

Imagine: a whole Different Kind of Medical Care

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with Peter Marcantel, M.Ed.

Awakened Publications Mesa, AZ Imagine: a whole Different Kind

of Medical Care

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Dedication

To Peter Marcantel, my brilliant and devoted partner in life and co-author of this book. Thank you for your continual support, so I can support others on their journeys to health. I'm grateful for your sense of humor that keeps me from taking my work (and myself) too seriously.

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Introduction

There is a paradigm shift taking place in health care in the United States. The alternative and complementary health care movement championed for the last three decades by people like Dr. Andrew Weil has moved from the fringes to mainstream. The term "integrative medicine" has become more commonplace, with many traditional medical institutions incorporating therapies like acupuncture, meditation training, and the uses of dietary supplements and botanicals as part of the care they offer. The more progressive health insurance companies are even starting to offer plans with broader coverage to include their customers' demands for wellness care and treatment that are outside the "norm" of traditional medical procedures.

So what's behind this change in thinking about how our health care is delivered? You are.

The sleeping giant that is the American health care consumer is awakening. People just like you—millions of them—have become disenchanted with the managed care model that only allows for 10-minute doctor visits – visits that always seem to end with a new prescription and, "See me again in six months." These patients are becoming much more proactive in educating and empowering themselves about medical matters, as evidenced by the rise in popularity of television shows such as *Dr. Oz* and *The Doctors*, and the growing interest in holistic doctors and authors like Dr. Christiane Northrup and Dr. Mona Lisa Schulz, as well as countless websites offering patient education.

This new awareness means changes in the traditional doctor/patient relationship. Patients are asking more questions and they're not necessarily ready to accept another drug that may be just a temporary fix for their symptoms. They want to get to the root causes of their problems and they're willing to look outside of the traditional medical bag (or pharmacy) to find them. As they become more aware of their bodies, people also realize there is much more to healthy living than managing specific symptoms. They are beginning to ask, "What do I need to do to get healthier, not only in my body but in my mind and my emotions and my spirit? I'm a whole being and I've got different facets of myself that need to be healed."

I've been a health care provider for over thirty years. I believe these changes are an exciting and vital new direction to seeing a healthier population in our nation. Doctors who allow patients to become participating partners in their own health plans become more effective as the patients provide the clues we need to assist them in the healing process. And, as patients experience these changes they become educated, they begin to understand their own bodies, and they are then able to help other people in need.

This book is for you – I know you are part of that waking giant. You have chosen to learn more about taking an active role in your own healing and overall wellness plan and you're ready to learn how a naturopathic or integrative approach can help you accomplish better overall health.

This book is not designed to be a comprehensive medical textbook, but rather an introduction to a philosophy of care. It's my personal philosophy of care, but I know it's shared by many of my colleagues in the medical field. It includes some of the clinical

treatments I have used with success in my practice, although I've changed the names and some of the circumstances to protect the privacy of my patients. My intention in writing it is to help you become empowered in taking responsibility for your personal health on all levels. My wish for you is that this becomes another tool for you to use along your personal journey to a healthy, happy, and rewarding life.

Chapter 1: Why I Became a Naturopathic Doctor

Since I was a young girl, I've been fascinated with how the human body works. One of my favorite childhood games was "Operation," and even though learning how to remove a "bread basket" or a "funny bone" didn't help much in my later anatomy classes it did help pique my interest in the healing arts.

After completing nursing school I served in a number of clinical settings from a hospital oncology unit to a public health clinic to an adolescent mental health facility. The last nine years of my nursing career were spent as a home health nurse.

Throughout my twenty-year career as a nurse I witnessed ever-increasing cases of diabetes, heart disease and cancer that could be largely attributed to patients' poor nutritional habits and lifestyles. I also saw an increase in toxicity among people as a result of the growing overuse of synthetic drugs, causing multiple adverse reactions and thus compromising the quality of these patients' lives. I saw the harmful effects of emotional disorders, as well. Stress, bitterness, or depression can lead to a variety of physical problems. Conversely, I've seen patients' health improve when they have made the choice to change diet, lifestyle, and even their attitudes.

I've always taken a holistic approach to healing. I've seen firsthand how helpful prayer and counseling are in promoting physical healing in my patients. I have also emphasized proper nutrition and exercise for recovery as well as for preventive measures. As an example, I cared for many diabetic patients as a home health nurse and I would see people with amputations or on dialysis due to complications from the disease. I started talking with my patients about alternatives like eating a better diet or exercising regularly to reduce blood sugars instead of constantly taking more insulin and other medications. Implementing these changes would often result in the blood sugars going down naturally.

At the same time, I would watch in frustration as the patients under my care were sometimes harmed as much as they were helped by synthetic drugs that were at times over-prescribed. I am certainly not opposed to the use of prescription medications when used in the proper conditions. Modern pharmacology has given us many helpful—often lifesaving—interventions. But problems arise when we (both doctors and patients) become too dependent on the use of drugs to mask the symptoms or effects of a disease process rather than trying to discover and deal with the root causes.

A good example of this is the rise in the popularity of statins to treat high cholesterol. While statins can be effective and necessary when dealing with extremely elevated cholesterol numbers for the short term, it's critical for the patient to address the causes of high cholesterol (chiefly poor diet and lack of exercise) to achieve good long-term health results. On top of that, statins can have side effects such as muscle pain and muscle weakness that add to the physical complaints of patients. This can lead to more drugs—either prescribed or over-the-counter—to offset the pain. Many of my patients have presented me with long lists of medications, including those they are taking to offset the side effects of the others! This problem is compounded by the fact that people (especially older patients) are often seeing several different specialists who may not always be aware of recent medications recommended by other doctors.

It's important to remember that all these synthetic drugs are actually seen as toxins by our bodies. Because they are not recognized as "natural," the body's filtration

system, including the liver, kidneys, lymph system, and intestinal tract, are all working overtime to flush them. In the end, the toxic buildup of these drugs in the system can actually cause greater problems than they were first prescribed to address.

As a nurse I wanted to provide the best possible care for my patients. While I recognized the problems of overmedication, my training didn't provide me with satisfactory answers and alternative treatments. When two of my friends were diagnosed with breast cancer I started studying the power of food and how if affects our bodies. Through good nutrition and a proper lifestyle of exercise, rest and pure air, our cells can be regenerated into healthy structures that work in our bodies to fight off sickness and maintain health. Our whole body changes—our cellular make-up changes—according to what we put into it. The old phrase "you are what you eat" took on a whole new meaning for me as I learned what the power of food could really do. Even after thirty years of practicing medicine that idea still gets me excited.

The more I studied and learned about alternative therapies, the more I wanted to know. That's what led me back to school at forty-three years of age. During my four-year medical training at Southwest College of Naturopathic Medicine in Tempe, Arizona, we learned conventional medicine like the pathophysiology of disease processes, biochemistry, and anatomy and physiology, but we also learned about alternative therapies: acupuncture, homeopathy, proper nutrition, herbal remedies, and other complementary treatment modalities. Knowing that I could use effective natural therapies in conjunction with "traditional" treatments made me feel more empowered as a health care provider.

Because naturopathic doctors are fully licensed and enjoy a wide scope of practice in the state of Arizona, I am able to take a truly integrative approach to treatment protocols. Sometimes conventional medical treatments for problems are necessary (prescription drugs, for example) and I can prescribe those as needed, but my preferred method is a conservative and natural approach that seeks to identify and address the root causes of medical complaints. It's also important to note that naturopathy is not intended to take the place of all other types of medical care. It is simply one more resource—in my mind, a basic and essential one—in the overall health care plan for people who are serious about living a healthy lifestyle.

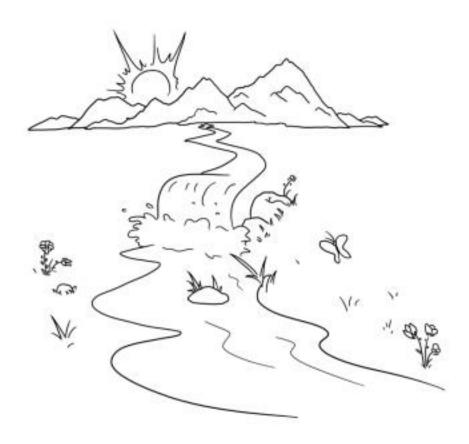
Hippocrates wrote that it is the tendency of nature "though untaught and uninstructed...to preserve a perfect equilibrium...to reestablish order and harmony." He taught that it is the duty of the physician to merely assist this tendency of the body to achieve its own equilibrium, harmony, and health—a state today's physicians sometimes refer to as "homeostasis." This idea—that, given the proper support, the body has an innate ability to heal itself through natural means—is as true today as it was 2400 years ago. It is also one of the guiding principles of naturopathic medicine.

As a Doctor of Naturopathic Medicine, it's my goal to teach people to assume personal responsibility for wellness, thus becoming a part of their own medical team to promote self-healing. This is something I truly believe in. I have practiced the principles of good nutrition, exercise, prayer and meditation, and alternative healing therapies in my own life for many years and I feel privileged to be able to share my experiences with my patients.

My childhood fascination with the human body has not diminished. In fact, the more I learn, the more I'm amazed at the body's capacity for healing. In offering my

patients an integrative and holistic approach in my practice and by taking the time to educate them about how they can help themselves, I feel I'm giving my best as a healthcare provider. I love hearing a patient say, "Thank you, Dr. Marcantel. Now that I really understand what's going on with my health I feel that there's hope I can get better."

Chapter 2: The River of Health



Imagine a river.

Start at the headwaters: a clean, clear, fast-moving mountain stream. The banks are verdant and lush; sparkling sunlight shimmers on the surface like thousands of tiny diamonds as dark flashes reveal trout swimming in the deeper, quieter pools. On a hot day, the waters invite you to plunge into their icy freshness, to scoop up handfuls to quench your thirst, to feel the cooling dampness on your cheek.

Following the riverbank downstream, the river begins to widen and the volume of water increases as tributaries add to the flow.

As you move down river, signs of "civilization" appear. The clear, fresh waters begin to get murkier. Industrial waste and agricultural runoff, along with trash cast off from careless passers-by, become more evident.

When you finally reach a stopping spot in the river, after passing through several cities, you can barely recognize the clear mountain stream. The banks are littered with broken bottles and dead fish, the dark, oily waters look ominous, and you can only grimly shake your head at the superfluous sign that reads, "No Swimming By Order of the Health Department."

Now think of this place as *your* "River of Health." Just as the mountain stream becomes toxic from the pollutants that are added to it as it flows toward its destination, your own health can suffer from countless outside influences.

Most of us are fortunate to be born with fairly healthy bodies. We enjoy our youth in the cool waters of the mountain stream, rarely even considering what a precious gift good health is.

As life goes on it's easy to go with the flow as we are often unconsciously pulled downstream. We may be unaware of some pollutants that enter our health stream, like the environmental toxins in the air we breathe, the cleaning products we use, or the additives and preservatives in the food we eat daily. Lifestyle choices we make also have a huge impact, such as smoking, alcohol abuse, lack of exercise, and most common of all, poor dietary choices.



Add to these the routine use of prescription drugs, stress from work, family problems and the busy-ness of life and we may well realize that we are bobbing around in the oily waters of the "No Swimming" zone.

So how do we get back to the headwaters of health?

That's what naturopathic care is all about. The goal of health care must go beyond simply treating the symptoms of whatever current health challenge we are facing. It should help us progress toward a vibrant, health-oriented lifestyle. How that is done is based on some simple, often overlooked principles.

First Principle: We are what we eat (and drink and do).

Suppose we were given the task of cleaning up a polluted stream. How would we go about it? The obvious first step would be to stop the source of the pollution. By the same token, if our goal is a healthy body, we must acknowledge that there are many things within our control that either enhance or detract from our health. We can educate ourselves about those things and commit to making the necessary changes to move toward better physical health. Some examples of this are obvious, like stopping smoking

or cutting back on alcohol consumption. There are other "pollutants," though, that may not be as evident but may be just as harmful, such as certain foods that contribute to high cholesterol, or processed carbohydrates that can contribute to high blood sugars, or even constant stress that is at the root of a wide variety of health problems. The more we learn about how our bodies operate, the better choices we can make.

Second Principle: We can't remove sickness from the body; we can only add health.

Now that we've stopped the source of pollution, how do we clean up the waters? While we could skim out a few pieces of floating garbage, the truth is that we would be hard-pressed to filter out the real pollutants. What's needed is fresh flowing water to wash away and replace the impurities in the river. In the same way, it is only in rare circumstances that we can actually remove sickness from the body. Most of the pharmaceutical drugs we take are designed to mask problems, not eliminate them. The real goal must be to add health that supports our immune systems so our bodies can fight off disease and resist future problems. Which brings us to our third point...

Third Principle: Ultimately, the body heals itself. Our job is to help it do its work.

A clean stream is an amazingly balanced ecosystem that is self-sustaining, but the human body is even more amazing. Our organ systems work overtime every day to keep our bodies balanced and running efficiently. The restorative powers of the body are a wonder! Even so, the mental, emotional, and physical stresses we place on ourselves can push our organs beyond the capacity to function properly, leading to heart disease, adrenal problems, thyroid problems, diabetes, and a host of other health challenges. While modern medical advancements can be a great help, they can never replace the human body's natural ability to heal itself; that is why we must provide our own bodies with every advantage we can by eating well, taking nutritional and hormonal supplements when necessary, exercising regularly, doing meditation or taking mental breaks throughout the day, and following a comprehensive plan to improve our overall health.

As you can probably tell, naturopathic care is not about seeking a quick fix to health problems. It is a long-term commitment to yourself, to learn about and incorporate healthy lifestyle choices that will have lifelong benefits. You learn to work as a team with your naturopathic doctor along with all your other health care providers with a goal of reaching optimal health.

Swimming upstream against the negative health influences in our lives isn't always easy, but think of the rewards that will come with finding yourself back in those crystal-clear headwaters of good health.

Chapter 3: The Patient/Doctor Relationship

Consider a typical visit to the office of a general practitioner who is working within the managed care (HMO or PPO) system:

After arriving on time for your 2:00 p.m. appointment, you are asked to take a seat in the waiting room. Thirty minutes to an hour later (if you're lucky) you'll be brought back to an examination room where the nurse will ask a few questions and take your weight and your vital signs. You wait another fifteen to twenty minutes for your doctor to enter. Once he enters, after a brief greeting, it's time to get right down to business to determine why you are there. You can expect to spend about 10-15 minutes in a face-to-face conference, according to national averages, so you know you have to make the most of each minute.

You begin to explain your symptoms as the doctor does a routine physical exam. "Lately I just seem to be so emotional; I blow up at my husband and my kids, or I'll suddenly burst into tears for no real reason. Also, I'm having bad hot flashes at night and I don't know the last time I got a good night's sleep. I know this isn't just mental—I just don't feel right physically. What's going on with me?"

The doctor nods and smiles sympathetically. "You're getting older. Menopause is coming on. I can give you a prescription for an antidepressant to help you calm down." For good measure, he also writes a prescription for a sleep aid before he rises to leave. As you watch him go you think of all the other questions you meant to ask and the symptoms you forgot to explain. Never mind—you'll buy the drugs and hope they mask the problems until something changes.

Although the specific symptoms and medical issues described in the scenario vary, the end result is all too familiar. Every day, patients leave their doctors' offices feeling frustrated and helpless to deal with their own medical conditions.

I remember once, during my days as a registered nurse working in the home health field, when a patient I was visiting was having some ongoing physical problems that didn't seem to be getting any better with her existing care plan. We made an appointment with Maria's doctor (the names of patients have been changed throughout the book) and I sat down with her to make a list of specific questions and issues she wanted to address when she went for her visit. When I saw her next, I asked how the appointment went and whether she had received satisfactory answers to our questions. Maria replied that, "The doctor seemed to me to be in such a rush that I didn't feel like he had time for my questions."

Because of her perception that the doctor was "too busy," my patient missed her chance to discuss important details about her ongoing health care. I explained to her that she was paying for her doctor's services and that she had the right to ask questions. I told her that, "It's important for you to speak up and be proactive!" Still, Maria's attitude is typical of many patients seeking help in the managed care system. They understand that their doctors are busy and don't want to "bother" them with questions. They are also often ready to accept a quick, short-term fix that's offered rather than press their doctors for the long-term answers they really need.

Now imagine a whole different kind of medical care. One where you work with your doctor to find solutions that are truly unique to your individual needs. A whole new

kind of medical care that empowers you with education for long-term health along with your short-term needs. A care that is more focused on keeping you healthy than on treating you when you're sick. That's the goal of naturopathic medicine and a standard I strive to achieve with each of my patients.

How can we provide "a whole different kind of medical care"?

It's simple...physicians need to go back to the old-fashioned idea of getting to know *you*, the patient. Through a combination of listening, interviewing, counseling, physical examinations, and testing we need to work with our patients to diagnose and treat not just their symptoms, but the root causes of their symptoms. By spending the necessary amount of time with you, your doctor can work with you toward the goal of restoring the body to a place of health so it can function on its own (without pharmaceutical help) as much as possible.

My patients teach me a lot of things by sharing the stories of who they are. The more you can tell me about what's going on with your body—your symptomology—the more I can help you. I always tell my patients, "You will help me to help you by giving me the information that your body is providing." I depend on that input because you live in your body and I don't.

Every person is an individual and every body has characteristics that are different from others so I treat each person as a unique patient. If I'm trying to get to the root of problems, it's important that the patient and I dig down and gather all the facts before I suggest a long-term treatment protocol. Symptomology is critical, of course, but the patient's family history is also helpful. A physical exam and laboratory testing provide more pieces to the puzzle as I seek to get a clear picture of the patient's physical state. Your emotional condition can be just as important; what you think and how you feel—positive or negative—and how you react to stressors can be critical data in making connections to how your body is functioning. Once I have all the information, I can be much more effective in helping you reach your long-term health goals.

In my practice, the patient and I actually list those goals. On the first or second visit, after I've done the intake and I receive lab results, the patient and I will sit down together to make a plan. "This is what we want to see: Increased energy, better sleep, higher progesterone levels." This concrete goal setting gives both the patient and me a better way to track how successful the overall treatment plan is.

Treat the Person, Not Just the Symptoms

If a person comes into my clinic and they're depressed and really not feeling well—say they're having difficulty getting up in the morning or have feelings of hopelessness—I may prescribe an antidepressant. I have nothing against that, but I'm going to try to figure out why they're depressed.

What are they depleted of or what do they have too much of? What is going on—is it maybe neurotransmitters or hormonal imbalances or is it something going on in their lifestyle? Is it stress? Stress can play a big role in draining us of our energy and thus affecting our hormones and our neurotransmitters, as well, as they try to supply the energy we need.

The important consideration is, "What does this particular patient need at this particular time in his life?"

I have no problem prescribing an antihypertensive if he has high blood pressure and we need to get it down quickly. Thank goodness we have modern medications to help deal with these symptoms, but I want to find out what's causing the high blood pressure and possibly other health issues that haven't surfaced yet.

A lot of times people are put into what I call a "diagnosis bucket"; they're thrown into a category based on symptomology. For instance, things like ADD, ADHD, chronic fatigue syndrome, fibromyalgia–all of these conditions are really symptoms of a combination of things, but those of us in the medical field sometimes look for concise and handy labels.

I have patients that come in to my clinic and say, "I'm chronic fatigue syndrome." They have actually become *identified* with their problem. I make them aware not to identify with that. That's not who you are. The various symptoms are what you and I have to consider to get to the root cause of why you have physical challenges. It's essential to know that *you are not your disease*. You are a divine being living in a body—an intelligent body that is speaking (or screaming) to you to make changes for its healing to occur.

Depending on your symptoms, it's important to identify the right questions to ask to help find the root of your problems. For instance, is it your thyroid gland that's causing some of these symptoms? Is it a poor ratio of estrogen to progesterone? Are your adrenal glands no longer producing as much cortisol as you need, to handle the stress? Do you possibly have food sensitivities that exacerbate your symptoms? Once the patient and I start asking the proper questions, we are on our way to finding meaningful answers.

Your mental, emotional, and spiritual conditions also play a huge part in your physical health. A person who is living in a constant state of anger, bitterness, fear, jealousy, resentment or other negative emotions will very often find that they cannot achieve the healing they need until they make peace with that aspect of their lives.

A schoolteacher came to me with several health concerns, but one of the chief complaints was foot pain (a real liability considering her profession). Becky had seen numerous doctors about the problem but had had little relief from the pain in years. After we talked for a while, she began to open up to me about negative feelings she had about herself that stemmed from a verbally abusive relative. Often, diagnosing root causes can be as much intuitive as scientific, and I've learned to trust my "inner voice" when I'm interviewing a patient.

As Becky shared her story, a passage from Louise Hay's excellent book *You Can Heal Your Life* came to mind. In the book, Hay draws connections between emotional trauma and specific medical conditions. I suggested to Becky that there could be a link between the pain she was having and her unresolved problems with her relative. As I read a specific passage from the book aloud to Becky, she began to cry as she identified with the subject I was reading about. After leaving my office, she eventually had an emotional breakthrough as she worked through the difficult process of forgiving and letting go of the past. Within a week of that visit, she reported that the pain in her feet was virtually gone and she felt "better than she's felt in years." For more on this topic, see chapter 15 on "The Mind-Body Connection."

I'm very thankful that I can prescribe medication to help people along their path of healing until we can get to the root cause of the problem and perhaps use other things to help them. For instance counseling, homeopathy, acupuncture, botanicals, a change of

lifestyle, stress management—all of these can be useful tools to help eliminate the symptomology and reduce the need for pharmaceutical interventions. At the same time, it's important to remember that there is no "one size fits all" treatment; every individual responds differently to therapies and so must find his or her own healing path. That's why it's important for me as a physician to truly get to know my patients and to treat them as a whole person and not to just target specific symptoms they present at our first meeting.

5 Ways to Help Your Doctor Help You

As I mentioned earlier, a key concept to a successful patient/doctor relationship is active teamwork: "You will help me to help you." Here are five ways to get the most out of a working relationship with your physician.

- 1. Do your homework before choosing a doctor. Read books and research the symptoms and signs your body is giving you. Look at the prospective doctor's website to get an idea of what their medical specialties or interests are and determine if they are a good "fit" for you. Explore your options and trust your "gut feelings" when choosing a doctor. Good communication and reasonable expectations from both sides from the first visit on will go a long way toward achieving a successful treatment plan for optimal health.
- 2. Specifically state your health concerns in order of priority when you visit. Your body is intelligent and will give you indications when something is wrong. You know your body better than anyone, so pay attention to what it's telling you and then communicate that as clearly as possible to your doctor. This can be used to deal with immediate symptoms, but it can also be very useful in getting to the root causes of problems. Also, I know that many of the patients that see me are seeing their primary care physicians and specialists, as well, which can mean they're taking several prescribed medications from several different doctors. Make sure the doctor knows your diagnosis and why you're taking medications and inform them of everything you are taking—prescription, nonprescription, or natural supplements—to avoid overdosing or unwanted interactions.
- 3. Be an active participant in your own care plan. Your doctor is there to assist you in your healing process by offering his or her years of clinical experience, research, and medical training, but you are ultimately the captain of your ship. That means being compliant with following the treatment plan you and your doctor have agreed on, but it may also involve long-term lifestyle changes. It's up to you to do your part in bringing balance to your life through exercise, proper diet, and a good mental attitude. We all need to be aware of those things, people, or circumstances that drain us of our energy and cause unnecessary stress that can exacerbate our health problems. It's true that we can't always eliminate those "energy suckers" in our lives, but we can learn to choose positive ways to respond to them rather than allowing them to control us with negative thoughts and feelings.
- **4. Be your own patient advocate.** You need to feel comfortable with the treatment plan that your doctor offers you—and, hopefully, it's not just another prescription! It's your body—you get the final say in what treatment you choose. A patient becomes self-empowered when they realize that the doctor guided them but it was they who made the conscious decisions leading to a healthier and happier life. Along those lines, be sure to communicate to your doctor what is working and what is not

working. Especially in cases of long-term health problems, it's often necessary to try several approaches or make changes to your existing treatment before finding the solution you need. Help your doctor work with you to explore those options.

5. Have realistic expectations about treatment and outcomes. If you go to a doctor with an acute condition such as a broken finger you generally know what to expect. If the doctor is covered by your insurance in a managed care system you make a co-payment and the doctor's office will bill your insurance plan for the treatment. You leave the office or hospital with a splint on your finger and a prognosis of X number of weeks for a complete healing. Visiting that same doctor for a chronic condition such as hormonal imbalances or fibromyalgia is a different story. Here is a summary of the experience that many of my patients have shared with me:

Patient: Fix me, Doctor. Here's my insurance card.

Doctor: I don't have time. Here's your prescription.

Chronic conditions generally take time-intensive visits to treat effectively. These visits are often not covered by traditional insurance plans, and the constraints of managed care often mean that doctors cannot devote the necessary time needed to deal with root causes. People who seek help outside the "traditional" insurance system realize that by choosing to pay out-of-pocket for visits, they are able to choose a doctor who has the time to work with them to deal with chronic complaints. That extra time spent with the doctor can also help prevent the misdiagnosis of a condition and save time, money, and frustration in the long run when bringing a patient into health. Even so, remember that chronic conditions often take years to develop and will (sometimes) take some time to reverse, especially when using more natural therapies.

Finding the Real You in the Mirror

To better explain why I believe it's so important to have an honest and trusting relationship between the doctor and patient, I'd like to share a story with you. It's a story I've heard over and over again as I'm interviewing new patients:

"Dr. Marcantel, I am a wreck. I'm probably the worst patient you've ever seen. I'm depressed, I've put on so much weight that I hate my body, and I'm so miserable that I'm just about ready to give up. I'm disgusted with myself; I'm tired of being the person I've become."

As she speaks I look into this woman's eyes and see a very different person than the one she's describing. I see a person with a brave heart who has shown the courage to take steps to explore health care options for herself, so she can try to feel better. I see a tired, discouraged individual who still has enough hope in reserve to continue to pursue help because deep down, she believes she can have a better life. I also see a soul who has cared for so many others that she has lost herself in the giving and has become ill herself. My challenge as her healthcare provider is to help her look past the poor self-image she has come to accept and to embrace the hope and potential for happiness that is her true self.

In one of my favorite movies, *Hook*, Robin Williams is a grown-up Peter Pan who has allowed the crushing responsibilities of the adult world to erase all memory of his childhood. When he finds himself back in Neverland among the Lost Boys, neither he nor the children can believe that he was once their leader. At one point one of the boys takes the middle-aged man's face in his hands to examine him. As he wipes away time by

smoothing out the wrinkles with his fingers, the boy suddenly exclaims, "Oh, *there* you are, Peter!" It's a pivotal moment as the character begins the journey of recapturing his true identity. Later when he sees his reflection in a pool, it is the Peter Pan of his youth that is looking back at him.

We may not be able to stop time by refusing to grow up, like the original Peter Pan. We don't, however, have to identify ourselves with the negative physical and emotional circumstances in our lives. When I see the true soul of courage, hope and generosity in a discouraged person sitting in my office I want to somehow reflect that image back to her. I try to provide an atmosphere of safety and trust that will encourage each patient to see the beauty of her own divine nature. This shift in thinking is critical because before any of us can truly heal we must first **believe that we are worthy** of the time, expense, and effort of pursuing wellness.

Having a positive self-image is an important part of the healing process.

What do you see when you look in the mirror? Is it a reflection of someone who is hopelessly discouraged by the person you've become? I hope you see the real you—a beautiful, unique soul with the potential for achieving the health and happiness you deserve. And I hope you find the right health care providers who can support you along your journey.

Chapter 4: Preventive Care

As a naturopathic physician, most of the patients I see have made the rounds. These are people who have been to all kinds of different doctors and different specialists. They've been put on many different medications, but they're still having problems. It's often only at that point that some people seek out a naturopathic doctor or other health care professional offering alternative or preventive treatments.

I don't know how many times I've heard, "I've tried everything and nothing works! You're my last hope!"

And so, as a "doctor of last resort," I'm asked to untangle years of medical issues in a few short months. Talk about pressure! I'm always willing to offer my services in these cases, with the understanding that problems that take years to develop can't be dealt with overnight. In many of these cases, I also believe that early intervention with some fundamental preventive measures could have helped the patients avoid years of unnecessary suffering.

I'm happy to report that attitudes are changing about personal responsibility regarding health care. As naturopathic and integrative medicine moves toward the mainstream, more people are seeing the advantages of preventive care. Instead of waiting until they are so sick that they *need* to see a doctor, they're choosing to take care of themselves: they want to lose the extra weight, to eat better, to get counseling on lifestyle changes and to find ways to cope with stressful times. Instead of just "feeling okay" or accepting sickness as a routine part of life, these people are seeking to take a proactive role in helping their bodies achieve optimum wellness while promoting a healthy immune system.

