SECRETS TO A LONG HEALTHY LIFE

Natural Strategies For Optimum Health

Using Herbs, Vitamins, and Food to Treat What Ails You



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INTRODUCTION

With every passing generation, there are more and more insights and scientific breakthroughs that promise longer, healthier lives. This is heartening because most people imagine getting older in good health with the opportunity for enjoying retirement and spending more time with friends and family, away from the hustle of a busy life. Yet, if we believe the current statistics on health, even in the light of cutting-edge discoveries, many of us are going to fall prey to some form of degenerative condition such as arthritis, cardiovascular diseases, diabetes, and cancer, to name a few. Being diagnosed with any of these conditions can radically change lifestyles and spoil our retirement plans.

Unfortunately, many will not have to wait until an advanced age to experience some of these challenges. They may affect us while we are quite young and create disturbing obstacles in all aspects of life.

Roberta, my wife of 40 years and business partner, is an example of this. In 1998 she was diagnosed with breast cancer, and we were both in shock. I am an acupuncturist and a Doctor in Human Development. Roberta counsels people and is an effective life coach. We both experienced excellent health and a strong spiritual practice throughout our lives. When the diagnosis occurred, we had been in practice for more than 20 years, and I thought we knew a great deal about health and well being. We had created a comprehensive system of healing based on the premise that a healthy mind lined up with a spiritual perspective produces and maintains a healthy body.

Our oversight was that we disregarded the negative impact that disturbances in the environment and certain genetic predispositions can have on both cells and the most basic physiological functions.

Thank God Roberta has enjoyed great health for the past several years and leads a very active, creative life. Still, her diagnosis was a rude awakening. It led me to extensive research into what constitutes a healthy physical body, and how we can ensure and maintain good health. The exploration that I embarked upon led to a range of discoveries that I am sharing with you in this book.

THE RIPPLE EFFECT OF POOR HEALTH

I live by this principle: take care of yourself so you can assist in taking care of others. Providing your body with its basic needs on an ongoing basis is an essential part of contributing to the health of communities and our world. Conversely, attending to the health of the planet is an essential aspect of taking care of ourselves and our health. The two are inextricably linked.



When a significant portion of the general population is in poor health, all aspects of society are affected. One good example of the impact of poor health on society is obesity. The increasing dependence on fast food loaded with hydrogenised fat, refined flour and various forms of sugar has brought about an epidemic of obesity throughout the U.S. This has caused problems, not only with adults, but also with children. Until recently, Type II diabetes was a condition found only among adults. These days, however, there are a startling number of teenagers and even younger children who experience it.

The recent increase in obesity and its physiological consequences are adding billions of dollars to the national health bill. The money that is being directed at the treatment of pathologies could be better spent improving the quality of our environment, which directly impacts our bodies and quality of life. Clearly, by taking care of ourselves through proper nutrition, sleep, relaxation, supplementation and exercise, we reach far beyond our individual physical and emotional health. Indeed, being healthy actually penetrates the physical and social ecology of the entire family of man, as well as our planet.

THE SIMPLE NATURE OF GOOD HEALTH

Healthy people have a much higher quality of life. They have high energy, so they do more. On average, healthy people earn more money. They save money by not spending it on health services. They have a better relationship with themselves and others. Less time is wasted in disease-related downtime.

Because they have more energy and feel good, the lives of healthy people are easier and more rewarding. Much of the chronic pain to which people have become accustomed naturally disappears when they restore the health of their basic functions. Because healthy people feel good and usually look good, it is amazing how a simple change in health can immediately translate into new social and professional opportunities.

Contrary to what many people believe, good health is not complicated; it is a natural state of being. One reason it may seem complex is because when we're sick and go to medical doctors, they often express themselves in unfamiliar language at a time when we feel vulnerable. Recent research indicates that more than 60% of patients leave their doctor's office without a clear understanding of what the doctor found or what the patient is supposed to do.

In addition, there is a generally held assumption that if we are not diagnosed with a disease, we must be healthy. This misconception reinforces the belief that healthy people fall ill in the same way that a car crash can happen to a good driver. Surely you've known someone whom you thought was a perfect example of good health, only to learn that he or she was diagnosed with catastrophic illness. This



was the case with Roberta, whom we thought was in excellent health. The truth is, however, that situations like these indicate that something had been neglected for a long time and suddenly came to a head.

After her diagnosis, Roberta and I both decided to follow her doctors' advice and pursue the traditional medical protocol. But that's not all we did. At the same time that she was receiving "emergency medical" treatments to destroy the cancer cells, we stayed true to our intuition and paid special attention to the variables that sustained her health and well-being. This was a proactive approach to shoring up all of the components of her existing good health that would reinforce an overall healthy atmosphere within her body. We call this approach attending to the physiological terrain. This approach is both simple in methodology and dramatic in impact.

There is a significant difference between this approach and the traditional perspective of western medicine. Medical doctors aren't trained to see the physiological terrain. They are trained to eradicate germs, surgically remove abnormalities, and repair broken bones due to life-threatening accidents. Medical doctors assess the body in relation to pathologies, diagnose diseases and treat them with pharmaceutical products or costly operations.

Recognizing the difference between an MD's approach and ours is not to suggest that we do not need both of them. These two approaches can be quite complementary and it would be to everyone's advantage if they worked cooperatively. That said, in this book you will learn that our approach illuminates the fact that we have many more choices about how to manage, regain and maintain our health than you may have heard about in the doctor's office. This approach also keeps little things from turning into a crisis. Ultimately, my intention with this book is to provide you with access to a variety of options and a wider range of treatments than you may have been exposed to before.

THE SIGNIFICANCE OF INFLAMMATION

What the medical establishment is discovering now, and which most people in the natural health field have known for centuries, is that inflammation can actually contribute to the cause of pathologies, chronic fatigue and degenerative diseases.

