age increases, so we'll have a tendency to put on a few pounds over the years even if we're watching what we eat and how much we're eating. Use exercise to reduce middle-age weight gain and to maintain a higher BMR. Weight training is especially good

because it will help your shape by toning and strengthening your muscles and by making your body a more efficient calorie burner.

EXERCISE

For the midlife woman, a regular exercise program is more important than dieting to control weight gain. So, why aren't you exercising? Check all that apply.

- You don't have time to fit it in.
- You don't have access to equipment.
- You don't have social support/peer pressure.
- You don't like exercise.
- You don't like to sweat and be short of breath (is this really the way it's supposed to feel?).
- You've been smoking to control your weight.

What benefits do you want to get from exercise? And let's face it, if you're going to put this much effort into this activity, you'd better get a lot back! Check all that apply, and feel free to add some of your own.

- Build bone
- Burn calories
- Decrease muscle wasting and rebuild muscle mass
- Increase metabolic rate
- Improve flexibility and coordination
- Decrease depression
- Increase self-confidence
- Improve sleep
- Replace hormone therapy for menopause symptoms
- Redistribute body fat

- Slenderize your figure
 - Control your appetite
 - Lose weight permanently
 - Help treat a chronic medical condition, for example, hypertension, high cholesterol, arthritis, diabetes, or urinary incontinence
 - Reduce breast cancer risk by avoiding weight gain
-
-
-

Go back and star the three benefits that are most important to you. It will bring focus to your efforts.

I confess that I really don't like to exercise, but I love the benefits and long-term results. So I stay focused on these benefits when I'm tempted to slack off my exercise regimen. And, when building bone and muscle or improving sleep and mood isn't enough, I begin to chant, "Cruisewear, cruisewear . . ."

What exercises should you be doing?

Do you do any walking, dancing, hiking, jogging, or running? These are weight-bearing exercises. You do these at 60–80 percent of your target heart rate for best results. Target heart rate = $220 - \text{your current age}$. If you are fifty, that's $220 - 50 = 170$; you should be performing your weight-bearing exercises so that your heart is beating 102 to 136 times a minute. How often? Three to seven times a week.

You can determine your heart rate by finding your pulse on the side of your neck or wrist and counting the number of beats for ten seconds. If your heart rate is lower than the range listed below, speed up your activity. If your heart rate is higher than the range listed below, slow down your activity.

Here is a handy chart of target heart rates.

Age	10-second target heart rate	60-second target heart rate
20	20–27 heartbeats	120–162 heartbeats
25	20–26	120–156
30	19–25	114–150
35	19–25	114–150
40	18–24	108–144
45	18–23	108–138
50	17–23	102–138
55	17–23	102–138
60	16–22	96–132
65	16–21	96–126
70	15–20	90–120

For the greatest aerobic benefit, exercise at your target heart rate for fifteen to eighteen minutes per exercise session. Therefore, for each session, you will need a minimum of six to eight minutes to get to your target heart rate, fifteen to eighteen minutes to maintain this activity level, and six to ten minutes to cool down, or twenty-six to thirty-six minutes, total.

Do you work out with weights, use exercise machines, resistance bands, or practice Pilates techniques? These are resistance exercises. You must eat proteins to feed your muscles when you do these exercises. How often should you exercise? Two to three times a week.

Do you practice yoga, do stretches or isometrics? These are balance and postural exercises. They are great for decreasing muscle tension and improving coordination. How often? Try to do one or two of these exercises every day.

There are excellent books available that describe exercises, techniques, and tools. If you want more personalized help, trainers are good teachers and can help you learn how your body responds to exercise.

Current Concepts and Practices

For the midlife woman, a regular exercise program is more important than dieting to control weight gain. In fact, as we age, dieting becomes less and less effective in achieving weight loss, so exercise is the key.

The following is a basic Exercise Prescription:

- Weight-bearing exercises three to seven times weekly at your target heart rate
- Resistance exercises two to three times weekly (if you're really strong, add weights)
- Isometric exercises throughout the day to maintain posture and relieve tension
- Balance exercises twice daily

You can "spot" exercise for those pesky body areas with cellulite. Target the thighs, hips, and buttocks with resistance exercises because strengthening and toning the muscle under the superficial fat layer improves the appearance of the skin and decreases the dimpling effect.

The best exercises for midlife women are resistance exercises because they:

- Tone and strengthen your muscles
- Increase your metabolic rate
- Redistribute body fat
- Slenderize the figure
- Don't require you to severely reduce your caloric intake

Use of free weights, exercise machines, resistance bands, and Pilates techniques are all resistance-type exercises.

Weight-bearing exercises are aerobic exercises such as walking, dancing, and stair climbing (low impact); hiking, jogging, and running (high impact). These build bone by increasing bones' absorption of calcium. They burn calories efficiently if performed at your target heart rate for a minimum of eighteen minutes per exercise session.

Isometric and balance exercises such as yoga, stretching, and postural exercises increase flexibility and muscle strength and improve coordination. You only need a few minutes every day to perform these exercises.

When you're exercising regularly, you will need to eat protein. The food groups that have the highest amount of protein are meat, fish, and poultry. The second highest protein food groups are whole grains, beans, seeds, and nuts. About three ounces of protein daily—the equivalent in size and weight to a pack of playing cards—is all you'll need for "muscle food."

There is a difference between the amount of exercise you'll need to do to maintain a healthy weight and the amount you'll need to do to lose weight. It takes thirty minutes of exercise daily at moderate intensity to maintain healthy weight (that's burning from 600 to 1,200 calories a week). This thirty minutes can be broken down into smaller segments of time so that you can fit it in during the day. To lose weight, you'll have to spend more time exercising. The *Journal of the American Medical Association* recommends at least exercising three hours and fifteen minutes weekly (forty-five minutes per day, five days a week) as well as cutting back your caloric intake. To reduce your body fat by one pound, you must burn

3,500 calories. You'll need to burn about 2,800 calories a week—400 calories a day, every day, or 560 calories a day, five days a week—to lose weight at all. Fortunately, formal exercise is not the only way to burn off calories; all activity counts (but some activities count more than others).

How many calories you burn in any given activity depends on the activity and will vary with each individual because this depends on your weight and physical conditioning. The more you weigh, the more calories you will burn if you don't have too much muscle wasting.

How many calories are burned per hour of activity? The following is a list of common activities. Compare your weekly activities to these. Are you a high- or low-calorie burner? Interestingly, every one of my girlfriends performs a high calorie burning activity at least once weekly. Their ability to maintain normal body weight isn't luck, after all!

AVERAGE NUMBER OF CALORIES BURNED IN ONE HOUR OF ACTIVITY

Average Calories Burned	One Hour of
500–600	Aerobic exercise Stair climbing Running 12-minute miles Tennis, singles
400–500	Dancing, Jazercise Hiking Walking 3–4 miles per hour
300–400	Cycling Gardening, mowing the lawn Moving furniture

200–300

House cleaning: mopping floors,
scrubbing the bathroom, sweeping,
vacuuming
Walking the dog
Golf

Source: American College of Sports Medicine

You don't have to exercise for months before you see any benefits. There is plenty of immediate gratification from exercise: increased confidence, reduced levels of stress, brightened mood, better sex, improved quality of sleep.

If you are thin, you will need exercise for its health benefits (protection against cancer, arthritis, bone wasting, and depression). Because you are thin, you'll need to do plenty of walking, jogging, and weight training. Your heavier counterpart is doing both aerobics and weight training every time she takes a step.

When trying to burn off calories, slow workouts and fast workouts burn about the same number of fat calories, even though the total number of calories burned is more in a faster workout than in a slow one.

Exercise can control hunger pangs and, if you don't increase your calorie intake when exercising, you'll start to burn your body fat for fuel. The good news is that we women tend to lose our stomach fat first and it feels good to have our waistbands feel loose and lie flat.

Weight training needs very little time to accomplish—thirty minutes for total body toning or ten to twelve minutes per body part, i.e., lower body, upper body, and abdominal. The standard prescription for training any body part is to do as little as one to three sets of an exercise with no more than fifteen repetitions of that

exercise per set. You should take one day off between routines to rest your muscles. This will give you the best results in muscle strengthening.

If you've been sedentary throughout your adult life and you want to obtain the health benefits of exercising and/or weight loss, this is how you can start becoming a physically active person:

- Set your goals and use a log to record your physical activity and formal exercise every day. The key is to be active every day (but doesn't require a formal workout every day). You can use the forms that follow.
- You can incorporate physical activity into everyday living by dividing exercise into ten to fifteen minute segments performed throughout the day, for example, a brisk walk, housework, and gardening (remember: all physical activity counts).
- If you enjoy walking, get an inexpensive pedometer from a sporting goods store and work up to a goal of four miles per day (that's ten thousand steps as measured on the pedometer).
- If you are in an office setting most days, you can perform exercises by doing two things at once, for example, walking in place while on the phone or isometric and balance exercises between appointments.
- If you prefer using exercise equipment, put it where you will probably use it—in front of a window or the TV.

The point is to make it your goal to go from being a sedentary person to being a physically active person by committing to moving your body every day.

The website of the American College of Sports Medicine is a good place to explore to get more tips on exercise and fitness: www.acsm.org.

Combating midlife weight gain involves changing our behavior. The two most common behavior problems of overweight women are underactivity and overeating/drinking. Surveys indicate that women give the following reasons for their habit of inactivity:

- I don't have time to fit it in.
- I don't have access to exercise equipment.
- I dislike exercise because it makes me sweaty and short of breath.
- I use smoking to control my weight gain.

Eating behaviors are habits, and we women eat for comfort. We eat oversized portions, too many snack foods, and drink too much alcohol. Eating sugary carbohydrates improves our mood. We use certain carbohydrates like drugs when we're under stress. And even though we'll cut back on high-fat foods, we'll replace these calories with high-sugar foods.

How can you change behavior? Research psychologists have defined the process whereby we can successfully make behavior changes. The stages of change are:

- Intellectualizing: This is the stage where we are thinking about the problem, increasing our knowledge, and assessing our benefits and risks.
- Committing: At this stage, we are ready for change and have made a commitment to ourselves. During this stage, we consider using social supports, define the behaviors we want to change, and we fantasize about rewarding ourselves for achieving our goals.
- Planning: This involves developing a plan of action that requires that we identify at least two personal benefits of

change. We select enjoyable activities and a specific time and place for these activities, and we outline a plan.

- Action: In this final stage, we contract with ourselves to carry out a plan that identifies our roadblocks and risks for relapse and that has defined time limits and rewards. We put the plan into action with the help of our social supports.

You can lose weight at any age but, as you age, this is going to involve changing your lifestyle. With some experimentation and patience, you can get results. And remember, exercise is the foundation of your weight-loss program, not dieting.

GOAL SHEET

Goals are things a person really wants to do. They add an element of balance to life.

 Today's Weight Goal Weight

List three reasons why you want to reach your goal.

1. _____
2. _____
3. _____

Identify two people who will support you in a healthy lifestyle.

1. _____
2. _____

Picture yourself having attained your goal weight—what you want to be doing, how you want to feel—and hold on to that mental picture. Remember: Your journey of a thousand miles begins with a single step. Record those steps on the Exercise Log that follows. And good luck!

Log your weight at:

- | | |
|-----------------------------------|-----------------------------------|
| <input type="checkbox"/> 6 weeks | <input type="checkbox"/> 9 months |
| <input type="checkbox"/> 3 months | <input type="checkbox"/> 1 year |
| <input type="checkbox"/> 6 months | <input type="checkbox"/> 2 years |

EXERCISE LOG

My Goal: _____

Sunday	Monday	Tuesday	Wednesday	Total

EXERCISE LOG

My Goal: _____

Thursday	Friday	Saturday	Total

Chapter 37

A Reference Guide to Minimizing Your Change of Life Symptoms

The manufacture and sale of vitamins and supplements is a billion-dollar industry. Many of you are trying these treatments because of unsubstantiated claims of cures based on limited research. In fact, most of the information about the effectiveness of these treatments is coming from magazines and user promotions, not research. Be cautious in your use of supplements.

A major cause of illness among prescription medication users is drug-to-drug interaction. This same problem can and will occur with supplement use. I've experienced adverse interactions myself.

Please use this chapter carefully as a reference. These are incompletely researched and unproven recommendations. Many are now being researched because of claims of effectiveness. Specifically, their short-term and long-term effects have not yet been clearly demonstrated, nor have their interactions.

Now that I've cautioned you, let's look at why so many of us choose to take nutritional supplements. Half of all adults in the United States use these products, often in combination with our prescription medications, and most of us don't tell our healthcare

providers what we're taking. So, what do we believe these products are good for? Here's a list of reasons we take them:

- to relieve the symptoms associated with menopause (that's 80 percent of peri- and postmenopausal women);
- to improve overall health;
- to slow down the aging process and preserve the appearance of youthfulness;
- to prevent loss of muscle and gain of body fat;
- to treat our medical problems and prevent disability from diseases associated with aging (that's 70 percent of all women); and
- to use as a treatment alternative to prescription medications (that's 30 percent of peri- and postmenopausal women).

Are you buying and using products from the health food store? From the supplement shelves of your local pharmacy? From stores specializing in nutritional products? If you are, list them along with your reasons for using them.

PRODUCT USEFULNESS

By the way, most of us are taking an average of four products every day! Chapter 5 includes a partial list of menopausal symptoms that many of my patients complain about and want help with. Here, I've listed supplements that are readily available and are in common use to help alleviate some of these symptoms. Please remember that nutritional supplements are not closely regulated by the government, most are marketed as foods, there is no requirement to probe whether they are useful or safe, and there's little research data on their interactions with prescription medications. However, the German E Commission (equivalent to our FDA) does study and

regulate many supplements for their efficacy and safety. I'll mention what is known about some of their actions and effects.