The idea of preventive medicine goes far beyond the scope of "eat right and exercise regularly." While proper diet and exercise are still the foundations of a healthy body, there is much more we can do to achieve optimum wellness. Women that go through perimenopause to menopause, for example, can prevent the bumpy road during that transition if we can get their hormones balanced earlier, rather than later, in the process. Those with a genetic predisposition to high cholesterol can learn which food supplements are helpful to control their conditions without having to go through the expense and possible side effects of statin drugs. There are tests that can be done to determine if you are sensitive to certain foods that can trigger pain or sinus problems. All of these and many more strategies are available as a way for your doctor to help you stay healthy rather than trying to heal you when you're sick.

I'm also seeing more patients who are bringing in family members—spouses, children, siblings, parents—for preventive care. For example, people who have a history of diabetes in their families may bring in their children to talk about good eating habits at a young age to prevent the development of type 2 diabetes, or women might bring in their daughters for hormone testing to prevent hormonal imbalances in the future. One woman I was able to help with some specific health problems decided to bring in several of her teenaged children for wellness checkups. All of the kids were eating well, exercising, and were generally healthy, but they each had some specific symptoms they were concerned about.

My initial assessment revealed that one had a potential thyroid dysfunction and one was experiencing worse-than-average PMS symptoms. Lab tests confirmed the thyroid condition in one and showed that the girl with PMS had low progesterone levels that resulted in her symptoms. All had low vitamin D. By intervening early, their mom and I were able to help them deal with troublesome issues while those issues were still relatively minor and easier to control.

The old saying that "an ounce of prevention is worth a pound of cure" certainly applies when it comes to living a healthy life. It just makes sense to take advantage of the knowledge your healthcare provider can offer to help you achieve your goals.

Seven Healthy Habits You Can Start TODAY

Everybody wants to be healthy, right? Although there are some things we can't control about our health, there are many things we can. By developing healthy habits, practiced on a daily basis, we can tip the odds in our favor for living a long and vibrant life.

- 1. Drink more water. Most people don't drink nearly enough water to properly hydrate their bodies. If you simply consider the fact that the human body is about 75% water, it helps to understand the importance of drinking the recommended daily amount of 8 to 10 eight-ounce glasses or approximately ½ your body weight in ounces. The problems associated with improper hydration and the benefits of proper hydration are too many to list here, but consider this: Inadequate fluid intake and dehydration increases the risk of developing kidney stones. If you've ever suffered the pain of a kidney stone, that knowledge alone could be enough to prompt you to drink up. Proper hydration also helps keep your skin looking younger, prevents muscle cramps, and helps regulate your bowels, so your body benefits both inside and out.
- **2. Eat less food more often.** Many people believe that the best way to lose weight is by skipping meals and eating less often. The truth is that when you skip meals, the metabolism slows down and you burn less calories and fat. It's better to eat four or five small meals and snacks (eat every three hours throughout the day) to keep the metabolism going. Include a protein (cheese, fish, lean meats, nuts, eggs, etc.) with each meal or snack to help prevent glycemic (blood sugar) spikes that can lead to weight gain. Don't eat until you feel full; eat just enough to satisfy your hunger and then stop.
- 3. If it's white, don't bite; eat brown from the ground. White bread, white rice, white sugar—these are all processed (refined) carbohydrates that have been stripped of their natural vitamins, minerals, and fiber. Stick with more natural foods like whole wheat bread, brown rice, and stevia (a natural sweetener). Processed foods that contain limited amounts of natural fibers and nutrients may fill you up, but they can still leave your body malnourished. Natural foods contain the fibers and minerals your body needs to function properly.
- **4. Support your liver.** For most of us, our livers are working overtime to filter toxins from the air we breathe, the foods we eat, the things we drink, and the medications we ingest. Like any filtering system, the liver needs to be cleaned occasionally to help it operate properly, so another good healthy habit to develop is periodic detoxification. To help the process, squeeze half a lemon in 8 ounces of water and add stevia to taste first thing every morning; the lemon juice helps support the liver in its process of detoxification of the body. Lemon juice also helps balance blood sugars naturally.

- **5. Get moving.** There's no way around it—if you really want to get and stay healthy, exercise is a key factor. A regular exercise routine improves cardiovascular health and burns calories to help you keep off unwanted pounds, but that's just the start of the benefits you'll reap. You'll find more on exercise in the next section in this chapter.
- **6. Take mental breaks.** Many of us wake up in the morning and begin a marathon run through the day's business until we fall into bed exhausted that night. It's essential to our mental and physical health to take breaks to allow our minds and bodies to relax and regroup. Learn the art of "mini-meditation" to stay refreshed and energetic all day long by taking five minutes out of your routine to relax and focus on deep breathing. It won't make the demands of the day go away, but it will help you handle them better.
- **7. Get your sleep**. Sleep rejuvenates cells and helps in the healing process and also helps to maintain and boost the immune system (e.g., the chances of catching a cold increase if you haven't had a sufficient amount of sleep). Lack of sleep also leads to stress, which leads to increased cortisol release, which leads to weight gain. How much is enough? For most adults, approximately 7-8 hours of sleep a night is about right.

As we all know, there's no time like the present to start on the road to better health. Start these healthy habits today and soon they'll be a natural part of your daily routine. Remember also that—as I tell my patients—"We're looking for progress, not perfection!" Give yourself time and a bit of grace as you seek to incorporate these and other healthy habits into your lifestyle. Each step in the right direction will give you more confidence and more energy to keep moving toward your wellness goals.

Exercise

Exercise can help you lose weight and strengthen your cardiovascular system, but do you want even more reasons to stay fit by staying active? Consider these other great benefits of a regular workout:

*Exercise combined with a proper diet is a great natural treatment for type 2 diabetes. Research shows that consistent aerobic exercise prevents obesity and insulin resistance that can lead to type 2 diabetes. Exercise has proven to be just as effective as a particular oral diabetic medication (metformin) in sensitizing the insulin receptor sites to allow glucose into the cells—and you don't need a prescription!

*Exercise also can help prevent premature bone loss. Weight-bearing exercises like walking or jumping rope stimulate osteoblastic activity, resulting in increased bone density.

*Studies have shown that a moderate exercise program will help you fall asleep faster and sleep longer. It also releases endorphins and serotonin, two brain chemicals that positively affect your moods.

*Aerobic exercise combined with strength building is an important way to stimulate the release of fat from fat cells. Regular exercise can also boost the metabolism by up to 8%, which means that less fat is stored in the first place.

*Studies have shown that women who exercised reported fewer fat and sugar cravings. So not only are you burning calories, your body actually learns to lose the desire for some of the foods you should limit!

*Another benefit specifically for women is that studies have found that women that exercise three or more hours a week reduced their risk of breast cancer significantly.

Because breast cancer is such an important topic for women, let's discuss it in more detail.

Breast Health and Exercise

Most women are very concerned about breast health and particularly about avoiding breast cancer. It's certainly an important issue to address. According to the government's Centers for Disease Control, "Aside from non-melanoma skin cancer, breast cancer is the most common form of cancer in women. Breast cancer is the number one cause of cancer death in Hispanic women. It is the second most common cause of cancer death in white, black, Asian/Pacific Islander and American Indian/Alaska Native women." (1)

The good news for women is that there are things they can do to promote breast health and reduce their chances of contracting this disease. We know that regular exercise is extremely important for many reasons concerning our overall health: weight loss, cardiovascular strengthening, balancing blood sugars, and much more, but did you know that exercise might also help you avoid breast cancer?

My clinical experience includes women who are experiencing signs and symptoms of estrogen dominance (an imbalance in the estrogen/progesterone ratio). There is evidence that this estrogen dominance may lead to breast cancer over a period of time. Dr. John Lee states in his book *What Your Doctor May Not Tell You About Menopause*:

Since many women in their mid-thirties begin to have non-ovulating cycles, they are producing much less progesterone than expected, but still producing normal(or more) estrogen....They develop signs of estrogen dominance relative to progesterone deficiency resulting in fluid retention, weight gain (especially around the hips and torso), depression and decreased libido. (2)

But this extra estrogen could have a more ominous effect. Dr. Bob Arnot, in his book *The Breast Cancer Prevention Diet*, cites many good studies that associate high estrogen levels with a high risk of breast cancer:

Researchers at NYU measured estrogen levels in women long before they ever developed breast cancer. Years later, the NYU health study found that those postmenopausal women who developed breast cancer had a markedly higher amount of estrogen measured in their blood than those who did not have cancer. (3)

Arnot also points out that exercise intercepts the estrogen pathway at several critical junctures. This results in a decrease in estrogen dominance. **The more women exercised, the less likely they were to get breast cancer.** A study at the University of Southern California of 1,000 women concluded that those who exercised 3.8 hours or more a week had less than half the breast cancer of those who remained inactive.

If you are not exercising on a regular basis, you don't want to try to do too much too soon. Talk with your doctor about an appropriate exercise program for you and remember that **the important thing is consistency and persistence**.

So what are you waiting for? Get moving and get (and stay) healthy!

Natural Skin Care

It's a fact of life that as we grow older our bodies require more maintenance. The most visible sign of aging is the condition of our skin, which is a major reason so many people are concerned with proper skin care. The bad news is that most of the "miracle" skin care products that sound too good to be true are exactly that. The good news is that there are positive steps we can take to naturally protect and repair our skin to keep it healthy and vibrant. Here are nine tips for naturally healthier skin:

- 1. Eat healthy. Foods containing omega fatty acids such as cold-water fish (salmon), flaxseed oil, walnuts and borage oil will provide the cells with a healthy membrane, resulting in healthy skin. I recommend patients take fish oil soft gel capsules daily, which I know will provide ample omega-3 fats. Foods containing B-complex vitamins such as fish, meat, eggs, and grain cereal products also help create healthy skin. Sweet potatoes and carrots contain beta-carotene, which is responsible for growth and repair of body tissues. Include citrus fruit and vegetables containing vitamin C, which is an antioxidant and provides collagen for the skin.
- **2. Treat yourself to a foot soak** with 1 part vinegar to 1 part water for 15-20 minutes, then rinse. This has proven effective for very dry skin. It also prevents fungal growth under the toenails. I particularly recommend this for diabetic patients who are prone to yeast infections of the feet.
- **3.** To slow down the progression of wrinkles, sunscreen should be applied to the skin before going out and reapplied every two hours while in the sun. Avoid the sun during the middle of the day, especially between 10 a.m. and 4 p.m. when the atmosphere absorbs less of the harmful UV rays of sunlight than earlier or later in the day.
- **4. Follow each bath with a moisturizer**. Moisturizers applied after the bath help keep water in the skin and therefore prevent drying. It's much more effective to apply a moisturizer to damp skin immediately after bathing than to put it on dry skin.
- **5.** Use "superfatted" soaps like Dove or Neutrogena that have extra amounts of fatty substances such as lanolin, coconut oil, cold cream, or cocoa butter. The "superfatted" soaps cause less irritation to the skin.
- **6. Exercise regularly**. Studies have shown that athletes have skin that is denser, thicker, stronger and more elastic than that of non-exercisers. So, besides keeping your weight down and your heart healthy, you're also helping with skin care when you take that brisk morning walk!
- **7.** Use a humidifier. If the air in your house is moist, so will your skin be moist. That may prevent smaller wrinkles that sometimes come with dry skin.
- **8.** Wash less and rinse well. A soapy film left on the skin will exacerbate drying. Over washing can lead to dryness, which can lead to wrinkling.
- **9. Take an oatmeal bath** to soothe irritated skin or skin rash. Oatmeal has been used for hundreds of years for skin soothing effects. Pour 2 cups of fine powdered oatmeal like Aveeno into a tub of lukewarm water and soak for ten to twenty minutes. Family doctors from years past prescribed this to soothe the skin irritation of chicken pox for children.

By getting into the habit of providing the nutrition and care your skin needs on a regular basis, you may avoid a future search for an expensive (and usually ineffective) miracle cure.

- 1 Department of Health and Human Services Center for Disease Control http://www.cdc.gov/cancer/breast/statistics/ accessed February 2011.
- 2 Lee, John R., MD, and Hopkins, Virginia. *What Your Doctor May Not Tell You About Menopause: The breakthrough book on natural progesterone.* New York: Warner Books; 1996.
- 3 Arnot, Dr. Bob. *The Breast Cancer Prevention Diet*. Boston: Little, Brown and Company; 1998.

Chapter 5: Nutrition—The Cornerstone of Good Health

Many of us seem to have a love/hate relationship with food. We love to eat. We often overeat, and then go looking for the latest diet to help us lose weight. We categorize foods as being "good" or "bad." We speak of "comfort" foods, but those same foods are often seen as the enemy.

I encourage my patients to understand that, as with all other areas of life, moderation and balance are the keys to healthful eating. The senses of taste and smell are wonderful gifts to enjoy. Food is a biologically necessary part of your life and it can also be a source of great pleasure to you if you know that *you* control what you eat—food does not control you. By educating yourself about nutrition and how your body processes different types of foods, you can begin to understand how to provide yourself with the proper fuel you need without overindulging. Because a good diet is foundational to maintaining a healthy body, you'll find information about food and nutrition woven into many of the chapters of this book.

Dieting and Weight Control

There is no shortage of diet plans on the market for those who are seeking to lose weight. Over the years I've studied many of them and I've tried more than a few, myself. Some of the plans offer well-balanced and nutritionally sound approaches to weight loss and many people have been successful with them. Still, as any dieter knows, it's not losing the weight that's the hardest part—it's keeping the pounds off long term.

I see a steady stream of frustrated women and men in my office who wonder why they seem to quickly regain weight after stopping a diet. One possible reason for this is obvious—if you return to the same habits you had before starting the diet, you'll likely regain the weight. It's a biological fact that if you take in more calories than you burn each day, you will put on pounds. Keeping a food and exercise diary can be a powerful tool to help you be more conscious of your calorie intake and how much exercise you're actually getting. While changing your habits is crucial to maintaining the hard-earned results of dieting, there are many more factors to consider.

As with any other type of treatment, I believe it's important to get to the root causes when considering why a person may have trouble losing weight. Many of my patients tell me that they've tried everything: they're exercising regularly, they're eating much better, they've tried various types of diet plans and yet they still can't lose weight. In these cases there may be an underlying medical problem.

There are many physiological conditions that can interfere with weight loss. Among them are:

*Hypothyroidism—An underactive thyroid slows down the metabolism, meaning you will burn less calories and tend to gain weight.

*Estrogen dominance—Too much estrogen in relation to the progesterone in your system can also slow down your metabolism.

*Insulin resistance—When your cell receptor sites become resistant to insulin, glucose stays in the blood instead of going into the cells, again compromising your metabolism.

*Overproduction of cortisol—Long periods of physical and emotional stress can cause overproduction of cortisol. Since cortisol is a fat-storing hormone, it can mean weight gain, particularly in the abdominal area. Exercise is a form of stress that releases cortisol, and many people are surprised to learn that **over exercising** can actually make it difficult to lose weight for this reason.

*Yeast overgrowth—Too much yeast in your system can cause cravings for sugar and other refined carbohydrates, making it difficult to avoid foods that contribute to weight gain.

If a person has any of these, it will be very difficult for them to lose weight successfully.

One woman sat in my office and tearfully told me her experience with her primary care provider. When she questioned him about her weight difficulties, he told her, "Fork to mouth. You eat too much." She explained to him that she had changed her eating habits with no results, but he offered no alternative solutions. When she shared her story with me, I questioned her about other symptoms she had. Based on our interview, I ordered screening for thyroid dysfunction. The blood tests revealed that she had a hypothyroid condition. Once we got her thyroid imbalance under control, she was able to start losing weight. In this case, as with many other patients I work with, by understanding and dealing with the underlying causes of her weight problems, I was able to work with her to come up with a diet plan specifically tailored to her needs.

For those of my patients who are really stuck when it comes to losing weight, I do offer a quick-loss diet plan. The HCG diet has been around for some time, and has had a recent surge in popularity.

In the 1950's an Italian doctor named A.T.W. Simeons developed what has come to be known as the "Simeons Protocol" for a weight loss program that combines a very restricted calorie diet with the use of a hormone commonly known as HCG (hCG). Simeons claimed in his later book, *Pounds and Inches*, to have discovered some important keys to quick weight loss that targeted stored fat but did not break down muscle tissue. HCG (human chorionic gonadotropin) is a hormone produced in pregnant women that allows the body to mobilize fat and use it as energy for both the mother and her fetus. By combining a small amount of this hormone with an extremely restricted calorie intake, it's possible to lose stored body fat without a significant loss of energy or feelings of extreme hunger.

After hearing about the HCG diet, I decided to assess the suitability of this weight loss method as a part of my overall clinical practice. I'm not a fan of "fad diets," but I do recognize that there are times when balancing hormones and following a good nutrition and exercise routine are not enough to lose stubborn pounds and inches.

Before recommending the treatment to others, I tried it myself with excellent results. Based on my personal experience I then worked with several patients as a clinical trial, again seeing excellent results. In many cases, patients see a weight loss of between one-half pound to a pound a day during the "fat-burning" phase of the diet. What excites me most about this program is the potential health benefit for patients who shed extra pounds. The cosmetic benefits are nice, but a more important result is the potential for reducing blood pressure or diabetes medications and promoting a healthier lifestyle by breaking unhealthy food addictions.

It is important to note that this diet involves extreme calorie restriction. I strongly believe that it should only be done under a doctor's supervision and that it is critical to closely monitor each patient's progress to assess any changes in their medical condition. For this reason, I require patients to make weekly office visits while on the program.

The original diet introduced by Dr. Simeons in his book allows only five hundred calories per day and has a very narrow range of foods to eat. Many people following that plan have experienced side effects such as hair loss, brittle nails and muscle cramps and there is the potential for more serious problems, as well. I use a diet plan that a nutritionist developed that allows for more calories and a wider variety of foods, plus a range of dietary supplements and vitamins specifically designed for the HCG diet to be sure the dieter is receiving all the necessary vitamins and minerals he needs. Using this plan, I've seen weight loss results similar to the Simeons protocol but with significantly less side effects. My program also includes nutritional education so the patient will understand how to make proper eating a lifelong habit to avoid regaining the weight lost while actively dieting.

If you're considering dieting, I recommend that you investigate your options to find one that's right for you. Be sure it also incorporates some type of education that helps you learn good nutritional habits so your results will be long lasting.

What the Italians Can Teach Us About Healthful Eating

Peter and I celebrated our 28th wedding anniversary with a trip to Europe. As we visited several countries bordering the northern Mediterranean Sea, I was able to observe for myself what I had often read in health articles: the obesity rates in those countries are far lower than that of the United States. Italy and France, in fact, have some of the lowest rates in the developed world, hovering around 9% as compared to over 30% in America, despite their reputations for gourmet cooking.

With all that great food around, why aren't more people overweight? Here are some things I noted about the southern European approach to food preparation and consumption that may help to answer that question—and that I try, when possible, to incorporate into my own culinary habits.

*The dishes and the way they are prepared (particularly in Italy) tend to be low in saturated fats—heavy on fresh vegetables, light on red meats. They cook in pure olive oil and use garlic and spices that not only enhance the flavor of the foods, but also are healthy for the body.

*Courses are served in smaller portions than most Americans are used to. The idea is to savor each dish, not to fill up as fast as you can. Presentation, also, seems as important as the flavor of the food; it sets the stage that makes a meal a feast for all the senses.

*People allow themselves time to eat slowly and enjoy their food. Many of our meals lasted for one and a half to two hours, and we heard that three-hour meals in restaurants are not uncommon. It took us a little while to get used to the unhurried pace of dining, but the longer time frame aids digestion and allows you to truly enjoy your meal and the company you're sharing it with.

*Wine is a staple that's served with most meals. A glass of red wine with a meal contains good antioxidant properties, complements the flavors of the food, and helps

make the dining experience relaxing and enjoyable. (If you prefer, a good herbal tea can do the same!)

*In many places in southern Europe a siesta is still taken after eating. Taking time to rest after a meal allows for proper digestion and can lower the cortisol production of the body, helping to reduce fat production and weight gain (particularly in the abdomen). I know it's impractical for most of us who are working to take a lunchtime siesta, but even allowing ten minutes for relaxation and meditation after lunch can be helpful.

*The Europeans tend to walk much more than Americans; they walk distances to work or to restaurants that most Americans would drive (not a bad idea, considering the crazy traffic in many European cities!). One article I read said that Europeans walk three times and bicycle five times as far as Americans each year. Using "active transportation" like walking and biking helps burn off some of the calories from those delicious French and Italian desserts.

These observations are not meant to be a scientific study of comparative nutrition between American and European diets. Still, I think there's a lot we can learn from reconsidering our approach to both what we eat and how we take our meals. The concept of "healthful eating" shouldn't imply that we are denying ourselves one of life's great pleasures; it just means that we choose to be thoughtful and deliberate with our dining options. Buon appetito!

Your Food Is Your Medicine

Just as a cut on the surface of your skin will heal itself, the rest of your body–from the cellular level to vital organs–is also designed for self-healing. Healing is a normal biological process programmed into your DNA and this self-healing occurs when you give your body the raw materials it needs to live and thrive.

Good nutrition is not just about weight management; certain foods we eat can actually be "medicine" to our bodies. It is so exciting to realize that we can control the health of our body cells by a healthy diet. Based on what we put into our bodies, we determine what our body will be made of and how well it will function. Thus, we can decrease or prevent illness.

There are many common ailments and diseases that foods can help heal. Here are a few examples:

Condition/Imbalance	Foods	Effect
Type 2 diabetes	High fiber—black	Prevents blood sugar
	beans, ground flax,	spikes
	broccoli	(hyperglycemia)
Low alkaline state	Lemon juice	Helps restore the
		healthy alkaline state
		and aids the body's
		physiological
		processes
Low potassium	Avocados, tomato	Prevents muscle
(hypokalemia)	sauce, bananas	spasms (esp. leg
		cramps)

Estrogen dominance—	Cruciferous	Assist the liver in
irritability, insomnia,	vegetables—	metabolizing estrogen
hot flashes	cauliflower,	
	broccoli, Brussels	Assist in absorbing
	sprouts	metabolized estrogen
		in the intestines and
	High fiber foods	eliminating it from
	like ground flax,	the body
	nuts, raw fruit	

Some people are surprised to find, shortly after they change to a healthier diet or start a detoxification program, that they may experience brief symptoms such as headaches, pimples, nausea, body aches, or loss of energy. This unpleasant little episode is known as the "healing crisis," "detoxification," or a "cleansing reaction," and it's fairly common. It is our body's way of ridding itself of toxins. I've also observed that the extent of detoxification symptoms a patient exhibits often depends on their current diet. A person with a poor diet (such as lots of fast foods) will often show more symptoms than a person who is eating well and taking proper amounts of supplementary vitamins. Although the initial detoxification symptoms can be uncomfortable, most people feel much better and have more energy once they get past them.

Remember, a good diet and nutrition regimen is not something you "try"—it's a way of life. When you realize that it can greatly improve the quality of your life, you understand that it's not a sacrifice, it's a favor you are doing for yourself!

One Food Everyone's Diet Should Include

One food that I highly recommend to all my patients is flaxseed. The health benefits of this little seed make it sound like nature's wonder drug: it can help protect against heart disease, cancer and diabetes; it can reduce cholesterol and has anti-inflammatory benefits; it's even been shown to reduce hot flashes in postmenopausal women!

Flaxseed is helpful in managing women's health issues because it contains high levels of lignans, which are phytochemicals (chemicals produced by plants) that are converted in the body into hormone-like agents that block the estrogen pathways and limit estrogen in fat cells.

Limiting estrogen is important because it can help prevent estrogen dominance, a condition that can lead to numerous health problems including premenstrual syndrome (PMS), insomnia, uterine fibroids, fibrocystic breast disease, and breast cancer. In fact, many physicians treat women with breast cancer by adding flaxseed to their diets. It should be noted that only **ground flaxseed** (not flaxseed oil) provides the medicinal benefits listed here.

Flax is a mega-source for an omega-3 called alpha-linolenic acid. Omega-3 is a great support for cardiovascular function, skin health, and joint health. It's also an excellent source of fiber (1 tablespoon ground = 2 grams of fiber), which can improve regularity and help prevent colon cancer, as well as helping to lower LDL cholesterol levels.

You can put flaxseed in muffins, breads, cookies, cereals, cottage cheese, sprinkle it on salads and add it to soups. Make sure the seeds are ground and kept in a closed container in the refrigerator. An amount of approximately 25 grams per day of ground flax will provide a medicinal effect. This equals 4 tablespoons per day.

You can find flaxseed in both the ground (milled) form and in whole seed form in almost any grocery store, usually in the health food section. I like to buy it in whole seed form and grind it myself in a small coffee grinder; it tastes better when it's fresh-ground and you'll retain more of the nutritional value. However, the milled form may be more convenient for you. Either way, it's important to understand that you should use the ground form because it is a soluble form of fiber that is much more effective in reducing cholesterol and triglycerides and excess estrogen. The seed form can also be irritating to those with bowel problems.

An important note: Flax should not be eaten within one hour of taking medicines or vitamins because of its absorbing properties. It can actually absorb and eliminate the medicines from your body, making them ineffective.

Stevia: The Natural Sweetener

Stevia is a natural sweetener with certain properties that make it an excellent alternative to sugar and artificial sweeteners. I especially like stevia and recommend it for my patients because it is natural and tastes good, plus it has medicinal effects on the body.

This plant is indigenous to mountainous regions of Brazil and Paraguay and is grown in numerous countries around the world, including the United States. Stevia is an herb with very potent sweetening power. It's natural in its biochemical structure and contains no artificial ingredients. It won't cause a rise in blood sugars and is calorie-free and can be used in baking, to sweeten your drinks, or wherever you might normally use sugar or a sugar substitute.

Using stevia instead of sugar can have the therapeutic effect of helping to balance blood sugars in hyperglycemic and diabetic individuals. It is the ideal sweetener for people with chronic yeast infections caused by high sugar levels. It can also help reduce dental cavities and carbohydrate cravings. Brazilians have used the plant to improve digestion, soften skin, and prevent tooth decay.

Stevia is available in either a white powder or liquid extract form and can be found in many grocery stores under different manufacturers' labels such as SweetLeaf, Sweet 'n Natural, and others (try the health food section if it is not with the other sweeteners).

Are You Overdosing on Food Supplements?

I recently had a new patient who came to see me with complaints that included headaches, nervousness and irritability—even her co-workers were beginning to make comments about her short temper. As Alice and I talked I learned that she had seen another naturopathic doctor some time before who had recommended certain dietary food supplements for her. She also had done some online research on her own and was buying supplements from a couple of different Internet websites. I asked her to bring in everything she was taking so we could get a better idea of her daily dietary intake.

On her next visit, Alice walked in carrying a grocery bag filled with bottles of all shapes and sizes. She had literally hundreds of dollars worth of vitamins and food supplements that she had purchased and was consuming on a regular basis. Together she and I went through and discussed the products while also reviewing proper food consumption and her specific medical condition. By the end of the visit, Alice was down to a few targeted supplements on a daily basis.

As we monitored Alice's progress over the next several weeks, she was pleasantly surprised to find that the irritability she had been experiencing for months almost completely disappeared. She and I agreed that her improved condition was directly related to the decreased number of supplements she was taking. As an added benefit, she had simplified her life and was saving quite a bit of money by taking only those supplements she truly needed for optimal health.

Alice's story is not unusual. In fact, I see a similar scenario with new patients on a regular basis. Most people who seek out the services of a naturopathic doctor are already motivated to look for "natural" (as opposed to "pharmaceutical") answers to their health issues. Their intentions are certainly good, but they often make the same mistake Alice did: they assume that because something is natural and healthful that the more they take of it, the better their health will be. There really can be, however, "too much of a good thing."

One fact that is sometimes overlooked is that water-soluble vitamins (for instance, B and C vitamins) can only be absorbed in certain amounts and over a certain length of time. After that, all those unabsorbed vitamins simply pass from the body in urine and solid waste. In other words, you are quite literally flushing many of those expensive products down the toilet! In order to get the most benefit from vitamins, I suggest taking the recommended daily dose two to three times a day in smaller increments to allow for more complete absorption.

On the other hand, fat-soluble vitamins and supplements (such as A, D, and E vitamins) can build up in the body's tissues and actually become toxic, leading to various adverse physical effects that can include (as in Alice's case) headaches, irritability, and sleeplessness.

Another problem is that many food supplements can interact with prescription medicines or with other supplements the patient may be taking. In some cases, this may mean that a particular supplement reduces the effectiveness of the intended medication; in more dangerous circumstances, the interaction may actually lead to harmful mixtures of chemicals in the body. See my section on "Nutritional Supplements and Herbal Remedies" in chapter 14 for more specific information on this.

So how much is really enough? The truth is that there's no "one size fits all" answer to which vitamins or food supplements you should be taking. I do usually suggest a good multi-vitamin for my patients to ensure they are getting a full range of their necessary daily intake of vitamins. After that, it's important to tailor the use of supplements to the individual needs of patients.