In the February 23, 2004 edition of Time Magazine, there appeared an article entitled "The Fires Within." It explored the major impact of inflammation on the body, including the chain reaction created by it. The author concluded by suggesting that the new medical approach to this issue is to increase the use of cholesterol-lowering drugs and non-steroidal anti-inflammatory drugs, such as Celebrex. I would be very careful about following these solutions. As you will see later, these drugs have serious side effects and while they may indeed reduce inflammation, they do nothing



to address the causes that create the problem of chronic inflammation. They simply palliate some of these effects.

In this book, and in plain language, we will explain answers to these questions:

- What is inflammation?
- Why should I be concerned about it?
- What are the main sources of inflammation?
- What are the natural approaches I can use to eliminate inflammation from my body and restore a healthy and fully functioning body?

We will also examine many other issues that may be interfering with your quality of life as you get older, and we'll provide suggestions about what you can do through natural means to restore your health and enjoy vitality throughout life.

Not long ago I had the opportunity to hear Ray Kurzweil, a leading authority on technological development, speak. He showed graphically that the speed of evolution of new technologies will resolve within 20 years all of the major health issues that are presently the main cause of death: cardiovascular diseases, cancers, diabetes and neuro-degenerative disorders. What we want to offer you here is a chance to optimize your health so that you will benefit from that medical revolution. This book provides you with simple effective strategies to address the day to day challenges that contribute to these issues. We do not necessarily want you to live forever, but we want you to live healthy and happy until your last breath.

CREATING THE OPPORTUNITY FOR HEALING

In essence, this book is designed to restore faith in the body's ability to take care of itself. In it, you will learn how to assist with this task. We examine the basic functions of the body, what in our environment and lifestyle has the most profound negative impact, and how to restore a healthy physiological terrain. We also explore what we need to do on an on-going basis to maintain optimal functionality of the body while also understanding how to age gracefully.

Nature is filled with healthy resources designed to assist with this task. Our research is drawn from time-tested traditions and knowledge from all continents regarding the medicinal applications and purpose of flowers, plants, minerals, food and spices. These are all natural properties that exist in our environment. We tap into the treasure chest of natural healing agents that can assist in identifying exactly what can help address your unique health challenges.



The treatments we recommend include the following.

- Homeopathy: Homeopathy was created in the late 1700 by the German physician, Christian Friedrich Samuel Hahnemann (1755 -1843). He evolved the notion that "like cures like." He first identified the symptoms produced by certain substances and then used those substances in infinitesimal dilution to treat the original problem or a similar pathological presentation. Upon doing so, there was an amelioration or eradication of the imbalance. Since then, homeopathy has developed to include combination remedies and strategies that deal with allergies, toxicity and other modern day challenges. Various dilutions work with different aspects of health ranging from the physical to the psychological and even spiritual causes of disease. A homeopathic approach to medicine is a specialty taught in medical school in Europe, India, South America and the Middle East, but it is still considered nonsense by most MD's in the U.S. I have personally used homeopathy for myself, my family and in my practice with incredible results. If you've never tried a homeopathic remedy, you're in for a pleasant, safe and promising surprise.
- Specific Natural Remedies: Throughout the book, you will be guided to web sites where you can purchase herbal, mineral or vitamin supplements that I have found to be effective.
- Eating and exercise programs that boost your overall well being. It is a
 well known fact that employing good food and fitness into your life
 promotes good health. We will remind you that it's never too late to
 get started—and it can be fun.
- A 90-day program for overall wellness that also addresses your psychological and spiritual needs.

Even though this book equips you to recognize the imbalances within your system so that you can treat them accordingly, you may be more comfortable working with a health-care practitioner. You may also need their assistance in obtaining certain kinds of tests and products that can only be accessed through a licensed practitioner. Since MDs do not have an eye for natural medicine, they typically are not the best to work with. Instead, seek a Naturopathic Doctor (ND), a chiropractor, an acupuncturist, a Doctor of Osteopathy (DO), a nutritionist or a homeopath. It is unlikely that every doctor you consult will use the kind of treatment strategies that I mention in this book. However, they are likely to steer you in the right direction.



These types of practitioners can be found in any large city and in many small towns. The best way to find one is to ask around as word-of-mouth generates the most honest assessment of their skills. If you don't find someone through the grapevine, turn to the yellow pages and interview the practitioner on the phone. Your gut usually guides you to the right person.

We also provide you with sources from which you can obtain tests and products that we have found are reliable and reputable. An appendix in the back of this book contains the website addresses or phone numbers for all of the businesses we discuss.

Basic health is simple, but we cannot take it for granted and pretend everything is fine when it is not. Even simple disturbances can lead to dramatic negative results. On the other hand, simple natural measures can restore good health in areas that were previously not functioning well. Whether you are accustomed to making choices about your health on your own, or choose to work with a health-care practitioner, this book can be both a comprehensive guide and most trusted companion on the journey to your optimum well being.



CHAPTER ONE: THE ENERGY SYSTEM AND HOW TO MAINTAIN IT

As we mentioned in the introduction, this book guides you on how to treat your physical conditions with natural remedies. We focus on your health through the body's structural (anatomical), functional (physiological) and biological point of view. First, let's explore how people have perceived health and wellness throughout history. We look at the body as an **energy system**. We'll only touch upon a few energy-based modalities, but we strongly encourage you to pursue them whenever you can. After all, they have been useful and effective for thousands of years. The wisdom in these traditions is still relevant and can be very much a part of your journey to wellness.

In all of the ancient forms of healing a special emphasis is placed on the foundation of life itself. This life force is called **Qi** (pronounced chee) in Chinese medicine, **Prana** in Ayurvedic medicine, and **vital energy** in western medicine. These terms clearly express that life and health are not just defined through structure and function, but that a more subtle force animates the whole process of creation and defines whether something is alive or dead. In the human and animal kingdom, this life force is represented by breath. In fact, the word Spiritu in Latin means **breath** but it also expresses the notion of **Spirit**.

The very act of breathing is both symbolic and significant. Respiration, the process of inhaling and exhaling, is like the taking in and releasing of spirit. When we take our last breath, some people say we have expired. In other words, the body releases the spirit, the Qi, the Prana, the life force.