I've added a brief rating scale which I've applied to the most well-known and frequently used products. Here's how it works:

- A—The product is known to be substantially beneficial, the research is good, the product is considered safe, there is a low risk of health problems, and it is definitely worth trying.
- B—The product has shown some benefit, research is ongoing and looks promising, safety is good given what is known about the product, few health risks have been reported, and it is worth trying.
- C—The product has unconfirmed benefits, research is inconclusive or contradictory, safety is fair given what is known about the product, some health risks have been reported but not confirmed, and if you can afford it, try it.
- D—There is only anecdotal evidence of the product's benefits, research is sparse and benefits have not been proven, safety and health risks are unknown, and you try it at your own risk.
- W—The product is popular, there is wide popular perception of the product's usefulness, and many brands are available.
- UR—The product is unrated; there is not enough information available to make an assessment.

Now we're ready to take a look at each symptom and at what products are on the shelves to alleviate them. With almost every symptom, I've listed some common causes. Not every one is a result of estrogen deficiency. Some are early signs of medical/psychiatric problems, or the results of bad habits and/or poor lifestyle—all of which are exacerbated by estrogen decline and life stressors.

Irregular periods are commonly caused by an imbalance in ovarian production of estrogen and progesterone. Other causes can be fibroid tumors, ovarian cysts, pelvic infections, and, rarely, pelvic cancers. Heavy, clotted menstrual bleeding can result in iron deficiency anemia. The goal of treatment is to correct the underlying hormonal imbalance and replace lost iron. Helpful supplements for irregular periods include:

Marigold (the flower, fruit, leaves, and stem prepared as an infusion, 2 gm to 1 cup of water for internal use 1–3 times daily), rated C

Chamomile (dried plant parts as elixir or syrup, 1.5 gm with meals), rated C

Chasteberry (ripe dried fruit and leaves in an aqueous extract, 30–40 mg daily), rated C

Black cohosh (see *Hot flashes*)

Evening primrose (see *Hot flashes*)

For iron deficiency:

Dandelion root (1 tbs in 1 cup simmering water daily), rated C

Spirulena (1 tsp daily), rated B

Folic acid (1–2 mg daily), rated A and W

Vitamin C (1000 mg three times daily), rated A and W

Omega-3 fatty acids (1000–1500 IU daily), rated A and W

Good dietary iron sources include red meat, fish, beans, dates, prunes, raisins, almonds, and brewers' yeast.

Hot flashes are repeating and transient increases in body heat that cause flushing and sweating, mostly in the face and upper body. Night sweats are the same but occur during sleep and produce a lot

of sweating and chills. Their cause is unknown, but these symptoms often occur before the changes in the menstrual cycle and blood estrogen levels that occur during perimenopause. They are the primary signal of the approach of menopause for eight out of ten women; therefore, most women will have them. If you're lucky, they'll last from six months to two years. If you're not, they can last ten years or longer. Each woman has her own pattern of frequency (monthly, weekly, daily, hourly) and time of occurrence (commonly during the early evening). There is no definitive test for determining the onset of menopause. Urine testing for FSH can help assess changes in ovarian function; Menocheck is a home testing kit available at pharmacies. The goal of treatment is to correct the underlying hormone imbalance. Some helpful supplements are:

Black cohosh (Remifemin tabs, 40–80 mg daily; Menofem tabs, 40–80 mg daily; Estroven tabs, 40–80 mg daily; has estrogen-like properties and is not considered safe for use by women with estrogen-sensitive breast cancer; can cause gastrointestinal upset; has no known prescription drug interactions; and the effects of long-term use are unknown), rated A and W

Red clover (sold as Promensil tabs, 80 mg daily; has estrogenic properties; no known toxicity or side effects), rated B

Soy (prepared as purified supplement tabs, available in whole foods such as soy flour, grits, and tofu and in mixed preparations of protein drinks and soy milk; 40–80 mg daily), rated B and W

Vitamin E (800–1200 IU daily, however women with a vitamin K deficiency have an increased risk of bleeding due to enhanced anticoagulation with the vitamin K deficiency), rated B and W

Progesterone (ProGest, a skin cream mixture with vitamin E and aloe vera, 20mg daily; ProFeme, FemCreme, and BioGest skin creams, 1 tsp applied to skin twice daily; derived from soybeans and wild yam; they have no known side effects; cannot be used to replace prescription progesterone hormone therapy to prevent the build-up of the uterine lining), rated B

Evening primrose oil (often combined in preparations with gamma-linoleic acid and vitamin E, 1000 IU daily), rated C and W

Flaxseed oil (rich in omega-3 fatty acids, 1-3 tsp daily), rated C and W

Ginseng (with licorice mixture, 100 mg daily; a known side effect is increased uterine bleeding; use is contraindicated with anticoagulants, stimulants, and diuretics), rated C

Dong quai (often part of herbal mixtures, contraindicated as ginseng, dosage not established), rated D

Heart palpitations can be induced by hot flashes, sleep deprivation, and stress. These can also be early signs of thyroid disease or increasing blood cholesterol levels. Rarely do they indicate heart disease in the perimenopausal woman. Helpful supplements are:

Magnesium citrate (360 mg daily), rated A and W

Milk of magnesia (360 mg daily), rated A and W

Both are known to interfere with diuretics and are not recommended for use by those with heart disease or kidney disease. Dietary sources of magnesium are whole grains and nuts.

Mood swings, irritability, depressed mood, and anxiety are related to the decline in estrogen and progesterone production as we age. Common

causes for women of any age are lack of sleep, life stressors, and physical illness. When these symptoms emerge, it is necessary to have a complete medical work-up. There is no shortcut to diagnosing the problem. Helpful supplements include:

Valerian (a sedative; as a tea infusion or ¼ tsp fluid extract daily, or 150–300 mg dried extract 1–3 times daily; has no side effects, but is not recommended for use for longer than six months), rated A and W

St. John's Wort (an herbal antidepressant; take 250 mg 3 times daily; takes 4–6 weeks for a therapeutic effect; side effects can be gastric upset, dizziness, and skin rash; should not be taken with prescription antidepressants; can interfere with the use of oral contraceptives and some heart medications), rated B and W

SAMe (a supplement that compares favorably with the effectiveness of traditional prescription drugs, recommended dosage is 400 mg 3–4 times daily), rated A and W

Flaxseed (see *Hot flashes*), rated A and W

Evening primrose oil (see *Hot flashes*), rated C and W

Chasteberry (see *Irregular periods*), rated B and W

Passion flower (a sedative, 1–2 gm in a tea infusion taken 3–4 times daily), rated B and W

Fragmented sleep results from night sweats as well as from frequent urination, and less frequently from leg cramps associated with vitamin or mineral deficiencies. Useful supplements include:

Valerian (see *Mood swings*), rated A and W

Chamomile tea (see *Irregular periods*), rated C and W

Passion flower (see *Mood swings*), rated B and W

Kava (a sedative and muscle relaxant whose dosage is 1 ml of fluid extract 3 times daily; it is toxic to the liver in high doses and interacts with prescription tranquilizers), rated C

Melatonin (a hormone that acts like an amino acid, it is sold in tablet, capsule, and sublingual tablet forms; usual dosage is 1-3mg at bedtime; there are many brands available and some products were found to be contaminated, so look up reputable manufacturers in the Resource Section for this chapter), rated C

Antihistamines (such as Benadryl; have many side effects, including constipation, urinary retention, depression, weakness, and headaches; dosage as indicated on packaging; tolerance to the sedating effects develops quickly, so their usefulness is very short-term), rated D

Concentration difficulties and short-term memory loss may be a result of estrogen deficiency or may occur with aging, but a definitive cause of these symptoms is unknown. We do know that insomnia and stress contribute significantly to these symptoms. Some helpful supplements are:

Valerian (see *Mood swings*), rated A and W

St. John's Wort (see *Mood swings*), rated B and W

SAMe (see *Mood swings*), rated A and W

Flaxseed (see *Hot flashes*), rated A and W

Chasteberry (see *Mood swings*), rated B and W

Passion flower (see *Mood swings*), rated B and W

Gingko biloba (10 mg capsules of dried herb taken 3 times daily; few side effects include headache and gastric upset; has drug

interactions with blood thinners, some heart medications, and oral medications for diabetes), rated B and W
Tylenol PM (dose as indicated on packaging), rated D
Antihistamines (see *Fragmented sleep*), rated D

Reduced stamina is caused most often by insomnia, followed by anemia due to heavy menstrual bleeding, and sometimes by thyroid deficiency. Useful supplements include:

Valerian (see *Mood swings*), rated A and W
Kava (see *Fragmented sleep*), rated C
Melatonin (see *Fragmented sleep*), rated C
B vitamins (dosage as indicated on packaging), rated B and W
Vitamin C (dosage as indicated on packaging), rated B and W
Omega-3 fatty acids (dosage as indicated on packaging), rated B and W

Skin burning and tingling and eye dryness appear to be caused by estrogen deficiency. There are few products useful for these symptoms. The most frequently mentioned for skin care is:

Antihistamines (see *Fragmented sleep*), rated D
The most frequently mentioned for eye care is:

Eye drops (such as Refresh, which is highly recommended by eye surgeons), rated A

Vaginal dryness is definitely due to estrogen deficiency. Some useful products are:

K-Y jelly (an excellent short-acting lubricant that is applied to the genital area at the time of intercourse), rated A and W

Astroglide (another excellent short-acting lubricant applied to the genital area at the time of intercourse), rated A and W

Replens (an excellent long-acting vaginal lubricant applied internally 2–3 times weekly), rated A and W

Silken glide (another excellent long-acting lubricant applied internally 2–3 times weekly), rated A and W

Reduced sexual desire may result from a number of factors. To date, treatments have focused on supplements that enhance estrogen or testosterone hormone activity. Helpful are:

DHEA (25 mg capsule daily for three months; the Schiff brand is reliable; blood levels of DHEA should be monitored while using this supplement), rated D

Yohimbe (a component in many products marketed to enhance sexual functioning; dosage, safety, and effectiveness are not well known), rated UR

Arginine (an amino acid sold as ArginMax Cream to be applied to the genitals; a significant side effect is that it can exacerbate herpes), rated D

Breast tenderness is a common PMS symptom caused by uneven ovarian production of estrogen and progesterone. Some helpful supplements are:

Calcium (1500 mg daily), rated A and W

Magnesium (750 mg daily), rated A and W

Vitamin A (15,000 IU daily), rated A and W

Vitamin C (1000 mg daily), rated A and W

Vitamin E (400–800 IU daily), rated A and W

Bioflavonoids (1000 mg 3 times daily), rated B

Licorice tea (3 cups daily), rated B

As a dietary recommendation, reduce caffeine consumption.

Constipation is most commonly caused by prescription medications, use of supplements in multiple combinations, and irritable bowel disease. Helpful products include:

Metamucil, psyllium, and Citrucel (stimulate the large intestine; dosage as indicated on packaging), rated A and W

Magnesium citrate, Sorbitol, and aloe (laxatives; dose as indicated on packaging), rated A and W

Probiotics (capsules such as bifidobacteria and lactobacillus, dosage as indicated on packaging; Activia yogurt with live, active cultures), rated A and W

Smooth Move (an herbal tea with extract of licorice root, dandelion, fennel seed, and ginger; 1 cup as needed), rated A and W

Peppermint or chamomile tea, rated A and W

Castor oil (increases gastric irritability but alters the body's fluid and electrolyte balance), rated D

Urinary tract infections develop with estrogen depletion and the onset of atrophic changes affecting the urogenital organs. The frequency of these infections increases through menopause into the postmenopause years. Almost 30 percent of women are affected, and even with treatment, these infections reoccur. Helpful are:

Tincture of goldenseal and echinacea (30 drops 4 times daily), rated B

Vitamin C (1000 mg 3 times daily), rated A and W

Vitamin A (25,000 IU daily), rated A and W

Zinc (50 mg daily), rated A and W

Urinate before and after sexual intercourse. Nutritionally, eliminate caffeine, alcohol, and sweetened fruit juices. Substitute cranberries or blueberries or their unsweetened juices.