A proper, healthful diet is the most important and effective way to get the vitamins and minerals you need. Dietary supplements are supposed to be exactly what their name implies: they should be used to give you a boost with specific nutrients your body needs that a good diet alone isn't providing for you.

What Foods Are Making You Sick?

Just as some foods can be medicine for our bodies, it is also true that certain common—and seemingly harmless—foods can trigger adverse reactions. We've all heard of people who have violent and even life-threatening reactions resulting from allergies to particular foods like peanuts or shellfish, but it's also possible to develop chronic health conditions that are triggered by sensitivities (as opposed to allergies) to certain foods. Because the effects are subtler and tend to develop over time, the connection between diet and condition can often be overlooked. That's where food sensitivity testing can be a very helpful diagnostic tool.

In the case of a food allergy, the body produces a substance called immunoglobulin E (IgE) antibodies in response to the presence of a particular protein. The reaction is often immediate—possibly within seconds or minutes—and signs and symptoms can include hives, difficulty breathing and in severe cases, anaphylaxis. Because these symptoms occur shortly after ingesting the problem food, most people with true food allergies are aware of them and have sought help from an allergist to identify the triggers and manage the allergy.

A food sensitivity (or food intolerance) is very different from a food allergy. In this case, the body overreacts to certain foods over a period of time—days, weeks, or months, although sometimes it can respond sooner. Immunoglobulin G (IgG) antibodies become sensitized to certain foods and release immune chemicals that can cause inflammation in the body tissues. A person with food sensitivities may also develop leaky gut syndrome, a condition in which the lining of the gut (mucosal membrane) has increased permeability that leads to food, bacteria and toxins that are in the gut leaking into the bloodstream and causing inflammatory reactions throughout the body. The resulting symptoms may manifest as skin rash, joint aches and pains, sinusitis, asthma, insomnia, headaches and digestive disorders producing bloating, gas and poor food absorption.



A heightened sensitivity to certain foods can result in chronic sinusitis, skin rashes, indigestion, joint pain, and many other health complaints.

If a patient or his physician suspects that food sensitivities may be causing chronic problems, they may first start with a simple food elimination diet to try to identify the source. Common intolerances are dairy and wheat products and removing those from the diet may provide enough relief to identify them as the culprits. But for those who want a more accurate way of assessing how specific foods may be affecting them, a food sensitivity test can be very helpful.

A food sensitivity test is a blood test that can measure the body's cellular inflammatory response to substances including foods, additives, coloring and chemicals. Laboratory testing can cover a wide variety of foods and spices and shows the client's incompatible foods and the level of each reaction: severe, moderate, or mild. Based on these results, your doctor can help you identify certain foods to eliminate from your diet and then monitor changes in your symptoms.

Although eliminating certain foods from your diet may seem like a simple treatment, the results can be dramatic. In one clinical example, my patient Henry did the food sensitivity panel along with his wife Linda and their teenage daughter Harriet. After we discussed the results from the lab, the family began following their food rotation plan. After just a few weeks on the new diet Henry reported that he and his daughter no longer needed the nebulizers they often used for asthma attacks on their hiking trips. Both Henry and Linda had an 80-90% reduction in joint pain and found they had lost excess weight, improving their flexibility and mobility. Harriet was happy to say that she was no longer embarrassed to wear short sleeves at school—her chronic problem with eczema had greatly subsided.

Even foods that have great nutritional value can become a problem if you eat them regularly and the body becomes sensitized to them. For instance, I ate almonds as a high protein snack between meals for years. When I took a food sensitivity test, the results showed a high intolerance to almonds. By eliminating them I also eliminated the inflammation that was causing the abdominal bloating and fatigue I had been experiencing.

If you have similar chronic ailments or complaints as those listed above and other investigations and treatments have reached a dead end, I'd suggest that you try food sensitivity testing.

Food, Wonderful Food!

I love to cook and I love to eat. I'll often spend hours in my kitchen on a weekend trying out new recipes or experimenting with combinations of interesting foods. Even though I've always tried to eat well, at times I've gained more weight than I wanted during my life journey, particularly when my hormones were fluctuating during and after pregnancy and at the onset of menopause. Along the way, I've had to change some of my attitudes about how I think about food. I'd like to share with you two important lessons I've learned.

1. Food is not my enemy. I consider food to be a wonderful way to indulge my senses of taste, smell, sight, and even hearing and touch! As I mentioned at the beginning of this chapter, the senses are gifts for us to enjoy. When my perception is one of acceptance of food as part of the deliciousness of life it contributes to my well-being and physical health. The key is learning to enjoy all things in moderation, including food.

It's a quirk of human nature that whatever is forbidden to us often becomes more attractive. If I think of fried chicken as something I can't have, that is what I'll want most. But if I realize that I have a choice between fried chicken and roasted chicken and choose the roasted chicken as the healthier alternative, then I empower myself by exercising my free will. That doesn't mean I can't enjoy a piece of fried chicken occasionally; it just means I'll opt for healthier alternatives most of the time.

I used to think of eating a piece of Swiss chocolate as "bad." Chocolate, like any other food, isn't necessarily "good" or "bad." It is what it is. I've learned to give myself permission to eat a bit of chocolate and take pleasure in the experience. The way the experience of eating can get out of balance is if I'm using it as a way of coping with emotional stress or seeking to fill a void that really has nothing to do with nutrition. And that brings me to my second point:

2. Eat consciously. I'm learning to *focus* on what I'm doing day by day and minute by minute. Some people call this "being present in the moment." I want to be aware of my surroundings at all times so I can experience life to the fullest, and a big part of life is food. So often, we eat unconsciously—while we're driving or watching TV—and we don't engage our senses in the experience. I strive now to be aware of each meal or snack as I prepare and eat it; that way, I can feel that I've truly satisfied my craving. It also helps me be aware of *why* I'm eating.

Am I really hungry, or am I just eating to have something to do or to satisfy some emotional need?

Remember that we eat to live—we don't live to eat. I realized that, particularly when I was dieting, I would fill my down time by flipping through magazines with pictures of scrumptious-looking desserts. That behavior made me think about how much I was denying myself and made me want to eat sweets. We all tend to do what we focus on the most. Between meals I don't need to be thinking of food all the time. Now when I browse through magazines, it's to look for ideas to stimulate another of my passions: interior design. That keeps my mind focused on things I love to do and away from constant thoughts of food.

By learning which foods keep your body functioning at its best, you can enjoy optimal health without missing out on the pleasure of great eating.

Chapter 6: The Digestive System

"Health begins in the colon" is a frequent saying among naturopathic physicians. In the United States our diet consists mostly of processed foods such as white bread, white pasta, white rice, refined sugar, and fast foods. Combine those nutrition-poor, low fiber foods with increased stress in our society and the incidence of colon disease will continue to climb. A healthy colon means a healthy immune system. When waste sits in the colon longer than it should (a long transit time), it becomes a perfect environment for toxins that can eventually cause the whole body to become toxic.

Irritable Bowel Syndrome

The most common gastrointestinal disorder is Irritable Bowel Syndrome, affecting an estimated one out of seven people in the U.S. The condition is characterized by abdominal pain and cramps, changes in bowel movements (diarrhea, constipation, or both), gassiness, bloating, nausea, and other symptoms. For those with IBS, the bowel may have sensitivity to stress and certain foods or drugs.

Here are some therapeutic considerations for treatment of IBS:

- *Eat small, frequent meals.
- *Eat slowly.
- *Eat citrus fruits in small amounts.
- *Avoid beans (they cause gas).
- *Avoid fried foods and other "trigger" foods such as dairy products, wheat products, carbonated beverages, foods with high sugar content, caffeine, and chocolate.
- *Sorbitol (found in sugar-free foods) can be another trigger. I recommend stevia as a sweetener—it's natural, tastes good, and is less likely to upset your stomach than artificial sweeteners.
- *Increase your intake of soluble fibers such as cooked vegetables like asparagus, mushrooms, zucchini, peeled apples, carrots, oat bran, and barley. Insoluble fibers tend to be irritants.
- *To prevent heartburn, take enteric-coated peppermint oil capsules between meals. Peppermint relaxes the GI smooth muscle and acts as an antispasmodic.
- *Take magnesium every day. Magnesium acts as a muscle relaxant and the colon is mostly muscle. Magnesium deficiency is associated with IBS.
 - *Supplement your diet with digestive enzymes to help digest your food.
- *Express your frustrations verbally. "Stuffing" your problems, anger and concerns affects you as much physically as it does mentally. I usually give myself forty-eight hours to vent, then try to forgive and let go of the past. Control psychological functions through stress reduction techniques like meditation and exercise.
- *As always, if symptoms are severe or long-lasting you should consult a physician.

Peptic Ulcer Disease

Peptic ulcers are open sores that develop on the inside lining of your stomach or upper small intestine. Bacterial infection or some medications can cause ulcers of the stomach and upper part of the small intestine (duodenum), so when your doctor suspects

an ulcer it's important to take a simple test to check for H. pylori infection. If H. pylori bacteria are detected in your system, you'll need treatment with antibiotics to kill the bacteria before healing can begin.

Although H. pylori or the use of NSAIDs (e.g., aspirin or ibuprofen) may be the cause of the ulcer, lifestyle choices can play a large part in creating the conditions in the stomach that are conducive to the development of ulcers. Stress, smoking, alcohol, and poor diet can all lead to gastritis—an inflammation of the stomach that breaks down the mucosal lining. Conversely, a person who suffers with ulcers can greatly speed his healing by making certain changes in diet and habits.

Peptic ulcer disease is divided into 2 categories: duodenal ulcers and gastric ulcers. There are similarities in the two, but they are viewed differently by doctors and have distinctive treatments. In this section we'll concentrate on the more common duodenal ulcers.

Approximately one-half of those who develop duodenal ulcers actually secrete more acid than would be considered normal and that can be a contributing factor. (They have twice as many acid-producing cells—called parietal cells—compared to the normal amount.) Genetics may influence this—often a family history of ulcers can be traced.

Along with H. pylori infection, some possible contributing factors of duodenal ulcers include smoking, stress, and NSAIDs use that can lead to the mucosal lining breakdown in the duodenum. Caffeine and alcohol both stimulate acid secretion that can eventually lead to ulceration.

Poor nutrition can also contribute to inflammation of the lining of the duodenum, exacerbating peptic ulcer disease. Deficiencies in zinc, essential fatty acid, vitamins A and E, and glutamine can slow the healing process. Food sensitivities can cause inflammation of the mucosal lining, as well, and a food sensitivity test can be helpful in knowing which foods to avoid.

Treatment begins with removal of the causative agent. The first step, as mentioned previously, is the elimination of H. pylori bacteria if they are present. Be aware that alcohol, NSAIDs, caffeine, spicy foods, milk, and black pepper are potential irritants.

Your doctor may prescribe acid blockers or proton pump inhibitors (PPIs) to reduce the amount of acid your stomach is producing. This can be effective, but you should be cautious. I've seen many patients who, when attempting to discontinue PPIs, experienced a strong rebound effect. Discontinuing the medication resulted in so much acid production that they needed to get back on the PPI to get relief. I've had success in weaning patients off by rotating days of using the PPI with histamine (H2) blockers and zinc. This weaning process should be done under a physician's supervision.

There are many natural approaches you can take to support healing, as well. Increasing certain nutrients will aid the production of protective substances in the duodenum or stomach. Zinc picolinate stimulates mucous production and improves gastric ulcer healing. Essential fatty acids found in safflower oil, black currant oil, primrose oil, and fish oil are anti-inflammatory and provide protection of the mucosal lining.

Refined products have been shown to increase stomach acid, so replace refined carbohydrates (white sugar, white flour) with whole grain and high fiber products.

Increased dietary fiber can have an acid buffering effect and can help protect the mucous lining. Cow's milk can contribute to an overproduction of acid—try almond milk instead.

Vitamin C is recommended to reduce oxidative damage produced by free radicals from peptic ulcer disease. Cabbage juice is high in glutamine, another healing agent, and aloe vera juice and slippery elm provide good coating to help protect the mucosal lining.

There are a number of anti-inflammatory herbs that can be used and there are also selected acute homeopathic remedies that are effective. Homeopathy is individualized and should be given at the direction of your naturopathic or homeopathic physician.

Yeast Infections (Candidiasis)

Many people are familiar with common symptoms of yeast infection, but did you know that signs and symptoms of infections caused by candida overgrowth can sometimes overlap or mimic other complaints such as chronic fatigue syndrome (CFS) or fibromyalgia? For that reason, it is important to rule out candidiasis when seeking a diagnosis.

Some of the more obvious signs of yeast infection in adults are jock itch, urinary tract infection (UTI), recurrent vaginal yeast infections (accompanied by thick white discharge with vaginal itching), fungal infection of toenails and fingernails (onychomycosis), and a white coating on the tongue.

Other symptoms of a yeast overgrowth may include unusual cravings for sugar and refined foods, abdominal bloating, rectal itching, brain fog, constipation or diarrhea, headaches, joint pain, fatigue, or itchy ears. Recurrent sinus infections can also be caused by yeast overgrowth instead of bacteria.

Candidiasis can also cause low immunity. Because toxins are released in the blood by yeast it can lower the immune response and increase the chance of getting colds, flu and other bacterial or viral infections.



Carbohydrate cravings, itchy ears, and abdominal bloating may indicate the presence of a yeast overgrowth.

Causes

Yeast infection (or candidiasis) is a condition caused by a group of microscopic fungi or yeast. Candida albicans is the most common of the more than twenty species of candida fungi that live on all surfaces of our bodies. Under certain conditions, they can become so numerous they cause infections, particularly in warm and moist areas like the mouth and groin. These infections can usually be cleared up fairly quickly with treatment, but if left untreated they can become serious health risks.

One of the most common causes of candidiasis is a recurrent use of antibiotics or steroids such as prednisone. While antibiotics can be helpful in the treatment of bacterial infections, they kill both harmful bacteria and the bacteria that are good for our bodies. The friendly bacteria in our colon help keep the candida fungi in check and when antibiotics have killed them the candida are allowed to proliferate. Some people are prescribed steroids to reduce inflammation, but steroids can contribute to yeast overgrowth.

Women are more likely than men to suffer from yeast infections for several reasons. An imbalance in the ratio of estrogen to progesterone in the system (estrogen dominance) can contribute to yeast growth. The use of birth control pills or hormone replacement therapy can add to high levels of estrogen in the body that feed a yeast infection. Women also tend to use more antibiotics because of a higher propensity for bladder and urinary tract infections.

Eating sugar or highly processed foods also may contribute to yeast infections. An extreme example is that diabetics often have recurring problems with candida overgrowth because of the high amounts of sugar present in their bodies. You don't have to be a diabetic, though, to have too much sugar in your system—a diet heavy in sugar and refined carbohydrates can have the same result.

When interviewing a patient, I'll often ask if they have strong sugar cravings. I sometimes get the response, "Oh, yes! I'm a sugar addict!" I explain that if there is a yeast overgrowth present, it's the candida that's craving the sugar to help it grow. My intention is to help them understand that there is a physiological reason for the cravings and they should not identify themselves as "addicts." Clarifying this subtle but important distinction helps the patient understand the difference between the psychological need for sugar and the nature of the candida's need for sugar to sustain its growth. By realizing they are not "bad" for craving sugar, they are better able to move forward with a plan for treatment.

Diagnosis and Treatment

It's important to present your health care provider with a thorough history of symptoms. You should also include in your history the type of diet you typically eat and a detailed list of antibiotics you have taken. Because steroid use can stimulate yeast overgrowth, you should be sure to include that in your report.

The first step in treatment is to kill the overgrowth of yeast. In my practice I use a dietary supplement that contains a combination of herbs and other ingredients that help to kill and reduce candida. If a patient's medical history reveals a sustained use of antibiotics and/or steroids and if the symptoms warrant it, it may be necessary to use a prescription-strength antifungal such as nystatin or Diflucan (fluconazole).

If nail fungus is present I recommend using a mixture of $\frac{1}{2}$ white vinegar to $\frac{1}{2}$ water to soak the affected area 1 to 2 times daily, until clear. I also have the patient apply tea tree oil to the affected nails. Remember that the longer the fungus has been present and the more extensive it is, the longer it will take to eradicate it.

The next step in treatment is to starve the yeast by eating a yeast-free diet. You should avoid refined grains, starchy foods, all different sugars and products containing vinegar, dairy, alcohol, and mushrooms (they are a type of fungus!). The length of time on the diet depends on the extent of the yeast overgrowth.

Finally, it's important to reestablish good flora/bacteria in the colon by taking some high quality probiotics. Without these good bacteria you can't keep the candida in proper balance in your system.

It's important to note here that as the overgrowth of yeast dies off the patient may feel worse before he or she feels better. This is a natural response as large amounts of yeast die off in a short time and the body goes through a period of detoxification. Each person's reaction is different, but exacerbation of your present symptoms may happen along with increased gas, bloating, and passage of mucus with your stool. Hang in there! Your body is simply preparing itself to get better by getting rid of the toxins.

Clinical Case

To illustrate how candidiasis may manifest and how effective treatment can help, let me share one case history with you.

A forty-year-old female patient came to me with numerous health complaints. She had difficulty walking because of joint and muscle aches and pains; she had chronic fatigue and a "foggy" brain. Her primary care physician had diagnosed her with fibromyalgia and chronic fatigue syndrome, which was a reasonable diagnosis given the signs and symptoms she described. However, she and her PCP had not been able to arrive at a treatment that brought her sustained relief of her symptoms.

After listening to her history I suggested that we try a candidiasis treatment protocol. After six weeks of treatment the patient reported that her pain had diminished by 80-90% and she was feeling more energetic. She is now able to participate in more activities, including a regular exercise program and she says she has more energy to take care of her family and perform her daily duties.

With proper diagnosis and treatment most yeast infections and their accompanying symptoms can be resolved without further problems. The treatment can even lead to unexpected health benefits as the body is allowed to detoxify and revitalize itself as it achieves the proper balance of intestinal flora.

Chapter 7: Balancing Hormones for a Healthier Life

"Dr. Marcantel, I know I'm not depressed but when I told my last doctor about my mood swings, inability to lose weight and my sleeplessness, he put me on antidepressants. I'm just so frustrated with taking medications to try to feel better. Sometimes they actually make me feel worse. What's going on with my body?"

As noted throughout this book, a lot of patients come to me with a similar story. They're worried about the amount of prescription drugs they are taking. They know their body is sending them a message, but they don't know how to interpret it. While each person is unique and needs to be treated as such, hormones are usually a good place to start.

One thing that could be causing problems for these patients, and perhaps for you, is an imbalance of hormones. The symptoms these imbalances can cause are often treated by prescribing antidepressants or anti-anxiety medications. These solutions mask the problems and can have side effects over the long run, and can be less effective with time. We've discussed the fact that prescription medications may offer temporary relief from serious symptoms, but there is no avoiding the fact that it's essential to get to the root of the problem if you want to achieve lasting results.

I like to explain it to my patients this way: "You weren't born with synthetic drugs in your system—what you were born with are hormones. These hormones need to be brought into balance before you can start feeling better physically and have an improved sense of well-being."

Female or male, young or old, it's hormones that keep our bodies functioning properly and keep us feeling healthy and happy. Hormones are chemical substances that are released by various glands in the body to target organ systems and specific cells to help them function normally. They are necessary for every activity of daily living including the processes of digestion, metabolism, growth, reproduction and mood control.

Hormones produced by the thyroid gland, for example, are essential to the proper function of every cell in the body. Insulin, produced by the pancreas gland, helps us to process sugars and convert them into energy. Sex hormones such as estrogen and testosterone affect our libido (sex drive), but are important in many other bodily functions, as well. Stress hormones such as cortisol and epinephrine (adrenaline) help us to cope with the many stressors, both physical and emotional, that we face as we go through the day.

Proper amounts of hormones keep our bodies healthy and help us feel good, but when we get imbalances of these natural chemicals in our systems, it can have a negative impact on our health.

I tell my patients to think of the hormones as the bandleaders of the body. They are in charge of the function of many organ systems and it's their job to make sure all those systems are playing in harmony with each other. We want to take care of the "big guys" first because they, in turn, take care of many of the biochemical processes. That way, instead of offering temporary solutions that may only mask certain symptoms we can address the root causes of those symptoms.

To return to my earlier example, if a patient is showing some signs of depression it's common for physicians to prescribe an SSRI (selective serotonin re-uptake inhibitor)

such as Prozac or Zoloft as a treatment. However, a salivary hormone test might reveal a lack of estrogen that can cause a lack of serotonin, leading to symptoms of depression. By bringing the estrogen levels into proper balance you can address the issues at a deeper level and avoid the possible negative side effects of the pharmaceutical treatment.

An Overview

The endocrine system is a collection of glands that produce and regulate the hormones that control many functions of the body. Once these hormones are released into the bloodstream, they find their way to specific "target cells" and tell those cells what to do next. There are too many different hormones to list them all here, but the following is a brief primer on some of those mentioned in this book. I created this to help you understand their functions and how they may relate to specific medical conditions discussed in detail later on. Please bookmark this section – you will likely be returning to it over and over.

Estrogen—Estrogens are sex hormones that are present in both men and women, but in significantly greater quantities in women. They perform many functions, but chiefly estrogens affect the reproductive system and are responsible for the female characteristics of feminine curves, breasts, menstruation, and pregnancy. Estrogens are produced in the ovaries in women and in the testes in men. They are also produced in smaller amounts in the adrenal glands of both. The three natural estrogens found in our bodies are estrone (E1), estradiol (E2), and estriol (E3). Estrogen tends to be highest during days 1-13 of a woman's monthly menstrual cycle. Think of estrogen as your natural antidepressant.

Progesterone—Progesterone is a steroid hormone produced mainly in the ovaries. Small amounts are also produced by the adrenal glands. It has many metabolic functions and can have a mild sedative effect that promotes calmness and relaxation. Think of it as your natural anti-anxiety agent. Progesterone tends to be highest during days 14-28 of the menstrual cycle.

Testosterone—Testosterone is the main male sex hormone, but it is also found in women. It plays an important role in maintaining bone and muscle mass and affects the reproductive system, as well as promoting a sense of psychological well-being.

DHEA—Dehydroepiandrosterone (DHEA) is secreted by the adrenal glands and serves as a precursor to testosterone in the female body. When a female has a low testosterone level, DHEA supplementation can be given to allow her body to turn the DHEA into the amounts of testosterone her body actually needs.

Cortisol—Cortisol is often called the "stress hormone." Produced in the adrenal gland, cortisol helps the body deal with both physical and emotional stresses.

TSH—When the pituitary gland senses low thyroid hormone levels in the blood, the pituitary gland releases thyroid stimulating hormone (TSH), which signals the thyroid gland to produce more thyroid hormones.

T3 and T4—These are two major hormones produced by the thyroid gland. Thyroid hormones affect a great number of biological functions in the body. I deal with thyroid function in much greater detail in chapter 10.

Both doctors and patients often talk about specific hormone problems as though they can be treated individually, but it's important to understand that all the hormones interact with and affect each other. Because of that interaction we need to be aware of how all the components of the endocrine system are functioning if we're to successfully balance the hormones and bring the body into a state of homeostasis.

The following are just a few examples of hormonal interactions that should be considered when working to balance hormones.

*Cortisol and thyroid—A proper amount of cortisol in the body is necessary to allow the thyroid to work efficiently. I say that cortisol is like a car that carries thyroid hormone out of the blood and into the cell in order for the thyroid hormone to work in the cell. On the other hand, too much cortisol can actually block the passage of thyroid hormone into the cell. This means that to get thyroid hormones functioning properly in the body we first have to make sure that the adrenal glands are healthy and that cortisol levels are where they should be. This can be done by measuring the cortisol with a salivary hormone test.

*Cortisol and progesterone—Progesterone is the "mother" hormone that is a precursor or building block that can turn into other hormones in the body, such as cortisol, DHEA, testosterone and estradiol. When the body is under chronic stress too much progesterone may turn into cortisol in order to handle the stress, leaving too little of the progesterone to turn into DHEA, testosterone, and estradiol. This results in tests showing low levels of these hormones and the patient may have symptoms that accompany those low levels. I use the analogy that "mother progesterone" feeds the loudest baby (cortisol), and the other children (DHEA, testosterone, and estradiol) decrease in size because all the attention is being given to cortisol. This happens because the priority of the body is to handle chronic stress by producing cortisol.

When I see a person with low progesterone I may supplement it to help relax her so she can sleep better at night—progesterone stimulates the production of the neurotransmitter *serotonin* in the brain, promoting sleep. But if her cortisol is low from adrenal fatigue and if she takes the progesterone at bedtime, the progesterone may turn into cortisol and actually keep her awake.

For someone who's taking progesterone at night and experiencing sleep problems, I suggest they take the dose during the day. That way, if it turns into cortisol it will give her a boost of energy during the day and not at night when it could interfere with sleep.

*DHEA and testosterone—In the female body, DHEA will turn into testosterone as needed. When a woman has low testosterone I prefer to give her DHEA instead of supplementing testosterone; this allows the wisdom of her body to turn DHEA into the amount of testosterone it needs. This can prevent the effects of too much testosterone such as facial hair, acne, or male pattern baldness.

Hormonal interactions can also cause a variety of symptoms that may make a proper diagnosis of imbalances a challenge:

*Hot flashes can be a symptom of not enough estrogen; but they can also occur from *too much* estrogen, too much cortisol, or hyperthyroidism.

*Chronic low DHEAS and/or testosterone levels may suggest adrenal fatigue, particularly if cortisol is also low and symptoms are indicative of low adrenal function.

*When the amount of estrogen is higher than the amount of progesterone, resulting in a low ratio of progesterone to estrogen, the decreased ratio can mimic symptoms of an underactive thyroid gland, or *hypothyroidism*, such as unusual weight gain or chronic fatigue.

Causes and Symptoms of Imbalances

Some causes of hormonal imbalances for men and women are:

- *Consistent, long-term stress
- *Aging
- *Disease
- *Changes in life cycles (e.g., from adolescence to adulthood)
- *Genetic predisposition
- *Exposure to environmental or food toxins
- *Xenoestrogens found in some foods, plastics and some cosmetics.

For women in particular some causes may be:

- *Use of birth control pills (past or present)
- *Polycystic Ovarian Syndrome (PCOS)
- *Postpartum changes (childbirth)
- *Perimenopause and menopause
- *Estrogen dominance

Symptoms of hormonal imbalances can include:

- *Mood swings
- *Weight gain or prevention of weight loss
- *Fatigue
- *Insomnia
- *Low libido
- *Irregular menses
- *Endometriosis or uterine fibroids
- *Fibrocystic breasts
- *Hair loss or unusual hair growth

Detection and Diagnosis of Hormonal Imbalances

A physical examination such as palpation of the thyroid to examine for enlargement and a pelvic exam to detect abnormalities is an important part of the diagnostic process.

Blood tests and salivary hormone tests can also be done to confirm hormonal imbalances. The results of these tests are also crucial in developing a proper treatment protocol for patients. However, it's important to note that sometimes patients can fall within "normal" ranges for certain tests but still be exhibiting symptoms that need to be addressed. For more on this, see "Why Your Doctor Might Miss Your Hypothyroidism" in chapter 10.

While a physical exam and laboratory testing are very important, the first and foremost method for diagnosing and treating hormonal imbalances is a careful review of the patient's symptoms. It is critical that the doctor gets a thorough and detailed history from the patient. Remember that you know your body better than your doctor possibly can—you live in it twenty-four hours a day! You need to be consciously aware of the changes you are experiencing and find ways to communicate that to the physician. Both the doctor and the patient should trust the intelligence of the body's symptoms in searching for the root causes of the patient's medical complaints.

When giving your history to your doctor, please remember that without all the pieces to the puzzle it's hard to put together a proper diagnosis. What may seem like something fairly insignificant to you may actually be very important. Let me illustrate this with a story:

A new patient came to me asking for help with hormonal issues. She had already had a hormone saliva test performed and presented the results to me. As we discussed her current medications during the initial interview I asked her if she had been taking progesterone.

"No, I'm not on any kind of hormones," she told me.

I was puzzled because the results of her test revealed an unusually high level of progesterone for a woman her age who was not supplementing the hormone with a prescription medication. It was important for me to know if her body was producing that level of progesterone naturally so I could prescribe proper treatment to help control the symptoms that were giving her problems. Over the course of the interview, I returned to my question several times, but she assured me she wasn't taking any type of hormonal supplements.

As we wrapped up our one-hour visit and I walked with her to the front desk, the patient asked me what she could take to help her sleep. I asked her if she was taking any type of over-the-counter medications at night and she said, "Well, my friend lent me some of her progesterone cream and I slather some of that on and that helps."

Since progesterone is a natural sedative, I'm sure it did help her sleep. "I thought you said you weren't taking any hormones," I reminded her.

"I'm not. They belong to my friend." Apparently, because it was not her prescription she felt it didn't count!

Treatment

Any treatment plan should be highly individualized. Each person's body is unique and responds differently to different protocols, so as a doctor I must evaluate each person according to his or her specific needs and symptoms.