The culture of western medicine is rooted in control and economic sustainability, so it has done away with encompassing the energy flow that animates body, mind and spirit. Fortunately, it is still available through the following traditions:

THE CHINESE MODEL

Traditional Chinese Medicine (TCM) is an ancient healing art that originated in China several thousands of years ago and is particularly involved in mapping out how energy (Qi) circulates throughout the body, and what influences that energy. TCM offers a psycho/spiritual model of health which is lacking in modern medicine.

The very foundation of TCM expresses health in terms of movement of energy through an active principle called yang, and a receptive principle known as yin. The interplay of yin and yang is integral to every life activity. The perfect interplay of these two basic principles is called the Tao - a state of perfect harmony between heaven (the spiritual) and earth (the material). In this framework, heaven is active (yang) and the earth as attractive (yin). In the cosmic dance between yin and yang, human beings act as a bridge between heaven and earth.

Heaven (Yang - Active)

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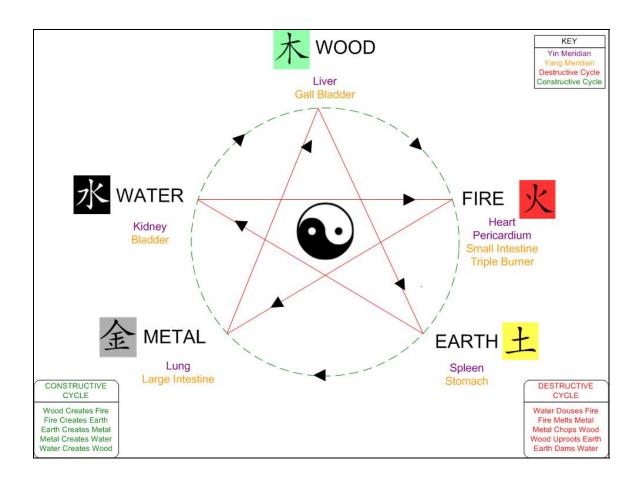
Α

Ν

EARTH (Yin - Attractive)

In the context of that model, we draw our life force from either above or within (as represented by heaven). That life force empowers us to function on the earth with all its needs, challenges and opportunities. Because the body is constantly dependent on the external environment for survival, each function of the mind, including will, emotion, intellect, instinct, and imagination, tends to forget about the source of empowerment. This loss of connectedness to the source creates a dependency upon false identities and physical and behavioral addictions. According to TCM, this disconnect is the very source of psychological disequilibrium and ill health or disease.

In Chinese healing, the five elements are associated with the five aspects of the mind: fire (will), earth (emotion), metal (intellect), water (instinct) and wood (creative Imagination). These five elements, or movements, make up the foundation of life and the natural order. They also provide the necessary insights for recovering a healthy body.



Balancing Qi is the main function of Chinese Medicine, which ultimately heals the rest of the body.

Balancing the energy system comprises a complex system of diagnosis and treatments which were created over the past 5000 years. They include the following.

- Acupuncture penetrating the body with very thin needles at appropriates points
- · Moxa stimulating certain points with heat
- Magnets moving Qi from one place to another to restore energy flow
- Herbal medicine using various plants and other natural substances to strengthen and correct deficiencies and excesses
- Qui Gong moving energy through intention, breathing and movements



Tui Na - a form of manipulation of bones and muscles to restore structural integrity

More recent modalities have been added to this repertory of diagnosis and treatments including Shiatsu, a form of massage; electro acupuncture; and laser stimulation.

Chinese Medicine has received a lot of attention in the past 30 years in the United States, although many MDs continue to regard it with a strong degree of suspicion and cynicism. Still, it has been recognized by the National Institute of Health for the treatment of myriad conditions and is presently covered by some insurance plans. The use of TCM is an invaluable contribution to health and healing and it is a great complement to pre and post-operative conditions and as an adjunct to radiation and chemotherapy in the treatment of cancer.

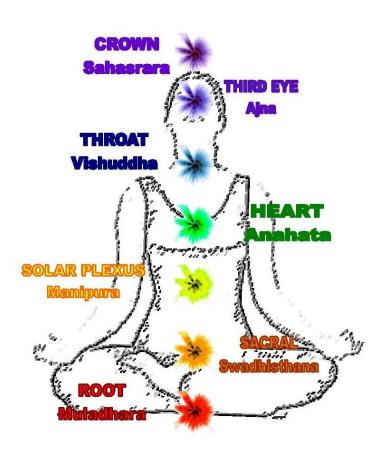
While Qui Gong can be practiced on your own, other modalities of Chinese Medicine require the care of a trained practitioner. One exception is a special device called a Perkl-Light[™] which can be used by an individual to receive some of the specific frequencies used in Chinese Medicine. For more information check www.perkl-light.com.

THE INDIAN MODEL

There are two systems of Indian energetic treatments. Yoga is spiritually based, while Ayurvedic medicine is medically based.

Similar to TCM in which the metaphysical (Taoism and the influence of Confucius) is intertwined with treatment, the basic philosophy of yoga and Ayurvedic Medicine cannot be easily separated. That said, yoga is a way of life that involves hygiene, diet, breathing (Pranayama) and exercise (Asanas).

There are different kinds of yoga, but in general, the energetic framework is based on chakras. Chakras are the energy centers through which energy, or Prana, circulates. According to yogic tradition, Prana enters the body through the breath.



The seven main charkas are located along the center line of the body, starting from the perineum where the first chakra is located. The second is in the lower belly, the third in the solar plexus (in the pit of the stomach), the fourth in the center of the chest, the fifth in the throat, the sixth in the forehead and the seventh at the crown of the head.

Each chakra is associated with specific qualities that affect human behavior, while also acting as an energetic support for the organs and glands related to each area. These energy centers can harbor egocentric needs and emotional reactivity, or they can be aligned with spiritual empowerment and promote balance, harmony and peace, thus providing good health to the body and individual expression.