Reduced muscle tone and weight gain come with aging, which lowers our metabolic rate and encourages loss of muscle tissue and replacement with fat. Some of us develop insulin resistance (a precursor to diabetes), symptoms of which are abdominal weight gain, irregular appetite, and high blood pressure. Little-recognized causes include sleep deprivation (chronically getting less than five hours of sleep each night) and chronic stress, which increases the steroid output of our adrenal glands, which in turn encourages the buildup of extra- and intra-abdominal fat. Refer to chapters 35 and 36 for a comprehensive review of management strategies. Helpful products include:

- Multivitamins, rated A
- Vitamin A, rated A
- Vitamin C, rated A
- Vitamin E, rated A
- Omega-3 fatty acids, rated A

The one inescapable sign of aging is weight gain. For women, how we look is critical to our self-image. When we gain weight for the first time, we have a grief reaction: surprise at being caught off guard, followed by sadness, and then fear of losing control, quickly followed by denial, and finally, acceptance and commitment to change. Getting frantic, dieting excessively, and using diet pills will make us sick. The following are useful weight loss supplements, BUT they must be used as just one part of an overall plan to reduce

food consumption that also includes an increase in physical activity. They are:

Creatine (increases muscle mass and boosts energy; available in powder form, capsules, and tablets; dosage is 2 mg daily), rated A

DHEA (increases muscle mass; available in tablets, capsules, liquids, and creams; dosage is 25 mg daily; blood levels of DHEA should be monitored during use), rated A

Magnesium (increases muscular strength; available in tablets; dosage is 300 mg daily), rated A

Pyruvate (decreases fat accumulation and boosts energy; available in tablets and capsules; dosage is 2 gm 3 times a day), rated A

Carnitine (L-carnitine) (reduces cholesterol, decreases fatigue, and enhances physical performance; dosage is 500–1000 mg orally daily), rated B

Chromium (Chromium picolinate) (aids in weight loss; dosage is 50–200 mg orally daily), rated B

Underactive thyroid is very common in middle-aged women and is often undiagnosed. If you have been diagnosed with underactive thyroid or have a family history of it, some helpful supplements are:

Omega-3 fatty acids (fish oils; take 1000 mg 3 times daily), rated A

L-tyrosine (500 mg 3 times daily), rated A

Calcium (1000 mg daily), rated A

Magnesium (600 mg daily), rated A

Multivitamins (containing vitamins B, C, and E, as well as selenium, iodine, and zinc), rated A

Kelp (seaweed capsules taken daily), rated A

Remember: Do not take all of these at the same time, and be sure to let your doctor know what supplements you are taking. Avoid

green leafy vegetables, dairy products, wheat, caffeine, and alcohol; these all suppress thyroid function.

Gum infections and loose teeth may be an early sign of osteopenia (low bone density). Helpful are:

Clove oil (5 percent aqueous solution used daily as a mouthwash),
rated A and W

Canadian bloodroot (as a component of toothpastes and
mouthwashes for sensitive teeth and gums), rated B

Rise in cholesterol can be hereditary. Other causes are obesity,
sedentary lifestyle, stress, and a high-fat diet. Helpful are:

Omega-3 fatty acids (fish oil capsules, 1000 mg 3 times daily),
rated A and W

Inositol (niacin, 500 mg 3 times daily), rated A and W

Coenzyme Q10 (100 mg daily), rated A and W

Chromium (200 mg 3 times daily), rated A and W

B-complex vitamins (50 mg), rated A and W

Garlic (cloves, 1–2 daily, or capsules, 8 mg daily), rated A and W

Migraine headaches and food allergies are common in women, exacerbated by the onset of perimenopause, and frequently flare up during the menstrual cycle. Certain foods, e.g., hard cheeses, red wine, chocolate, smoked meats and fish, also trigger allergic reactions.

Helpful supplements include:

Omega-3 fatty acids (14 gm daily), rated B

Feverfew capsules (300 mg twice daily), rated B

Tinctures of ginger and meadowsweet (herbals, 60 drops twice daily), rated B

Indigestion and bloating affects twice as many women as men. Even though genetic predisposition plays a major role, this symptom is commonly induced by stress, and if persistent and chronic, can become irritable bowel syndrome. Helpful are:

Peppermint oil (2 capsules after meals 3 times daily), rated A and W

Fennel seed tea (1 tsp of the herb per cup of hot water after meals 3 times daily), rated A and W

Psyllium (see *Constipation*), rated A and W

Probiotics (see *Constipation*), rated A and W

Chapter 38

A Reference Guide to Improving Your Health

This is how to use this chapter:

- Choose medical conditions that are of interest to you.
- If you have multiple medical problems, focus on one at a time.
- Discuss these recommendations with your doctor and decide which ones will be safe to try.
- Follow your doctor's advice about diet changes, supplement dosages, and exercise limits.

More is not better. The supplements mentioned are reported as individually effective, so within any one category of problem, do not consume more than one or two supplements at the same time. Avoid using products with multiple, combined supplements except for multivitamins. Most good multivitamins will give you adequate, recommended dosages of vitamins and minerals.

Please notice that there are many recommendations in common across these categories of medical conditions, and making changes under one medical problem can be useful in prevention of others.

The following is a list of medical problems that can occur in the postmenopausal years:

- Wrinkles and cellulite accumulation
- High cholesterol

- High blood pressure
- Obesity
- Urinary tract disorders
- Sexual dysfunction
- Diabetes
- Heart disease
- Osteoporosis
- Arthritis
- Depression
- Cancer
- Alzheimer's disease

QUIZ

Do you have any of these conditions? If so, list them:

Are you at risk for any of these conditions? If so, list them:

Are you taking prescription medications, vitamins, or over-the-counter drugs? If so, list them:

Let's see what's useful for the following conditions or problems.

WRINKLES AND CELLULITE

Aging skin and fat accumulation under the skin

The primary cause of wrinkled skin is sun damage due to overexposure, and it takes years before the damaging effects of sunbathing emerge. We have less control over cellulite deposits—where these occur is usually genetically determined. In other words, both fat and thin women will acquire cellulite on their bodies with age.

And for some of us, losing weight can actually make cellulite deposits more prominent.

Diet—Follow one that's high in fruits, vegetables, fish, olive oil, beans, and water, and low in animal fats and dairy. Avoid caffeine and sugar. Don't smoke. Use sunscreen outdoors.

Dietary supplements—Useful vitamins are A, C, and E. Useful herbs are green tea, gingko biloba, grape seed, sweet clover, and evening primrose oil. Remember: no more than one or two at a time.

Exercise—Best choice: lower body weight training. Second choice: daily aerobics of moderate intensity.

Useful skin products—The FDA recently approved a sun screening chemical that's been in European products (such as L'Oreal) for years. The chemical is Mexoryl. All sunscreens protect from the ultraviolet beta rays that cause sunburn, but this chemical protects from the ultraviolet alpha rays that cause skin damage and cancer. Products for cellulite control are marketed as antiaging, firming creams. Those that contain retinoids, caffeine, green tea, and/or antioxidants do show results. Try Cellu-Sculpt (Avon), Anti-Cellulite Treatment (Neutrogena), and Anti-Cellulite Firming Gel (L'Oreal).

My mother was a dermatologist, and she gave me this recipe for a lotion to help reduce my cellulite: 1 part pure virgin olive oil to 2 parts apple cider vinegar, massaged over the cellulite areas 3 times a week. It's inexpensive and also helps when my joints are sore and stiff. Cellulite treatments include Tri-Active laser and massage applied to cellulite areas by trained technicians (treatment sites can be located at www.syneron.com) and Endermologie, a suction and massage applied to cellulite areas by trained technicians (treatment sites can be located at

www.aad.org). Improvements must be maintained with ongoing treatments. The expense might be worth it: Some women have begun using these treatments as a replacement for their previous regularly scheduled massage therapy.

HIGH CHOLESTEROL

High blood serum cholesterol

Some of us have a genetic predisposition to elevated cholesterol levels, but most of us have high cholesterol because we ingest large amounts of cholesterol-rich foods. The chief offenders are trans-fatty acids. These are liquid vegetable oils that have added hydrogen molecules (partially hydrogenated fat) to make them semi-solid at room temperature and give them a taste and texture similar to butter (and are delicious and habit-forming).

Diet—Follow one high in mono- and polyunsaturated fats (like fish and olive oil) and low in meat and dairy. Substitute for margarine and salad dressings (try Benecol or Take Control). Avoid dietary cholesterol. Consume daily 1 serving of fiber (whole grains, 4 ounces), 1 serving of low-fat protein (4 ounces of soy product, lean meat, fish, or poultry), and 1 serving each of fruits and vegetables ($\frac{1}{2}$ cup each; they are high in vitamins and minerals and are cholesterol free). Additionally, use cream substitutes such as soy milk and olive oil for cooking.

Habits—Don't smoke, and stop drinking coffee.

Supplements—Useful are vitamin B complex, coenzyme Q10 (60 mg daily), garlic capsules (3 times daily), chromium (200 mcg daily), and omega-3 fatty acids. Not helpful is policosanol, a dietary supplement derived from sugar cane (Bayer's One-A-Day Cholesterol Plus vitamin); research has concluded that it is

not effective in lowering LDL ("bad") cholesterol levels. The dietary supplements recommended have been well researched, and their use can help you attain up to a 20 percent drop in LDL cholesterol. This is equal to the effectiveness of prescription drugs such as Provachol.

Exercise—Best choice: walking two hours a day. Second choice: running or jogging twenty miles a week.

The FDA has ordered that foods containing 500 mg or more of trans fats per serving must be labeled as such. However, even consuming 50 calories or more of trans fat daily is enough to increase our risks for coronary artery disease. Many foods contain a lot less than 500 mg of trans fats per serving, so many foods that may still increase the risk of coronary heart disease will not be labeled.

Testing—As with glucose testing for diabetics, finger-stick blood testing and testing strips are available for home use and can be purchased at your local drugstore. This test will measure your total cholesterol blood level (the combined HDL and LDL blood level).

HIGH BLOOD PRESSURE

Greater than 140/90

Diet—The DASH diet (Dietary Approaches to Stop Hypertension) is high in fruits, vegetables, and whole grains, and low in animal fat, dairy, dietary cholesterol (less than 200 mg daily), and salt (less than one teaspoonful daily). Avoid processed foods and alcohol. Eliminate caffeine.

Supplements—Useful minerals are calcium, magnesium, and potassium. Also useful are phytoestrogens, especially soy protein. Add a daily serving of high fiber food (e.g., whole grains), 2 garlic

capsules 3 times daily, or 1000 mg vitamin C 3 times daily. Note that more than 1000 mg of magnesium daily can interfere with your prescribed diuretic.

Exercise—Best choice: walking daily for about thirty-five to forty minutes, or about two miles (low and moderate intensity). Second choice: all forms of physical activity, for example, gardening, if done regularly.

Testing—If you've been diagnosed with high blood pressure, acquiring a blood pressure monitor for use at home is a good investment. Getting your blood pressure measured at each doctor's office visit is not enough monitoring. You'll need to closely and frequently monitor the effectiveness of your diet and medications in order to gain firm control over this silent disease.

OBESITY

BMI greater than 30; see chapters 35 & 36

Many of us are overweight (BMI greater than 25) and some of us will become obese because weight gain is a chronic, progressive symptom. Rarely is obesity genetically determined; in most cases, it's caused by our diets and habits. It's true: We are what we eat.

Diet—No single diet is right for all women. You must reduce the total number of calories you consume daily. Eliminate starch, sugar, and alcohol. Whole grains (1 serving daily) and vegetables high in fiber and B-complex vitamins (4 servings daily) are digested slowly. These foods will keep your blood sugar from spiking, which in turn decreases food cravings and hunger pangs. I'm not obese, but I could have been with my slow, steady weight gain. Since we lose 20 percent of our muscle mass by the time we reach age sixty, I wanted to strengthen what was left,

regain some lost muscle, preserve bone density, and keep my dress size (10–12). I decided to increase my physical activity and designed a schedule of exercise (30 minutes minimum, 7 days a week) that resulted in hunger pangs and food cravings. I was using my muscles, and they needed food. I realized I also needed to watch what I was eating. Here's how I eat as a result:

3 meals daily and a snack at night; 2–4 ounces of protein at each of the three meals. Protein helps form new muscle and minimizes food cravings. The latest research on muscle nutrition recommends 0.7 gm of protein per pound of ideal body weight per day for weight trainers. Good protein sources are chicken, turkey, fish, lean red meat, low-fat dairy products, beans, and soy products.

5 servings combined of vegetables and fruits daily. I eat a salad every day, but I only use 2 tbsp of olive or canola oil in my dressing.

1–2 servings of whole grains (a slice of bread, a few crackers, or cereal).

I love to have a protein-rich drink or eat protein-rich food after my workout (usually in the morning). When I eat this way, I rarely have mid-morning hunger pangs. I take a multivitamin daily, along with additional calcium and antioxidant supplements. I'm lactose intolerant, so I can't drink milk, but I can eat hard cheese, 1 serving daily. And I take my multivitamins with food. I stopped the weight gain, I have energy, and my waistline is back! It's worth it to find a food plan that works for you.

Supplements—Useful minerals are calcium, magnesium, and chromium. Useful prescription drugs are Meridia and Xenical. These must be prescribed by a doctor and must always be used with diet and exercise. Useful non-prescription supplements are those that include the following combination of amino

acids: L-arginine, L-ornithine, and L-lipine, in quantities of 500 mg each, taken before bedtime. Effective—but not recommended because of their serious cardiac health risks—are ephedra-containing products. Widely used (although research is inconclusive) is chromium picolinate (up to 1000 mcg daily), reported to eliminate sugar cravings and burn fat. As with prescription medications, supplements are most useful when combined with diet and exercise.

Exercise—Your weight loss goal is one to two pounds a week. Best choice: muscle toning and strengthening two to three times a week. Second choice: aerobics daily. The recommended goal for achieving and maintaining weight reduction is a consistent program of weight training (free weights or machines) in divided sessions totaling approximately two hours weekly. Resistance bands or power bands (elasticized ropes) are similar to hand weights except they give more resistance at the end of the exercise movement. They were developed by physical therapists to help patients recover from injuries. They can be bought in different sizes and strengths. They are light-weight and travel easily. Explore this website for resistance bands: www.collagevideo.com.

Testing—For women, a waist measurement greater than 35 inches or a waist to hip ratio greater than 0.85 (divide your waist measurement in inches by your hip measurement in inches).

URINARY TRACT DISORDERS

Urinary incontinence and recurrent infections

Urinary tract infections are very common in women because of our anatomy. The urethral opening (bladder access), the vaginal

orifice, and the anus are close together, and *E. coli* from our intestines is the cause of most of these infections. Estrogen deficiency causes shrinkage of the membranes in the urethra and vagina, which results in incontinence, the most common urinary symptom for menopausal women. There are two types of incontinence: stress type, where urine leakage occurs when you laugh, cough, sneeze, or exercise; and urge type, where urine leakage occurs as soon as you feel the urge to urinate, even when your bladder isn't full (which results in increased trips to the bathroom day and night).