Still, there are some basic starting places for every patient. A good foundation is a proper meal plan that may include a mild detoxification, food sensitivity inquiries and possibly an anti-candida diet. Certain nutritional supplements may also be helpful, if the patient's symptoms and dietary habits suggest a need for them.

Why start with nutrition? Because the old saying "You are what you eat" may sound trite, but it's still absolutely true. The types of foods we ingest affect all the chemical processes of our bodies, including hormone production. Adjusting the way you eat, including the types of foods as well as the timing of meals and means of preparation, can go a long way toward relieving your overworked systems and achieving the goal of hormone balance.

Of course, the use of prescribed bioidentical hormones may be an essential part of the protocol if there is sufficient need for this type of treatment. Bioidentical hormones are compounds designed to have the same molecular structure as the hormones your body produces, making it easier for your body to assimilate them. Hormone replacement therapy is a controversial issue in some medical circles and there are some risks involved with it. It's important to understand those risks and know your options as you and your physician agree on whether it's the right path for you.

In chapter 9 on "Testing and Treatment for Hormonal Imbalances," I'll discuss those risks along with the different types of hormone therapies available.

Estrogen Dominance: Losing the Healthy Hormonal Balance

Insomnia, mood swings, irregular bleeding, irritability, anxiety, water retention, low thyroid symptoms, depression, fat gain (especially around hips, thighs and abdomen), fibrocystic breasts, uterine fibroids and low sex drive; if you're a woman approaching middle age, there's a good chance that you are experiencing one or more of these symptoms. Many of my patients ask me, "Am I going crazy? Why does it seem like my body is rebelling against me?" The answer may be as simple as having too much estrogen in your system—a condition known as estrogen dominance.



Estrogen dominance in perimenopause can cause mood swings.

"Estrogen dominance" is a term coined by John R. Lee, M.D., in his book *What Your Doctor May Not Tell You About Menopause*. It refers to a condition in which there is too much estrogen hormone in ratio to progesterone hormone. I tell my patients to remember that all the hormones dance with each other; they work with and support each other. When they're in balance, when that ratio is good, the woman feels well. She has a sense of well-being and she can handle stress much better. When I talk of estrogen dominance it's important to understand that it doesn't just refer to the amount of estrogen in the system—it means that there's too much estrogen in ratio to the amount of progesterone that is present.

To illustrate this concept, consider this: As a woman enters perimenopause—the interval in which a woman's body makes a natural shift from more-or-less regular cycles

of ovulation and menstruation toward permanent infertility, or menopause—her body begins to produce less estrogen. It is still possible, however, that along with that decrease you may actually have too much estrogen.

How can that be?

The answer to that question is that estrogen dominance is often caused by a progesterone deficiency. A decade or so before actual menopause the woman may slow down or stop ovulating, which causes a lack of production of progesterone from the ovaries. Menstrual cycles will continue even without the progesterone so you won't be aware that the lack of progesterone is causing symptoms of hormonal imbalance. In perimenopause and the menopausal and post-menopausal years estrogen levels drop 40-60%, but without ovulation, progesterone output drops to nearly zero.

In What Your Doctor May Not Tell You About Menopause Dr. Lee writes: "Estrogen dominance is a condition in which a woman can have deficient, normal, or excess estrogen, but in the absence of ovulation, little or no progesterone to balance its effects upon the body. When estrogen is dominant and progesterone deficient, estrogen becomes toxic to the body."* It's this hormonal imbalance that can result in many of the frustrating symptoms that women associate with menopause.

Endometriosis and Uterine Fibroids

It's not just middle-aged women who can suffer from estrogen dominance. Younger women can experience it, too, and the effects may be even more severe than those we normally associate with symptoms of menopause.

Estrogen, in itself, is very good. It helps us with our brain processes, including aiding our memory and helping us to think more clearly. Another function of estrogen is to cause the proliferation of certain target cells in the breasts and the uterus. Under normal conditions this is a good and natural function of these hormones, but if estrogen levels are too high or estrogen dominance is present it can lead to problems.

For instance, if a woman comes in with cysts on her ovaries or cysts in her breasts, or she has fibroids on her inner uterine lining, or she has endometriosis—these are all tissues that are growing. They may be increasing because she has too much estrogen in her system. We've seen a marked increase in the amount of hysterectomies performed over the last few decades because women are getting large fibroids and they're bleeding very heavily, which can lead to anemia.

I went through this myself, personally, in my forties. I had a lot of estrogen dominance but back then I didn't really understand the concept or how to treat it, so I wound up having a hysterectomy because I developed uterine fibroids and every time my period came I would bleed very heavily. The only option I seemed to have was surgery-removal of my uterus. Many women who have estrogen dominance are going down that same path that I took, but the path can be made smoother by early detection and treatment of these hormonal imbalances. That's one reason I'm very glad to see that more and more parents are bringing in their daughters to the clinic at an early age. By being proactive with their health care they can avoid many of the problems that will develop as a result of long-term hormone imbalances.

Estrogen dominance can also be a root cause for symptoms of premenstrual syndrome. The hormonal imbalance in this case may be linked to contraceptive use, stress, extremes in diet and exercise, or *xenoestrogens* found in foods—the by-products

of industrial or chemical processing that have estrogen-like effects. For more details on this, see my section on hormone imbalances in younger women.

PMS (Premenstrual Syndrome)

Premenstrual syndrome is the term used to identify a combination of emotional, physical and psychological changes that can occur after a woman's ovulation and typically ending with the onset of her menses or menstrual flow. Approximately 80% of women experience some symptoms of PMS and it's estimated that 20-30% of women have clinically significant symptoms severe enough to affect their normal functioning.

The most common emotional symptoms are irritability, depression, anxiety, crying, oversensitivity and mood swings ranging from sadness to outbursts of anger. Physical symptoms may include low energy or fatigue, and fluid retention (edema) leading to breast swelling and tenderness, along with abdominal bloating, headaches, altered libido, appetite changes, food cravings, sensitivity to certain foods and severe abdominal cramping.

A major cause of PMS is an imbalance in the biochemistry of the body brought on by the hormonal changes associated with a woman's monthly period. Although a monthly cycle is a natural part of a female's biological functions, there are things women (and the doctors who treat them) can do to help alleviate the symptoms.

Some studies have detected low magnesium levels in PMS patients. Taking magnesium relaxes the muscles, causing a decrease in uterine (abdominal) cramping that is a common complaint for those experiencing PMS. Magnesium also promotes sleep and helps to relax the colon muscles, supporting healthy bowel movements that remove toxins.

Women with PMS often have high estrogen and low progesterone levels, or they may have estrogen dominance (discussed in an earlier section of this chapter) in which the levels of progesterone may be within normal ranges but the ratio of progesterone to estrogen is low. These hormonal imbalances can be most accurately detected through a simple laboratory test called a salivary hormone panel. If clinically appropriate, a prescription for bioidentically-compounded progesterone will help balance this ratio and can lower PMS symptoms dramatically. Introducing higher amounts of fiber into the diet (for instance, ground flaxseed) also helps to reduce extra estrogen in the body because estrogen binds to the fiber and then is eliminated with other waste products.

Doctors often prescribe birth control pills to help regulate periods and control PMS symptoms. While this can effectively regulate a woman's monthly cycle, the extra synthetic estrogen present in most BCP's can help to promote estrogen dominance. The result may be an actual worsening of PMS symptoms, particularly anxiety, depression, weight gain and insomnia. The use of bioidentical hormones to regulate the cycle can be a good alternative to avoid that problem, but it's important to understand that bioidentical hormones are not used for birth control and *will not protect against pregnancy*.

Serotonin levels also fall after ovulation. Serotonin is a neurotransmitter that has a calming effect on the body; lower amounts of serotonin can lead to mood swings, insomnia, anxiety and irritability. I often recommend 5-HTP and/or tryptophan, which turns into serotonin and provides a calming and natural sedative effect that can help decrease the emotional symptoms of PMS. An added benefit is that 5-HTP has also been

shown to reduce the carbohydrate and sugar cravings that many women experience during PMS.

Besides individual supplements like those mentioned above, there are a number of botanical (herbal) compounds that are designed to specifically target PMS symptoms. These products contain a variety of herbs that are known to address the symptoms and some patients respond very well to them.

Because many women are sensitive to certain foods during PMS, it's advisable to avoid dairy, wheat, refined sugars and fatty foods that may aggravate the symptoms. A simple diet of lean meat, fish, vegetables and fruit can be very beneficial. In addition to good foods, a regular exercise routine balanced with ample sleep time and naps, if necessary, can help reduce stress and make your regular monthly cycle much more tolerable.

Diagnosis and Treatment

Saliva hormone testing combined with a thorough history of symptoms can accurately determine an imbalance of hormones. The results of specific hormone testing coupled with a patient's history of symptoms will provide a basis for an individualized treatment program for the patient. You'll learn more about this in chapter 10, "Testing and Treatment for Hormonal Imbalances."

Once a patient's individual needs have been assessed and a treatment protocol has been started, it's critical to closely monitor hormone levels with follow-up testing. The goal is to achieve the proper balance of estrogen and progesterone by supplementing with bioidentical hormone replacement therapy (if needed) and other treatments.

Because the body is a very complex system and because you and your doctor may be using more natural treatments to accomplish your goals, the process may take some time and some trial-and-error to find just the right treatment protocol for you. The success of the treatment, or course, is measured not only by the hormone levels in the body but also by a reduction of the symptoms that caused the patient to seek help in the first place!

PCOS (Polycystic Ovarian Syndrome)

Polycystic Ovarian Syndrome is a hormonal disorder that involves multiple organ systems within the body. This condition encompasses a group of signs and symptoms that include some but not necessarily all of the following:

*Irregular periods (menses) or no menstrual bleeding. This may include infrequent menses cycles occurring at 2, 3, or even 6-month intervals. The flow and length of periods may vary. These infrequent menstrual cycles or the absence of periods may lead to infertility from the lack of ovulation.

*Increased hair growth on the back, chest, or face. Patients may also experience male-pattern baldness or thinning hair, acne, or oily skin as a result of elevated testosterone levels.

*Weight gain and obesity can result from elevated insulin levels due to insulin resistance; untreated, this may lead to type 2 diabetes.

*Elevated cholesterol and hypertension may result from the resultant weight gain.

*Many (poly) cysts, or fluid-filled sacs, may be present in the ovaries.

The cause of PCOS in not definitely known, but it is believed to be linked to cellular insensitivity to the hormone insulin. Too much insulin can cause an imbalance in female hormone production leading to irregular menstrual cycles and infertility. There may be a genetic component in PCOS and a good medical history should include a discussion about family members (particularly mother or sisters) who were diagnosed with the syndrome.

Testing

Testing for a diagnosis of PCOS may include several methods:

- *A thorough physical examination that includes measurement of the abdominal girth, weight and an assessment of unusual hair growth on the face, arms, or back.
- *A medical history interview to gather details about symptomology and whether there is a family history of PCOS.
 - *Blood tests to measure fasting insulin and glucose levels.
- *Salivary hormone tests to measure testosterone, estrogen, progesterone and progesterone-to-estrogen ratio levels.
 - * An ultrasound of the ovaries to rule out the presence of cysts.

Treatment

While there is no "cure" for PCOS, it can and should be successfully managed. A naturopathic approach to treatment can be very effective in helping women with PCOS lead healthy, virtually symptom-free lives.

- *Specific botanicals and food supplements can be used to target and normalize hormone levels and support healthy ovulation.
- *A healthy diet that includes high-fiber foods such as flaxseed is important. Liver support supplements are also helpful in decreasing high levels of testosterone in the body.
- *A professionally guided weight loss program will decrease both weight and insulin levels. This can help prevent the long-term effects of PCOS such as heart disease or type 2 diabetes.
- *A proper exercise regimen is also important. Research shows that a consistent exercise routine can be as effective as the medication metformin that is commonly used in PCOS to reduce insulin resistance.

If you or your doctor suspects Polycystic Ovarian Syndrome, you should be properly screened for a diagnosis. Effective treatment and management of PCOS can mean not only a better quality of life now, but also avoiding other serious health problems in the future.

* Lee, John R., MD, and Hopkins, Virginia. What Your Doctor May Not Tell You About Menopause: The breakthrough book on natural progesterone. New York: Warner Books; 1996.

Chapter 8: Understanding Your Changing Body

Because the human body is such a wonderfully complex organism, it is constantly changing. As we progress from childhood to puberty, through the childbearing years and into menopause, then into post-menopause and the years beyond, our hormone production fluctuates. Many of these hormonal changes are the body's natural response as it adjusts to the changing needs of the different stages of life. In this book, we're discussing influences such as diet, stress, illness, environment and other factors and how they can cause imbalances that make these times of transition more difficult. My philosophy of care is to show patients that the path can be made smoother by understanding the changes and bringing the body back into proper balance.

What Is Menopause?

Every woman who goes through middle age will experience menopause. For a fortunate few, this transitional time is relatively easy; for many others, it is marked by a number of physical and psychological challenges that may leave them frustrated and physically drained. As with any health issue, the more a woman understands the process of menopause, the better able she will be to deal with it.

Medically speaking, menopause is said to be the stage of life when no menstrual periods have occurred for one year. This cessation of menses is due to decreasing ovarian function. In the United States, the average age is 51 years old; however, it can happen any time from your late 30s to your mid-50s or later.

It's important to understand that this process is not a disease; it's a normal part of a woman's life. But just as puberty can be a scary and confusing time for young girls, the entrance to this stage of adulthood can leave many women wondering why their bodies appear to be "rebelling" against them. They may even question their own sanity!

Signs and Symptoms

For some, the symptoms associated with the changing levels of estrogen and progesterone in their bodies may be relatively mild. For others, however, the physical problems can be moderate to severe and may include hot flashes, night sweats, headaches, and atrophic vaginitis (inflammation of the vagina due to thinning and shrinking tissues with a decrease in lubrication) which can cause burning, itching, or bleeding. Weight gain and changes in blood pressure can also accompany menopause.

Many women find themselves going through psychological changes, as well. Fatigue, insomnia, anxiety, depression, memory loss, mood swings, irritability and an inability to concentrate are common.

Lifestyle can also be a contributing factor in the severity of menopausal symptoms: stress, poor diet and lack of good exercise habits can often exacerbate the problems.



Hot flashes and night sweats can result from hormone imbalances associated with menopause.

Treatment

While menopause is a normal part of life, for many women it's difficult to deal with the changes their bodies are going through. If you are experiencing some of the symptoms listed above, you may want to seek medical help to cope with the problems. The good news is that there are things you and your doctor can do—often through natural therapies—that can alleviate the symptoms.

Many women who ask for help (particularly for anxiety and depression) may find that their doctors are quick to prescribe drugs such as antidepressants or sleeping pills that simply mask their symptoms and can lead to dependency or unwanted side effects. This treatment can certainly be appropriate at times, but it's often possible to approach the root causes of the symptoms in natural ways that are ultimately more effective.

The first step, as always, is a complete medical history and physical exam. It's important to determine whether the reported problems are really menopause-related or if there are other medical conditions that need to be taken into account as part of the treatment program.

Laboratory tests, if indicated, can be very helpful. For instance, if FSH (follicle-stimulating hormone) is markedly elevated and estrogen is depressed, this constitutes a lab diagnosis of ovarian failure. A salivary hormone evaluation would also include testing levels of estradiol (E2), progesterone, testosterone, DHEA, morning cortisol level and the ratio of progesterone to estradiol. These tests can help the doctor develop an individualized protocol for bioidentical hormone replacement therapy (BHRT), if needed.

There are a number of other things women can do along with BHRT to help alleviate the symptoms of menopause and head off potential post-menopausal problems like osteoporosis and cardiovascular disease. A proper diet, a good exercise regimen and dietary supplements and vitamins all should be part of an overall wellness program.

I believe a woman should be evaluated holistically. I spend time not only teaching about the physical and mental aspects of menopause, but the spiritual aspects, as well. For years, a woman may have given herself to the nurture and care of others. This change of life speaks to her to return to self and embrace herself with kindness and love. An important part of my therapy program is a reminder of the importance of taking time to nurture yourself during this transition.

If It's Natural, Why Treat It?

Since it's a natural part of the aging process for the ovaries to produce less sex hormones, why is it necessary to consider replacing the lost hormones?

It's true that the ovaries will eventually stop producing estrogen and progesterone. However, that doesn't mean that your body doesn't still need those hormones to continue to function properly. Nature, in her wisdom, has provided other means for you to get those hormones from other organs in the endocrine system.

An important source for these "back up" hormones are the adrenal glands. The adrenals produce a variety of hormones, such as cortisol and epinephrine, that help us cope with stress, but they also produce the sex hormones progesterone, estrogen and testosterone. The problem is that many people have so much stress in their lives from so many sources that they are in *adrenal fatigue*, meaning that their adrenals can't produce sufficient amounts of hormones to replace those they are losing as the ovaries decrease their output.

The question of whether or not a woman needs bioidentical hormone replacement therapy really comes down to the symptomology of the patient. Women who go through menopause with very few symptoms may not need bioidentical hormones. If their adrenals are not compromised from stress, they can often make the transition to perimenopause and menopause much more smoothly because the adrenals are able to produce the needed amounts of sex hormones to keep their bodies functioning properly.

On the other hand, there are some women who have hot flashes, mood swings, insomnia, low libido and other symptoms mentioned previously that need to be addressed. If these are the result of hormone imbalances, BHRT can be very helpful. I usually recommend some adrenal support therapy, as well, to help heal the overworked adrenals.

The ultimate goal is for the patient to feel good using the safest and most natural therapies available. Eventually the patient's body will adjust to the lower amounts of estrogen and progesterone that they are producing. For some, that means the physician can reduce or even eliminate the amount of hormones they are taking and possibly

introduce some botanical compounds that can help them go through menopause; others may want to continue on low doses of hormones and botanicals to maintain their optimum wellness.

Hormone Imbalances in Younger Women

Hormone imbalances can occur at younger ages in women just as they do during the perimenopause and menopause stages of their lives. These imbalances can start with the onset of puberty, and for that reason I recommend that a baseline salivary test be done in the first year that a young woman starts her menstrual cycle.

Our dairy and poultry products are laced with hormones, including estrogen, and more and more girls are forming larger breasts and starting their periods at an earlier age from these environmental influences. An increasing number of girls also are presenting with an irregular menses because of estrogen dominance. On top of that, they're often prescribed a birth control pill to regulate their periods, which introduces even more estrogen into the body and can cause long-term problems.

When a woman gives birth her estrogen stays about the same and her progesterone decreases, again leading to an estrogen dominant state. Sometimes this leads to a type of depression called "postpartum blues." Later on, when a woman goes through perimenopause (the years before menopause) her estrogen levels go up and down while the progesterone decreases, which can lead to estrogen dominance, as well.

I even see women who have an estrogen deficiency and yet are still estrogen dominant. The reason for this is that the body is not producing the required amount of estrogen, but at the same time the progesterone is low in ratio to that small amount of estrogen. In a case like that, it's necessary to supplement both the estrogen and the progesterone to bring them into proper balance.

Another important consideration is that the liver has to break down all the extra estrogen a woman produces during her lifetime, and it's sometimes difficult for the liver to process all the excess estrogen. I'll often give liver support to the patient to help the liver metabolize the estrogen, then work with bioidentical hormones to bring them into balance, if symptoms are present.

The phytoestrogens in the foods we eat (compounds found in plants that can mimic the effects of estrogen in the body), the use of birth control pills and genetic predisposition can all be contributing factors to hormonal imbalances in younger women and those imbalances can manifest in many ways. It's also important to consider the entire endocrine system when seeking a diagnosis for problematic symptoms. A good illustration of this point is my receptionist, Brianna, who wanted to share her story in hopes of helping other young women who may be struggling with the same health issues that she has.

Brianna was eighteen years old when she first came to work for me. She was a great worker, but she had some health issues that were really bothering her. In her words: "I felt like I was 'running on empty' or like I was stuck in a rut and could not get out of it...I would wake up tired and I would stay that way all day, and I had to take naps every day or else I couldn't function...I also got sick a lot and my cycles were so unpredictable that I would sometimes get two in one month, along with very painful cramps...I was depressed a lot and I always had a constant feeling of being 'down' and sad...I have always had extremely cold hands and feet..."

After discussing her symptoms, I suggested that she take a blood test and a salivary hormone test. The blood test revealed that she had Hashimoto's thyroiditis, a condition in which the immune system attacks the thyroid gland. The resulting inflammation often leads to an underactive thyroid gland or hypothyroidism and inflammation throughout the body affecting other tissues with resultant symptoms. Brianna's family history made her genetically predisposed to this, so the test confirmed the symptomology and history she had shared with me. The salivary test showed estrogen dominance. By finding the proper diagnosis for her condition and starting her on a treatment plan, Brianna soon noticed a difference.

"I have never felt like this, ever," she told me. "This is a life that I have not experienced before; I've never had this much energy and have never felt this good."

Many women—younger and older alike—are so used to their symptoms that they've come to accept them as "normal." By working closely with a doctor who will listen carefully to their symptoms, hormone imbalances in young women can be addressed and it may be possible to leave "normal" behind and feel better than they have ever felt before!

Male Hormonal Imbalances

Women aren't the only ones who go through a "change of life" phase as they approach middle age. As females enter the decade of their forties they will often begin to feel the effects of perimenopause. During this time their estrogen levels are spiking and bottoming out, up and down, up and down, and the accompanying mood swings and hot flashes can seem unbearable—not just for the women, but for their husbands, as well!

Perhaps the men tend to lack sympathy because their version of "the change" is much less dramatic. As men enter andropause—the term many doctors use to refer to agerelated male hormone changes—their testosterone production slowly decreases and the physical changes they experience are more subtle and gradual than those of women. The main complaints I've seen from men in my practice are low libido and decreased motivation and drive—especially at the workplace. They also often experience unusual fatigue, weight gain and depression (although women are more likely than men to mention depression).

Men are sometimes surprised to learn that their bodies should be producing small amounts of estrogen and progesterone, as well. A salivary hormone test can check their levels of testosterone, estrogen, progesterone, DHEA and other hormones to get a clear picture of how their endocrine system is functioning.

If called for, doctors can prescribe testosterone or other hormones to bring them back into a proper balance. I tell all my patients—male and female—that hormone therapy is not an overnight cure. Usually within a month or two they're feeling better as the drive and motivation return, their libido improves and they have an improved sense of well-being.

Testosterone therapy can be administered by injections or by a gel that is rubbed onto the scrotum. The gel is a more consistent delivery method, but many men opt for the injection because the gel must be administered daily and it can be sticky and a bit messy. The injection can be given once a week or once every two weeks. Compliancy seems to be much better with men when they do the IM injection.

For both men and women, understanding the changes their bodies are going through can help take some of the mystery out of why they are experiencing certain physical and psychological symptoms. It also helps them work with their doctors to find solutions that can lead to a better quality of life, no matter what phase of life they're in.

Chapter 9: Testing and Treatment for Hormonal Imbalances

Most of the patients who come to see me have already explored books, the Internet, and other sources in an attempt to reach a diagnosis for the problems they're having and to find solutions for their symptoms. When the interview takes us in the direction of possible hormone issues, I'll ask what type of testing they've done to check hormone levels in the past.

Some have never had their hormones tested but many tell me that they've had blood tests done and that their physicians have told them that the hormone results were "within normal limits." Consequently, hormone therapy isn't even considered and the treatment they receive is usually in the form of prescriptions for antidepressant, anti-anxiety, or sleeping medications. As a result, these patients tend to think that their symptoms are related to psychological problems.

I tell them, "It's not you that's unbalanced; it's most likely your hormones!"

Because many of these patients have done their health homework and are sensitive to their bodies' signals (particularly the women), they are often confused about why they're having what appear to be hormone-related symptoms when the blood tests show they are normal. The answer often lies in the type of laboratory testing that's being used.

Saliva Tests vs. Blood Serum Tests

Steroid hormones such as estrogens, progesterone, testosterone, cortisol, and others are mostly bound to carrier proteins in the bloodstream. It's only the unbound 1-5% of these hormones that are actually available to target tissues and that actively exert particular effects on the body. Saliva tests, unlike serum (blood) tests, measure the level of these bioavailable hormones. Because of this, salivary hormone levels often relate to specific symptoms of hormone imbalances. A blood test, on the other hand, may show "normal" hormone levels but may not reveal how the hormones are actually affecting the body.

The laboratory I work with in my practice uses extremely sensitive assay methods. It reports the patient's hormone test levels, the specific hormonal imbalances that relate to the patient's current symptoms, and a comprehensive analysis of the findings.

If the test results warrant it, the doctor and patient can then mutually decide if they wish to pursue bioidentical hormone therapy or herbal treatments to help bring the hormones into a proper balance to relieve symptoms. Once treatment begins it's very important to monitor levels regularly, so I require my patients to perform a second saliva test after six months and then annually as long as they are receiving hormone supplementation.

Saliva testing can help the patient and physician in several ways:

- 1. It can identify hormone imbalances before symptoms or diseases appear, thus promoting good preventive health practices.
- 2. It identifies specific hormone imbalances associated with symptoms, allowing the patient to understand why she or he is experiencing those symptoms and to pursue a proper treatment protocol.

3. It monitors hormone levels while the patient is receiving treatment, thus allowing for individualized hormone dosing for optimum results.

Once baseline hormone levels are established, I can work with patients to start bringing things into balance and get them feeling better. So many of them have said to me, "Oh! I'm not crazy after all—look at the levels of hormones that are out of range." When they see the results of their saliva tests, they're often relieved to see hormone levels that match up with their symptomology.

There are specific symptoms that hormone deficiency and hormone excess exhibit. You can work with your doctor to sort through these symptoms to help you get the best individualized treatment available for you. A good starting point for assessing hormonal status is to measure estradiol, progesterone, testosterone, DHEA, and cortisol levels.

Several natural approaches can be taken to alleviate symptoms of hormone imbalances, including changes in diet, stress reduction, and exercise routines, and those should be considered an integral part of any treatment regimen. After doing a comprehensive assessment, your doctor can work with you to determine if bioidentical hormones are also appropriate for your situation. If so, he or she will prescribe the necessary dosages of bioidentical hormones to begin your treatment program. It's also vital that your doctor closely monitors your progress, working with you to optimize your response to the therapy, minimizing any potential side effects of the treatment.

Bioidentical Hormone Replacement Therapy

Hormones in our bodies are made in different quantities during the various phases of our lives. As we age it's common for the levels of some of these hormones to diminish. As a woman enters perimenopause and then menopause (which may occur naturally or as the result of a hysterectomy), certain hormones—particularly estrogen—are produced in lesser quantities by the body. As we mentioned in earlier chapters, this lack of hormones can result in troubling symptoms such as hot flashes, night sweats, low libido, vaginal dryness, sleep difficulties, irritability and unexplained weight gain.

For many years the accepted medical treatment for menopausal symptoms was hormone replacement therapy (HRT). In traditional HRT a synthetic estrogen such as Premarin is prescribed to try to alleviate symptoms.

HRT was widely prescribed until fairly recently, but in 2002 findings from a large study called the Women's Health Initiative raised concerns about its safety and side effects. Researchers found increased risks for serious health problems. Women who were taking estrogen alone had an increased risk for stroke and blood clots, while women who had taken a combination of estrogen and progestin (a synthetic form of progesterone) for several years were at greater risk for such things as heart disease, breast cancer, stroke and blood clots. In seeking a safer alternative to synthetic hormone replacement therapy, an increasing number of women and their doctors are turning to bioidentical hormone replacement therapy (BHRT).

To understand the difference between bioidentical hormones and those I'm calling "synthetic" or "non-bioidentical" it's essential to define some terms. In a sense, all hormone supplements can be considered synthetic because they are all produced in laboratories. What differentiates natural and synthetic hormones as described here are their chemical structures. Premarin, for example, is a type of non-bioidentical estrogen

that is derived from the urine of pregnant mares (also called *conjugated equine estrogen*). Scientists have slightly altered the original estrogen to make a molecule that is similar to natural estrogen, but it is different from any estrogen found in nature.

Why do that? Because the resulting substance can then be patented and sold by a pharmaceutical company. These synthetic estrogens are more potent than human estrogens and their molecular structures are harder for the body to metabolize, leading to possible side effects.

Bioidentical hormones, on the other hand, are made from wild yam extracts that are converted in a lab to have the same molecular structure as the hormones your body produces. These are made in compounding pharmacies (pharmacies that put together medical compounds from "scratch" rather than using factory-made pharmaceuticals) and cannot be patented because of their natural structure. Unlike non-bioidentical hormones, bioidentical hormones fit perfectly into the hormone receptors of your body because they are identical to your natural-made hormones. Because they are more natural our bodies recognize them as their own and can metabolize them as they were designed to do, minimizing side effects.

Thus, when you compare "natural" and "synthetic" hormones the crucial difference is that natural (bioidentical) hormones have a molecular structure that is identical to the types of hormones that are made by your body.