Each organ in the body is also perceived as an energy center and their specific influence, like TCM, is described by the five natural elements:



- The heart is associated with ether
- The stomach with earth
- The lung with air
- The kidney with water
- The liver with fire

Joints are believed to contain a vortex of energy (43 in total), and the head and brain with their unique functions are said to possess 36 chakras or energy centers. In addition to the breath carrying Prana throughout the body, a network of tiny receptors on the surface of the body receives and processes light, which also nurtures us. These tiny energy centers are called nadis and are said to number 72 000 to 3.5 million depending on the authors that you consult.

Yoga focuses primarily on three lines of energy that are also called nadis. These energy channels travel upward from the base chakra to the top chakra. Ida is recognized as the left channel and represents the feminine principles (similar to yin) such as white, cold, receptive and is associated with the moon. Pingala is the right, masculine channel (akin to yang), related to qualities such as red, hot, active and is associated with the sun. The center line unifies all the charkas from top to bottom and represents the integration of the Ida and Pingala.

When this center line of energy is awakened, it is described as the action of kundalini, a powerful force promoting transformation within the body and the mind. This kundalini awakening occurs through breath, initiation or the practice of the Asanas (yoga exercises) depending on the tradition. Practicing yoga exercises has been shown to have a profound positive impact on the health of meridians.

Ayurvedic Medicine is a complex and proven healing art. It relies on an extensive system of diagnosis of pathology and treatment that includes herbal medicine, massage and homeopathy. Practitioners classify people according to three basic types or constitutions: Vata, Pitta and Kapha and treat individuals according to their constitution.

THE GREEK SYSTEM

Early medicine in the west is based on the Greek system, usually linked with Hippocrates. It also is based on the notion of balance and equilibrium. Before Hippocrates' time another Greek, Anaximander, introduced the notion of the same



four elements that we find in Ayurvedic Medicine: water, earth, air and fire. Pythagoras introduced the concept of balance and opposition similar to the notion of yin and yang in the Chinese system. Hippocrates defined health as the equilibrium of four fluids within the body and Aristotle expanded on this concept to define four individual constitutional types:

- Choleric
- Sanguine
- Phlegmatic
- Melancholic.

This way of understanding health from the point of view of individual types and their unique needs was still prevalent until the 1930s. The emphasis was on the individual and the need for balance instead of focusing on the pathology.

INNER ECOLOGY

A common denominator of ancient and modern energy medicine is the idea that the body is an energy system that is constantly influenced by both our inner and outer environment.

Our inner environment is made up of survival instincts, thoughts, imagination, emotions and intentions. A cutting-edge science called psychoneuroimmunology sheds a great deal of light on how the body and mind interact. Neuropetides are protein molecules that are charged during brain activities and communicate to receptors throughout the body about our moods and how we are programmed to respond.

Bruce Lipton, a cellular biologist, explains in his book **The Biology of Beliefs** that we have been programmed to respond in certain ways based on the environment in the womb and in early childhood. He indicates that every cell has an antenna that receives energetic messages and responds to those messages according to its needs and basic programming. These 7 trillion cells work from a continuum of every emotion, from fear to love, and then respond accordingly. The higher the number of cells programmed with fear, the higher the likelihood that the organism, as a whole, will respond from a place of survival and lack thus creating a potential for physical and mental diseases. The higher the amount of cells programmed with love and peace, the more likely the organism will respond with openness and generosity. Learning how to overcome patterns of conditioning is the work of energetic medicine. It involves a body, mind and spirit approach based on inner peace, love and forgiveness.



OUTER ECOLOGY

Many aspects of the environment affect our global response and can affect the state of health and well-being: climate, electromagnetic fields, psychic fields, seismic energies and social, political, religious and professional atmospheres. Maintaining a healthy energetic field in such circumstances can be quite challenging.

Yoga, meditation, acupuncture and Qui Gong have shown that our physical, psychological and spiritual health is dependent on the sustained balance of our energy. In fact many physical and psychological conditions have been treated and cured by energetic means alone.

A large number of healing traditions have been built around the notion of subtle energy: acupuncture, polarity therapy, Reiki, aura balancing, Do-In, Qi Gong, psychic healing, laying on of hands and so on, and indeed all of those have produced miraculous results. Some of these techniques have made their way to the field of chiropractic and a growing number of practitioners are integrating these techniques into their practice.

Understanding subtle energy has also helped us develop comprehensive testing techniques that provide valuable information to practitioners. Some rely on neuromuscular feedback. Others use machines or computers to analyze subtle frequencies. Some of the same machines have been designed not only to diagnose but also to treat.

We're fortunate to have the benefits of both the ancient healing arts which have been fruitful for thousands of years and the newer technologically-based approaches that today's science can provide.

As you work with this book, don't forget about your energy system. It would be wise to complement what you will soon learn about natural remedies with one or more of these energetic approaches. For more information or resources about these approaches check the Internet or even better, look for people in your area who are more experienced in Natural Medicine and ask for referrals.



CHAPTER TWO: THE PHYSIOLOGICAL TERRAIN

A brilliant French scientist named Claude Bernard said, "Health is in the terrain." An obvious question is, "what did he mean by "the terrain?"

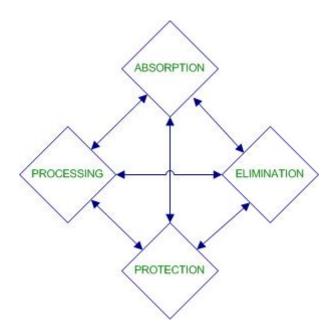
Claude Bernard's analogy was drawn from nature. In the same way that the earth's soil, minerals and other organic substances support the foundation for robust plant life, Bernard perceived the body's terrain as the foundation of good human health. He likened the systems within the body to the plants that grow on the earth's terrain. If the terrain of the human body is healthy, obviously the systems within it will do their job and the individual will flourish. In the same way that plants will not survive if the earth is depleted, not properly stirred, deficient in humidity, organic material or exposure to the sun, the human body will suffer if its overall terrain is out of balance. What survives in poor soil conditions are usually weeds; what surfaces in the body under poor conditions are imbalances or diseases.