Diet—Alkaline urine encourages bacteria growth. Therefore, avoid sweetened fruit juices. Only unsweetened cranberry juice is helpful (not Ocean Spray cranberry juice) and it can be obtained from natural food stores. Drink plenty of water and eat plain yogurt. Follow a diet low in starches and sugars.

Habits—Stop smoking and eliminate caffeine and alcohol if you are prone to repeated infections.

Supplements—These can be taken even with antibiotic use. Useful are acidophilus (2 capsules 3 times daily) and vitamin C (1500 mg 3 times daily). Also helpful are acidophilus vaginal douches 1-2 times weekly (1 tbsp per quart of warm water) and apple cider vinegar douches (2 ounces per quart of warm water).

Exercise—Try Kegel exercises daily. This exercise strengthens the pubococcygeal (PC) muscle, the muscle that you can squeeze to stop the flow of urine. The exercise procedure is to squeeze, hold for a count of five, and release; repeat ten times. The whole series should be performed at least 5 times daily. You can do these in the car, at work, in front of the TV, virtually anywhere you sit. They are effective if done consistently. If you like to exercise but

experience some urine leakage when you do, try inserting a vaginal tampon prior to your exercise routine for temporary symptom relief.

Testing—Dipsticks are available at the drugstore. Dip the strip in a fresh urine sample and a color change will indicate the presence of a bacterial infection.

DIABETES

Type II

Some medical researchers describe diabetes as a constellation of organ malfunctions that inevitably leads to heart disease, or as the first stages of advancing vascular disease throughout the body involving every organ of the body. Heart function is essential to vascular function, and diabetes will eventually damage the heart. There is a group of symptoms known as Metabolic Syndrome that precedes the development of diabetes. Its characteristics are a waist measurement larger than 35 inches (in women), high blood pressure, high triglycerides and low HDL cholesterol (with blood testing), and elevated fasting blood sugar. All the recommendations cited for obesity and high blood pressure control also apply to diabetes and heart disease.

Diet—The USDA Pyramid Diet is harmful. It recommends consuming too many carbohydrates, doesn't differentiate between high-quality carbs and low-quality carbs, and recommends too much dairy. Follow a diet high in protein, complex carbohydrates, fiber, vegetables, whole grains, beans, monounsaturated fats, and omega-3 fatty acids, and drink plenty of water. Restrict consumption of fruits, nuts, and dairy. Eliminate starches, sugars, and "below-ground" carbohydrates, such as potatoes. Recommended

is daily consumption of at least 1 serving each of foods high in magnesium (almonds, cashews, brown rice, kidney beans, bananas, avocados, raisins) and beta carotene (carrots, tomatoes, spinach, kale). NOTE: Research is indicating that smoking even a few cigarettes a day (used by some women to control their appetites) blocks the benefits available from these foods.

Habits—Switch to artificial sweeteners.

Supplements—Use multivitamins with chromium, magnesium, and selenium. Useful vitamins are A, C, E, and folic acid, though vitamin E may interfere with absorption of your diabetic medication. Check with your doctor. Also useful are omega-e fatty acids.

Exercise—Weight reduction is important. Your exercise plan should include muscle strengthening two times a week and aerobics three times a week. Insulin is a growth hormone; abnormally low levels will lead to muscle wasting. Certain diabetic medications are also muscle wasting, as are the statins often used to treat diabetics for high or potentially high cholesterol.

HEART DISEASE

Coronary artery disease

Heart damage can be detected by measuring a blood protein called homocysteine. B vitamins have been shown to lower homocysteine blood levels. As a result, these vitamins have been undergoing extensive research to determine whether they can help prevent heart attacks and strokes. See chapter 14 for more discussion.

Diet—Follow one high in whole grains, complex carbohydrates, fiber, vegetables, fish, and poultry, and low in fats (less than 30 percent of your daily calories), low in cholesterol (less than

300 mg daily), and low in meat, butter, and other dairy products. Avoid salt and alcohol. Eliminate fast foods.

Habits—Stop smoking. Take one low dose aspirin daily.

Supplements—Useful vitamins are A, C, E, folic acid, B6, and B12; also useful are magnesium, coenzyme Q, garlic, and omega-3 fatty acids.

Exercise—Best choice: walking, either vigorous or moderate, at least one hour daily. The longer you walk, the more preventive is the exercise.

Testing—Helpful tools to determine your heart disease risk are waistline measurement and waist to hip ratio measurement. If you are being treated for hypertension, regularly monitor your blood pressure.

OSTEOPOROSIS AND OSTEOPENIA

After the age of thirty-five, we tend to lose up to 1 percent of our bone mass each year. Osteopenia (low bone mass) is inevitable unless we make specific efforts to slow down our bone loss. We need to supply our bodies with sources of calcium for bone use, to nutritionally encourage calcium absorption by bone, and to make use of methods shown to reverse bone loss. Dietary calcium requires the presence of vitamin D to be absorbed for bone use. Some common medications interfere with this absorption; they are the diuretics, thyroid supplements, and steroids. Calcium supplementation alone does not reverse bone loss. This was demonstrated recently by the findings of the Women's Health Initiative: In the postmenopausal women studied, supplementation did not prevent hip fractures. But there is evidence that exercise can reverse bone loss. We should keep taking our

supplements, but in combination with the following dietary guidelines and physical activity. Also, most of us are not taking enough vitamin D to establish adequate serum blood levels. Newer guidelines recommend increasing vitamin D intake to 800–1000 IU daily. Many complain that calcium tablets are too large to swallow and cause constipation, but there are many products available. Calcium citrate does not need much gastric acid for absorption, Extra-Strength Tums can be taken with every meal to avoid constipation, and Viactiv, a chewable supplement, is easy to swallow.

Diet—Follow one high in low-fat dairy products, cold-water fish, lean meat, poultry, beans, whole grains, and dark green leafy vegetables, and low in salt. Avoid soda, caffeine, and alcohol.

Habits—Stop smoking.

Supplements—Use calcium, magnesium, and vitamin D.

Phytoestrogens—Use soy protein and green tea.

Exercise—Best choice: weight training.

Testing—An at-home screening is to measure your height annually, ideally starting at age thirty-five. If you discover a cumulative loss of more than 1.5 inches, you could be experiencing bone loss. See chapter 16 for more information.

Dairy products contain both calcium and vitamin D, but at low doses. For example, 8 ounces of milk or yogurt or 1 ounce of hard cheese contains 300 mg of calcium and roughly 60 IU of vitamin D. A lot of women eat cottage cheese, but it has a very low calcium content. A serving of a calcium-rich vegetable such as broccoli (1 cup) or spinach (4 cups) contains 300 mg of calcium but no vitamin D.

ARTHRITIS

Osteoarthritis

Osteoarthritis develops as a result of the wear and tear of aging:

The cartilage that cushions bone deteriorates. Some of us have a genetic predisposition for this condition and it attacks many of us right at midlife, during the change of life. Usually one joint at a time is affected, but the overall stiffness and aching we feel when arising in the morning are early arthritis symptoms. The food and drinks we are piling on the counter of the supermarket checkout line are aggravating the pain and discomfort from this condition: large amounts of red meats, citrus fruits, prepared foods high in salt or sugar, sweetened drinks/juices, and whole milk. Avoid tomatoes, green peppers, and potatoes. All of the fresh green leafy vegetables, whole grains, non-citrus fruits and cold water fish are good for pain relief. Drink plenty of water.

Diet—Drink half your body weight in ounces of water daily (if you weigh 160 pounds, drink 80 ounces of water every day). Cook with olive oil and flaxseed oil. Eliminate fast foods, microwave entrees, fried foods, bakery goods, and margarine.

Supplements—Useful are vitamins C, D, and E, omega-3 and omega-6 fatty acids, and selenium. Other useful supplements are kava (for muscle ache and spasm), glucosamine (1,500 mg daily), and chondroitin (1,200 mg daily) for pain (remember: take one or two at a time), and basil, oregano, and garlic seasonings. Check your multivitamin for iron. Do not take iron supplements; they will worsen the symptoms. Instead, consume foods high in iron such as broccoli, Brussels sprouts, and cauliflower. Try these for pain relief:

Garlic capsules, 2-3 times daily with meals;

Salmon oil, 2 capsules twice daily;
L-cysteine, 500 mg twice daily;
Ginger, 500 mg daily;
Capsaicin topical cream, applied as needed over painful areas;
ThermaCare patches to provide heat to affected joints; or
Ibuprofen and naproxen, which are excellent for pain relief
but are not recommended for long-term use because this
leads to gastrointestinal bleeding and kidney disease.

Exercise—Best choice: stretching, for example, yoga. Second choice: muscle strengthening and low-impact aerobics. Remember: You are already in pain; don't add muscle soreness and strain to this. Start slowly, a few minutes daily, and build to your goals slowly, over time. This way, you'll experience improvements: much less stiffness, decreased pain, and increased strength.

Testing—The onset of morning stiffness and loss of movement are signs to look for.

DEPRESSION AND ANXIETY

Stress precedes depression. Chapter 22 includes a lengthy assessment of common stressors. To treat symptoms, many of us are taking antidepressant medications, which do help us, but their use doesn't address the life stress issues. In America, we seem to live to work, working to "get ahead" and to make as much money as we can, rather than working to live. Very few of us have a balanced life of work and play, including those of you who are full-time homemakers. The hardest challenge in my psychiatric practice is to convince my patients to take the time to incorporate the health/lifestyle changes they need to make in order to get well and stay well.

Diet—Follow one high in vegetables, fruit, whole grains, low-fat dairy products, fish, lean meat, and poultry. Avoid sugar, flour, saturated fats, and caffeine—while these elevate brain serotonin (and lift mood), they cause weight gain. Eliminate alcohol; it has addictive potential due to the temporary relief it provides.

Supplements—For mild to moderate symptoms:

Kava can reduce anxiety and improve sleep; dosage is 60–120 mg daily. A word of caution: Like prescription tranquilizers, kava should not be ingested for long-term use and should not be taken with alcohol.

Passion flower is sedating; dosage is 2 gm 3 times daily.

Valerian is a sedative and improves sleep; dosage is 1 gm 3 times daily; should not be used in combination with prescription antidepressants or taken with alcohol.

St. John's Wort is a mild antidepressant; dosage is 250–300 mg 3 times daily, but not for extended periods as its safety is unknown; it should not be used in combination with prescription antidepressants.

SAMe (S-adenosyl methionine) is an antidepressant whose effect was found to be similar to that of Elavil in clinical studies; dosage is 400 mg 3 times daily; caution: it can induce mania in bipolar patients.

EPA (eicosopentaenoic acid) is an omega-3 fatty acid; dosage is 1–2 g daily; it is safe to use to augment prescription anti-depressant medications

Remember: one or two at a time, as always.

Exercise—Best choice: aerobics daily (moderate to intense).

CANCER

Lung, breast, colon, uterus

In general, cancers can be divided into four groups:

Sarcomas, or cancers of the bone and muscles

Carcinomas, or cancers of the organs, glands, and skin

Leukemias, or cancers of the blood cells

Lymphomas, or cancers of the lymphatic system

Over one hundred varieties of cancer have been described and we don't know what causes most of them. Some cancer researchers speculate that the most common causes are: first, stress and diet factors; second, environmental factors; and third, hereditary factors. The last two factors could explain why we can still be susceptible to cancer even if we've been trying to do all the right things to live a healthy lifestyle.

With regard to our eating habits, national surveys indicate the following: two out of five of us do not eat fruit; one out of five of us does not eat vegetables; and four out of five do not eat whole grains. It's obvious that too many of us are not nourishing our bodies or helping our immune systems protect us against continuous exposure to environmental toxins. I live in the mid-Atlantic region, an economically stable area with good to excellent healthcare—but our cancer rates are high and we don't know why (see U.S. cancer rating by state). We are all at risk for cancer, and the longer we live, the higher our risks become. There are no definitive prevention strategies, but the following may help to increase our protection from these frightening diseases.

Diet—Follow one high in green vegetables, fruits, whole grains, and beans, and low in animal proteins and saturated fats. Avoid alcohol. Good fats to consume are cold water fish and olive oil.

See the website of the American Cancer Society for information on the macrobiotic diet, which may help.

Habits—Stop smoking. Minimize weight gain. Taking one baby aspirin daily is useful for colon cancer.

Supplements—Useful vitamins and minerals are vitamins A, C, and E, folic acid, calcium, magnesium, and selenium. Other useful supplements are flaxseed, green tea, and garlic. Many products are being rigorously studied. The following have unproven results; however, they appear to be safe and seem promising as aids for cancer treatment:

Indole-3-carbinol, derived from leafy vegetables, take 400 mg daily if you have breast cancer;

Vitamin D, 1000 IU daily if you have breast, colon, or ovarian cancer;

Vitamin B2, if you have breast cancer;

Niacin, if you have breast cancer; and

Selenium, if you have lung or colorectal cancer.

NOTE: Vitamin A has not been shown to have any benefit in prevention of or treatment for lung cancer.

Exercise—Best choice: aerobics of moderate intensity, at least four hours/week.