Why Regular Testing Is Critical

As I mentioned earlier, once treatment begins it's very important to monitor levels regularly. I require my patients to perform a second saliva test six months after starting hormone supplementation and then annually as long as they are receiving treatment. The reason for this is that the body is constantly changing. A specific dose of hormones may be proper to bring everything into balance for a while, but changes in the endocrine system could mean the dose will need to be adjusted periodically. To better understand this concept, let's look at an example.

If a patient's salivary hormone test results reveal that she is in a state of estrogen dominance (too little progesterone in relation to estrogen levels), I would probably prescribe bioidentical progesterone treatment to bring her hormone levels into proper balance. At the same time, she may be in a state of *adrenal fatigue*, meaning that her adrenal glands are not producing proper amounts of hormones. If so, I would recommend treatments to support her adrenals until they can heal and resume proper function.

Remember that all the hormones produced by the endocrine system interact with each other, as I talked about in chapter 7. When the patient responds to the adrenal support and her body begins to produce more hormones on its own, it's necessary to adjust the amounts of bioidentical supplementation she's receiving. The only way to properly adjust the dosages is to monitor hormone levels through regular lab testing.

Along with that, if the patient makes positive diet and lifestyle changes that in turn affect hormone production it may be possible to wean her off the supplementation, which is my ultimate goal as her doctor.

Besides checking hormone levels I also insist that all my female patients who are receiving hormone supplementation get an annual Pap smear and an annual mammogram. Male patients need an annual digital rectal prostate exam and PSA blood test. Although I believe that bioidentical hormones are a safer therapy than their non-bioidentical

counterparts, they are still hormones that are being introduced into the body. Because some hormones have been linked to the proliferation of cancer cells, I prefer to be cautious by ruling out that possibility through regular testing. For that reason I also don't recommend BHRT for people with a history of cancers such as ovarian, breast, uterine, or prostate.

Types of Delivery Used for Hormone Medications

There are a number of different methods for delivering the hormone supplementation your body needs. The three main forms I use in my practice are a cream, a troche (a lozenge that dissolves under the tongue), and a capsule. For patients needing higher dosages, prescription-strength medications are formulated specifically for the patient in a compounding pharmacy. The method used usually depends on how well the patient responds to them.

Creams are popular because they are fairly convenient and it's easy to adjust the amount of medication the patient is receiving. The cream is rubbed on and absorbed through the skin. If a patient's symptoms reveal that she is not getting enough or is receiving too much hormone supplementation, we can simply adjust the amount of cream she is applying. This usually works well, but I've also found that some patients simply don't absorb the cream properly. For example, I had a patient who was a woman in her thirties who had had a hysterectomy and was complaining of terrible hot flashes. We started her on the cream and adjusted her dosage several times, still with no relief. It dawned on me that she might not be absorbing the hormones properly, so we switched her over to the troche and within a week her hot flashes had diminished by ninety percent.

Troches are a good option for women who do not use the cream and who cannot properly absorb the medication delivered in capsule form because of digestive problems caused by a compromised (improperly functioning) gut. The troche is allowed to dissolve in the mouth and the hormones are gradually absorbed into the bloodstream. Another good thing about troches is that they are soft and can be cut in half to adjust the dosage, if necessary.

Often patients choose the type of delivery they'd like to try and I'm fine with that. Sometimes, however, the age or the particular symptoms a patient presents with may dictate the best type of method to use. For instance, I would probably give a woman progesterone in a slow release capsule form if she is suffering from insomnia, rather than the cream or troche form. The reason for that is because progesterone is a natural sedative and a capsule form may help her relax and sleep through the night as she receives a steady release of the medication over a longer period of time.

Another delivery method that is sometimes used is the implantation of pellets under the skin. The advantage of this method is supposed to be that the pellets dissolve over a long period of time and the patient does not have to worry about taking daily doses of the hormone supplementation. I, personally, don't use pellets and don't recommend their use because once the pellets are implanted the doctor cannot adjust the dosage to respond to the patient's changing symptoms.

Oprah and Bioidentical Hormones

On January 15, 2009, Oprah Winfrey dedicated her entire program to hormone replacement therapy and bioidentical hormones. Joining Oprah were Robin McGraw (better known to some as Dr. Phil's wife) and Dr. Christiane Northrup, a well-known author of several books on women's health issues. All in all I thought this was an excellent show to help introduce women to the topic and I thought I'd review a few of the points that were made and why they were important:

*Women should start monitoring their hormonal balances earlier, rather than later, in life.

Robin McGraw shared how she began her journey to find the answers to a better quality of life at the age of 45. She told the audience that she had been continually researching the subject of hormone replacement therapy for the past ten years. She mentioned that she thought women should start monitoring their hormone levels much earlier than she did (possibly in their mid-twenties), and I heartily concur.

Why? Because hormonal imbalances aren't just attributable to menopause. Premenstrual syndrome (PMS), childbirth, and perimenopause can all play a role in fluctuating hormone levels that can lead to weight gain, depression, fatigue, and other unwanted symptoms.

*It's not selfish to take care of your own health first.

McGraw also made the point that she realized that if she weren't healthy she could never provide for the needs of her other family members. Time and time again in my practice I've had patients describe how they make sure that their children, spouse, parents, etc., are provided for first. The problem is that once you've taken care of everyone else's needs, you often don't have the energy or health to take care of yourself. It's the airlines' "put your own oxygen mask on first" philosophy that will allow you to truly help your loved ones best.

*Take control of your health care.

Oprah, Robin, and Dr. Northrup all agreed that you must be your own health care advocate and assume responsibility for seeking the best care possible. They emphasized the following points:

First, find a doctor who will listen to you and work with you to provide an individualized care plan. One-size-fits-all treatment plans usually turn out to be a terrible fit. Don't settle for a five-minute visit that results in a prescription followed by "call me in six months."

Second, be sure that your doctor addresses your symptoms, not just your lab results. Just because your tests come back "within normal limits" doesn't mean that your symptoms are all in your head. What is "normal limits" for one woman who is asymptomatic may cause serious problems for another. Lab tests are a vital tool, but your treatment plan should be defined by your symptoms, not your lab results.

Third, educate yourself about your symptoms and possible treatments. Your doctor should certainly help with this (I'm very big on patient education) and there is plenty of information on the subject of hormone replacement therapy in books and on reputable websites. Learn about your options.

*Rebalancing hormones is not a "quick fix" or a one-time doctor visit.

Because your body is constantly changing and adjusting to any health care regimen you follow, it's vital to monitor and adjust hormone therapy prescriptions as

symptomology warrants. All the panelists on Oprah's show that day stressed that this is a long-term commitment that requires working along with your physician to find the optimum health plan for you, but the rewards for those who are willing to follow it can be amazing!

Chapter 10: Hypothyroidism—Often Overlooked and Under-Diagnosed

The thyroid gland is located just below the Adam's apple in the neck. It measures about two inches across and resembles a bow tie. Normally this gland cannot be palpated but if it becomes enlarged, it can easily be felt. The function of this gland is to secrete thyroid hormones that control the body's metabolic rate. As with most of your body's systems, when it's functioning properly you're not even aware of it.

When a problem does develop with the thyroid gland, it may manifest with many different signs and symptoms.

Thyroid disease can fall into several categories:

*Hypothyroidism—Hypothyroidism (underactive thyroid) is a condition in which your thyroid gland doesn't produce enough of certain important hormones.

*Hyperthyroidism—Hyperthyroidism (overactive thyroid) is a condition in which your thyroid gland produces too much thyroid hormone.

*Thyroid cancer

The focus of this chapter will be on hypothyroidism because it is the most common disorder and because it is often overlooked by medical practitioners who are seeking to match a patient's symptoms to a diagnosis.

Signs and Symptoms of Hypothyroidism

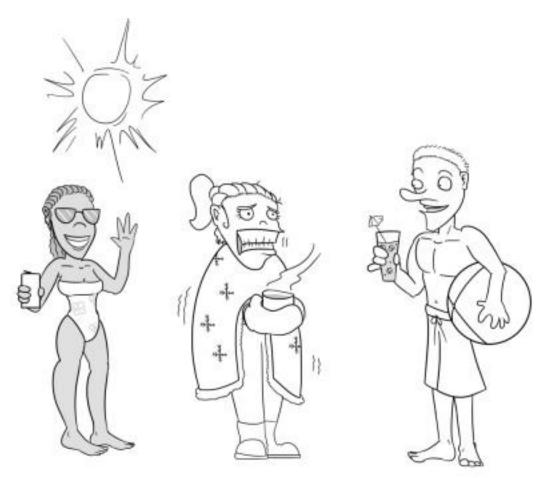
Some signs and symptoms of low thyroid production are dry skin and hair, hair loss, weight gain, cold hands and feet, constipation, hypersensitivity to cold, fatigue, and depression. Lab tests may reveal elevated cholesterol, which can also be associated with thyroid problems.

The thyroid gland is a major player in the body and affects many different systems, so the symptomology associated with hypothyroidism can sometimes mask its origins. Because the symptoms of thyroid disease can be attributed to a number of other causes, hypothyroidism is often missed in clinical diagnoses. For example, I've had numerous patients come to me who are on antidepressants when the depression they're experiencing can be traced to a thyroid condition. A patient presenting with high cholesterol may be put on a statin drug, or someone with complaints of muscle or joint aches and pains may be diagnosed with fibromyalgia or rheumatoid arthritis. All of the symptoms mentioned here can result from a hypothyroid condition, and I've often seen these problems subside once I start a patient on thyroid treatment.

We usually associate thyroid disease with older adults, but thyroid conditions can occur in people at any age and I've seen a number of young children with hypothyroidism. At one point within a two-month period I saw three unrelated cases of children who presented with thyroid problems. One of the girls was thirteen, the other was nine and the other was ten. All had similar symptomology: weight gain, fatigue, difficulty concentrating in school and all three had elevated cholesterol. Two of the girls were on antidepressants.

Each of these girls had been through the gamut of doctors and tests; they had been to neurologists, had brain scans, gone to psychologists and even had some laboratory testing for thyroid problems, but because several of the test results were in "normal"

ranges, thyroid disease was ruled out. After questioning the parents of each of these patients I learned that all had relatives with thyroid problems. Thyroid problems are not necessarily genetic, but they can be, which is why a detailed family history can be very revealing and an important factor in seeking an accurate diagnosis. I ordered lab screenings for thyroid disease based on their symptoms and medical history. Testing revealed that all three had Hashimoto's thyroiditis. Once we got the girls on proper thyroid medication, most of the symptoms abated.



Feeling cold most of the time can be a sign of hypothyroidism.



An under active thyroid can lead to an increase in hair loss.

Why Your Doctor Might Miss Your Hypothyroidism

A doctor who is seeking a diagnosis will first consider the particular signs and symptoms a patient presents with. As pointed out earlier, the symptoms associated with hypothyroidism can often be attributed to other conditions, as well, which may lead your doctor to rule out thyroid problems. However, if the physician does suspect a thyroid condition, she may order blood testing to screen for it. Blood tests are an excellent tool, but even they can sometimes be misleading.

The two major hormones produced by the thyroid gland are triiodothyronine (T3) and thyroxine (T4). T3 is produced in smaller quantities and is the hormone that actually stimulates cell metabolism, so it is said to be the more "active" form of thyroid hormone. Most of the T4 that the body produces is converted to T3 inside the cells. The vast majority of the T3 and T4 hormones in the bloodstream are bound to carrier proteins called thyroxine-binding globulin. It is the *unbound* hormones (free T3 and free T4) that are available for biological action at the cellular level, meaning they will help cells convert oxygen and calories into energy.

Thyroid Stimulating Hormone, or TSH, is secreted by the pituitary gland in the brain and causes the thyroid gland to release thyroid hormone. If the body needs more available thyroid hormones, more TSH is released. If there are sufficient amounts of thyroid in the bloodstream, TSH levels are lowered. Blood tests to measure the levels of TSH are often used by doctors to rule out hypothyroidism but those results can be deceptive.

Hashimoto's thyroiditis is the most common type of thyroiditis (inflammation of the thyroid gland). It is an autoimmune thyroiditis in which the body turns against itself, creating thyroid peroxidase antibodies (called TPO antibodies) that attack and inflame the thyroid gland. Inflammation of the gland will initially cause the gland to go through a phase of hyperthyroidism that will eventually damage the gland and lead to a state of low hormone production. In a patient with Hashimoto's, the doctor will feel an enlargement of

the thyroid gland. While the enlarged gland may be painless, sometimes it can be sensitive when it's palpated during a physical exam. Most people with Hashimoto's develop hypothyroidism and may need to take thyroid hormone replacement therapy.

When doing blood tests, the diagnosis for Hashimoto's disease is often missed because the patient may have a normal thyroid stimulating hormone (TSH) test, they can be in the normal range for free T3 and free T4 and normal range for T3 and T4. At that point their doctor may tend to rule out thyroiditis because of the blood tests. However, it's important to also check the TPO antibodies because they are an excellent indicator of Hashimoto's. Sometimes the TPO antibodies can be extremely high even though the other tests seem to be in the normal ranges. I said earlier that test results can be deceptive, and this clinical example illustrates why.

Jane, a young woman in her mid-thirties, came in to see me several years ago complaining of a ten-pound weight gain within the last few months. She also had fatigue and difficulty concentrating. She had been to a couple of other doctors and they told her that her blood tests were fine. We ran a new test to check for TSH, free T3, free T4 and TPO antibodies. Sure enough, the other hormones were in the normal ranges but the TPO antibodies were greater than 1,000—the norm should have been less than 34! Jane was exhibiting all the symptoms of hypothyroidism but the only problem showing up in tests was the TPO antibodies. I sent her to an endocrinologist who told her there was nothing that could be done because the TSH, free T3, and free T4 were normal. Basically, she was told she had to live with her condition.

Jane wouldn't settle for that, however. She read on the Internet about a doctor in another state who was treating people for thyroid conditions and she packed her bags and headed for his clinic. When she came back to see me a few months later, Jane looked like a different person. She had lost the ten pounds she had recently gained, her energy was good, she was able to concentrate and work much better and no longer had cold hands and feet. The physician she had seen had been willing to treat her symptoms rather than strictly relying on the usual test results. He prescribed a natural thyroid hormone replacement called Armour Thyroid and it worked well for her.

Jane taught me a very important lesson. People who have "normal" TSH, free T3 and free T4 but who have Hashimoto's disease *with symptomology* need to be treated with thyroid medication. The conventional treatment is to look at the TSH and treat according to that test. By recognizing the disease from the symptoms and confirming it with the proper laboratory tests, many people can get the help they really need.

Testing

Testing for thyroid disease can include blood tests to measure the amount of the thyroid hormones free T3 and free T4 and pituitary response to the thyroid hormone TSH. A TPO test can measure thyroid antibodies to determine autoimmune problems like Hashimoto's disease. This test can be crucial when, as indicated in my earlier story, there are signs and symptoms of hypothyroidism but the routine tests reveal normal ranges for T3 and T4. Salivary testing can be done to measure a patient's cortisol levels to rule out adrenal fatigue. It is necessary to correct adrenal fatigue and support the adrenal glands in order for thyroid treatment to be effective because the cortisol produced by the adrenals actually delivers thyroid hormone to the cells. For more on that subject, see the following chapter on adrenal fatigue.

Testing for ferritin (the major iron storage protein in the body), vitamin D and iodine levels can also be helpful. Low ferritin can contribute to a decrease in the transport of thyroid hormone (T3) to the nucleus of the cell. Vitamin D level is an effective immune modulator when there are elevated autoimmune thyroid antibodies. The thyroid gland needs a small amount of iodine to synthesize thyroid hormones. Large amounts of iodine can decrease the amount of hormone the gland produces.

Treatment Options

Supplements of zinc and selenium can help to produce thyroid hormones. Supplements of vitamin D and iron may be used as needed, according to blood test results. Thyroid hormone supplementation may also be recommended according to test results.

Prescription thyroid medications for hormone supplementation may be synthetic, natural (tablets made from pig thyroid gland) or bioidentical (made at a compounding pharmacy). So what's the difference and are some better than others? The answer depends on the individual patient's needs.

Levothyroxin, which is marketed under the brand names of Synthroid, Levoxyl, and others, is a synthetic drug that is prescribed by many doctors for their patients with diagnosed hypothyroid conditions. Levothyroxin contains T4, which is the storage form of thyroid that is produced by the thyroid gland. The reason this drug has traditionally been prescribed is that under proper conditions the body converts T4 to T3, which is the active form of thyroid that is necessary to relieve the symptoms of hypothyroidism. For some, levothyroxin works well as a treatment; for others, however, this "T4 only" medication may yield limited results.

The problem that too many doctors overlook is that many patients have difficulty converting the storage form (T4) to the active form (T3) and therefore they still have many of the symptoms of hypothyroidism even though they're taking a proper dose of medication to treat it. This treatment can be made more effective by adding a synthetic form of T3 called Cytomel. If Cytomel is not given in this case, the next step a doctor may take is to prescribe statins for the high cholesterol, antidepressants for the fatigue and depression and a range of other drugs to try to address the symptoms that may simply be the result of a poorly treated thyroid condition.

Another option is natural thyroid medication made from desiccated pig glands and marketed under the brand names of Armour Thyroid, Nature-Throid, Westhroid and others. These medications contain both T4 and T3 and many patients respond very well to them. The dosage is easy to adjust as patients report their symptomology once they've begun treatment, and this medication has been an excellent help for millions of thyroid disease patients. One disadvantage to this medication is that the ratio of T3 to T4 is fixed—it isn't possible to "tweak" one or the other to achieve an optimal balance for the patient. All of these brands are essentially the same, with the exception of the fillers or the binders used in their manufacture. With some patients I do avoid using animal thyroid if the patient has autoimmune diseases such as Hashimoto's or rheumatoid arthritis because it can add to the inflammatory process if the patient's antibodies react to the animal thyroid.

Compounding pharmacies can also make a synthetic bioidentical form of T3 and T4. These can be a great advantage for those who need to fine-tune the amounts of the

thyroid hormones in their bodies because the medications can be specifically tailored to the patient's needs. This is also a good option for those people who may need to have their medications adjusted frequently. For example, I've found that people with Hashimoto's disease may need to change their dosages when they go through times of unusual stress. Under stress their bodies produce more TPO antibodies that can attack the thyroid gland and inhibit its proper function, causing the patient to exhibit signs of fatigue, hair loss, or other symptoms of hypothyroidism. They'll need a higher dose of either T3 or T4 or both T3 and T4 when that happens and we can make that adjustment with the compounding pharmacy. Compounded T4 and T3 can also be made in a slow release form that works over the course of the day, mimicking the body's normal output of thyroid hormones.

Let me share a clinical example to illustrate the role stress can play. I have a patient with Hashimoto's disease who is a schoolteacher. Most of the year she's fine, but when fall comes around she starts getting very fatigued. The added stress of the new school year usually means I have to adjust her medication so she can function at her optimal level. Because the bioidentical hormones she uses can be tailor-made for her, we are able to quickly and easily adjust her medications to suit her needs.

Conversely, there are many cases when patients' thyroid medications need to be decreased because the patients are in a place in their lives where job, health and other aspects of lifestyle are more balanced and less supplementation is better.

Some Other Considerations

Prescribed thyroid medication action can be altered by certain drugs, so it's very important to inform your healthcare professional of all medications and nutritional supplements you may be taking. Also, the absorption rate of these thyroid meds can be decreased if there is inflammation in the gastrointestinal tract or a parasitic infection is present.

Eating a proper diet and learning to control stress are also important factors that should be addressed for people with hypothyroid conditions. For example, patients with Hashimoto's disease do much better when following a gluten-free diet because gluten can actually trigger an increase in TPO antibodies. As mentioned earlier, stress also can play a big role in increasing TPO antibody production. For people with Hashimoto's disease, it's important to avoid unusual stress as much as possible. Take time to relax and allow your body to heal!

Chapter 11: Adrenal Fatigue—How Stress May Be Affecting Your Health

Adrenal fatigue (also called adrenal insufficiency) is a common health problem that, like hypothyroidism, is often overlooked or misdiagnosed. One of the biggest contributing factors in adrenal fatigue is stress—something we all experience in different degrees in our lives. Interestingly, some people get so used to living with stress that they don't even realize how much of a toll it's taking on their bodies. Weight gain, anxiety, insomnia, fatigue, depression, and high blood pressure are just a few of the physical problems that can result from this potentially debilitating illness.

The adrenal glands are part of the endocrine system and are anatomically located just above the kidneys. The adrenals produce a variety of hormones that are responsible for handling stress. Cortisol is released for the purpose of coping with long-term stresses such as chronic allergies or infection, overexertion, and fear. Epinephrine and norepinenphrine are released in acute stress situations such as sudden job loss, the death of a loved one, surgery, or physical or mental trauma.

Your body usually recovers from a stressor within one to three days after proper rest. However, if the stressors in your life become chronic and levels of cortisol remain elevated, the elevation may lead to the first stage of *adrenal fatigue*. Leading up to this stage, your adrenal glands have been working overtime to pump out high levels of cortisol to help your body deal with stress. As you enter into adrenal fatigue, there are times of both elevated cortisol and low levels of cortisol. For this reason, there are times when you may feel fine, but other times when you're pushing yourself to make it through the day. Symptoms may include weight gain, insulin resistance, diabetes, increased susceptibility to infections, autoimmune conditions, high blood pressure, osteoporosis, and other degenerative diseases.

A prolonged period of chronic stress can eventually cause *adrenal exhaustion*, meaning the adrenals can no longer meet the demands of the body and cortisol production falls to lower levels than the body requires. This second stage can lead to lack of energy, decreased ability to handle stress, lowered libido, chronic fatigue syndrome, low motivation, fibromyalgia, and anxiety disorders. A complete failure of the adrenal cortex is called *Addison's disease*—a medical emergency that can result in death.

My Personal Bout with Adrenal Fatigue

I'm aware of the effects of adrenal fatigue because I've walked down that road myself.

When I was a practicing nurse I would often have times when I would lose my sense of self-care by focusing first on patient care. Later in my nursing career as I juggled a busy home health care practice with raising three children, I often felt "burned out." But the real toll of stress on my health became evident as I entered medical school at the age of forty-three.

Medical school meant early-morning classes and late-night study sessions. Weekends were often devoted to research and writing papers. Add to that clinical rotations and the pressure of the national board exams. All this while still helping my husband raise three children! The busier I got, the more I tended to let lifelong healthy

habits fall by the wayside. I exercised less, gave up hours of sleep, and fell into poor eating habits.

As I entered the fourth year of school I was exhausted and having difficulty focusing on tasks. I had gained unwanted weight and was experiencing insomnia and hypoglycemia. I knew I was nearing the end of my rope, so I visited the naturopathic clinic run by my school. After a physical exam and testing the doctors told me that I was in an advanced stage of adrenal fatigue. They also warned me that if I continued down the path I was traveling without treatment the consequences could be serious.

Now that I had a diagnosis that matched the symptoms I was experiencing, I knew I could begin the healing process. The pressures of medical school were still there, but I began a treatment protocol to help heal my overworked adrenal glands. I also began taking the needed breaks from school and studying to allow my body and mind "down time" to heal. As my recovery progressed I found that I was handling the daily pressures of life and school much better.

I believe that my experience with adrenal fatigue was another reminder that I should honor my body with a balance of sleep, exercise, proper diet, and fun.



For a person with adrenal fatigue the simplest tasks can become exhausting because of low motivation, lack of energy, and the inability to handle stress.

Diagnostic Tests

Since high or low blood pressures can both be indicators of possible adrenal problems, a blood pressure check is an important part of a physical exam. Laboratory testing also plays a crucial role in the diagnostic process, and there are specific lab tests that I use to diagnose adrenal problems. A salivary hormone test will measure the amount of cortisol hormone the body is producing.

For this test, the patient collects saliva specimens at four specific times during the day. The reason for this is that cortisol has a classic circadian rhythm, dropping more

than 80% throughout the day; taking several samples gives us a picture of how the body is handling stress over time. For instance, if cortisol levels are high at night it could be the reason a patient has insomnia. If they are unusually low during the day the patient may be experiencing fatigue and poor absorption of thyroid hormone. Matching the lab results to a patient's symptoms can be a big step toward finding an effective treatment protocol.

The saliva test is a simple non-invasive procedure that can be done at home. The patient mails in the take-home kit to the lab after collection. I also test other steroid hormones such as DHEA-S and testosterone that, if low, can be indicators of adrenal exhaustion.

If I suspect insulin resistance, which can be an indicator of elevated cortisol levels, I will run a fasting insulin blood lab.

How the Adrenals Affect the Thyroid

As I've noted in earlier chapters, all of the different glands in the endocrine system are interrelated. I tell my patients that they dance together, they play together, they interact and affect each other. As this interaction takes place, balance is maintained in the body.

Let me give you a clinical example of how this applies to the thyroid and the adrenal glands. Adrienne is a 60-year-old woman who has had hypothyroidism (under active thyroid) for probably 15-20 years of her life. I've been seeing her for the last three years. She was taking a daily dose of 1/2 grain of Armour Thyroid. This amount seemed to help her, but it wasn't enough to completely relieve the hypothyroid symptoms of fatigue and cold hands and feet that she was experiencing. The patient and I agreed to try bumping it up, so we increased the dose to 3/4 grain. She called me later and said that she was very nervous, jittery, her heart was pounding, and she felt like she wanted to crawl out of her skin. I reduced the medication immediately and the symptoms went away, but we were back where we started. All we did was increase the medication by 1/4 grain. Why such a marked reaction?

When we did a salivary hormone test on her adrenal glands we discovered the answer. By measuring four cortisol levels at different times during the day we found that Adrienne's cortisol production was quite low throughout the day. This result, coupled with her complaint of very low energy, pointed to a diagnosis of adrenal fatigue.

In chapter 7, I used the analogy that the cortisol that is released from the adrenals is like a car that carries thyroid hormone out of the blood into the cell where it becomes active and begins to work by decreasing symptoms. If that thyroid hormone stays in the blood and doesn't get into the cell, then there is too much thyroid hormone in the blood, resulting in the symptomology of *hyper*thyroidism. The woman's nervousness was a sign of too much thyroid in the blood, even though she didn't have enough thyroid in the cells. Because of her adrenal fatigue, Adrienne wasn't producing enough cortisol—the "car"—to carry the additional thyroid medication out of the blood and into the cells, so I had to treat the adrenal glands to address the thyroid issue.

To do this, I gave Adrienne a protocol for adrenal fatigue. I had her eat small protein snacks in between meals to stabilize her blood sugars to prevent hypoglycemia (low blood sugars), which most patients with adrenal fatigue experience. I also prescribed nutritional intravenous (IV) therapy for her to support her overworked adrenal glands

while they healed. I chose to start her on IV therapy because her history and symptoms indicated that she had a compromised gut, meaning she was not absorbing and assimilating her food properly. This meant she wasn't getting enough vitamin C and B complex as well as other nutrients, and those nutrients are critical for helping the adrenal glands heal. An IV push with a combination of B vitamins and vitamin C gives tired adrenals a good jump-start. You can learn more about the benefits of IV therapy in chapter 14.

I combined this with a protocol for repairing the gut to improve food and nutrient absorption. As a result, when she finished her IV therapy she could begin an oral regimen of vitamins B and C for continued adrenal support.

The other important part of repairing the adrenals is sleep; Adrienne, as with many patients with adrenal and/or thyroid problems, wasn't sleeping well. If the adrenal glands are producing too much cortisol, those levels will be elevated at night, keeping the person awake or suddenly awakening them in the early hours of the morning. There are botanical supplements that, when taken at bedtime, lower nighttime cortisol output. I gave her a protocol to help her relax and sleep, which in turn reduced stress levels and gave her adrenal glands a rest.

Once Adrienne and I dealt with the problem of her overworked adrenal glands, her cortisol production was balanced and we were able to settle on a consistent dosage of thyroid medication that provided her with the relief she needed from her hypothyroidism symptoms. She also now had the added benefit of healthy adrenal glands.

Adrienne's story underscores the importance of looking at the big picture and considering root causes when dealing with hormonal imbalances. Simply increasing her thyroid medication wasn't a good option; it was important to help her adrenal glands heal themselves so they could do their part to assist her body in processing the thyroid hormone supplements.

Where Are the "Commas" In Your Day?

Those patients who come to my office with signs of hormonal imbalances like adrenal fatigue, estrogen dominance, and hypothyroidism can all exhibit the common symptoms of fatigue, irritability, insomnia, foggy thinking, mood swings, and several other related complaints. All of these conditions are stress related. Adrenal fatigue is the result of the adrenal glands having to release cortisol over an extended period of time in response to chronic stressors in a person's life. I've observed that in patients with Hashimoto's disease the condition often is exacerbated by stress. (Hashimoto's is an autoimmune condition of the thyroid gland discussed in chapter 10.) And women with low levels of progesterone, a natural sedative, produce more cortisol when they are in a state of estrogen dominance.