Certain fundamental requirements must be met for your health to thrive and for all the vital functions of your body to be properly carried out. We call this essential foundation **the physiological or ecological terrain**. This terrain is the biological foundation that supports not only the ecology of physical health, it also supports psychological and spiritual health that enables expression and the ability to interact socially and share unique skills and talents.

While imbalances in the ecology of physical health impact the optimum functioning of the body, they also directly affect moods, relationships, and the ability to work. These often lead to the financial drains of medical and insurance bills which impact the price and quality of health care delivered both in the U.S. and throughout the world.

THE FOUR PILLARS OF HEALTH: THE FOUNDATION FOR A VIBRANT TERRAIN

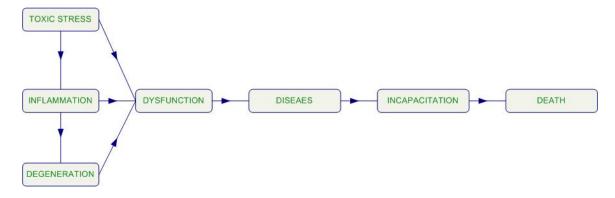
A healthy physiological terrain is predicated on the following four variables, which we refer to as The Four Pillars of Health.



- Absorption: The degree to which you receive and absorb the right nutrients in your body. There are 34 basic nutrients that the body needs to receive on a daily basis to maintain strength and balance. They include air, water, proteins, carbohydrates, vitamins, minerals, enzymes, amino acids, carotenoids and bioflavanoids.
- Metabolism or processing: The effectiveness with which the body processes these nutrients. All the nutrients we talked about above participate in multiple functions and are combined with others in thousands of ways.
- Elimination and detoxification: The degree to which the body eliminates what
 it does not need including the toxins absorbed in air, water and food. You
 also absorb a considerable amount of toxins through skin and mucous
 membranes.
- Protection or immunity: The degree to which the body protects itself against invaders as expressed through the integrity of the skin, the membranes of your lungs, digestive track, mucous membranes and your immune system.

In the same way that healthy soil in your garden leads to beautiful vegetation, a functional biological or physiological terrain leads to radiant, flourishing health. The condition of the Four Pillars of Health determine how well the environment, or terrain within you, functions. They operate at various levels of the body, including the cells, tissues, organs, physiological systems, and finally, the whole body. For this reason one of the primary purposes of this book will be to identify what negatively impacts the health of our terrain and how to restore it.

Any imbalance in the basic terrain manifests in disease, producing progressively serious manifestations:



EMOTIONAL TERRAIN

Similar variables also operate on an emotional or psychological level. It has taken awhile, but most everyone agrees that there is a legitimate mind/body connection. Indeed, the interplay between the physical and psychological is truly what determines the overriding health of physiological terrain. Without going into great depth, (which would truly be another book) here's a look at the four variables that determine the quality of emotional health, and that greatly contribute to the physiological terrain:

- Receptivity: This is based on trust in ones self and others.
- Resourcefulness: The ability to respond effectively to life challenges.
- Being present: This means letting go of negative experiences and choosing action and commitment over wishful thinking and fantasy.
- Staying on purpose: Maintaining the integrity of unique expression without getting caught up in all the demands and excessive expectations of others.

As you can see, these variables are the emotional equivalents of the Four Pillars of Health: receptivity equates to absorption; resourcefulness to processing; being present or letting go to elimination; and staying on purpose to protection.

The ease with which we live out these emotional qualities is related to the state of our physical health. Feeling physically bad profoundly affects personal effectiveness. Likewise, personal effectiveness is strongly impacted by the way you take care of your body. Again, the two have always been, and always will be deeply intertwined.



Let's now take a deeper look at what these Four Pillars of Health do to maintain a flourishing terrain, and how they relate to each other.

Absorption

Absorption is the process of receiving nutrients where they are needed. The food or supplements we ingest go through many transformations, and several steps are necessary to achieve the final outcome:

- First, mastication and the production of substances such as saliva, hydrochloric acid, bile, buffer salts and enzymes.
- Next, the nutrients penetrate the wall of the small intestine in a process called active transport and are received in the blood stream where they are sent to the liver for further detoxification and transformation.
- From there, blood delivers the nutrients to all the appropriate locations to support specific structures and functions.

Our bodies work diligently and with great sophistication to deliver these nutrients. Unlike most machines that function on a limited amount of fuels (water, gasoline, electricity, oil, and oxygen), the human body needs a great diversity of fuels, or nutrients, to maintain life, health and well being.

Apart from protein, carbohydrates, fat, water and air, the body also needs vitamins, minerals, bioflavonoids, carotenoids, enzymes, and Essential Fatty Acids (EFAs). These, in turn, are converted into various amino-acids, enzymes, fats, tissues, hormones, neurotransmitters and other substances essential for physical and mental functioning.

Imbalances caused by either a lack or excess of these basic nutrients result in a chain of negative reactions that can present unwelcome symptoms that we are all familiar with: poor digestion, nausea, body pains, low energy, low motivation, excessive eating, and more.

Because each function of the body needs a different set of nutritional supports, the best approach to making sure that nutrients are getting where they need to go is through proper nutrition, supplementation, exercise and rest.

That's easier said than done for most Americans. The quality of the air we breathe, and the food and water we ingest has decreased and the diet of many people has deteriorated. Traditional home-cooked meals are progressively replaced by processed food full of hydrogenised fats, refined flour or sugar, and synthetic



colorants and preservatives, only to be cooked in a microwave oven. The nutrients in these foods are minimized or depleted, so the absorption of them is too.

At the same time, the increase in toxins released in the environment is entering our bodies through our lungs, skin and by what we eat and drink. These multiple toxins displace nutrients at the cellular level and interfere with the other basic functions of metabolism, elimination, and protection. It is estimated that in addition to the ongoing release of heavy metal to which we will devote a chapter, there are over 10,000 new chemicals released into the environment yearly without any preliminary impact study. The good news is that basic detoxification and supplementation is often enough to prevent negative chain reactions and to restore health.

Metabolism or Processing

Metabolism is the process of transforming one thing into something else. This function takes place throughout the body. At the cellular level alone there are thousands of enzymatic actions and reactions every second.