Testing—A breast self-exam should be performed at the same time every month. The Gail Model is a formula for calculating the risk of developing breast cancer by taking into account age, race, age at first child, number of pregnancies, family history of cancer in first degree relatives, and previous breast biopsies showing abnormal cells. Talk to your gynecologist; a hand-held calculator capable of performing the function is available in many medical offices. A chemically-treated test strip can be used to detect blood in the stool. Blood can be present as a result of red meat

consumption, ulcers, hemorrhoids, colitis, and colon cancer, so this test is not specific for colon cancer, but it is first level screening for a number of problems.

ALZHEIMER'S DISEASE

This disease tends to run in families. It can be detected by neurological examinations and tests, but the diagnosis can only be confirmed after death by examination of the brain at autopsy. The severe memory impairments of this disease are caused by low levels of brain acetylcholine. This is a chemical that allows the brain cells to communicate with each other. Is some degree of memory loss normal as we age? Yes. Aging causes a sharp decline in our ability to learn and remember new material and a decrease in the speed and accuracy of our mental functions. Scientists don't know how many of us experience age-related memory loss. However, they do know that these age-related memory impairments are preventable and reversible.

Diet—Follow one high in green leafy vegetables, fruits, whole grains, and fish, and low in saturated fats. Ingesting blueberries looks promising; in animal studies, these appear to improve memory and reaction skills. Minimize alcohol intake.

Habits—Get mental exercise. Read, do crossword puzzles, play cards. Get physical exercise (taking dance lessons is my "sport"). Get playful: turn off the TV and learn some challenging board games to play with your family and friends. I know you'll remember this, it's not a new thought: Use it or lose it!

Supplements—Useful vitamins are E, folic acid, B6, B12, and C; useful minerals are zinc and selenium. Other useful supplements include choline, coenzyme Q10, aspirin, such amino acids as tyrosine and glutamine, and herbs like gingko biloba and

ginseng. All of these supplements appear to be safe, but have not yet been proven so.

Testing—An enzyme skin test is being developed for early detection of Alzheimer's. It works by detecting enzymes in the skin that are associated with the disease. It is anticipated that this test will be available prior to publication of this book.

SEXUAL DYSFUNCTIONS

Vaginal dryness and decreased libido

The physical symptoms caused by estrogen decline (e.g., hot flashes, vaginal atrophy), depression, and fatigue due to poor quality of sleep are all significant causes of impaired sexual functioning. Refer to Part VI for a detailed explanation of female sexual function and dysfunction.

Diet—Follow one high in whole soy foods (for example, soybeans and tofu).

Supplements—L-arginine, vitamin E, niacin, ginseng, and gingko biloba are useful, as are topical lubricants and vitamin E suppositories.

Phytoestrogens—Useful are black cohosh, dandelion leaves, oat straw, wild yam, dong quai, and chasteberry.

Exercise—All types help.

Testing—Measuring the pH of the vaginal lining during the pelvic exam is considered an excellent test for determining vaginal atrophy. A pH greater than 5.5 indicates atrophy. Regular sexual activity helps maintain vaginal lubrication. However, one third of us in the early postmenopause years will lose our regular sexual partners through illness, divorce, or death. The regular use

of contoured sexual aids for self-stimulation is helpful. These devices are available through magazine ads and catalogues.

NOTE: Whether or not you have vaginal atrophy, if you are experiencing repeated vaginal yeast infections, talk to your doctor about the possibility that they are an early sign of diabetes.

Part VI

Let's Talk about Sex

Many women have said to me, "I don't feel like my husband does about sex. Am I normal?"

Yes, *and* we're different from men in how we function sexually.

Chapter 39

Hormones and Sex

During the past three years, I've been involved in clinical research testing new treatments for female sexual dysfunctions. As a result of this experience, this section of the book addresses the normal female sexual experience as well as female sexual problems – their frequency across our life cycle, some of their causes and current treatments, and research advances in the field.

We become sexually active during our adolescence, and I've known women who have remained sexually active into their eighties! So, even though the menopausal transition can be physically and emotionally tumultuous, it is too simplistic to think that hormonal changes alone will cause significant impairment in our sexual functioning.

As I mentioned in chapter 15, most postmenopausal women experience some changes in their sexual functioning. We have to expect that our sexual functioning, like our physical appearance, will change as we age. But there are other factors that are present at midlife that have a stronger influence on our sexuality than change of life. These are mental health and well-being, the quality and duration of the emotional relationship with our partners, our physical

health at menopause, and the amount of satisfaction we've had in our sexual experiences prior to the onset of menopause.

Let's begin with a review of the sex hormones, their origin, and their influence on sexual functioning.

All our hormones are derived from one hormone known as "the parent" or "super" hormone, called pregnenolone. This hormone is converted to DHEA which, in turn, is broken down into estrogen, progesterone, and testosterone.

All our hormones, including pregnenolone, are made from cholesterol. Because every bodily function is regulated by hormones, cholesterol is important to our physical functioning.

Estrogen is actually a group of three estrogens: estrone (E1), estradiol (E2) and estriol (E3).

Estradiol is the principal estrogen during our premenopausal years and the estrogen that decreases significantly at menopause. Estrone, which is normally 20 percent of our total estrogen during premenopause, increases postmenopause. This is possible because it is not made predominantly in the ovaries, but in fat cells. Estriol is made in the ovaries, is the least potent of the three estrogens, and begins to comprise the majority of the estrogens postmenopause. The estrogens affect the pelvic organs by maintaining blood flow, moisture, and protection from cellular damage. They exert a positive influence on all the phases of the sexual response cycle.

Progesterone is produced by the ovaries at high levels during ovulation. When ovulation ceases (at menopause), progesterone levels fall significantly. Progesterone balances the effects of estrogen. For example, estrogen dominance can damage the lining of the uterus and breast cells; progesterone protects against an excess of estrogen. Its effects on sexual functioning have not been

determined. However, many physicians feel that it decreases sexual desire, because in birth control pill form, progesterone can display this side effect.

Testosterone (also known as androgen) is the predominant male hormone. It has a powerful effect on sexual desire in both sexes, and is nicknamed “the hormone of desire.” Other hormones that are being studied for their effect on sexual functiong are DHEA and cortisol. These are some of the hormones currently being used to treat some sexual disorders. The current thrust of research is toward determining the role of hormone replacement for maintenance of our sexual health as we age. However, this is not the only approach. New drugs, not based on the sex hormones, are being developed—and these can directly influence the brain centers responsible for sexual desire.

During menopause, hormonal changes affect mood and sexual interest and cause physical symptoms that can interfere with sexual activity. But circulating sex hormones are only one component of sexual functioning.

Chapter 40

The Sexual Response Cycle

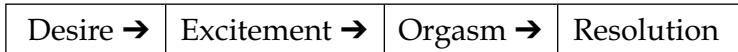
Any discussion of sex has to start with Masters and Johnson's groundbreaking work in the 1960s describing the human sexual response. They developed a four-phase model to describe the sexual response cycle in men and women. In 1979, Kaplan proposed an alternative model for men and women which is in use today and forms the basis of the definitions of the various sexual dysfunctions.

The following are the phases and their definitions.

Definitions of the Phases of the Sexual Response Cycle in Women

- Desire: The desire to have sexual activity accompanied by thoughts and fantasies about sexual activity
- Excitement: Also called arousal, the emotional building of excitement and pleasure with vaginal lubrication and swelling of the genitals
- Orgasm: The peaking of sexual pleasure with rhythmic contraction of the pelvic muscles
- Resolution: The release of sexual tension

Below is a schematic of the current model of sexual response:



Most women I speak with are not specifically aware of the phases of sexual response. However, they do realize that their sexual response and behavior is different from that of their male partners, and they are wondering if these differences are normal for them. Here's an example of what I'm referring to. Many women experience few orgasms during lovemaking. The reason: having sexual intercourse in the traditional missionary position doesn't stimulate the clitoris. However, applying gentle clitoral stimulation pre- or post-intercourse works. We should be talking to our partners about what helps stimulate us sexually and encourage them to get and read materials about female sexual responsiveness.

The model described above is problematic for women. Desire is supposed to motivate us to engage in sexual activity, but we can be perfectly healthy and not experience spontaneous sexual thoughts and fantasies that motivate us for sex. There are many reasons for women to engage in sexual activity other than having sexual thoughts. We need and seek out emotional intimacy and affection. Our sexual desire is significantly influenced by our feelings for our partners and by the quality of the emotional relationship with our partners. We are not generally focused on or driven to initiate sexual activity, but are instead seeking intimacy and are receptive to sexual stimuli as a result. Sexual fantasies and sexual arousal are intertwined for us and help us focus through the course of sexual activity. Our experience of arousal is not primarily physical but rather is an interplay of our thoughts, emotions, and physical response. Men experience arousal predominantly physically with

genital swelling and enlargement. Men are focused on achieving the goal of orgasm, and their sex drive has more urgency than ours. On the other hand, we are motivated to achieve emotional and physical satisfaction which isn't necessarily orgasmic. Many women don't experience orgasms consistently or frequently when engaged in sexual activity, but do report pleasure and satisfaction with their sexual activity and with their partners.

There is a newer model of the Female Sexual Response Cycle, a model based on intimacy needs as the starting point and one that incorporates the biological and psychological factors that influence our desire and arousal, one that is less focused on achieving orgasm and more focused on increasing intimacy. Here is a visual representation of the proposed newer model, which better describes the female sexual experience.

Women's Sexual Response Cycle

Sexual Neutrality/
Wish for Intimacy

→ Seeking out and being receptive to

Sexual Stimuli

→ Biological and psychological factors affect processing of stimuli

Sexual Arousal

→

Sexual Desire

→ Arousal, pleasure, and positive emotional and physical outcome

Enhanced Intimacy

Copyright 2001 from *Human Sex Response Cycles* by Rosemary Basson, MD; adapted by permission of Taylor and Francis, Inc., www.routledge-ny.com.

The physical aspects of sexuality arrive with puberty, when our bodies change and our hormone levels rise.

How old were you when you had your first period (the start of puberty)?_____

What were your most noticeable physical changes?_____

How old were you when you first started dating?_____

How old were you when you had sex for the first time?_____

I hope that you started puberty in good physical health overall, and that your hormonal glands, particularly your ovaries, were functioning normally. The ovaries produce 90 percent of our circulating estrogen (which is essential for genital health) until this level declines with menopause.

The cultural influences on our sexual functioning are numerous.

How did you learn about sex?

From school?_____

From friends?_____

From a family member?_____

From the media?_____

What was considered acceptable sexual behavior for girls in your family?_____

Did this differ for boys in your family?_____

Did you follow the "restrictions/rules"?_____

How many sexual relationships have you had?_____

How many of these were sexually pleasurable?_____

The psychological factors that influence sexuality include common mental disorders. A survey done in England found that of 41 percent of the women who reported a sexual problem also reported problems with anxiety and depression.

So, does depression cause sexual impairment, or vice versa? We don't know, but they do coexist. Some women are more susceptible to both depression and sexual problems than others. For example, women with severe PMS throughout their premenopausal years are more susceptible to depression than other women.

Other psychological factors are the fear of or desire for pregnancy and past exposure to sexual abuse. Sexual trauma is a significant problem encountered in psychiatry. One half of the women in treatment for mental health disorders report that they have been sexually abused.

Have you had a traumatic sexual experience in the past?_____

If so, do you still think about it?_____

Do you think this kind of experience has had an effect on your sexual behavior?_____

If you had a bad sexual experience, did you ever talk with anyone about it?_____

If so, what was the outcome?_____

Sexual abuse usually leaves the victim feeling ashamed and self-denigrating. If you harbor feelings of self-hate, these emotions will infect your relationships with others.

Your interpersonal relationships are the remaining component of healthy sexual functioning. Particularly as we age, our desire for and interest in sex is influenced by the availability of a meaningful relationship with a partner.

How long have you been with your partner?_____

How satisfied are you with your relationship?_____

Does your partner have health problems that affect your sexual activity?_____

Has your desire for sex lessened or been absent over time?_____

Do you want to continue to be sexually active as you age? _____
How would you rate the quality of your life in general (refer to chapter 2)? _____

Our sexual response cycle is dependent on the interaction of our thoughts and feelings with the physical responses of our bodies.

The following sexual experiences are normal in healthy females:

- We do not spontaneously fantasize about sex.
- The level of affection in our relationships with our partners determines our sexual interest in and level of sexual activity with our partners.
- We engage in sexual activity to please our partners, and not just for the physical pleasure of the activity.
- Our pleasure in sexual activity is not dependent on experiencing orgasms frequently or consistently.
- Our sexual activity does decline with age but it is still an important part of our relationships with our partners.
- Sexual activity for physical pleasure is more important to men than to women.
- Sexual activity is important to women for maintaining a healthy and happy relationship with their partners.
- These are only some of the important differences between males and females, and we're still learning.
- The point is this: Most women feel that maintaining sexual activity as we age and having a satisfying sexual relationship with a partner are important to the quality of our lives.

Chapter 41

Sexual Attitudes and Aging

We baby boomers have been through a cultural sexual revolution during which we've been encouraged to express ourselves as sexually active beings. However, women of all ages are experiencing sexual problems, and most of us will not openly discuss sexual issues or concerns with each other or our healthcare providers. We researchers and providers are trying to break down these barriers to open discussion, but there are at least three problems in the way:

Women feel at fault for these problems and some feel psychologically damaged by them.

There are not enough providers who know how to evaluate and screen for sexual symptomatology.

The treatments for specifically female sexual dysfunctions are sparse (and based on treatments for male sexual dysfunctions).

What changes in sexual functioning do midlife women commonly experience? They report:

- a decrease of sexual activity within their long-term relationships;
- a general decrease in sexual activity with age;
- a declining interest in sexual activity with age; and

- an increase in symptoms of sexual dysfunction.