People with these conditions have often fallen into an endless stress cycle—chronic stress in their lives causes hormonal imbalances, which in turn lead to a reduced ability to handle the stress, which leads to more chemical imbalances. For example, a woman with low progesterone is missing the calming effect it has on her body. This can lead to sleep difficulties. Lack of sleep means she is tired, which increases stress. Her adrenals pump out more cortisol to handle the stress, and the additional cortisol can interfere with her sleep patterns.

So how can you break the cycle and start the healing process?

Part of my job as a doctor is to identify what those imbalances are by listening to your symptoms and by performing pertinent laboratory testing, as mentioned earlier. That way, the patient and I can begin a treatment protocol of supplements and bioidentical hormones to try to bring those imbalances under control. But until the patient takes an active role in reducing stress levels in her or his life, it will be difficult to heal. That's why I often ask, "Where are the 'commas' in your day?"

Just as commas break up long sentences and allow us to pause and process what we're reading, we need pauses in our day to allow our bodies to rest and come into balance. Diverting to a calming act for your body decreases stress, causing the adrenal glands to decrease their production of cortisol, resulting in less of an excitatory response and bringing more of a feeling of tranquility and peace. Choosing to pace yourself better by finding increments of time in your day to slow your body down and quiet your mind decreases the burden of stress on your body and allows it to heal.

A day in my clinic can be pretty hectic for me. It's usually eight to nine hours of seeing patients, reviewing charts, answering e-mails, researching cases and taking phone calls. Here are a few examples of "commas" I use to break up the stress of the day:

*Snack time—eating a juicy, crunchy apple and consciously enjoying it

*Reading a few pages in a favorite magazine or book (maybe something inspirational)

*Taking slow, conscious, deep breaths (we take shallow breaths when we are in stress mode, providing less oxygen to the body for wakefulness)

*Pausing to give thanks for some of the specific blessings in my life (especially important when things aren't going as planned that day!)

*Stepping outdoors for a few moments of sunshine—the bright light helps awaken me and focus during afternoon sluggishness

*When I'm at home I like to break the day's chores with a few minutes sitting in my back yard and listening to the symphony of the birds and enjoying my flower garden

So how do *you* pace yourself throughout your day to keep from burning out? The pauses don't have to be lengthy—just enough to break the cycle of stress in your day. The comma you allow yourself will benefit your body by providing calmness and peace of mind, preventing the buildup of stressors that can lead to sickness.

Of course, for those with serious adrenal problems the solution may be a more radical change of lifestyle. If a person is living in a high-stress environment that has seriously compromised her health, it may be time to make some life-changing (and possibly lifesaving) decisions about how she can alter her circumstances to reduce stress. Sometimes that means considering a career change, learning to say "no" to the demands others are putting on you, or confronting an abusive situation that is holding you back. In those cases, it is important to seek counseling and support before making decisions.

Chapter 12: Fibromyalgia—Getting to the Root of the Problem

Fibromyalgia syndrome is characterized by aching pain and stiffness in soft tissues including muscles, ligaments, and tendons. There are areas of great sensitivity called "tender points." Other characteristics may include sleep disturbances, restlessness, numbness in arms and legs, irritable bowel syndrome, chronic fatigue, and headaches.

The cause of fibromyalgia seems to be unknown, but it may be triggered or exacerbated by stress. Emotional, physical, or mental stress originates from a wide range of things such as job demands, family problems, poor diet, adrenal fatigue, an imbalance of hormones (such as thyroid or sex hormones), food sensitivities, or even air pollution.

Conventional drug therapy may include:

- *tricyclic antidepressants in low doses to help reduce pain and promote sleep
- *sedatives to help fibromyalgia sufferers sleep
- *local anesthetics injected into tender points to relieve pain

While drug therapy can provide some short-term relief, non-drug treatments are usually the most helpful. Specific non-conventional testing may help the physician discover the root cause of the symptoms of fibromyalgia. Along with those lab tests, a wide range of therapies can be used to alleviate specific symptoms. Below are some of the approaches I take.

Testing for hormonal imbalances is an important diagnostic procedure. A thyroid panel may reveal hypothyroidism (an under active thyroid gland) that causes a decreased metabolic rate which can lead to decreased energy, unwanted weight gain, and a decline in hormone production of the body. An imbalance of hormones can lead to chronic fatigue and pain. A decrease in specific hormones could include progesterone, estrogen, and DHEA, as well as cortisol, which functions in helping the body cope with stress, controlling inflammation and pain, and promoting sleep and a sense of well being. I use salivary hormone testing to assess hormone levels and, if hormone support is necessary, I use bioidentical hormones and/or nutritional and botanical support. If a decrease or imbalance of hormones is contributing to the root cause of fibromyalgia, then replenishing natural hormones will be more effective long-term in decreasing the signs and symptoms of fibromyalgia rather than Band-Aiding the symptoms with pain medications, tricyclics, or sedatives. You can learn more about salivary hormone testing and bioidentical hormone replacement therapy in chapter 9.

Testing for food sensitivities and proper nutrition can also be very helpful. A blood test can determine if the body is releasing IgG antibodies against specific foods and causing pain, inflammation, fatigue, gastrointestinal problems, and other symptoms. Effective results can often be achieved by identifying and eliminating problem foods from the diet. I ask patients to record and bring in meal diaries for me to assess so I can make recommended changes for a nutritionally sound meal plan. For more on food sensitivity testing, see "What Foods Are Making *You* Sick?" in chapter 5.

Acupuncture and acupressure treatments may reduce the pain of fibromyalgia and promote a natural sedative effect. Acupuncture points also are used to tonify (build up and strengthen) the body, leading to increased energy. Systemic enzyme therapy can

assist in pain and inflammation reduction and assists in liver detoxification. See chapter 14 for details on acupuncture and systemic enzyme therapy.

A moderate exercise routine is also helpful. Alternating yoga or Pilates routines with fifteen to twenty minutes of aerobic exercise several times a week, with gentle stretching before and after exercise, can help reduce symptoms. Too much or too little exercise may exacerbate symptoms, so it's important to monitor and assess the amount of exercise that works personally for the patient.

Awareness of emotional, mental, and physical stressors is crucial to a healthy body. Stress is a big factor in triggering or exacerbating symptoms associated with fibromyalgia. The personal counseling I offer patients often helps them discover lifestyle changes they can make to improve their quality of life and reduce their stress-related symptoms. I often refer to other therapists as well, always trying to match the needs of the patient with the appropriate counselor.

Neurotransmitter testing may help point to therapies that improve the quality and quantity of sleep. Tests can be done to measure serotonin levels and other neurotransmitters that may be affecting the patient's sleep patterns. I may use amino acid supplementation if testing and symptomology reveal a decrease in certain neurotransmitter levels. Patients may also have an elevation in certain neurotransmitters that can cause an increased sensitivity to pain, calling for treatments to bring them into proper balance.

Calcium, potassium, and magnesium supplements in a proper dosage help to promote muscle relaxation and blood flow and thus reduce muscle pain. It's appropriate to check levels of these important nutrients to determine if a shortage could be causing muscle cramping.

Detoxification of the body can also help alleviate symptoms. Use of a combination of nutrients, herbs, systemic enzymes, and IV therapy promote the body's natural detoxification process and remove toxins that can cause muscle pain.

The Cure May Be More Basic Than You Think

Headaches, bloating, muscle and joint pains, leg cramps, fatigue, insomnia, cravings for sugars and carbohydrates, unwanted weight gain: all these have been associated with signs and symptoms of fibromyalgia, arthritis, and chronic fatigue syndrome.

You or someone you know may have experienced the frustration of seeking help from one doctor after another only to be given prescription medications that temporarily mask the symptoms. You may even have been told that you'll simply have to learn to live with them.

In my clinical experience, I've found that many of these troubling conditions can be caused by hormone imbalances, food sensitivities, and/or an overgrowth of candida that causes inflammation and toxicity in the body. Often these symptoms can be greatly reduced or even eliminated with a good detoxification program, a controlled diet to identify possible food sensitivities, proper nutritional support, and a good antifungal agent to reduce candida growth. Instead of just dealing with the symptoms, why not seek to address the root causes?

A Case Study

A 46-year-old woman came to me with a prior diagnosis of fibromyalgia and chronic fatigue syndrome. She complained of abdominal bloating, muscle and joint aches and pains, weight gain, insomnia, and low energy levels that she said she'd been experiencing for the last five years. She had a history of antibiotic use for treatment of urinary tract and dental infections. (The antibiotic use is significant because antibiotics can destroy the natural flora in our intestines that help maintain a healthy digestive system.)

After testing Lucy for food sensitivities, I put her on a rotation diet meal plan. We eliminated foods that could be causing inflammation and incorporated yeast-free foods to eradicate the overgrowth of yeast she might have. Along with the diet plan, I also prescribed an antifungal medication to reduce candida. (Depending on the severity and number of symptoms, prescription medicines may be necessary; often a nonprescription herbal antifungal can be very effective, as well.)

To aid the detoxification process I suggested the use of antioxidants to combat the release of toxins. I also offered her a probiotic to reestablish the good gut flora that had been destroyed from years of antibiotic treatments and overuse of refined carbohydrates.

Lucy's blood labs also revealed Hashimoto's thyroiditis, a condition that can cause inflammation not only of the thyroid gland but also throughout the rest of the body. I prescribed a thyroid medication to help reduce the inflammation.

The patient was amazed at the results...

Within two weeks the patient reported that 70% of her joint and muscle aches and pains were gone. She exhibited an increased range of motion, an increased energy level, a decrease in abdominal bloating and much improved sleep patterns. Within six weeks, the patient reported that up to 90% of her pain was gone. She had no return of her urinary tract infection or her frequent sinus drainage. She was continuing to sleep well, had a weight loss of 15 pounds and reported that her sugar cravings had decreased significantly. After seeing these excellent results in the improvement of Lucy's condition, Lucy and I began slowly reintroducing foods to her diet so we could pinpoint the specific problem foods for her to avoid in the future.

This patient described her results as "miraculous." The fact is that the answer to her health problems was as basic as balancing her thyroid hormones and finding the right combination of foods and dietary supplements and appropriate antifungal treatment for her individual needs.

Chapter 13: Preventable Epidemics

The alarming rise in the obesity rates of the population of the United States has spawned new epidemics. Despite warnings from prominent health and fitness experts, government agencies, documentary filmmakers, and their own health care providers, the simple truth is that Americans are getting heavier. As their waistlines expand, their health declines.

The typical American diet leaves much to be desired and an increasing consumption of refined sugars, refined carbohydrates, and fatty foods, coupled with a decrease in exercise and activity, has led to major health problems. According to a 2011 report compiled by the National Center for Health Statistics, an astonishing 2/3 of adults in our country can be classified as overweight or obese, up from about 30% only a decade earlier. This excess weight contributes to heart disease, high blood pressure, stroke, type 2 diabetes, and a host of other medical issues.

Cardiovascular Disease

Heart disease is the leading cause of death for both men and women in the United States. While there are some risk factors that you can't control—such as family history and genetics—there are many things every person can do to reduce the risk of cardiovascular disease. Quitting smoking, losing extra pounds, and exercising regularly are all good ways to improve your health and avoid heart problems.

High levels of triglycerides or LDL (the so-called "bad" cholesterol) are another contributing factor to heart disease and strokes. Elevated LDL can result from a combination of genetic influences, poor diet and lack of exercise. If blood tests reveal high cholesterol and triglyceride levels, your doctor may recommend statins as a way to reduce them.

As with any pharmaceutical drug, statins can have undesirable side effects—particularly if taken over extended periods of time. These side effects can include muscle pain and damage, liver damage, and digestive problems. While statins have their place, I believe they should only be used if cholesterols and triglycerides can't be controlled by natural approaches.

How much influence can diet and exercise have on cholesterol levels? Time and time again in my practice I've seen patients dramatically improve their test results by changing what they eat and getting more active. To illustrate this point, I'll let my husband Peter tell his own story.

Even though I've been a pretty active person all my life, my cholesterol levels have tended to be high. I'm not overweight, but my genes seem to be a little less forgiving of the types of food I eat. In November of 2008 I had a routine blood test done that showed a total cholesterol reading of 257 and my primary care physician told me I should get on some medication to get that level down. I assured him that I could do it with proper diet and exercise. I then immediately proceeded to do nothing about changing my diet and exercise habits.

At the beginning of May I took another blood test and my total cholesterol reading was 250. My PCP was a bit more insistent this time, recommending a statin because my family history puts me in some risk categories for heart disease. I assured

him that this time I was serious and that I would put myself under my wife's care to get this under control (husbands are always the last to listen). He told me that in his clinical experience most people could only lower cholesterol naturally by about 20-30 points and that I needed to get my total count under 200. Still, he agreed to give me until August to try.

It took me another week to make the commitment (you don't want to rush into this sort of thing), but I finally went to my wife and asked her to make me a meal plan and a protocol for cholesterol-lowering food supplements. After twenty-six years of trying to change my eating habits she was a bit skeptical at first, but I assured her that this was a new me. So long, Taco Bell! Bring on the broccoli!

Tina laid out a plan for me. I carefully wrote it down and tacked it to the refrigerator door. I increased the amount of fiber I was eating, began drinking fresh carrot juice every morning, cut out refined sugar and bad carbs, increased my walking to four times a week and began taking cholesterol-lowering supplements, including fish oil.

I started feeling better within a few days. I found that I had more energy and less aches and pains (a side benefit of a proper diet). At the end of June I had another blood test done. I hoped to have lowered the cholesterol levels some and I really just wanted to know I was making some progress. Here are the comparative results of the three tests from November through June (remember that I started my new regimen about mid-May):

	Total cholesterol	Triglycerides	HDL	LDL	Ratio
Recommended					
levels:	< 200	<150	>39	<100	< 5.0
11/28/08	257	85	57	183	4.5
05/08/09	250	140	56	171	4.5
06/29/09	168	49	53	107	3.2

So is lowering cholesterol naturally possible? I'm certainly a believer. And I proudly delivered a copy of my test results to my PCP with "I told you so!" scrawled across the bottom!

Since then I've had my blood tested annually. Because I'm not always as careful about what I eat as I could be, my levels have fluctuated a bit. However, I'm still maintaining a total cholesterol level of around 200 with a good HDL/LDL ratio.

Peter's experience is a common one among my patients who have chosen to take control of their own health by improving certain lifestyle habits. As I've said before, it's better to address the root causes of health problems rather than relying on medications to deal with specific symptoms.

Type 2 Diabetes

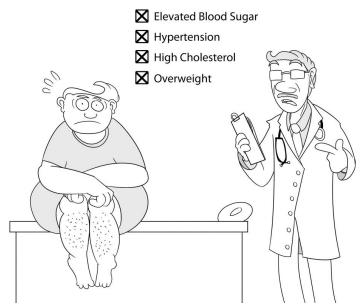
Another result of the trend toward obesity is a skyrocketing number of new cases of type 2 diabetes, a very serious—and potentially deadly—disease that can and should be properly managed when it is diagnosed. Far better, though, is to avoid developing the disease altogether; unlike some diseases, type 2 diabetes is largely preventable by making certain dietary and lifestyle changes.

According to the National Diabetes Information Clearinghouse (NDIC) website, at the time of this writing diabetes affects 25.8 million people of all ages in the U.S., or about 8.3 percent of the population. Approximately seven million of those affected are undiagnosed, and so are going untreated. The hardest-hit demographic is those who are over 65; in 2010 some 10.9 million or 26.9 percent of that age group were affected. Even scarier is the fact that the numbers are growing among young people, with about 1.9 million people ages 20 years or older who were newly diagnosed with diabetes in 2010. On top of that, health professionals are seeing more children who are developing diabetes as a result of childhood obesity.

How serious is the disease? Very serious. Diabetes is the leading cause of kidney failure, nontraumatic lower-limb amputations, and new cases of blindness among adults in the U.S. and the seventh leading cause of death. Left untreated it can also lead to severe foot ulcers, vision loss, neuropathy, cardiovascular disease, and stroke.

There are several types of diabetes (also called diabetes mellitus), but the most common are type 1 and type 2 diabetes. Type 1 typically occurs before the age of 20, and for that reason was formerly known as "juvenile onset diabetes." There can be a range of causes for the development of the disease, but the result is that the body's immune system actually destroys the insulin-producing cells in the pancreas, the organ that secretes insulin. While eating a proper diet and exercising regularly are very beneficial, type 1 patients must take insulin either by pump or by injection to control the disease. For that reason, these cases are usually best managed by an endocrinologist.

In type 2 diabetes, formerly known as "adult onset diabetes," the pancreas continues to manufacture insulin—sometimes even at higher than normal levels. I tell my patients that insulin is the gentleman who opens the cell door to allow glucose into the cell to produce energy. However, as the disease progresses the cells develop resistance to insulin's effects, decreasing the transfer of glucose from the blood into the cell. In some cases the pancreas gland will eventually slow down its production of insulin and the patient has to be given insulin medications. The good news is that with early intervention it's often possible to stop the development of type 2 diabetes. Even if you have already been diagnosed with this disease, though, it is possible to manage it and even to reverse many of the effects with proper treatment.



Does this checklist sound familiar? The combination of these signs may indicate type 2 diabetes or metabolic syndrome (a pre-diabetic condition).

Symptoms of Type 2 Diabetes

Type 2 diabetes accounts for 85-90% of the diabetic cases in the U.S. While there are a number of risk factors for developing the disease, one of the highest factors —and most preventable—is obesity.

The type 2 diabetic usually presents with fatigue because there is not enough glucose in the cell to produce energy. Headaches, blurred vision, recurrent yeast infections or slow healing of a cut or wound, low libido, and urinary tract infections can all be possible symptoms of diabetes. Your doctor can diagnose the disease by your clinical signs and symptoms and by lab screenings and diagnostic tests.

If you have a family history of diabetes or if you fall into other risk categories for developing the disease you should consult your doctor before you start noticing the symptoms. As always, it's much better to prevent problems than to try to cure them.

Is Your Type 2 Diabetes *Really* Under Control?

Many diabetic patients think their symptoms are "under control" because they are taking insulin and other oral medications that help keep their blood sugars within acceptable levels. In fact, I've seen some insulin-dependent diabetics who seem to think diet is not important. After eating rich foods that cause a rise in their blood sugars, they simply increase their insulin intake to offset the foods' effects.

Medications are, of course, important in the treatment of the disease. However, if the patient does not commit to an active role in addressing the causes of problems the result may be an ever-increasing dependence on insulin or other medications that have their own negative side effects over time. For instance, did you know that insulin is a fatstoring hormone that often leads to unwanted weight gain among diabetic patients? That weight gain can then lead to other issues such as high blood pressure or joint problems.

If you have been diagnosed with type 2 diabetes, it's important to know that you don't have to be a "victim" of this disease. By being proactive and working with a knowledgeable physician, you can control your diabetes without letting it control you.

In my own work with patients, I stress four important factors. The first is *education about the disease process*. It is critical to understand what diabetes is and what the effects can be on the body. Without proper treatment, problems such as loss of vision, pain or numbness in the extremities, ulcers on the feet, and damage to vital organs can occur. Learning about how the disease affects the body and causes these problems is the first crucial step in a treatment plan. For this reason I show patients posters that illustrate the pathophysiology (the functional changes associated with a disease or syndrome) of diabetes. Visuals help patients understand what is happening; the light bulb goes on when they actually see a drawing of glucose molecules adding up in the blood vessels, causing physical problems.

The next factor is developing a *personalized meal plan*. "You are what you eat" is never truer than when talking about diabetes. By understanding how certain foods affect your body and your blood sugars, it's possible to enjoy good meals while still controlling blood sugars and decreasing your weight. As an example, eating a piece of fruit alone can cause blood sugars to rise, but taking a protein such as nuts or cheese with the fruit will prevent a spike in the blood sugars. Eating foods that are high in fibers also help balance blood sugars.

Targeted nutritional supplements or botanical treatments can also be very helpful. Recent studies have shown these alternative therapies to be effective in decreasing blood pressure, lowering cholesterol, and decreasing blood sugars, thus reducing potential organ damage.

Perhaps the most important factor in a treatment plan is an *ongoing monitoring* and support program. Working with a health care provider who will spend time discussing your progress and modifying your treatment plan on a regular basis is critical to successfully managing the disease. A case in point is the patient who comes to me on insulin or metformin; as he learns to eat and exercise properly, his health will improve and his dependence on these drugs will lessen. If we don't adjust his doses on a regular basis, he could eventually be harmed more than helped by the medicine because he will need lower doses to regulate his disease.

How the progression of diabetes affects the body became very real to me when I was a home health nurse. As a diabetic wound specialist I saw first-hand how high glucose in the blood decreased circulation and destroyed surrounding tissue, often resulting in the amputation of toes and limbs. I would watch in frustration as my patients succumbed to a disease that could have been largely controlled—and may have been prevented—with diet and lifestyle changes and other natural therapies. It had such a profound effect on me that it was one of the key factors that propelled me to seek out and attend naturopathic medical school.

With naturopathic medicine, I have found a resource that works for me - as a practitioner - and for my patients. Together, we work as a team to head off or effectively manage problems like type 2 diabetes and cardiovascular disease.

Education about disease processes and about the value of proper nutrition and regular exercise is a vital part of what I can offer as a naturopathic doctor, but there is

also a wide range of alternative and preventive therapies available, as well. In my next chapter I'll introduce you to a few of those health care options.

Chapter 14: Alternative Therapies

The use of the term "alternative" when describing treatments and therapies can be a bit misleading. It naturally might prompt the question, "Alternative to what?" The short answer is that the expression is usually used to describe therapies that are not practiced by conventional medical doctors or taught in mainstream medical schools. That can certainly be true, but consider this scenario:

Your last blood test showed a high, but not necessarily alarming, cholesterol count. According to your family history you may be in one or more risk categories for heart disease. When your general practitioner reviews the test with you, she says that she would like to put you on a statin drug to lower your cholesterol levels. However, she says, because there are certain risks of side effects from the drug she would like you to try specific dietary changes first to see if that improves your lab results. Your M.D. has just offered you a more natural "alternative therapy" to prescription drug treatments to control your cholesterol.

Many of the treatments that are labeled alternative have been around for hundreds, and even thousands, of years and have been an effective part of conventional medical practices until fairly recently. However, the sharp increase in reliance among medical doctors on pharmaceutical drugs and surgeries has pushed natural therapies aside. This, in turn, has led to an increased public demand for health practitioners like naturopathic physicians, osteopaths, chiropractors, nutritionists, and others who offer a more natural approach to the healing arts.

In this chapter I'll give a brief overview of some of the alternative therapies that I offer my patients. These are just a small sample of the countless treatments available to those seeking help outside what has come to be considered mainstream medicine.

Nutritional Supplements and Herbal Remedies

As I explained in chapter 5 ("Nutrition: The Cornerstone of Good Health"), a nutritious diet is the foundation for a healthy body. For that reason, I almost always begin a treatment protocol with a discussion about proper eating. For some, though, a healthy diet cannot always supply all the vitamins and minerals their bodies need at particular times in their lives. To meet those needs I may recommend specific supplements. Older people, for instance, can be susceptible to osteopenia or osteoporosis; a good mineral and vitamin supplement can help promote strong bones. There's a lot more to the knowledgeable use of supplements and herbs than simply filling nutritional deficiencies, though.

The use of plants to treat various health conditions has been around forever. In fact, many modern drugs are derived from active ingredients first found in plants. As the alternative health movement has grown, people are moving away from expensive and sometimes toxic pharmaceuticals to return to more natural plant-based products for help with their medical conditions.

There are hundreds of products by scores of manufacturers, many bought OTC (over the counter), designed to address such complaints as insomnia, restless leg syndrome, gastrointestinal problems, hormonal imbalances, muscle and joint soreness—the list goes on and on. Many of these can be very helpful. It is important, though, to

educate yourself about these products and to consult your doctor when considering their use.

I'm a great believer in the effectiveness of natural products when used properly in a patient's overall care plan. I also think it's good that more and more people are investigating natural therapies, but there are three vital things every consumer should consider about botanicals and dietary supplements.

1) Just because a plant or herb is natural doesn't make it safe for you to take in all circumstances, even if it is sold as an alternative medicine.

Since herbs and plants must be used in strong enough doses to make them effective in the treatment of conditions, there can also be contraindications (conditions that make a particular treatment inadvisable) for the use of them. For example, taking certain herbs over an extended period of time or in large doses may result in a buildup of toxins in the body in the same way the extended use of pharmaceutical medications can. This can even apply to the overuse of vitamins, as I pointed out in chapter 5's section, "Are You Overdosing On Food Supplements?"

Drug interactions may also occur when an herb is taken. Combining an herbal remedy with another drug may be problematic and possibly dangerous. The combination of a pharmaceutical drug with an herb may interfere with the activity of the herb or drug, thus producing a decrease or increase in the effectiveness of the drug.

For example, the herb willow (salix) is used as an anti-inflammatory and analgesic (pain reliever) to treat inflammatory conditions such as arthritis, headache pain, and fevers. But since willow has blood thinning properties it is contraindicated in patients with bleeding disorders like hemophilia or when used in conjunction with other blood thinning agents in medicines like Coumadin (warfarin).

It is absolutely essential that you keep your primary care physician and all others who may prescribe medicines for you (natural or pharmaceutical) aware of any and all medications you are taking.

2) Not all herbal remedies or natural medicines are created equal.

Some manufacturers make more effective products than others. Consumers should consider many things when choosing botanical medicines, including the delivery method (pill, capsule, powder, or liquid), the potency of the product, and what types of fillers, binders, or coatings are used. I like to look at the research done on the products that I prescribe to my patients before recommending a particular herbal remedy or botanical medicine.

3) As always, if the claims about a product sound too good to be true, they probably are.

There are a lot of natural products on the market that are being hyped with some outrageous claims. It is true that I have seen some pretty amazing results with some botanical medicines, but use common sense when considering a new product. There is no "cure all" with herbal remedies. There are more scientific clinical studies being done every day on herbal products, and I try to use those that have been tested and proven effective. Used with a complete treatment program, botanicals can be very helpful in promoting the overall health of a patient.

If you are one of the millions of people who are researching and considering the use of herbal remedies, I congratulate you for wanting to take an active role in your own

health plan. Be sure to be an informed consumer, and keep your health care providers abreast of all the medicines or supplements you may be taking, natural or otherwise.

Acupuncture

Acupuncture is a health science used to treat pain and other dysfunctions in the body. This science began in China and has been used as a medical treatment for over 2,500 years. Although some in the West are still skeptical about the effectiveness of acupuncture, it has gained popularity and acceptance in the U.S. in the last several decades.

The human body's energy (call the "chi" in Chinese medicine) flows through meridians or channels that are normally balanced. The meridians can be likened to the flow of blood through the blood vessels. If a disruption of energy flow exists, it can affect the entire body system, producing pain or symptoms throughout different areas of the body. Correction of this delicate balance corrects the body's dysfunction or problem.

Acupuncture needles are solid and extremely thin (about the width of a human hair). They are sterile and used only once, then discarded, so there is no risk of infection from this treatment. When the acupuncture needle contacts the energy channel at specific points on the body the sensation is felt as a mild to moderate dull aching sensation or a tingling sensation. This initial discomfort usually passes very quickly. In some cases, a very mild electric stimulation may be applied to the needles to increase the movement of the energy through the channels. After the needles are inserted, the patient simply relaxes for twenty minutes to an hour. I like to provide some nice, soothing music and low lighting for my patients during this time—many patients get so relaxed that they even fall asleep!

The number of treatments can vary depending on whether the condition is chronic or acute. Acute problems generally require fewer treatments than chronic problems. In either case, it is important to note that a positive outcome is based on the consistency of the treatments.

My introduction to acupuncture came not long after I started naturopathic medical school. Coming as I do from a conventional medical background, I was a bit hesitant about my first acupuncture treatment. I had been suffering from chronic sinus congestion, though, and was looking for an alternative to the standard over-the-counter drugs, so I decided to give acupuncture a try.

Throughout the day following my treatment I had continuous sinus drainage, which eventually led to clear sinuses and complete relief. I was amazed at the results. Later, as part of my training as a naturopathic physician, I learned numerous protocols for treatments of various complaints, and I regularly offer acupuncture as part of an overall treatment plan for my patients.

My personal and clinical experience has led me to believe that although we may not have the technology as of yet to measure the energy flow in the human body or completely understand how acupuncture works, we mustn't discount it as an effective therapeutic tool. Just because we cannot explain every therapy in conventional Western medical terms doesn't mean they don't work.

Acupuncture is effective for treating many different conditions. Here are a few examples:

- *Acute and chronic pain resulting from such things as diabetic neuropathy, sports injuries, or accidents
- *Migraine and sinus headaches
- *Cervical (neck) and shoulder pain
- *Post-operative pain
- *Insomnia, irritability, and anxiety
- *Gastric or digestive problems and constipation
- *Fatigue
- *Fibromyalgia (general muscle pain)

Acupuncture has also been credited with helping with weight loss and smoking cessation.