In addition to the digestive process that occurs for absorption, the other main centers of processing are through the cells, liver, pancreas, endocrine glands and the neurological system. We go into greater detail about these processes later in the book.

Elimination or Detoxification

Elimination is the process of releasing from the body what it cannot use. This includes toxins and food, fluids, and air by-products. It involves complex operations to break down the toxins and bind them to fluids, filtering the impurity out of the blood and releasing the impurities through urine, feces, sweat and other bodily fluids. The main organs involved in elimination are the liver, large intestine, kidneys, cells, lymphatic systems and the skin and lungs.

Protection or Immunity

Our body's natural protection depends on the integrity of specific surface areas so as to prevent micro-organisms (germs) or other substances from penetrating where they do not belong. The main areas where these invaders penetrate are through the digestive tract, the respiratory tract, skin, eyes and mucous membranes of the urogenital tract. Protection is also dependent on immunity, a complex system of defenses built to defeat invading enemies and abnormal cell proliferation.



Overall protection is dependent on the health of the three other Pillars of Health: absorption, metabolism and elimination. More specifically, protection depends on the liver and lymphatic system. Fostering a clean, healthy, well nourished, well rested, and well-exercised body dramatically improves the degree of protection against internal and external invaders.

Immunity is also related to the emotional terrain. Recent research in psychoneuroimmunology reiterates the importance of our psychological health in relation to the immune system. The adrenal glands, situated just above the kidneys, are essential for managing stress, but they also play a major part in immune modulation. Long-term stress depresses the immune system. Sometimes people subjected to acute or long term stress want to give up and be done with it. This is also true of people who are depressed. In these instances, neurological stress engages the sympathetic nervous system that is associated with the fight or flight response. That response is very hard on the body. At the same time, laughter, joy, and happiness enhance the immune system by engaging the parasympathetic nervous system, which induces relaxation, tissue repair and increased immune protection.

Dysfunction in any one of The Four Pillars of Health automatically affects the other three and creates major disturbances in the foundation of our overall health. The effect of these basic dysfunctions promotes cellular and tissue damage that results in inflammation. The inflammation leads to degeneration and the combined effect of inflammation and degeneration progressively deteriorates health and wellbeing.

We are constantly assaulted by an array of environmental toxins as well as being negatively impacted by certain processed foods and the pharmaceutical products we use or have used in the past. A great number of individuals also operate on little sleep and exercise. They are also often dealing with very strong financial, relational, professional and social pressures. All of these influences dramatically disrupt our physiological and psychological terrain. With major deficiencies in our terrain, we cannot effectively cope with life challenges. Whether our physiological or psychological terrain is disrupted, the body's ability to bounce back against toxins or microbes is compromised, and this, consequently, throws everything off balance.

THE POWER OF HOMEOSTASIS AND ITS RELATIONSHIP TO THE TERRAIN

When the Four Pillars of Health are working well and the physiological terrain is intact, the body's natural ability to restore balance operates with ease. This is a process called Homeostasis. This is the most exciting and magical work of the body. It exhibits the natural ability to self correct, heal, detoxify, repair damaged tissue and bone, and eliminate bacteria, viruses, fungus and parasites and abnormal



cells. It also adjusts to temperature and various climatic conditions. It is constantly correcting damages and restoring balance. That incredible function is dependent on all our organs, glands and nerves, especially the adrenal glands which play a major role in modulating our response to physical and psychological challenges.

As you now know, the adrenals can impact immunity. But they also orchestrate most responses to physical and emotional stress. As such, they directly impact the brain, heart, respiratory and digestive systems, and reproductive functions. The glands are particularly sensitive to imbalances in the physiological terrain, and greatly affected by inflammation, imbalances in sugar metabolism and chronic psychological stress. Consequently we'll explore the causes and management of inflammation, the regulation of sugar and its relationship to weight and the management of psychological stress.

The French scientist, Claude Bernard who introduced us to the idea of body as terrain, felt so strongly about how the physiological terrain is responsible for the prevention of disease, that he swallowed a culture of smallpox in front of his amazed colleagues of the French Academy of Science. There was no damage to his health. He did this to demonstrate that germs were not the issue we should focus on; rather their effects were dependent on the general health of the body.

Meanwhile, another famous French scientist, Claude Pasteur, posited the competing point of view: that we should invest our research in and maintain health by defeating germs. Mr. Pasteur's contribution was a worthy one, as he developed the vaccine for rabies. But if the focus of health science had referred to the terrain as suggested by Dr. Bernard, medicine today would primarily be concerned with maintaining a healthy physiological environment. It would emphasize preventing diseases by enabling us to maintain health rather than spending millions of dollars fighting diseases and managing ill health.

That perspective is not lost, however. Managing your physiological terrain is within your reach, and learning to keep it vital is in the palm of your hand.



CHAPTER THREE: UNDERSTANDING INFLAMMATION AND HOW TO TREAT IT

Earlier, we talked about how inflammation is the cause of most imbalances. Although there are still mysteries surrounding the reason for certain occurrences of inflammation, we can effectively treat the symptoms, including pain, with a variety of natural remedies. First, let's take a deeper look at what inflammation is and what it is trying to tell us.

Whenever you have a cut, an injury, or an attack from a microorganism, the body mounts a quick response at the site of the trauma to destroy the microbes or eliminate the damaged or infected tissues. Part of that emergency response appears as inflammation and is the body's first line of defense. This aggressive response usually shuts down rapidly—as soon as it does its job—and is followed by a process of regeneration.

Dr. Emad El-Omar, a leading gastroenterologist at the Institute of Medical Sciences at the University of Aberdeen in the United Kingdom states that, "Chronic inflammation is the source of all evil." This is a bold statement which encourages us to examine the main causes of inflammation and how we can approach them more responsibly.