What are your attitudes about sexuality and aging?

Is your sexual activity less important to you as you age?

Data from two surveys of women forty-five years and older (U.S. Department of Health and Human Services) confirms that most women feel that their sexual functioning before as well as after menopause is important to their self-images and their partner relationships, even as their sexual activity declines.

Do you think that older women have more sexual problems than younger women?

Women of all ages are experiencing sexual problems. Between ages eighteen and fifty-nine, the prevalence of sexual disorders reported by women ranges from 25–64 percent. Lack of interest in sex is the most common problem among both pre- and post-menopausal women.

Do you believe that when you reach menopause, you will probably experience sexual problems?

Menopause and decline in estrogen production can cause some interference with sexual functioning. However, symptoms of sexual dysfunction are experienced mostly by midlife women who have depression/anxiety and/or relationship difficulties. For most women, emotional intimacy is as important as sexual intimacy. We remain sexually active as we age even though our sexual activity tends to decline.

Review chapter 15: Urogenital Dysfunctions. Are you experiencing any of these signs or symptoms?

- a decreased interest in sex
- inability to achieve orgasm
- pain during intercourse
- difficulties with lubrication

These are the most common sexual problems that women experience across all age groups. And even though men complain more, sexual problems are more common in women than in men (43 percent compare to 31 percent).

Female sexual functioning is complex and is dependent on biological and non-biological factors. Biological factors include your overall health, the functioning of your hormones, and your brain chemistry. The non-biological factors include your past sexual experiences, your cultural and religious beliefs, your mental health, and the quality of the relationship with your partner.

What Is Sexual Dysfunction and How Common Is It?

Basically, a sexual dysfunction is a symptom or complaint that is causing personal distress. You can have more than one. The categories of female sexual dysfunction (FSD) are:

- Low sexual desire;
- Difficulty with arousal;
- Difficulty with orgasm; and
- Pain upon sexual intercourse.

These categories are based on the traditional model of the Female Sexual Response Cycle (Kaplan). Disease classifications and descriptions have been developed under each category to encompass the emotional, psychiatric, and physical influences on female sexual functioning. This categorization has been criticized and changes have been recommended. The categories and their definitions continue to evolve.

Diagnoses, descriptions and diagnostic codes have been developed for each category by

- The World Health Organization's International Statistical Classification of Diseases and Health Related Problems (ICD-9);

- The American Psychiatric Association in the Diagnostic and Statistical Manual for Mental Disorders (DSM-IV); and
- The International Committee of the American Foundation for Urological Disease (AFUD).

Sexual dysfunction is more common in women than in men and, in research studies across communities, the prevalence of female sexual dysfunction ranges from 25 percent to 63 percent (as reported by the National Health and Social Life Survey, conducted 1992; the survey included 1,749 women ranging in age from eighteen to fifty-nine years).

The most common sexual complaints and symptoms reported in this general female population were:

Lack of interest in sex (desire, 27–32 percent), which was most frequently reported among premenopausal women and least frequently reported among postmenopausal women. In fact, sexual desire dysfunction is the most common sexual disorder among young women, and is often associated with our reproductive events (the menstrual cycle, PMS, pregnancy and postpartum, and perimenopause).

Trouble lubricating (arousal, 10 percent), which was highest among postmenopausal women. Half of all women with mood disorders report problems with lubrication.

Pain with intercourse (pain, 8–21 percent), highest among premenopausal women.

Inability to achieve orgasm (orgasm, 25 percent), reported fairly evenly across the age groups, with prevalence slightly higher in younger women than in older women.

Sex not pleasurable (17–27 percent).

More than one sexual symptom (50 percent).

In chapter 15, I asked if you were experiencing any sexual symptoms or complaints. Above are listed specific dysfunctions. Are you experiencing any of these? Remember: Dysfunction means that YOU are distressed by these symptoms.

In a later chapter, I'll discuss how to approach evaluating these problems.

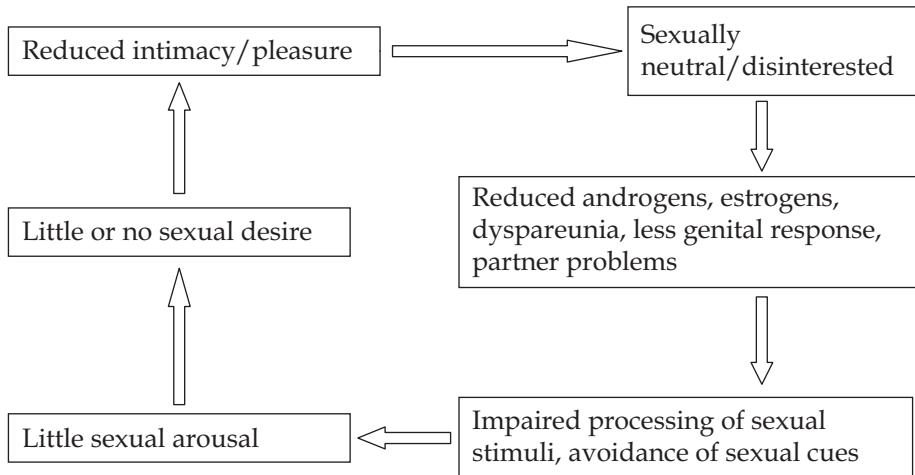
Chapter 43

How Does Menopause Impact Sexual Functioning?

The effect of menopause on our sexual functioning is negative, but not for all of us.

As we pass through perimenopause into postmenopause, many of us will experience decreased sexual desire and/or disinterest, lessened genital response to stimulation (decreased arousal), and vaginal pain with intercourse and reduced sexual activity.

The following is a proposed schematic of the peri- and post-menopausal sexual response cycle.



Minimal genital engorgement and possible discomfort and mild or no orgasm lead to little or no sexual desire and reduced intimacy/pleasure (Basson, J. *Sex and Marital Therapy*, 2000: 26:51–65).

In this scheme, sexual neutrality can become a lack of desire; reduced hormonal output can impair the physical response of the genital organs (causing decreased lubrication and pain); a diminished orgasm, resulting in an overall decreased experience of pleasure with less frequent occurrence of sexual activity.

A variety of factors have been identified as contributing to the development of sexual dysfunctions in women of any age. However, those that have the most relevance to the midlife woman are:

The hormonal changes identified with the menopause transition;
General medical illnesses and side effects from the prescription medications used to treat these illnesses;

Psychiatric disorders (particularly depression disorders) and side effects from prescription medications used to treat these illnesses;

Substance abuse, particularly abuse of alcohol and/or prescription medications;

Partner relationship problems; and

Sexual trauma.

In my psychiatric practice, I treat adult women exclusively. And many of these women who have reached menopause do experience urogenital atrophy (physical wasting in the genital organs). These physical changes are due to estrogen deficiency: We lose about two-thirds of our ovarian estrogen production during menopause. In chapter 15, review the vaginal, urinary, and sexual symptoms again. These are signs of estrogen deficiency, and these signs can lead to sexual pain and orgasm dysfunctions.

Sexual functioning has been linked to testosterone, the male hormone. Our ovaries produce half of all the testosterone that circulates in our bodies, and at menopause we lose half of this production capacity. Testosterone replacement has been given to post-menopausal women for years. We know that it has positive effects on sexual functioning by increasing desire, arousal, and intensity of orgasm. However, our low levels of circulating testosterone after menopause have not been clearly linked to any specific sexual dysfunction. Testosterone is produced by the adrenal glands as well as the ovaries. In women who have lost most of their testosterone production as a result of surgical removal of both ovaries and adrenal glands, loss of sexual desire specifically occurs. In most of us who still have these organs at menopause, researchers presume that low testosterone levels may play a role in problems with sexual desire.

Here are some symptoms of testosterone deficiency. This list applies to postmenopausal women only; we simply don't have enough research data on those women who haven't yet reached menopause.

- Loss of sexual desire
- Decreased sexual arousal
- Unexplained persistent fatigue
- Depressed mood and headaches
- Decreased energy
- Loss of pubic hair
- Loss of muscle mass and strength

Sexual desire dysfunction is the most common female sexual dysfunction across the adult female life span. Is a "testosterone deficiency" a major cause? We simply don't know, and our tools for measuring the body's testosterone levels are not sophisticated enough.

The following is a partial list of the medical illnesses that may cause sexual dysfunction.

- High blood pressure
- Elevated cholesterol
- Hardening of the arteries
- Diabetic neuropathy
- Liver disease
- Anemia
- Asthma
- Thyroid disease

Some of the medications with sexual side effects are:

- Blood pressure medications (alpha and beta blockers)

Diuretics

Sedatives and narcotics

Oral contraceptives

We now have research data that implicates depression disorders and their treatments as a cause of sexual dysfunction. I specialize in treating mood disorders. Half the women I've treated for depression have a sexual dysfunction, and one out of three of these women is experiencing her sexual dysfunction as a result of her treatment medications.

Substance abuse with prescription medications is more common among women than we previously assumed. For the middle-aged and older woman, the most commonly abused substances are alcohol, tranquilizers, pain medications, and cigarettes. The symptoms of abuse mimic so many of the psychiatric symptoms that it's easy to miss the substance abuse diagnoses during the early part of a psychiatric and sexual functioning evaluation.

Many of the women who come to see me are not initially aware of a relationship problem with their partners. They will focus instead on what's wrong with themselves and their decreased ability to function like they used to. Their partner problems are revealed when I say things like, "Tell me about your relationship," and "How satisfied are you in your relationship?" Most women are very reluctant to reveal relationship problems, particularly when in a long-standing relationship, because they feel shame or self-blame.

My questioning of my patients about sexual abuse is very direct: "Have you had a sexually traumatic experience? Have you ever discussed this with anyone? Is the experience still bothering you?" As a healthcare provider, I know that if I don't ask these questions, these issues will rarely be raised spontaneously by my patients. I always

allow my patients to refuse to answer these questions, but I rarely make the mistake of not asking these questions.

To sum this up, I offer the following chart.

Causative Factor at Menopause	Associated Sexual Dysfunction
Decreased estrogen	Sexual pain, arousal dysfunction
Decreased testosterone	Low sexual desire
Medical and psychiatric disorders and the medications used to treat them	Low sexual desire, arousal dysfunction, and orgasmic dysfunction
Substance abuse	Low sexual desire, arousal dysfunction, and orgasmic dysfunction
Partner relationship problems/ lack of a sexual partner	Low sexual desire/no sexual desire, low sexual activity/no sexual activity
Sexual trauma	Sexual pain, sexual avoidance

Is this simplistic? Yes, and deliberately so. I'm trying to make this point: Female sexual functioning is complex, involving the synchronization of the physical with the emotional. Twenty years ago, medical researchers and providers changed our beliefs about the primary causes of male sexual dysfunctions. Originally, we had thought of these problems as mostly psychological, and now we view them as mostly biological and in need of medical intervention.

Unraveling the causes of female sexual dysfunction is slowly evolving in the same direction. This chart indicates that the research evidence is growing and directing us to view these problems as mostly biological (and in need of medical intervention). For you, this means that it's okay to feel embarrassed to admit you have sexual complaints. After all, your sex life is personal and private. However, it is not okay to let feelings of shame or guilt deter you from getting an evaluation, because these symptoms can mean that there are medical problems brewing that are going undetected.

Evaluation and Treatment Strategies

The Work-up

Any evaluation of problems with sexual functioning begins with a face-to-face interview (the Sexual Functioning Interview). This interview:

- should dispel the myth that sexual problems are most likely psychological problems;
- should be “phase specific,” i.e., it should ask direct questions about the presence of symptoms in each phase of the cycle;
- should inquire about the degree of personal distress the problem is causing;
- should emphasize that sexual problems require thorough medical, gynecological, and psychiatric evaluations, and lab and targeted medical tests will need to be ordered;
- should acknowledge the prevalence of these problems, thereby validating the patient’s complaint, and should attempt to classify the sexual disorder based on the presenting complaint; and
- should be evaluated in combination with a careful medical history, a thorough physical examination, and laboratory tests.

The following are the most common medical/psychiatric problems causing sexual dysfunction at midlife, and sexual functioning evaluations must include screening for these.

- Depression disorders
- Diabetes
- Hypertension
- Thyroid disorders
- Urinary incontinence
- Urinary tract infections

I like self-report forms and evaluations. I will give a new patient a sexual health questionnaire before the face-to-face interview to get her acquainted with using sexually explicit language and to help her focus on specific symptoms she might be experiencing.

The work-up interview is therapeutic, an opportunity for the patient to explore and explain these highly personal issues and for the medical provider to carefully listen and educate. What follows is the self-assessment I administer to my patients (the SPEQ—Short Personal Experience Questionnaire).

Midlife and Sexual Health

When you contacted my practice, you mentioned some concerns about your sexual functioning. Sexual difficulties are some of the most frequently reported complaints of women experiencing change of life. The following is a brief questionnaire to help you pinpoint your sexual issues. Please answer these questions before your appointment with me so we may discuss them.

Female Sexual Response

Please answer the following questions in terms of your current experience (during the past month) by circling the appropriate number: 1=Not at all; 5=A great deal.

"Sexual activity" includes behaviors from self-stimulation or masturbation, foreplay (arousal with partner) to sexual intercourse.