What makes this therapy even more effective is combining it with other alternative therapies such as nutritional supplements, enzymatic therapy, herbal therapies, and relaxation techniques along with lifestyle counseling and stress management.

There have been numerous studies done that show acupuncture to be an effective form of treatment. Of course, in the end the important question is, "Does acupuncture work for *you*?" As with any type of medical therapy, different people respond in different ways. Your health care provider will work with you to determine if this will be an effective way to enhance your overall treatment protocol.

Detoxification

Detoxification is a concept that has become important when talking about general health and fitness. Often as patients begin a new effort to try to restore their bodies to better working order, their health professionals will urge them to follow a detoxification regimen to help boost that healing process. So what is detoxification, why is it necessary, and how do we go about it?

Toxins can simply be thought of as any substances in our bodies that are causing a harmful effect or putting stress on our biochemical or organ functions. Some of these toxins we may ingest unknowingly, while others we choose to put into our systems.

Our bodies are exposed daily to environmental toxins such as air and water pollution and allergens. There is mercury in our fish (especially albacore tuna and swordfish) and hormones added to our chicken. Alcoholic beverages, pesticides and herbicides on raw fruits and vegetables, and additives and preservatives in foods also add toxic substances to our systems, as do hair dyes and hair sprays, paint and paint remover and countless other products.

Medications are another major source of toxins for many people. Over-the-counter and prescription medications are man-made chemicals that our bodies must figure out how to process. While these medications can be beneficial, over time they can build up to dangerously poisonous levels in our bodies.

People with high levels of toxicity may experience headaches, fatigue, insomnia, nausea, unexplained rashes, and unexplained body aches and pains. Other symptoms may include constipation, stomach bloat, poor digestion, gas, weight gain, excessive mucus, poor concentration, skin rash, poor memory, depression, body odor, and bad breath.

Our bodies have a natural process for eliminating toxins from our systems. The liver cleanses debris from the body. A healthy liver means a healthy body and better quality sleep with more energy. When the liver is not filtering well it is not detoxifying

the body. The kidneys are another filtering system that cleanses the body of toxins. The intestines also must be functioning proficiently to help the body remove these unwanted substances.

Although we cannot avoid toxins completely, we can educate ourselves on certain ways to decrease them in our bodies. We can help our bodies become more efficient in allowing the detoxification pathways to function more proficiently. Here are a few tips to start the process:

*Squeeze a whole lemon in 16 ounces of water each morning to help detoxify your liver and kidneys. (Stevia is a good natural sweetener; I use it to make healthful lemonade. Some stevia products also contain probiotics to help re-establish normal intestinal flora.)

*Take 1-2 teaspoons of organic apple cider vinegar in 16 ounces of water (sweeten with stevia to taste) to help the kidneys in detoxification.

*Exercise with sweating assists the lymphatic system to help rid the body of toxins and build up the immune system.

*Take 25-35 grams of fiber daily to help the colon rid itself of toxins from the body. Include both soluble fiber such as psyllium, oatmeal, and skinless fruits and vegetables and insoluble fiber such as whole grains, seeds, and fruits and vegetables with skin.

The above measures are simply a way of aiding your body's natural cleansing processes. In order to embark on a more complete detoxification regimen, you should consult with a health care professional who can help set up a program that is right for you.

In my practice, I first do a thorough examination of the patient and his or her history to determine the patient's needs. Their regimen may include using a combination of botanicals and homeopathic formulas that work by stimulating the body's natural processes of elimination to cleanse it of toxins that have built up over time and are negatively affecting the body's health.

Proteolytic systemic enzymes can also help cleanse the blood of debris and reduce inflammation in the body, thus reducing aches and pains, while certain vitamin and mineral supplements help decrease mercury toxicity and restore energy. Counseling for stress management and lifestyle changes can also play an important role in allowing the body to cleanse itself and restore balances in its chemical processes.

Finally and most importantly, a good plan should incorporate an individual meal program that includes fiber, antioxidants, and low-glycemic foods that assist in the body's healing processes.

One major principle of naturopathic medicine is recognizing that the body has the innate ability to heal itself. Following a detoxification plan is one way we can help our bodies effectively carry out this healing process.

IV Therapy

IV or intravenous therapy is another procedure I offer my patients. Simply put, it is the giving of liquid substances directly into a vein, and it is useful for safely delivering vitamins, minerals, and homeopathic remedies that can be quickly and efficiently absorbed into the body. It can be beneficial for numerous purposes including:

*Adrenal support

- *Natural detoxification
- *General health maintenance using vitamins and minerals
- *Diabetic neuropathy
- *Arthritis
- *Injuries with muscle pain and inflammation
- *Migraine headaches
- *Viral infections such as sinusitis and rhinitis

There are several reasons why IV therapy can be more effective than administering vitamins and minerals orally. First, absorption into the blood stream is complete and bioavailability of the substances is immediate. Second, there is no "first pass" effect in the liver, thus the procedure lessens the workload on the liver. Another thing to consider is that the absorptive capacity of the bowel may be decreased with age, and this along with a decrease in the natural production of hydrochloric acid and pancreatic enzymes can result in nutritional deficiencies because the body is no longer properly breaking down and absorbing nutrients from the foods we eat. IV repletion leads to a rapid increase in nutrient levels in the blood, meaning that the nutrients are able to get into the cells as needed and increase cell metabolism.

After an IV session some patients may feel mild symptoms of detoxification such as temporary headache, mild gastrointestinal symptoms, or muscle aches, while other patients feel energized. In many cases, it causes patients to feel good and see excellent results within a short time after treatment.

Homeopathic remedies can also be used in IV therapy to treat many conditions. Homeopathic solutions often work as well as conventional medicines in the treatment of pain, viral infections, immune deficiencies, and other conditions but with the added benefit of little or no side effects.

Homeopathy

Homeopathy is based on the principle of "like cures like." Homeopathic medicine uses very small doses of substances from the plant, mineral, and animal kingdoms to stimulate the body's defenses. The primary principle of this treatment is the "law of similars"; that is, the principle that a substance will help to heal symptoms similar to those it is known to cause. The symptoms of the patient are matched with the symptoms of the homeopathic remedy. For example, Eyebright (Euphrasia officinalis) is an herb that in large doses irritates the eyes, but in small doses has a healing effect. The homeopathic remedy derived from Eyebright is often prescribed for relief of allergy symptoms.

The analogy I use when explaining homeopathy to my patients is to think of how an immunization works. Giving a person a small amount of a toxin that causes a disease stimulates the body's immune system to produce antibodies against the disease. In a similar way, homeopathic remedies stimulate a person's immune system and bring about an improvement in that person's health.

The remedies used in homeopathy are highly diluted. Paradoxically, the more dilute the remedies are, the more potent they are. Although homeopathic medicines may be so dilute as not to have any molecules of the original substance, an energy or essence of the substance remains.

The wonderful benefit of homeopathy is that this method is truly holistic; it treats the whole person—the physical, mental, and spiritual is addressed with the etiology (all of the causes of a disease or abnormal condition).

Let me share one clinical example to show how effective this treatment can be.

A middle-aged woman visited my practice, presenting with signs and symptoms of Bell's palsy on the left side of her face. Bell's palsy is an abnormality of the facial nerves that leads to sudden weakness or paralysis of the muscles on one side of the face. The night before she came to my office for treatment the patient had gone to the emergency room and received the drug prednisone. Because she had just received this treatment, she and I made the decision to wait and allow the prednisone to take effect. After three weeks there was no change.

When she visited me again, I did a homeopathic intake—a process that includes a detailed interview of the patient—and prescribed a remedy. Within days of taking the remedy, there was noticeable progress; after two weeks there were no residual signs and symptoms of Bell's palsy on her face. She left my office in awe of homeopathy.

As with any alternative or conventional medical procedure, the effectiveness of the treatment differs with the individual. Homeopathy should not be regarded as a "magic cure-all," but as one more option a healthcare provider can offer patients. My advice to people is to stay open to all types of therapies. Modern technology may not be able to measure exactly how homeopathy works at this time, but the results can be amazing and the side effects are negligible.

Neurotransmitter Therapy

Neurotransmitters are naturally occurring chemicals within the brain that relay signals between the nerve cells and are required for proper brain and body function. They play a large part in our mental, emotional, and physical states. These neurotransmitters affect our moods, behavior, sleep, digestion, weight, focus, and learning ability. Most imbalances of neurotransmitters can be traced to stress or poor diet. Other causes may be genetics, environmental toxins, and other conditions. Usually patients have an imbalance that involves more than one neurotransmitter.

In my practice I work with a company that provides test profiles to patients to detect neurotransmitter imbalances. Patients submit samples of urine for analysis of neurotransmitter levels. According to the individual lab results, the patients are given supplemental precursors (amino acids) that make neurotransmitters that will help in restoring them to a proper balance.

Selective serotonin reuptake inhibitor (SSRI) antidepressants like Prozac, Zoloft, and Paxil temporarily fix the symptoms of depression by managing the neurotransmitters present in the body without adding additional neurotransmitters. However, depression usually returns after the SSRI is discontinued because the neurotransmitter level goes back to the previous low levels. On the other hand, amino acid precursors to neurotransmitters actually result in an increase in systemic neurotransmitter levels. These natural precursors restore neurotransmitters within normal ranges and eventually the patient's supplement can be decreased depending on his or her maintenance of optimum neurotransmitter levels. The supplements can also be used in conjunction with an SSRI to boost its effectiveness.

The treatment of neurotransmitter imbalances is especially dear to my heart. My mother and many members of her family were affected by depression and anxiety disorders. Anti-depressant drugs helped somewhat, but there were side effects and these anti-depressants were needed for years. I'm pleased to be able to present patients some alternative therapies that offer long-term solutions to neurotransmitter imbalances.

Enzyme Therapy

An enzyme is a biocatalyst that either begins a reaction or causes a reaction to speed up. Enzymes cause the chemical reactions for many of our body functions. As we all know, our bodies change as we grow older, and one of those changes is decreased enzyme production. Therefore, we need to supplement these vital proteins as we grow older.

When referring to enzymatic supplements, it's important to distinguish between those used as *digestive* and *systemic* aids. Digestive enzymes are taken orally with food in order to help break down food for improved digestion. Systemic enzymes are taken orally in between meals. It is important *not* to take them with food so that they can be absorbed in substantial quantities into the blood.

Systemic enzymes can be helpful in a number of ways:

*They help to rid the body of toxins by assisting the liver in detoxification reactions. As mentioned earlier, the detoxification reactions in the liver are a beneficial cleansing for the entire body.

*They help your body reduce inflammation, thus decreasing swelling and pain. Inflammation is the cause of pain in arthritis, fibromyalgia, sports injuries like muscle sprains, sciatica, and chronic back pain. Systemic enzymes are a healthy alternative to nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen and aspirin.

*They help fight viruses by eating away at the virus's protein shell. I have seen it work well for the common cold and sinusitis caused by viruses. This is a much healthier alternative to antibiotics if the health problem is caused by a virus.

*They promote normal blood flow by helping to prevent blood clots and platelet aggregations within blood vessels.

*They speed healing and increase our body's defense mechanisms by modulating our immune system. Enzymes increase binding to cytokines and have a very powerful influence on immune cells.

There have been many clinical research studies done that show the effectiveness of systemic enzymes in these areas. In my practice I have seen good results with their use in helping to control chronic pain and as a treatment for rhinitis and sinusitis.

Professional protocol systemic enzymes are only available through health care professionals. As always, before beginning the use of these supplements you should be evaluated as a candidate for this treatment and it is extremely important to be aware of any potential interactions among the various medications being taken. Always keep your primary care physician apprised of all the supplements being introduced into your treatment program.

Mary is a thirty-four year old female patient of mine who had excellent results with systemic enzyme therapy. Her chief complaint was warmth, redness, and swelling of the joints of the hands, finger joints, and feet for at least six months. Four months before

seeing me, she had been diagnosed with rheumatoid arthritis by a rheumatologist. She had been taking NSAIDs such as aspirin and ibuprofen for approximately five months. She was taking two aspirin tablets (325 mg per tab) four times per day, but had been recently advised to increase the dosage for sufficient pain relief. Her doctor also told her that she would be placed on stronger drugs for pain in the future. Mary was looking for an alternative therapy for pain relief and inflammation.

I started Mary on systemic proteolytic enzymes administered orally 2 caps 3 times per day, 1-2 hours away from meals. I had her stay on this dose for approximately three weeks, then reduced the enzymes to 1 cap 2-3 times per day for a maintenance dose to control pain and inflammation. (Tip: Patients sometimes have trouble remembering to take the doses an hour after and an hour before eating. To increase compliancy I always tell them to take a dose first thing when they wake up and just before they go to bed—then they only have to actually "plan" one more dose during the day.)

In conjunction with enzyme therapy I gave Mary ten weeks of acupuncture for pain control (one treatment per week). We also did a food sensitivity panel and eliminated those foods that may have contributed to the inflammation.

After ten weeks of treatments Mary reported that she no longer used aspirin or ibuprofen regularly as before. She only needed NSAIDs approximately two doses per week compared to four doses per day. Pain and swelling of the joints had decreased by 70%.

I did not see Mary in my office again until six months later. She had been on the maintenance dosage of systemic enzymes, taking 1 cap 2 times/day since I last saw her. Her pain was slowly starting to increase. I told her to begin again using the enzymes 2 caps 3 times/day for 10 days, then once again to return to the maintenance dose. Four weeks after this visit I had a telephone conference with her and she reported improvement with a 70-80% decrease in pain and swelling.

Another reported benefit for Mary from use of the systemic enzymes was relief from chronic sinusitis from seasonal allergies. She was both surprised and relieved by this anti-inflammatory effect the enzymes had on her sinusitis.

As I mentioned at the beginning of this chapter, these are just a sample of the many effective alternative treatments available to the public. As the term "alternative" implies, the purpose of these therapies is not to replace the use of pharmaceutical drugs or surgery when they are medically necessary. The goal is to offer a wide variety of options to the growing number of people who want to assume responsibility for their own health care. I have found, though, that with the use of alternative therapies and with proper guidance from their doctors many people are able to reduce or eliminate the need for pharmaceutical drugs or surgery.

Chapter 15: The Mind-Body Connection—What's Stopping Your Healing?

To illustrate my point about getting to the root causes of a patient's problems, I like to give people an analogy. I show them a glass that is half full of water and explain that the glass represents the person and the water inside is their overall state of health. A full glass would signify optimal health.

If a person comes to me with a physical problem, I can prescribe certain therapies or medications to help them feel better—we're starting to fill up the glass. But no matter how many things I pour in—whether they're prescribed medications, bioidentical hormones, adrenal support, or other medical interventions—if the glass has a *crack* the vital fluid of health will gradually leak out.

The crack is symbolic of the root cause of the symptoms. The questions the patient and I need to answer are, "What is that crack? When did the crack start? How did it start? Why is it that we fill up the person with what they need and they're doing okay for a while and then the health drains away again?" If we can find that root cause and repair the crack, the patient will be on the way to the long-term health she desires.

As we've seen in previous chapters, we can often trace physical problems to specific biological imbalances in the body. Those imbalances may represent the crack in the vessel that is draining healing. Still, if we truly want to get to the root causes we must also consider the amazing power the *mind* has over the body. Time and time again throughout my medical career I have observed how such things as emotional stress, bitterness, unresolved grief, and negative thinking can all potentially block long-term physical healing.

Stress Drains Healing

There have been numerous studies linking psychological stress to both acute and chronic illnesses. In fact, it's been estimated that 75-90% of primary care doctor visits are from stress-related illness. Stress can lead to heart disease, high blood pressure, back problems, a weakened immune system—the list goes on and on. It also affects our endocrine systems, which in turn affects our hormone balances.

I've seen that when a person goes through unusual stress in his or her life their hormones and their biochemistry will shift. Even the thyroid, one of the master glands, is affected by stress. I tell my patients, "I can help you by prescribing you hormones and giving you medications or nutritional supplements that you need, but your responsibility, besides educating yourself, is to work with your lifestyle on an everyday basis."

As a naturopathic doctor my goal is to treat the whole person. Part of this holistic approach is to raise the patient's awareness of all the factors that may be blocking his healing. I always ask the patient, "Where is this stress coming from? To whom or what are you giving away your energy?" I want people to reflect on this because identifying these things is often the first crucial step toward real healing.

I impress upon people the importance of meditation. Each of us needs to take some quiet "me" time with no external input. I'm not talking about sitting in front of the television set; you need to take some time to let your mind relax and download some of the constant stimulation you receive throughout the day. It can start with just a few

minutes a day in the morning, evening, or even taking five minutes during your lunch break at work to simply sit quietly and just *be*. You'll be amazed at how refreshed you'll feel after you become comfortable with this age-old art.

Another important practice is that of being mentally present in each thing you do throughout the day. Think of how many wonderful experiences people fail to fully enjoy because they are too busy dwelling on thoughts of the past or worrying about the future. Being in the present moment means being able to truly appreciate the beauty of a flower, savor the taste of a delicious meal, or delight in the laughter of a child—all great stress relievers!

It's also crucial to detach from those things that drain us of our energy. There are certain things we can't change—I know that. But if you become aware of those things that are draining you, you can make a conscious effort to emotionally detach from the problem. Suppose you have a particularly annoying co-worker. It may be an unhappy person who takes his anger and frustrations out on others. Learning how to emotionally detach from his griping may show you that he is simply a hurting person who spreads his pain to others, and you don't have to accept his complaints as valid criticisms of you or of your job performance. You may not be able to physically avoid him, but putting emotional distance between the two of you can go a long way to reducing your own stress levels at work.



Tools like meditation or yoga can help you cope with daily stress.

Many people that arrive at my clinic are so exhausted, so fatigued, that they're at the end of their ropes and they don't know what to do. Often they have been giving,

giving, giving to everyone else except themselves. I tell them, "Take your power back! Put yourself at the top of the list."

No doubt you've heard it before but I cannot emphasize this enough: If you don't take care of yourself, you can't take care of anybody else. *You* are your first responsibility—if you don't take care of yourself, nobody else will.

If you've been frustrated with your healing journey, take some time to think about this: What is the "crack" that is draining your energy? As you examine the mental, emotional, and spiritual aspects of the question, you'll better learn how to stay filled with the healing you desire. But reducing stress isn't the only thing that can block your healing. Let's take a look at some other facets of the mind-body connection.

Take Your Power Back By Stopping the Blame Game

When you place blame on others you shift responsibility.

When you shift responsibility you give up power.

You are responsible for the way you feel and the actions you take.

When you accept that responsibility, you empower yourself to find peace and health.

It's very common to blame other people for the problems we may be experiencing. After all, we live in a finger-pointing society. Everywhere you look there's someone screaming, "It's not my fault—it's his!"

Blaming others for how we think, feel, and act may help us justify our situation in the short run, but in the end we're doing ourselves a huge disservice. Until we learn to own our problems we can never really solve them. The hard truth is that each of us, alone, is responsible for our own thoughts and feelings. Even the common saying, "He makes me so angry!" is a lie we tell ourselves.

No outside influence can make me angry. *He* didn't make me angry–I *allowed myself* to become angry because this person offended me in some way. Anger is an emotion I choose to feel in a given situation because I disapprove of the way a person acts.

What does this have to do with health and healing? I have seen in my own clinical experience that for many people, the realization that they can no longer blame others for their own actions or emotions is the key that unlocks the door to healing.

Understand that I am in no way justifying perceived harm that others may have inflicted upon you.

Consider this hypothetical example: Ellen had an overly demanding mother. As she grew up it seemed that nothing she did could please her mother: If she made a "B" on a test, why hadn't she made an "A"? If she cleaned her room, why hadn't she cleaned the kitchen also? Her mother continually called her fat, lazy, and selfish.

Ellen moved into adulthood and took on the responsibilities of a career, husband, and children, but she constantly heard her mother's voice as she went through the day. She struggled to be the perfect wife, mother, and employee. Of course, she could never measure up to the impossible standard of proving her worth to her mother in everything she did. Ellen eventually worried herself sick trying to be perfect.

Working with a good holistic caregiver, Ellen has come to understand that her physical problems are related to the emotional trauma of trying to live up to her mother's unreasonable expectations. Now she has a choice to make. On the one hand, she can

continue to give her mother power over her by saying, "It's my mother's fault that I'm sick. She's responsible for the negative feelings I have about myself. If she would only accept me for how I am, I could get on with my life." On the other hand, Ellen can take back control of her life and health by accepting responsibility for her own feelings. She can learn to say, "This is my choice. I am my own person. I do not need my mother's approval to prove I am a good and worthy person."

While it's true that it is not Ellen's *fault* that she has a demanding parent, the guilt and shame she feels are her *responsibility*. Whether her mother ever acknowledges her own unreasonable criticisms or has tried to make amends for her actions is really irrelevant to the real question: How will Ellen choose to live? She'll either continue to give her mother power over her emotional well-being or she will take charge of her own thoughts and actions.

It's these negative emotions that people carry that I most often see blocking a general sense of health and happiness. I hear them expressed time and time again with phrases like, "My parents' divorce makes me not trust people...She hurt my feelings so I'm bitter...He causes me pain so I want to hurt him back...I'm depressed because of what they said about me." The characters and circumstances change, but the theme is usually the same: "It is his/her fault I feel depression, anxiety, pain, and poor health." As I mentioned earlier, when you shift responsibility you give up power. If you truly believe that it is someone else or some outside circumstance that is controlling your health and emotional well-being, then you have surrendered your power to that outside source. Instead, why not take your power back by saying, "In spite of my circumstances or what others may think, I choose to make positive changes in my life in the areas I can control."

In his powerful poem "Invictus," William Ernest Henley talks about dealing with the struggles of life. The trials can be difficult, he implies, but it is up to us to assume the responsibility for our ultimate destiny. He sums this idea up in the last two life-affirming lines: "I am the master of my fate: I am the captain of my soul."

At this point, let me say that there is a good reason that I've saved this chapter for the end of this book. It has often happened that as a patient begins to tell her story to me that I can perceive the emotional stressors that may be affecting her health. At the same time, I recognize that the patient is too overwhelmed by the physical problems she is dealing with to even think about addressing issues like chronic grief or bitterness. I might mention the possibility of emotional connections with the specific symptoms she's experiencing and explain how those things can be the "crack" that may make long-term healing difficult. If the patient acknowledges that there are things she knows she needs to deal with but isn't ready to tackle them yet, I'll simply say, "Let's deal with that when, and if, you want to explore those things."

Once the patient has relief from the immediate symptoms that brought her into my office, she will often be ready to continue the healing journey to find the root causes of those symptoms. The counseling I offer may be enough to help her make a personal breakthrough. If, however, there is a need for more in-depth psychological counseling I am always happy to refer the patient to other counselors or psychologists. In any case, a major first step on the road to emotional healing is the decision to take responsibility for the changes she wants to see in her life.

So how do you begin to take responsibility and bring about changes in your life?

First, you must decide that you truly want change. That means that you're ready to let go of many of the negative attitudes and emotions that you've blamed other people for causing.

Second, you accept that the past is the past and you cannot change it. You can, however, choose how you will move forward into the future. There's nothing wrong with acknowledging your feelings; in fact, it's healthy to express your feelings of anger or frustration. The key here is to vent and move on! After you express those pent-up emotions it's time to consciously choose to release, detach, and get on with your life.

Third, learn to forgive those you feel may have wronged you. This isn't about justifying what those people may have done to you—it's about canceling their debts so you can free yourself from unhealthy emotional entanglements. I'll grant that practicing forgiveness is often "easier said than done," but in the next section of this chapter I'll offer some practical suggestions on how you can get started.

Fourth, take full responsibility that you have allowed yourself to feel and act the way you have. Understand that you are in control of your life, not someone else. Allow yourself space and grace to make mistakes along the journey through life's experiences.

Last, and most importantly, take positive steps to change whatever is holding you back. This can take many forms depending on your unique circumstances, but it might begin with lovingly but firmly learning to say "No" to the negative influences in your life and "Yes" to positive new opportunities.

How you go about accomplishing the above steps depends on your individual situation. Some can do this process on their own; others may need the help of trained counselors to help them work through the steps. Remember that emotional healing, just like physical healing, usually takes some time and patience. Allow yourself to proceed at your own pace and in your own way.

You owe it to yourself to be in control of your own life and to be happy. When you continue to blame others for the way you feel or the things you do, you are effectively giving those people the power to control you. Take your power back!

A Practical Approach to Forgiveness

"He ruined my life."

"I've tried to forgive her, but I just can't!"

"That person doesn't deserve my forgiveness."

"I'll never forget what they did to me."

If any of these phrases sound like things you may have said to yourself or to others, you're certainly not alone. All of us tend to carry a certain amount of resentment toward others in our hearts. What we often don't stop to consider is what that resentment is costing us, and the price of that grudge in terms of our health can be surprisingly high. Bitterness, for instance, may have a link to physical illnesses including obesity, arthritis, cancer, fibromyalgia, and countless other problems.

So how do you start the process of healing? The first thing, of course, is to acknowledge that there is a specific person that you feel has wronged you. You may even think that you have already forgiven that person for their offense, but try this test: if you can't encounter that person or think of her without feeling anger, fear, or any other strong

negative emotion rising inside you, then you haven't truly forgiven her. Now let's deal with each of the statements from the opening lines of this article.

"He ruined my life." The next step is deciding to forgive that person. Why should you do that? Because as long as you hold any kind of grudge against another person, you give that person power over you.

Suppose you are driving down the street one day and a person cuts you off in traffic. You get angry, honk your horn, scream obscenities at your windshield, and reaffirm your belief that lousy drivers should be banned from the roads. You're very tense when you arrive at your destination and proceed to tell anyone who'll listen about the idiot who cut you off in traffic. You are allowing that unknown person to control your thoughts, mood, and even the type of conversations you're having with others. The irony is that the person who cut you off may never even realize what he did and he probably has had a great day.

The offenses you are dealing with are probably much greater than inconsiderate driving. They may well have been life-altering experiences. But the principle remains the same—by continuing to harbor bitterness, you give others the power to control not only how you think, feel, and act in many ways but also to some degree power over your physical health, as well. If you keep telling the same story about the people who have wronged you, you may never be able to move forward with emotional and physical healing. Change your life by changing your story. By choosing to forgive, you're taking back the power to control your own health and destiny.

"I've tried to forgive her, but I just can't!" Once you've decided that it's in your best interest to forgive a person, how do you move forward with it? To start the process of true forgiveness it's important to understand exactly what forgiveness is—and isn't. Simply put, forgiveness is the unilateral cancellation of a debt. "Unilateral" means that it is an action taken by one party; the person receiving your forgiveness really has nothing to do with your choice to forgive. This is something you're doing for yourself, not as a favor for the other person. Which brings us to our next point...

"Those people don't deserve my forgiveness." Of course they don't; if you felt they deserved it you would have forgiven them by now. The most frequent arguments against forgiveness are, "If they would only admit what they've done to me" or "If they would just apologize." When someone has offended you, you feel that they owe you a debt. You might be willing to take a discounted payment on that debt (an apology), but if you are requiring any action from the other party you are still requiring payment. Remember that the release that you are granting through forgiveness requires nothing from the other person—not even an admission of guilt.

This is an obstacle many people have trouble getting past. For one thing, they feel that forgiving someone is the same as saying that what they did was acceptable. That's not the case at all. When you choose to forgive someone unilaterally you are saying, in essence, "What you did to me was not okay, was not right, was terribly wrong, in fact. Still, I'm choosing to release you from any retribution I feel I deserve from you." That decision can be incredibly freeing.

"I'll never forget what they did to me." And that's okay. The old adage "forgive and forget" is really impractical. If someone has injured you in a significant way there's little chance that you're going to forget about it. In fact, it may be healthier not to forget it; you certainly don't want to invite the same type of injury again by allowing it to be

repeated by that person or someone else. The goal is to reach the point where, as I said earlier, you can think of that person or incident objectively and without the accompanying negative emotions that have dominated you in the past.

I have seen many clinical examples of patients who have found a path to physical health by changing the way they think. You can start the process today of repairing those "cracks" in your life that have hindered your healing by putting into practice the ideas expressed in this chapter. Identify the stressors in your life and find strategies to deal with them. Accept responsibility for your physical and emotional well-being. Choose to forgive those you feel have wronged you. When you do those things, you'll prepare your physical body to receive the healing it needs.

Chapter 16: Imagine—Possibilities

Every person who reads this book is unique. Each individual who picks it up has his or her own reasons for reading it. Some are simply curious about naturopathic care. Some are desperately seeking answers to ongoing health problems. Some want to learn more about preventive care or to find tips to help them achieve optimum wellness. Whatever your intentions for reading are, my main desire is that you have a renewed sense of *hope* through the messages I've shared here.

At the start of this book I asked you to "imagine a whole different kind of medical care."

If you are a person who has become discouraged with the health care system as you know it, or if you feel that you have simply run out of options in seeking the health and vitality you wish for, I hope the things I've shared in these pages have helped you. Like millions of others, you have the chance to take control of your own health destiny by adopting a new way of thinking and a new way to look at *possibilities*.