In certain cases, however, inflammatory reaction can maintain itself with no apparent cause. This is often termed **an autoimmune disorder**. An increasing number of health professionals recognize that autoimmune diseases are a result of the body attacking its own tissues to dislodge an invader within the tissue, such as fungus, toxicity or other pathogens. Generally, these are undetectable through standard testing procedures. This is your body's "frustration" equal to how we may become frustrated by a situation that we do not know how to handle. The root cause of the emotional frustration may be forgotten or buried in our subconscious mind, but we still maintain an ongoing, or chronic, pattern of emotional and behavioral reactivity. In essence, your body's ongoing frustration shows up as chronic inflammation.

Treating chronic inflammation is one of the first strategies of a natural approach to health in the same way that inflammation is the first line of defense in the body. That said, we understand that in addition to causing long term degenerative damage, inflammation is frequently the cause of acute or chronic pain and the foundation of many degenerative disorders such as cardiovascular diseases, diabetes, rheumatisms, and asthma to name just a few. It is also associated with chronic debilitating disorders such as fibromyalgia and chronic fatigue syndrome.



There are two types of drugs used in western medicine to treat inflammation: steroidal and non-steroidal anti-inflammatory drugs, referred to as NSAIDs. These drugs are actually treating the inflammation and in some cases are essential to maintain life. What they often do not address, however, are the underlying causes of the imbalance.

Steroidal drugs use synthetic substances similar to cortisol, the antiinflammatory hormone produced in the adrenals. Their prolonged use is responsible for causing an array of side effects throughout the body.

NSAIDs attack specific substances associated with inflammation called Cox 2 and Leukotrienes. Simultaneously they also destroy another substance called Cox 1, which is responsible for maintaining the surface integrity of the digestive tract and kidneys. Long term or frequent use of any traditional anti-inflammatory drugs can have serious or catastrophic consequences in the body depending on your level of sensitivity. Aspirin has been linked to serious bleeding in the gut and Tylenol has been linked to serious liver degeneration while ibuprofen is hard on the kidney.

Our approach to treating pain is to evaluate the physiological terrain and treat the source of the problem, obviously a more coherent approach than treating only symptoms. But, it does take time and it can even increase discomfort because eradicating toxicity or microbial and fungal infection through natural means can create a healing crisis which can last several days and increase many symptoms.

Fortunately, there are a host of wonderful and effective natural antiinflammatory products that can regulate the inflammatory processes and alleviate pain, without all the side effects.

In an article published on Prevention.com, Dr. Andrew Weil, MD, a leading proponent of complementary therapies, recommended Zyflamend™, an herbal formulation containing most major anti-inflammatory herbs, as a way to support a healthy inflammation response. Dr. Weil stated that: "The hottest topic in medicine these days is inflammation. The most studied herbs are ginger and turmeric. You could use ginger and turmeric in cooking, but it would mean consuming a lot of both herbs on a daily basis. That's not practical for most of us. So I usually recommend using them as supplements. A good supplement to try is Zyflamend. It combines ginger and turmeric with other herbs and gives good results."

Certain herbs have been extensively researched and are included in international medical databases as effective treatments for inflammation. They are time-tested herbs, that, when properly extracted and blended in the correct proportions may safely and significantly support a healthy inflammation response.



- Holy Basil (Ocimum sanctum): contains the powerful ursolic acid, which significantly enhances detoxification and helps support the inflammation response.
- Turmeric: Unique curcumin phytonutrient complex, naturally works synergistically with green tea, significantly multiplying the healthy response to inflammation supported by green tea polyphenols.
- Ginger: Supercritical extract offers numerous anti-aging constituents.
- Green Tea: Proceedings of the National Academy of Sciences report green tea polyphenols contain 51 phytonutrients that support a healthy inflammatory response.
- Rosemary: Dual extracts offer highly concentrated, full spectrum detoxification.
- Hu Zhang (Polygonum cuspidatum): Richest known resveratrol source, shown scientifically to support a healthy inflammation response.
- Chinese Goldthread and Barberry: Unique berberine phytonutrient complex that naturally supports the inflammation response system.
- Oregano: Source of large number of compounds (31) that promote a healthy inflammatory response, according to USDA database.
- Scutellaria: Unique baicalin phytonutrient complex that naturally supports healthy inflammatory responses.

For more information about these herbs, their specific active ingredients and healing action, check: http://www.herbnet.com/Herb%20Uses_AB.htm

Each of these herbs is included in the Zyflamend formula in the right proportions. It is available through the New Chapter website, or at many health food stores. It is totally safe, and up to three capsules can be taken two to three times per day.

Many people have also had powerful results by using these herbs singly rather than in combination. Most of these herbs are available from your local health food store in various combinations and concentrations.

Another herb that has received extensive scientific attention is Boswellia. Unlike the Tumeric in Zyflamend that acts by restricting the production of COX 2, Boswellia targets another culprit of inflammation called leukotrienes. Leukotrienes



are associated with histamine production often experienced with allergic reactions. For this reason, Boswellia is particularly effective for allergic reactions in the airways, the digestive tract and the skin.

Finding a potent enough formula at the health food store is another matter. The active ingredient in Boswellia is called AKBA, and most of the products in health food stores are standardized with only 3% AKBA. This is way too low to have any significant impact. True Botanica offers a powerful Boswellia with the AKBA standardized at over 90 %. The name of the product is Boswellia Forte.

Herbs aren't the only natural remedies that can help. Products that contain protease and serrapaptase are all excellent choices for calming inflammation. Time tested sulfur compounds like glucosamine, chondrointin, and MSM can be very effective at alleviating joint pain and stimulating detoxification pathways. They can be combined with cetyl myristoleate and sea cucumber, products which have been shown to inhibit arthritic and rheumatoid conditions.

Serrapeptase

Serrapeptase is a proteolytic enzyme isolated from the microorganism Serratia E15. This enzyme is naturally present in the silkworm intestine and is processed commercially today through fermentation. This immunologically active enzyme reveals powerful anti-inflammatory effects. This enzyme digests (dissolves) non-living tissue, blood clots, cysts, and arterial plaque and inflammation in al forms. It has no known side effects. Many people take very high doses to speed-up the relief, e.g. in sports injuries in which case dosage can be as high as 30 per day with no side affects whatsoever except a faster recovery. It is even safe for children of 2 years+ for a wide range of conditions: (asthma, lung problems, arthritis, etc.).