- | | | | | | |
|--|---|---|---|---|---|
| 1. How enjoyable are sexual activities currently for you? | 1 | 2 | 3 | 4 | 5 |
| 2. How often during sex activities do you feel aroused or excited? | 1 | 2 | 3 | 4 | 5 |
| 3. Do you currently experience orgasm (climax) during sex activity? | 1 | 2 | 3 | 4 | 5 |
| 4. How much passionate love do you feel for your partner? | 1 | 2 | 3 | 4 | 5 |
| 5. Are you satisfied with your partner(s) as lover(s)? | 1 | 2 | 3 | 4 | 5 |
| 6. Do you currently experience any pain during intercourse? | 1 | 2 | 3 | 4 | 5 |
| 7. Do you currently experience any lack of vaginal wetness (lubrication) during sex activities? | 1 | 2 | 3 | 4 | 5 |
| 8. Does your partner(s) experience difficulty in sexual performance? | 1 | 2 | 3 | 4 | 5 |
| 9. About how many times have you had sexual thoughts or fantasies (e.g., daydreams) during the past month? | | | | | |
| 0—Never | | | | | |
| 1—Less than once a week | | | | | |
| 2—Once or twice a week | | | | | |
| 3—Several times a week | | | | | |

4—Once a day, sometimes twice

5—Several times a day

10. How many times during the past month have you had sexual intercourse?

0—Never

1—Less than once a week

2—Once or twice a week

3—Several times a week

4—Once a day, sometimes twice

5—Several times a day

11. Do you have a current sexual partner? Yes No

THREE KNOWN MECHANISMS IMPLICATED IN SEXUAL DYSFUNCTIONS

Female sexual disorder treatments are based on the causes we know about. Due to ongoing research, we know more about the hormones and brain chemicals (known as neurotransmitters) that are involved in our sexual functioning and that influence specific phases of the sexual response cycle.

Since I became involved in clinical research to assess and treat female sexual dysfunctions, we've found that in 20–30 percent of our carefully evaluated study patients, the physical causes of their sexual problems have been missed because their medical work-ups have been incomplete.

It's important to thoroughly screen for and correct for those factors related to general medical/psychiatric conditions, various classes of prescription medications, substance abuse, partnership problems, and/or sexual trauma. Treatments for female sexual disorders where none of the foregoing is a factor are based on

treatments of male erectile dysfunction, which is the most-studied sexual dysfunction. Female sexual disorder treatments also have a limited focus, targeting the three phases of the sexual response cycle—desire, arousal, and orgasm—and include increasing genital blood flow, altering the balance of the sexual hormones, and enhancing those brain chemicals that are known to affect the sexual response cycle. Even though female sexual disorders are prevalent in adult women of all ages, most treatments have been studied in only the postmenopausal woman.

DRUGS THAT INCREASE GENITAL BLOOD FLOW

HRT

See chapter 26 for dosages and forms

All estrogen products are useful when low estrogen contributes to decreased lubrication, pain, and urinary incontinence.

Useful for improving arousal, unclear effect on desire

Topical preparations are Premarin vaginal cream, Estring, and Vagifem.

Viagra

Dosage/form—tablets, dosage starting at 25–100 mg

Recommended for treatment of arousal disorders

Has been found useful for some premenopausal women who are not experiencing any other sexual symptoms

Has not demonstrated a beneficial effect in most women

L-arginine

Dosage/form—Arginomax tabs, 2000–3000 mg daily

Used to improve arousal; non-prescription; specifically marketed as improving sexual performance

An amino acid supplement, usually found in combination with other supplements; take with vitamin C, vitamin E, and

choline; a GNC product, Rekindle, combines L-arginine, ginseng, damiana, and gingko biloba

NOTE: This amino acid can stimulate herpes outbreaks; counter this effect with Lysine, 750 mg daily.

Yohimbe

Dosage/form—oral preparation, Aphrodyne, 5.4 mg tabs

Usefulness—for arousal and orgasm difficulties

Non-prescription, an herbal

Has demonstrated only modest effectiveness

Side effects include elevated blood pressure, insomnia, and anxiety

MUSE

Dosage/form—topical intravaginal gel or suppository, 0.05–0.2 percent

Useful for arousal difficulties

A prostaglandin or neurotransmitter currently undergoing clinical research

EROS—a CSD (clitoral stimulation device)

Dosage/form—a battery-powered clitoral vacuum designed to increase blood flow to the clitoris; instructions provided

Useful for low sexual desire and orgasm difficulties

By prescription only

So far, data is limited concerning its effectiveness

Gingko Biloba

Dosage/form—tablets, 60–180 mg daily

Useful for arousal

NOTE: Possible side effects are gastric upset and headaches; there have been a few reports of intracranial bleeding with excessive dosing over long periods.

We lack good scientific studies evaluating its usefulness and risk.

DRUGS THAT ALTER THE BALANCE OF THE SEX HORMONES**Estrogen Replacement Therapies**

Dosage—see chapter 26

Forms are creams, gels, vaginal pills, vaginal rings, and oral tablets

Usefulness—available by prescription, ERT alleviates symptoms of postmenopausal vaginal atrophy

For more discussion, see Part IV

Testosterone Replacement Therapies

Dosage/forms—oral, intramuscular injection, patch, gel/cream, subcutaneous pellets

Usefulness—recommended as an addition to estrogen replacement and, for postmenopausal women, prescription drugs

None are approved by the FDA for treating female sexual disorder in pre- and postmenopausal women

DHEA

Dosage/form—non-prescription, over-the-counter androgen supplement taken orally, 50 mg daily

Useful for arousal problems and low desire

Has demonstrated some effectiveness in postmenopausal women in enhancing libido (desire) but not arousal; no effectiveness shown in premenopausal women

Trifulus terrestris

Dosage/form—an herbal in tablet form, 1200–2400 mg orally daily

Useful in increasing desire and widely used in Europe

Can cause stomach upset and should be taken with food

Lecithin

Dosage/form—capsules, granules, and powder; 1000 mg daily

Used in Europe to treat sexual disorders

Zinc

Dosage/form—a mineral supplement available in tablet form;
30 mg daily

The mineral in oysters that accounts for their reputation as an aphrodisiac; this mineral synthesizes testosterone

Tibolone

Currently under research study and not available

A SERM like Tamoxifen, which is prescribed for breast cancer treatment

Has estrogenic effects on vagina similar to HRT

Can reduce sexual pain

Phytoestrogens

Three supplements that generally can help reduce vaginal dryness and restore moisture to vaginal mucosa (enhancing arousal and orgasm) are:

Black cohosh

Dosage/form—capsules and tablets, 20–40 mg twice daily; tincture, 15–30 drops 3 times daily

Ginseng (Panax)

Dosage/form—capsules and tablets, 100–200 mg of standardized extract twice daily

Chasteberry

Dosage/form—capsules and tablets, 30–40 mg twice daily; tincture, 40 drops daily

You can access a 2007 review of female sexual enhancers at www.consumerhealthdigest.com.

DRUGS THAT ALTER BRAIN CHEMISTRY

The brain chemicals (neurotransmitters) implicated in sexual functioning are norepinephrine, dopamine, and serotonin. Nitric oxide is also a neurotransmitter but found mostly in the pelvic organs. Norepinephrine, dopamine, and nitric oxide all enhance sexual functioning (desire, arousal, and orgasm) whereas serotonin inhibits sexual functioning.

Drugs that increase brain epinephrine

- Yohimbe
- Ritalin
- Amphetamines
- Ephedrine

Drugs that increase brain dopamine

- Levidopa (prescribed as treatment for Parkinson's Disease)
- Bromocriptine (prescribed as treatment for pituitary tumors)

Drugs that increase nitric oxide in the pelvic organs

- Viagra

Drugs that block the action of brain serotonin

- Wellbutrin
- Serzone
- Remeron

These are antidepressants prescribed alone or in combination with the serotonin-enhancing antidepressants that are known to cause sexual dysfunction in 50–75 percent of women being treated for depression.

The rationale for the use of these drugs is that they seem to have a positive effect on various aspects of sexual functioning, or they can block the negative effect that other drugs can have on sexual functioning.

New drugs in this category are currently undergoing research trials for their specific effects on neurotransmitters and as phase-specific treatments for sexual dysfunction (for example, low desire). If these drugs prove successful, they will become the first FDA-approved non-hormonal treatments for specific female sexual dysfunctions.

Boehringer Ingelheim Pharmaceuticals anticipates FDA approval of its drug, flibanserin in 2009.

EXERCISE

Exercise is a non-drug treatment for low desire and arousal problems. In several recent European studies (involving 8,000 women ranging in age from 18 to 60 years), aerobic exercise (three forty-five-minute weekly sessions) demonstrated a raise in testosterone levels, increases in genital blood flow, enhanced desire (33 percent), enhanced arousal (40 percent), and increased number of orgasms (27 percent). I recommend exercising together as a couple because it's fun and sexy. So, if you try this treatment modality, schedule time to do both the exercise and the love-making.

TREATMENT UPDATE: WHAT'S NEW AND CONTROVERSIAL

The Role of Testosterone in Female Sexual Functioning

As mentioned earlier, the ovaries and the adrenal glands produce all of our androgen, either directly or indirectly.

Conditions such as estrogen deficiency (i.e., menopause) and brain chemical imbalances (i.e., mood disorders) have been well defined, but an androgen deficiency syndrome and its specific relationship to sexual dysfunction has not been defined. Androgen levels after menopause drop by some 50 percent, but then don't

change much as we continue to age. There is no clear association between the serum levels of androgen we can measure and sexual functioning. Significant androgen deficiency has been studied in those women who have had both ovaries and adrenal glands removed, resulting in non-specific impairment in all phases of sexual functioning. The symptoms resulting from androgen deficiency due to both oophorectomy and adrenalectomy are:

- Loss of pubic hair;
- Dry skin and brittle scalp hair;
- Diminished muscle mass and loss of muscle tone;
- Global loss of sexual desire (lack of sexual dreams and fantasies);
- Decreased sensitivity to sexual stimulation of the nipples and clitoris;
- Thinning of the vaginal lining and loss of lubrication;
- Decreased arousal;
- Decreased capacity for orgasm;
- Decreased energy and fatigue; and
- Depression and headaches.

There are medical conditions that cause androgen levels to physically decline in our bodies as well. These are:

- Surgical removal of the ovaries;
- Conditions causing insufficient functioning of the pituitary and adrenal glands (these are conditions associated with specific endocrine diseases);
- Excessive thyroid medications and hyperthyroid condition (much rarer than low thyroid condition); and
- Chronic illness, such as anorexia, depression, or cancer.

In menopausal women, no link has been found between natural menopause, decreased androgen production, and sexual dysfunction disorders. So, what is the usefulness of androgen therapy for women? Years ago, testosterone therapy was tried as a cancer treatment but it failed. For more than thirty years, though, it has been used by women to stimulate sexual desire, eliminate fatigue, and boost energy.

TREATING SEXUAL DYSFUNCTION WITH TESTOSTERONE HORMONE REPLACEMENT

Research in testosterone therapy and its effect on sexual functioning has been evaluated only in postmenopausal women who were also taking estrogen replacement therapy. Testosterone therapy did improve desire and arousal and increase sexual activity in these women.

Should you try testosterone? Please answer the following questions.

Are you postmenopausal (naturally or surgically)? If yes, continue.
Are you having problems with your sexual functioning? If yes, continue.

Are you currently taking estrogen replacement therapy? If yes, continue.

Has your current treatment been ineffective in improving your sexual functioning? If yes, continue.

Are you under the care of a physician who is familiar with testosterone treatments? If yes, continue.

Those women who have identified causes for low testosterone (listed above) are considered the best candidates for this treatment. Testosterone therapy also has been prescribed for women without

these specific medical conditions, but you should first be evaluated for the following:

- Breast cancer
- Uterine cancer
- Cardiovascular disease (abnormal lipid levels with blood testing and/or history of heart disease with heart attacks)
- Liver disease
- Abnormal liver function

If you have any of the above, testosterone therapy is contraindicated for your use. If you and your doctor agree that you are a candidate for testosterone treatment, the following is a discussion of its benefits, side effects, and risks.

The administration of any testosterone preparation to treat female sexual disorders is “off-label,” meaning this type of treatment is not FDA approved. The safe use of these products by pre- and perimenopausal women is unknown because the research is not available.

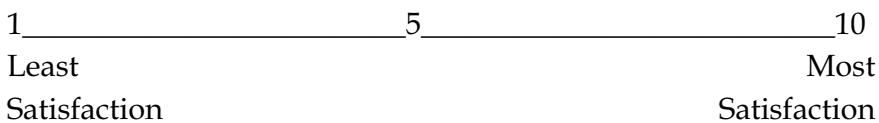
Oral and non-oral testosterone preparations have positive effects on these phases of the sexual response cycle, i.e., desire, arousal, and orgasm, in postmenopausal women. Testosterone should be taken with estrogen therapy because there is no proof of its usefulness when taken alone. Its usage is recommended at the lowest dose for the shortest period of time to reach effectiveness. Use of prescription products is preferable to non-prescription compounds to ensure consistency of dosing. Non-oral preparations are preferable to oral preparations to reduce the risk of side effects. It can take from one to three months for a therapeutic response to occur.

You should carefully consider using these products. Get a good medical work-up with blood testing to rule out any other causes for your sexual problems. Try various other treatments first. When undergoing androgen treatments, get regular blood testing to monitor your lipids and liver function, and to check that your blood levels of testosterone stay within physically healthy ranges. Remember, these products are for short-term use only. We have no long-term study data regarding their effectiveness beyond six months.

The side effects are weight gain, enlargement of the clitoris, increased facial and body hair, acne, changes in lipid levels (blood testing showing decreased levels of "good" cholesterol), and changes in liver functioning (blood testing that can show liver cell damage).

How well do any of these treatments work? This is mostly subjective.