It is *possible* to assume responsibility for your own general health by choosing to educate yourself about good eating and exercise habits.

It is *possible* to find health care professionals who have the time and desire to establish the doctor/patient relationship that allows you to work with them to seek out the root causes of your health concerns.

It is *possible* to "think outside the box" of customary medical treatments through the use of alternative therapies, bioidentical hormone treatments, and a holistic approach to healing.

It is *possible* to look at old problems in a new light and recognize that how we think, feel, and act plays a huge role in both our emotional and our physical well-being.

My patients are sometimes surprised to hear me tell them that I am not responsible for making them well. It's my job as a physician to provide the tools and the education for my patients to work with to allow their bodies to heal themselves. My intention in sharing the information presented here is to empower you to take a more active role in your own health care.

On the other hand, this book certainly isn't meant to take the place of a doctor's care. It is not a medical manual. Even though I've addressed a number of specific health concerns, the real purpose is to raise the reader's awareness so she can explore her options in an educated way. Having more knowledge about your condition and your options for treatment will empower you to partner with your health care providers for successful healing.

I also want readers to understand that I have nothing against "conventional" medical doctors or treatments. We all have the same goal—to provide the help we can to our patients. We must work together to accomplish that goal. Throughout my professional career as a nurse and doctor my intention has always been to build bridges of understanding among caregivers. Every day I see patients who are seeking advice from a wide variety of health care professionals: naturopathic physicians, medical doctors, doctors of osteopathic medicine, nurse practitioners, nurses, chiropractors, pharmacists, and many others. Each provider has certain knowledge and insights that others may not

have. My vision is that we will not see each other as competitors, but that we will all work together for the good of the patient.

I want to close this book with a heartfelt thanks to you, the reader. Thank you for investing your valuable time as you read. Thank you for being a part of that awakening giant that is bringing true health care reform to our system by educating yourself and expecting the quality of care you deserve from your providers. And thank you for passing this new knowledge on to others around you.

I wish you health, happiness, peace, and prosperity.

Healthy Recipes

Healthy eating is for everyone, so whether you're watching your blood sugars, trimming your weight, or just want to do your body a favor, here are some great ideas for eating. I love to cook and experiment with recipes and all of the following are either my creations or "variations on a theme" I've done to make a good meal a bit healthier. Along with the recipes we've thrown in some health tips and fun facts about good eating. You'll also find these and many more recipes like them in printable form on our website at

http://www.DrMarcantel.com.

Enjoy!

SOUPS AND SALADS

Cream of Vegetable Soup

Broccoli contains beta carotene, an antioxidant that attacks free radicals responsible for diseases in the body (like cancer). Broccoli and cauliflower are cruciferous vegetables found to be protective against colon cancer. The properties in cruciferous vegetables can also help promote a healthy estrogen metabolism and can help reduce estrogen dominance.

- 2 large broccoli heads
- 2 large containers fat free chicken broth
- 1 large head cauliflower
- 1 large container Land O' Lakes fat free half and half cream
- 1 large onion
- 2 zucchinis
- 2 tomatoes

Boil all vegetables in chicken broth until cooked soft. Remove from fire. Add cream and season to taste. Stir. Ladle mixture into blender and blend until smooth. Put in plastic containers for freezer storage. (This soup freezes well.) When the container is removed from freezer later to eat, just heat up with microwave or on stove. You may add shredded cheese, walnuts, or roasted or rotisserie chicken from your local supermarket to soup for a complete meal.

Hearty Winter Soup



- 1 lb ground beef
- 1 large can (32-36 oz) tomato sauce
- 2 large onions, chopped
- 2 cans Rotel tomatoes
- 6 stalks celery, chopped

4 cans water
4 cans black beans with juice
1 pack dry ranch dressing mix

Brown meat and drain. Add onions and celery and sauté until tender. Add remaining ingredients and cook approx. 1 hour. Season to taste. When serving, sprinkle with grated cheese. Freezes well.

Crunchy Tomato Soup



A quick and easy recipe that contains the antioxidant lycopene in the tomatoes, protein in the almond milk and chicken, and anti-microbials in the garlic and onions. It also tastes good!

1 baked or roasted chicken—deboned and chopped 1/2 cup chopped onion
1 large can tomato purée
2-3 cloves chopped garlic
1 cup unsweetened almond milk
1 cup pecan or walnut pieces
1 tablespoon chopped fresh basil
low-fat sour cream (dollop as topping)
1 cup chopped cucumber
Tony Chachere's Creole Seasoning

In blender mix tomato purée, almond milk, fresh basil, cucumber, onion, garlic, Tony's seasoning to taste. Blend until smooth. Remove from blender and stir in nuts and chopped chicken. Serve in individual bowls with a dollop of sour cream. May be served warm or cold.

Here's an interesting FOOD FACT from Wikipedia.com: "Unlike other fruits and vegetables, where nutritional content such as vitamin C is diminished upon cooking, processing of tomatoes increases the concentration of bioavailable lycopene. Lycopene in tomato paste is four times more bioavailable than in fresh tomatoes. Thus processed tomato products such as pasteurized tomato juice, soup, sauce, and ketchup contain the highest concentrations of bioavailable lycopene. Because lycopene is so insoluble in water and is so tightly bound to vegetable fiber, the bioavailability of lycopene is increased by food processing."

Crispy Turkey Salad

5 ounces thin sliced cooked turkey several chopped olives with pimentos 1 small sliced roma tomato 1/2 Asian pear chopped (very crispy and sweet) 1/4 cup chopped walnuts 1 tablespoon raspberry vinaigrette

Mix all ingredients and place on a bed of romaine lettuce.

Why turkey? Many doctors and nutritionists (including myself) recommend turkey as a good choice when you eat meat. Turkey has a lot of good health benefits. Here's an excerpt from an article on "The World's Healthiest Foods" website:

"Turkey is a very good source of protein. A four ounce serving provides 65.1% of the daily value for protein, along with 11.9% of the daily value for saturated fat, about half the amount of saturated fat found in red meat. The structure of the human body is built on protein. We use animal and plant sources of protein for our amino acids and rearrange the nitrogen to make the pattern of amino acids we require." (www.whfoods.com)

Amino acids play a key role in making neurotransmitters that are naturally occurring chemicals within the brain that relay signals between the nerve cells and are required for proper brain and body function. They play a large part in our mental, emotional, and physical status. Turkey is also an excellent source of selenium, niacin, and vitamin B6–all-important for maintaining a healthy system.

Seafood and Okra Gumbo



Here's a nice Louisiana gumbo recipe that's great for the cool weather. As we Cajuns would say, "Talk about good!"

3 lbs. frozen chopped okra 1 small can of tomato paste 3 tablespoons canola oil

1 tablespoon Tabasco sauce

1 large chopped green bell pepper

2 tablespoons Worcestershire sauce

3 cups chopped white onion

4 quarts water

2 cans Rotel chopped tomatoes

Creole seasoning to taste (I use Tony Chachere's)

2 lbs. crabmeat (I like Trader Joe's in the can).

Sauté onions, bellpepper, and okra in oil for 20 minutes over medium high heat. Transfer to large pot. Add tomato paste, tomatoes, water. Mix well. Add tobasco, Worcesterchire sauce, and Creole seasoning. Bring to boil, then add crabmeat and shrimp. Simmer for approximately 1 1/2 to 2 hours, stirring occasionally. Spoon over brown rice to serve.

APPETIZERS AND SNACKS

Blood sugar balancing tip:

Eating a protein along with fruit helps keep the blood sugars balanced. When blood sugars spike and then drop it signals the body that it's hungry, so try to avoid those high sugar levels!

Apple Protein Snack



This is a yummy, high-energy snack that provides protein and fiber.

4 gala apples sliced 1/2 cup melted chunky peanut butter ground cinnamon 1/2 cup chopped walnuts 1 cup shredded cheese stevia to taste

(Stevia is a great natural sweetener that comes in liquid or powder form. See chapter 5 for more details!)

Preheat oven to 350 degrees. Place apples on baking sheet and sprinkle cinnamon and stevia and walnuts on top of apples. Cook until apples are tender. Remove from oven. Heat peanut butter in microwave for a few seconds until liquid. Drizzle peanut butter over apple mixture and sprinkle shredded cheese over mixture. Place back in oven until melted. Remove from oven and let cool. Divide into individual portions and use as snack. Keeps up to 1 week in fridge.

Protein Parfait

16 ounces silken tofu Land of Lakes sugar-free whipped heavy cream 2 cups chopped fresh strawberries stevia to taste soy milk

Combine tofu, strawberries, and stevia in blender. Add enough soy milk to allow ingredients to blend smoothly. Put in refrigerator to congeal. Add whipped cream on top before serving.

Fiesta Salsa

This is a tasty vegetarian dish that contains protein, lycopene, fiber, and essential fatty acids.

15 oz. can black beans
1 cup cooked corn
1 cup jicama
2 avocados—chopped well
1 large bunch cilantro
2 raw tomatoes—chopped
1 bunch chopped green onions
4-6 slices of jalapeno pepper (to taste)
juice of 1/2 of a lime
cumin to taste
salt and pepper to taste
Food for Life Ezekiel 4:9® tortilla

Use a blender to purée cilantro, tomatoes, green onions, and jalapenos. Combine puréed vegetables with black beans, corn, jicama, avocado, lime juice, cumin, and salt and pepper. Serve with homemade baked Ezekiel tortilla chips. I use Ezekiel tortillas because of the variety of healthy sprouted grains they contain.

To make a tortilla into chips, simply spray the tortilla on both sides with a vegetable cooking spray, salt lightly, then bake in oven at 350 degrees until crispy (approximately 5-10 minutes). Let cool, then break into chips.

Sumptuous Salsa

This one is packed full of fiber. It's high in protein and low in fat.

2 16-ounce cans black beans
1 teaspoon cumin powder
1 can whole kernel corn
1/4 cup lemon or lime juice (optional)
1 small chopped roma tomato
1 small red bell pepper chopped
1/2 red onion chopped finely

Combine and mix thoroughly. You can eat it right away, but if you let it sit overnight it will be even better! This is good as a topping on baked pork chops or chicken, or you can mix in some boiled shrimp or sliced turkey and make a meal of it. It also goes great with scrambled eggs, or mix it with ranch dressing for a great southwest flavored topping. Be creative and have fun with this versatile add-on!

Apple Jell-O® Delight

Here's a quick, easy, cool summer snack that contains apples for vitamins and fiber along with a protein (cottage cheese) and a healthy fat (walnuts) to help prevent a spike in blood sugars.

1 large box sugar-free lime Jell-O 1/2 cup chopped apples 1 cup hot water 1/2 cup walnut pieces 1 large container low fat cottage cheese (I like Shamrock Farms)

Dissolve Jell-O in hot water. Blend Jell-O and cottage cheese in blender (you may have to add some low fat milk to blend it properly). Remove from blender and add chopped apples and walnuts. Let set in refrigerator until congealed.

SMOOTHIES

Smoothies are a great breakfast drink to start your day and a perfect energy snack between meals. They're a fast and easy way to get a good amount of antioxidants and phytonutrients in one delicious drink! It's fun to make up your own recipes, and the variety of flavors you can have is as unlimited as your imagination.

Coconut—Pineapple Smoothie

3/4 cup light coconut milk 3/4 cup frozen pineapple

1/2 dropper of stevia (optional) 1/2 of a frozen banana

Place all ingredients in blender. Add water to achieve desired consistency. Blend.

Cherry-Vanilla Smoothie

2 tablespoons vanilla protein powder 1 cup of unsweetened vanilla almond milk a few drops of stevia sweetener (optional) 1/2 cup frozen cherries

Place ingredients in blender, add water, and blend.

HINT: A number of people have told me that they don't make smoothies because they don't want to deal with the blender clean up. For added convenience, use an individual serving sized blender like the Bella Cucina Rocket Blender or the Magic Bullet.

Blueberry—Spinach Smoothie

1/2 cup of blueberries a handful of baby spinach a handful of baby carrots 1 cup of unsweetened vanilla almond milk 1 tablespoon ground flax seed 1/2 of a frozen banana a few drops of stevia sweetener

Place ingredients in blender, add water, and blend.

Peanut Butter Banana Smoothie

1/2 frozen banana2 tablespoons peanut butter1 cup unsweetened chocolate or vanilla almond milk

Place ingredients in blender, add water, and blend.

HINT: Add 2 tablespoons (more or less) of whey protein powder to any of these for extra protein punch. If you are sensitive to whey, pea protein powder or egg white protein powder make great alternatives.

MAIN DISHES

Lentil Tomato Sauce Over Spaghetti Squash

A Vegetable Feast!

Spaghetti squash is an excellent substitute for pasta. It's low in carbs and calories and has a deliciously crunchy consistency. Lentils are a great source of fiber, vitamins, and protein. Bell peppers are a good source of vitamin C. Garlic has properties that are good for the cardiovascular system. This recipe is high in protein and low in cholesterol and can be used as a main dish. And, best of all, it tastes wonderful!

1 lb cooked black lentils (I get mine at Trader Joe's—already steamed)

1 yellow bell pepper—chopped

2 large cans of low sodium tomato sauce

2 garlic pods—chopped

3-4 Roma tomatoes raw

2 medium onions—chopped

16 oz fresh sliced mushrooms (I use baby portabellas)

1 medium spaghetti squash 1-2 cups of water (depending upon desired consistency)

Preparation of spaghetti squash:

Slice lengthwise and place exposed pulp of squash down in Pyrex dish in shallow water. Bake at 350 degrees for approximately 45 minutes. Let cool, then remove pulp by dragging a fork through it—it will come out looking like small strands of spaghetti!

Sauce preparation:

Place cooked lentils in blender with 1 can tomato sauce and raw Roma tomatoes. Purée until smooth, then set aside. Sauté onions, garlic, and bellpepper until soft. Add lentil mixture and mushrooms and 2nd can of tomato sauce and 1-2 cups water. Heat all ingredients together until warm.

Pour prepared sauce over spaghetti squash and enjoy!

Chicken or Seafood Alfredo

This is a rich Italian dish, but lower in fat and processed carbohydrates than some similar recipes.

1 container (8-12 oz) of brushetta

1 small (8 oz) container artichoke hearts

1 12-16 oz can of low fat alfredo sauce

Whole wheat angel hair pasta (Note: Try spaghetti squash as a pasta alternative)

1 small can (4 oz) mushrooms

Cooked crabmeat, cooked shrimp, or cooked chicken

Combine all ingredients except pasta in pot and heat until warm. Add the meat of your choice. (I like to use broasted chicken from my local grocery store—it's already cooked, so I just debone and add it in.) Serve over whole wheat pasta.

Tarragon Chicken

One source tells us that during the Middle Ages "there was a wide-spread belief that the herb tarragon could not only ward off serpents and dragons, but could also heal snake bites." We don't recommend this meal to get rid of rattlers, but a variety of vegetables combined with the wonderful flavor of tarragon makes this main dish both healthy and tasty.

1 medium sized chicken
1/4 cup canola oil
1 cup chopped onion
1 cup chopped bell pepper
1 cup fresh mushrooms
1 small can tomato paste
1 small can pimentos
1/4 cup whole wheat flour
1/2 cup celery
1/2 teaspoon tarragon
brown rice
seasoning

Cut up and pan fry chicken until brown. Stir in flour. Let brown, then add water to make gravy. In another pan brown onions, bell pepper, and celery, then add tomato paste, mushrooms, seasonings, and tarragon. Add this to chicken and gravy. Bake 30 minutes at 350 degrees. Serve over brown rice.

Low Carb Enchiladas

The whole wheat tortillas used in this recipe contain 8 grams of fiber each. (I like to use South Beach Diet brand tortillas.)

1/2 dozen whole wheat low-carb tortillas

1 28 oz. can enchilada sauce*

1 lb lean ground beef

1 large can black olives

1/2 cup finely chopped onions

1 small can diced green chile peppers

2 cups shredded cheese

*I use Las Palmas enchilada sauce because it contains no corn starch. Be sure to read the ingredients; corn starch or sugars add carbohydrates!

Brown beef and drain fat. Sautee onions until browned. Dip tortillas in sauce to soften. Stuff tortillas with beef, cheese, olives, onions, and peppers. Roll and place seam down in baking pan. Pour any remaining sauce and olives in pan. Top with remaining cheese. Bake 15 minutes at 350 degrees. If desired, add a dollop of fat-free sour cream to each enchilada.

Turkey Fried Rice



This dish is complete with protein, complex carbohydrates, healthy oil, and vegetables.

- 1 large turkey breast*
- 1 can bean sprouts
- 2 tablespoons canola oil
- 1 package fresh broccoli (steamed in microwave)
- 2 eggs
- 1 can water chestnuts
- 2 cups cooked brown rice

Chop turkey breast. Sautee onions in oil. Add eggs and cook until firm. Add rice and stir. Add bean sprouts, broccoli, water chestnuts. Stir. Season with Tony Chachere's Creole Seasoning. Add turkey. Serves four.

Creamy Shrimp Pesto Rotini

The whole wheat rotini helps prevent blood sugar spikes that you might experience from refined (white) pasta, the garlic contains antibiotic properties, and the basil in the pesto can help relieve gas (see below). What more could you ask from a delicious Italian recipe?

10-12 oz. pack whole wheat rotini (cooked)

1 1.2 oz. pack Knorr Creamy Pesto sauce mix

2 cloves of garlic finely chopped

1 4 oz. jar pimentos (drained)

1/2 onion finely chopped

1 lb. shrimp (boiled and peeled)

1 cup milk

1/4 cup olive oil

fresh basil leaves

^{*}I buy mine at the grocery store already cooked.

Saute onions and garlic in olive oil until tender. Stir in milk and sauce mix and bring to a boil. Add pimentos and cooked shrimp. Reduce heat and simmer approximately 5-10 minutes. Season to taste. Remove from heat. Add rotini and mix with sauce. Top with fresh basil to serve.

We've read that the ancient Greeks believed that basil would grow only if gardeners vilified it while sowing it—can you get a mental picture of that? People in other countries, however, cherished it as a protection against witchcraft and as a symbol of love. We don't know about that, but we do know that basil's effectiveness as a carminative (a substance that relieves gas) has been established and research shows that extracts of the plant inhibit organisms that can cause dysentery.

High Protein Stir Fry

A half cup of edamame (soybeans) provides 12 grams of protein and 6 grams of fiber. One pound of shrimp provides 19 grams of protein.

1 lb. peeled uncooked shrimp 2 oz. sliced fresh mushrooms 1/2 cup edamame (shelled and cooked) 1/2 cup mozzarella cheese 1 can artichoke hearts (in water) — drained 1/2 cup Smart Balance light buttery spread

Sauté mushrooms in Smart Balance. Add shrimp and cook until pink. Add artichoke hearts and stir. Add edamame and cheese and stir. Remove from heat and serve warm. Makes approximately 3-4 servings.

Mediterranean Pesto Pizza

A pesto variation on our Ezekiel's Pizza recipe. The Ezekiel tortilla is flourless and high in protein, tomatoes add lycopene, the spinach has plenty of iron, vitamin A, and calcium, and the pesto is packed with omega-3s from the olive oil and walnuts.

2 large Ezekial 4:9 Sprouted Grain tortillas*

7 ounce tub of pesto (I like Genova pesto from Trader Joe's)

2 Roma tomatoes (thinly sliced)

5 ounces of fresh sliced mushrooms

2 cups baby spinach

7 ounces mozzarella cheese

2-3 ounces of crumbled feta cheese

1/2 teaspoon salt

*You may wish to substitute a large whole-wheat pita for the crust. The tortilla will be much thinner and crispier.

Preheat oven to 400°. Spray tortillas with canola oil cooking spray, then heat directly on oven rack until edges are crispy. Blend tomatoes, spinach, feta, mushrooms, and salt with 1/2 of pesto. Place heated tortillas on sprayed baking sheet. Spread remaining pesto on the two tortillas. Sprinkle 1/2 of mozzarella over the tortillas. Spread topping mixture over cheese, then top with the remaining mozzarella. Cook until cheese is thoroughly melted (about 5 minutes). Cut into quarters and serve hot. Yum!

Glossary

acupuncture: A form of treatment in traditional Chinese medicine that involves the use of sharp, thin needles that are inserted in the body at very specific points. This process is believed to adjust and alter the body's energy flow into healthier patterns, and is used to treat a wide variety of illnesses and health conditions.

<u>adrenal fatigue</u>: A collection of signs and symptoms, primarily characterized by chronic fatigue, that results when the adrenal glands function below their proper capacity to produce necessary hormones.

allopathic medicine: Another term for what has come to be known as "conventional" or "mainstream" medicine as distinguished from naturopathic or other alternative medical practices.

<u>antioxidant</u>: A substance such as vitamin E, vitamin C, or beta carotene that protects body cells from the damaging effects of oxidation. Antioxidants work by counteracting or neutralizing the effects of *free radicals* in the body—incomplete particles that attach to cells and cause deterioration of those cells.

bioidentical hormones: Hormones that are derived from plants and converted in a laboratory to have the same molecular structure as the hormones the human body produces.

chronic condition: A condition or disease that lasts for a long period of time. Unlike *acute conditions* that are of abrupt onset and short durations, chronic conditions usually develop more gradually.

<u>complementary medicine</u>: The use of alternative therapies or treatments together with conventional medical treatments in an effort to improve desired outcomes. An example of this might be taking the nutritional supplement CoQ10 to help decrease the muscle pain associated with statin treatments for high cholesterol. Another example would be the use of acupuncture in conjunction with medications to control pain.

<u>detoxification</u>: The process of eliminating toxic substances from the body. The body has natural methods for detoxification, primarily through the function of the liver, kidneys, and intestines. Detoxification therapies used by health care providers attempt to activate and assist the body's own detoxification processes.

<u>endocrine system</u>: A system of glands and cells that make hormones that are released directly into the blood and travel to tissues and organs all over the body. The endocrine system controls growth, sexual development, sleep, hunger, and the way the body uses food.

<u>enzymes</u>: Proteins or protein-based molecules that act as catalysts to promote chemical reactions in the body. Digestive enzymes, for example, are produced in the stomach and intestines and help break down the foods we eat.

<u>estrogen dominance</u>: A condition in which there is too much estrogen hormone in the body in relation to the amount of progesterone hormone. This imbalance of hormones can manifest in a variety of troublesome symptoms in women.

gland: A cell, a group of cells, or an organ that produces a secretion for use elsewhere in the body or in a body cavity or for elimination from the body.

gluten: A protein found in wheat and other grains. A person with gluten sensitivity may experience a wide range of adverse effects from eating products containing glutens,

including mild to severe digestive problems and a variety of other symptoms including headaches, migraines, and lethargy. Glutens can cause severe reactions in people with *celiac disease*, an autoimmune disorder of the small intestine.

<u>herbal</u> (botanical) medicines: Medicinal substances derived from plants or plant extracts.

holistic medicine: A term used to describe therapies that attempt to treat the patient as a whole person. That is, instead of treating an illness, as in orthodox allopathy (conventional Western medicine), holistic medicine looks at an individual's overall physical, mental, spiritual, and emotional well being before recommending treatment. A practitioner with a holistic approach treats the symptoms of illness as well as looking for the underlying cause of the illness.

<u>homeopathy</u>: A therapeutic system that holistically treats illness and inherent constitutional problems by applying the "like cures like" principle and using minute quantities of specially prepared plant, animal, or mineral substances.

<u>homeostasis</u>: The process by which the body attempts to naturally maintain a state of stable physiological balance. A basic principle of naturopathic medicine is to use therapies that aid the self-healing and self-correcting mechanisms of the body to achieve that balance.

hormones: Chemical substances that are released by various glands in the body to target organ systems and specific cells to help them function normally.

<u>insulin</u>: A hormone secreted by the pancreas gland that plays a vital role in carbohydrate metabolism. When blood sugar rises, insulin acts to cause certain cells of the body to take in glucose, primarily liver and fat cells.

<u>integrative medicine</u>: Healing-oriented medicine that takes account of the whole person (body, mind, and spirit), including all aspects of lifestyle. It emphasizes the therapeutic relationship and makes use of all appropriate therapies, both conventional and alternative.

libido: the conscious or unconscious sex drive in a person

<u>metabolic syndrome</u>: A set of conditions that include increased blood pressure, a high blood sugar level, excess body fat around the waist, and abnormal cholesterol levels. These conditions occurring together increase your risk of heart disease, stroke, and diabetes.

menopause: The permanent end of menstruation and fertility, medically defined as occurring twelve months after the last menstrual period. While technically it refers to the final period, it is not an abrupt event, but a gradual process.

<u>neurotransmitters</u>: Naturally occurring chemicals within the brain that relay signals between the nerve cells and are required for proper brain and body function. They play a large part in our mental, emotional, and physical states and can affect our moods, behavior, sleep, digestion, weight, focus, and learning ability.

<u>nutritional supplements</u>: Preparations intended to supplement the body with vitamins, minerals, fiber, and other nutrients that may not be consumed in sufficient quantities through diet alone.

optimal health: The health goal of feeling your personal best physically, spiritually, and emotionally.

<u>osteoporosis</u>: Thinning of the bones, with reduction in bone mass, due to depletion of calcium and bone protein.

perimenopause: The interval in which a woman's body makes a natural shift from more-or-less regular cycles of ovulation and menstruation toward permanent infertility, or menopause.

<u>phytoestrogens</u>: Estrogen-like chemical compounds that occur naturally in plants and plant products.

refined carbohydrates: Foods such as grains or sugars that have been processed by machinery and stripped of most of their nutritional value. The process gives foods a finer texture and prolongs shelf life, but it also removes important nutrients and fiber. This has the effect of concentrating the carbohydrate and breaking it down so the body processes it very quickly, generally causing a high rise in blood sugar.

<u>root cause</u>: The underlying condition—whether physical, emotional, or spiritual—that is the cause of a problematic medical symptom.

<u>statin</u>: A class of drug used to treat high cholesterol levels. The most common side effects from statin use is muscle pain, but there may be other side effects, as well. While statins can have their place in the treatment of high cholesterol, they should not be used as a substitute for proper diet and exercise.

symptomology: The combined symptoms of a disease or condition.

xenoestrogens: By-products of industrial and chemical processing that have estrogen-like effects.

About Naturopathic Medicine

A naturopathic medical doctor (NMD or ND) is a primary care physician clinically trained in conventional medical sciences with an emphasis on preventive care. The goal of naturopathic therapy is to find and eliminate the root causes of symptoms presented by the patient. In addition, in natural medicine the doctor seeks to teach and empower each person to care for himself or herself in order to improve his physical condition and prevent future problems.

A licensed naturopathic physician attends a four-year, graduate level naturopathic medical school and is educated in all of the same basic sciences as an MD, but also studies holistic and nontoxic approaches to therapy with a strong emphasis on disease prevention and optimizing wellness.

In addition to a standard medical curriculum, the naturopathic physician is required to complete training in clinical nutrition, acupuncture, homeopathic medicine, botanical medicine, psychology, and counseling (to encourage people to make lifestyle changes in support of their personal health). A naturopathic physician takes rigorous professional board exams so that he or she may be licensed by a state or jurisdiction as a primary care general practice physician.

In Arizona, naturopathic doctors are licensed and regulated by the State of Arizona Naturopathic Physicians Medical Board. The scope of practice in Arizona includes limited prescription privileges, minor surgery, diet and nutrition counseling, homeopathy, acupuncture, botanical medicine, physical manipulation, environmental medicine, and other modalities.

At the time of publication of this book, sixteen states, the District of Columbia, and the United States territories of Puerto Rico and the United States Virgin Islands have licensing laws for naturopathic doctors. In these states, naturopathic doctors are required to graduate from an accredited four-year residential naturopathic medical school and pass an extensive postdoctoral board examination (NPLEX) in order to receive a license. Licensed naturopathic physicians must fulfill state-mandated continuing education requirements annually, and have a specific scope of practice defined by their state's law.

For a list of states with licensing laws and to learn more about the naturopathic medical profession, please visit the website of the American Association of Naturopathic Physicians at http://www.naturopathic.org.

About the Authors

Dr. Tina Marcantel received her degree of Doctor of Naturopathic Medicine from Southwest College of Naturopathic Medicine, in Tempe, Arizona, in July of 2003. She received her Bachelors of Science in Nursing degree from the University of Southwestern Louisiana in Lafayette, Louisiana, in 1979 and worked as a registered nurse in Louisiana and Texas before entering the program at SCNM. Her extensive clinical experience includes hormone evaluation and treatment, women's health, diabetes management, nutritional counseling, and mental health. Dr. Marcantel's background in allopathic (conventional) medicine combined with her training in naturopathic and alternative therapies helps her incorporate the best of both types of treatments in her practice. She has been in private family practice in the Phoenix, Arizona, area since 2005.

Peter Marcantel is a former high school English teacher and the author of numerous published essays, articles, and short stories.

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