Below is a scale I like my patients to use to describe how satisfied they are with improvements in their sexual functioning as they undergo treatment.



Draw a circle on the line marking your highest level of satisfaction prior to starting treatment. Place an X on the line at your highest level of satisfaction after beginning treatment. This is an overall assessment of whether your treatment is giving you the benefits you are hoping for. It can be repeated at any time.

FORMS OF ANDROGEN USED FOR TREATMENT

Oral

Micronized testosterone

Methyltestosterone

Dehydroepiandrosterone (DHEA, a non-prescription nutritional supplement, 25–50 mg daily)

Testosterone injections (IM)

Testosterone implants

Topical

Testosterone transdermal patch

Testosterone gel or ointment, e.g., Androgel, $\frac{1}{4}$ of a 2.5 mg packet daily applied to the skin of the lower abdomen

Bremelanotide nasal spray manufactured by Palatin Technologies

A SUMMARY OF KNOWN RISKS AND BENEFITS WITH TESTOSTERONE TREATMENT

Bone density – unknown

Well-being – no benefit

Menopause symptoms – no benefit

Lipids – reduces HDL (“good” cholesterol)

Coagulation – no effect

Cardiovascular system – unknown

Cognition – not enough research evidence, though benefit is suggested

Weight gain – increased weight due to increase in lean body mass

Hirsutism and acne – facial hair growth and acne occur with both oral and non-oral forms

Breast cancer risk – unknown

Long-term use – no data beyond six months’ therapeutic administration

Part VII

The MAP

NEW DRUG PRODUCTS FOR WOMEN THAT COULD BE AVAILABLE SOON

To increase blood flow:

Femprox cream – manufactured by NexMed, Inc.

Vasofem tablet – manufactured by Zonagen, Inc.

To replace testosterone:

Androsorb cream – manufactured by Novavax

Intrinsa patch – manufactured by Proctor and Gamble

Tostrelle gel – manufactured by Celigy

Chapter 45

The SANE Approach to Developing Your MAP

We women are aging, and I've asked myself (and my patients), "What do we want out of the life we have left?"

We want to feel good and look good.

We want to be as healthy as possible.

We want to learn the best ways to manage our current health problems to avoid getting sick.

As aging baby boomers, we want our healthcare providers to take a special interest in our needs.

We want to maintain sexual health for ourselves and for the good of our relationships.

We want to live longer than our mothers *and* have a meaningful life.

In 1999, I founded a company called Women's HealthSource whose mission is to educate women about midlife health. I developed wellness workshops for businesses as well as a series of seminars open to all, both of which we continue to conduct. These seminars provide women with an opportunity to obtain the information they seek from a medical professional, to explore their options with other women who can understand their experiences, and to better prepare themselves to discuss their midlife health issues with their doctors. Each program brings together small groups of women who have questions to ask, experiences to share, a concern for their present and future health, and a common interest in becoming informed healthcare consumers.

This book has evolved from the discussions I've had with these groups of women. The issues we struggled with are those I've researched and discussed in this book. The information and exercises in parts I through VI have been designed to prepare you for part VII.

There are a few basic principles I'd like you to remember and commit yourself to. I call them the SANE approach to disease prevention and health maintenance.

The Sane Approach

S—Stop smoking.

A—Avoid alcohol.

N—Nourish your body with good nutrition; vitamin supplements are a must.

E—Exercise daily, just as you brush your teeth and go to work daily.

We are the Baby Boomers and we are entering our maturity. We are:

Chapter 46

Completing the Menopause Action Plan

- Making an effort to find ways to stay healthy as long as we can
- Getting the tools and guidance we need from our medical experts
- Learning ways to slow the aging process through lifestyle changes and better nutrition
- Wanting and willing to help ourselves rather than relying solely on other authorities

Let's turn to completing your MAP now.

Part I—My Current Symptoms

The MAP is a set of worksheets that will help you define your problems, identify your health concerns, and formulate solutions to them. The screening tests and risk assessments in this book are a kind of early warning system also designed to help you complete the MAP. Ideally, you will complete part I of the MAP after completing part I of the book, part II of the MAP after part II of the book, part III after part III, etc. Not only will the material be fresher than if you do it all at one time, but the effort won't seem so daunting. In any event, should you draw a blank or become confused while answering one of the questions on the MAP, go back to the corresponding part of the book and look for the answer.

Your MAP is the product of your reading and thinking. It identifies the issues that are relevant to you. I've tried to provide some practical guidelines to getting medical monitoring and timely check-ups and testing. And I've included some safe treatments for specific symptoms as well as tips to help stabilize your current medical conditions. You have some very good ideas about how you can live a healthy life and a lot to talk about with your doctor. Go to it: I encourage you to take a greater part in actively managing your own menopause and your own future health. The best of health to you!

Chapter 48

Part II—My Medical History

What are your most bothersome change of life symptoms?

List them: _____

Did you have PMS during puberty or during the young adult years? If so, list your symptoms: _____

Attach a copy of the screening examinations appropriate for your decade (see part II, chapter 10).

Circle the term that best fits the group of symptoms you are experiencing.

PMS Perimenopause Menopause Postmenopause None

List the medical/psychiatric conditions for which you are

currently being treated: _____

List your current habits (for example, smoking, drinking, recreational drug use): _____

Do you have a history of problems in these stages? If so, describe them:

Pre-Puberty _____

Menarche _____

Childbearing Years _____

Midlife _____

Older Adult Years _____

Most recent test/measurement results:

Blood pressure _____

Pulse rate _____

Height _____

Weight _____

List all your current prescription medications and their dosages:

List all nonprescription drugs you are taking, including vitamins and minerals:

Have you had the following tests within the past twelve months? If so, record the results:

Pelvic exam and PAP smear Yes No _____

Chapter 49

Part III—My Disease Risks

Mammography Yes No_____

Blood glucose Yes No_____

Lipid profile (total cholesterol, LDL, HDL, triglycerides)
Yes No_____

Urinalysis Yes No_____

Follicle-stimulating hormone Yes No_____

Thyroid-stimulating hormone Yes No_____

Bone mineral density Yes No_____

Which diseases do you worry about getting? List them:

List those diseases for which you are at risk:

Are you having any early signs or symptoms of disease?

Which disease(s)? _____

Do the diseases you have listed above have any risk factors
in common? Yes No

If yes, list them: _____

Can any of these risks be changed? Yes No

If yes, which risk factors are you willing to work on? List them:

My first commitment is to schedule an appointment with my
doctor for further evaluation.

My doctor's name is:

Address:

Phone:

My appointment is scheduled for:

Date:

Time:

Chapter 50

Part IV—My HRT Assessment

QUIZ

I have decided to try HRT. Circle one: Yes No

If yes, continue. If no, proceed to the table listing alternative treatments.

I am currently taking HRT and have decided to continue with it.

Yes No

I know I can take HRT safely because I have discussed it with my doctor. Yes No

I have completed my Disease Risk Assessments and have had the laboratory tests and examinations recommended for my age.

Yes No

I have no contraindications to taking HRT. Yes No

My reasons for taking HRT are (check all that apply):

- to get symptom relief
- to minimize any physical changes
- to obtain long-term disease protection

I am taking the following product: _____

It contains estrogen alone. Yes No

It contains estrogen along with progestin/progesterone. Yes No

I take it: _____ orally _____ topically _____ vaginally

Are you getting the therapeutic benefits you hoped for? Yes No
My second commitment is to do the following when I take HRT:

- I will take HRT for no more than five years.

Or

- I have been taking HRT for more than five years and I will faithfully get all my screening examinations and laboratory tests done yearly.
- I will try alternative therapies to eventually substitute for my use of HRT.
- I will use HRT in combination with healthy eating habits and exercise.
- I will check regularly for changes in my:

Weight

Blood pressure

Cholesterol

Breasts

- I will report any side effects/changes to my doctor.

Please sign your name to this commitment:

Date: _____

ALTERNATIVE TREATMENTS

If you are trying alternatives, list each product you are using, the reason for using it (indication), and its benefit to you.

Chapter 51

Part V—My Lifestyle

I prefer to change my lifestyle and habits.

QUIZ

My current health problems are (from part I):

My future health risks are (from part III):

Habits to change (circle each number that applies):

1. Smoking—Which smoking cessation method are you going to use? _____
When do you plan to stop? _____
2. Alcohol—By how much will you decrease your intake?

3. Lack of physical activity
4. Weight gain
5. Overeating

Eating Plan

How many calories do you need daily to maintain a healthy weight?

Describe your eating plan for weight control, for example, pyramid, self-designed.

Vitamins and Minerals

List those supplements you will add to provide your daily requirements: _____

List those supplements you will add to provide for disease prevention (two only): _____

Phytoestrogens

List those you will take for symptom relief: _____

Weight Control

My current body mass index is: _____

My ideal BMI is between 19 and 24.

My ideal weight range is between _____ and _____. These weights correspond to a BMI of 19 and a BMI of 24, for a woman of my height.

My exercise plan calls for:

My diet plan calls for (type of diet, for example, pyramid, self-designed): _____

How many calories do I need daily to maintain a healthy weight? _____

At a recommended weight loss of one to two pounds per week, how many weeks will it take me to reach a BMI of 24 or less? _____

How much weight will I lose in that time? _____

My third commitment is to work toward disease prevention and health maintenance using the SANE approach. I will:

S—Stop smoking.

A—Avoid alcohol.

N—Nourish my body with good nutrition; vitamin supplements are a must.

E—Exercise daily, just as I brush my teeth and go to work daily.

Please sign your name to this commitment:

_____ Date: _____

Chapter 52

Part VI—My Sex Life

My sexual functioning is important to me. These are the important factors that will influence my sexual health through and beyond menopause:

- My mental health and sense of well-being
- The quality of my emotional relationship with my partner
- My physical health at the onset of change of life
- Satisfaction with my sexual functioning prior to any midlife changes
- Any personal history of sexual trauma

I will identify any problems that pertain to these areas and will decide how to address these problems, through self-awareness and self-educating consultation with medical experts or discussion with family/friends. Impaired functioning in the sexual response cycle (desire, arousal, and orgasm) are medical problems which require medical evaluation and work-up. I will take the time to schedule an appointment with my doctor.

Be prepared to answer these questions:

How long have you had a problem with your sex life?

Did it begin gradually or suddenly?

Is it a problem every time you have sex with your partner; is it a problem when you masturbate?

How have you responded to this problem and how has your partner reacted?

Have you tried any treatments?

What medications and supplements are you currently using?

Do not try treatments for these problems without first informing your doctor. If you have a sexual dysfunction, the best treatment approaches are the use of medical supervision and continuous medical evaluation to assure your health and safety.

Make a commitment: I will not ignore any concerns I have regarding my sexual functioning because problems in these areas might be indicative of other health issues that I am unaware of.

Afterword

The individual is the context.

Consider carefully the forty or so years ahead of you. How well you prepare for the second half of life may be the most important decision you will ever make. As we age, good health and vitality depend on what we do to prevent problems. A good health program can be developed at any age if we have information. We will all live longer than our mothers, but without good health, that longer life is just a shadow existence. This book is my effort to answer the midlife woman's question, "What's happening to me and what does it mean?" I have filled this book with questions and exercises to make the information personally relevant to you. Most of the questions were designed to get you thinking about making changes. Change is hard but possible if you have a plan, make your steps small, and take them one at a time. There isn't any one health plan for success that can be applied to every woman. There is only your health plan, and you'll have to discover one for yourself through (guided) trial and error. This is the rest of your life we're talking about, so be patient and persevere. The best advice I can give you is to take personal responsibility for yourself; make habit and lifestyle changes that are proactive and preventive.

Good health and good living.

Resources

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North American Menopause Society: www.menopause.org

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Dana Foundation: www.dana.org

Journal of the American Medical Association: www.ama-assn.org

Medscape, Women's Health: www.medscape.com

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NEWSLETTERS

Harvard Women's Health Watch
P.O. Box 420068
Palm Coast, FL 32142
Toll Free U.S./Canada 800-829-5921
Outside U.S./Canada 904-445-4662
www.med.harvard.edu

HerbalGram
American Botanical Council
P.O. Box 144345
Austin, TX 78714
Toll Free U.S./Canada 800-373-7105
Outside U.S./Canada 512-331-8868
www.herbalgram.org

The Soy Connection
Communiqué, Inc.
P.O. Box 237
Jefferson City, MO 65102
573-635-3265
www.talksoy.com

Tufts University Health & Nutrition Letter: Your Guide to Living Healthier, Longer
Tufts University
P.O. Box 420235
Palm Coast, FL 32142
Toll Free U.S./Canada 800-274-7581
Outside U.S./Canada 617-350-7994
www.healthletter.tufts.edu

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Camp Health Care, www.camphealthcare.com. A device called the "weighted kypho-orthotic (WKO)" is now commercially available. It looks like a small backpack, contains weights that help correct posture and spinal curvature. It is made by Trulife and can be seen on their website. It is not sold to the public and must be ordered through an orthopedic supply store. You may need a prescription.

Collage Video's guide to Exercise videos, www.collagevideo.com. This company provides helpful information for choosing exercise programs well suited to your own goals and level of physical fitness.

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eDiets: www.ediets.com

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Q & A

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Written in an easy-to-read format, **The Menopause Answer Book** helps you understand your symptoms and develop a plan to get you the help you need.

Marsha Lynn Speller, MD, is the founder and executive director of Women's HealthSource, Inc., which offers Change of Life seminars to women and women's midlife health education programs to businesses. She is a psychiatrist, a certified menopause clinician, and participates in clinical research pertaining to menopause symptoms and treatment.

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