Serrapeptase is used for the following:

- Varicose veins and other circulatory problems
- Pain problems such as, arthritis, joints and muscle pains and even MS
- Lung diseases such as emphysema, asthma, bronchitis and bronchiectasis
- Sinus and other ENT (ear, nose and throat) problems
- Post-operative healing, lesions and cysts (breast, ovarian, etc.)
- Arterial plaque, DVT (Deep-Venous Thrombosis, good for travelers) and blood clots



- Migraines (vascular)
- Enlarged prostate

Serrapeptase can be obtained from Mountain States Health Products under the name Serraflazyme.



Formulas for Inflammation

Following is a list of good, safe and effective products that can ease the pain and discomfort caused by inflammation: Zyflamend: a combination herbal remedy produced by New Chapter and available in all major health food stores. All the products contained in this formula and mentioned above can be found individually in health food stores or on the Internet, and have profound anti-inflammatory effects

Boswellia: produced under the name Boswellia Forte by True Botanica; the recommended dosage is 1 to 3 capsules daily. Boswellia is also available in health food stores, usually at a much lower concentration.

Wobenzyme: This is a proteolytic enzyme formula that contains trypsin, chemotrypsin and bromelain. Available on the Internet at iherb.com or in many health food stores: the recommended dosage is 3 tablets two to three times daily at least 2 hours before or after meals.

Nutrizyme: Also contains protease, with the same formula as Wobenzyme. This is only available through your natural health-care practitioner who can order it from American Nutraceudicals. The recommended dosage is 2 to 3 tablets, at least 2 hours before or after meals.

Zyflamend: This serrapeptase, available through Mountain Health Products, can be taken in large quantities up to 30 capsules per day for injury. Otherwise, take 3 capsules two to four times daily.

Oxicell fights inflammation on the cellular level. It is a transdermal combination of glutathione and super oxide dismutase. These two powerful antioxidants work within the cells to protect them from the free radical damage resulting from cell metabolism. This product is available from APEX. The recommended dosage is ½ teaspoon, two times daily rubbed on the site of the inflammation or on some fatty tissue.

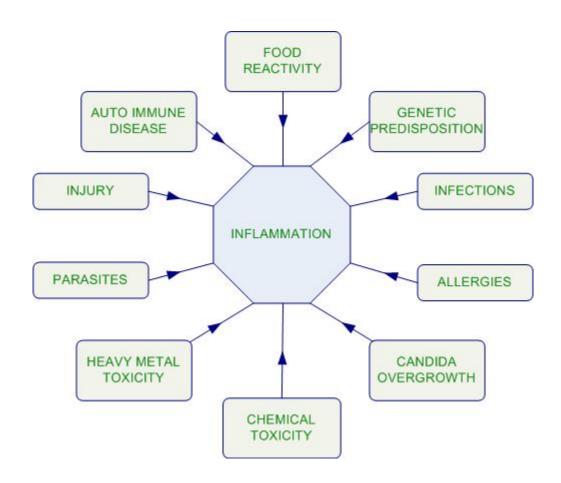
None of these products are designed as a substitute for a deeper treatment of the core issues, nor are they a substitute for medical treatment for serious inflammatory conditions. For more information about the various companies mentioned above see the Appendix.

THE MANY CAUSES OF INFLAMMATION

Obviously, when we stub a toe and it swells up, gets red and throbs, there's no mystery about why it's inflamed. If the root causes of all the inflammation we experience were that clear, writing this chapter would be unnecessary. The reality is that inflammation presents itself in our bodies in many different ways, often bewildering the one with symptoms, and causing discomfort or pain.

Medical doctors and holistic practitioners tend to take significantly different views when it comes to understanding and treating the more vexing cases of inflammation. Again, your general practitioner would likely prescribe a drug to relinquish the pain. But we're going to explore why the inflammation may be occurring at all, which could actually heal what ails you.

The main sources of chronic inflammation are shown below.





Each of these causes can show up as a symptom in the body in a variety of different ways. One of the most common manifestations is an inflamed, protruding or aching gut. But these conditions can also cause pain in the joints, the muscles, nerves and other tissues, organs, and the vascular and lymphatic systems. It can also produce headaches, fatigue and depression, asthma and skin rashes or eczema.

INFLAMED OR IRRITATED DIGESTIVE TRACTS

Specialists who have done extensive studies in glandular (endocrine) research say the primary cause of glandular disequilibrium comes from inflammation of the digestive tract. This inflammation goes under the name Irritable Bowel Syndrome (IBS) and Gastro Intestinal Reflux Disease (GIRD). Approximately 60% of the population suffers from these disturbances.

Studies have also shown that four food groups are the primary culprit for these inflammatory conditions.

- Grains, particularly those high in gluten, including wheat, oat, barley, rye, buckwheat, bulgur, etc.
- Milk products and particularly cow's milk
- Eggs and all food containing eggs, particularly the egg whites which are high in albumin.
- Soy and soy products, contrary to convincing Japanese advertising campaigns, are not the ideal foods. Soy inhibits vitamin B absorption, enhances low thyroid levels, and is a common cause of allergies for approximately 25% of the population. Highly fermented soy, soy isoflavone, and phospholipids derived from soy usually do not produce this reaction.
- Other food sensitivities

Even though fewer people are sensitive to these foods, there are a significant number of people who also react to peanuts or other nuts; shellfish or other fish; tomatoes; peppers; eggplant, citrus, strawberries; and cucumbers.

It is not that any of these foods are bad. It's simply that a high proportion of the population is reactive to one or more of them.

There are many common signs that suggest an allergic type of reaction to specific foods. The most common presentations include the following.



- Cramping
- Bloating
- Diarrhea
- Gas
- Irregular bowel movements
- Unusually smelly stool
- Constipation
- Head aches
- Rashes
- Eczema
- Various aches and pains
- Frequent undigested food particles in stool
- Upper respiratory discomfort
- Watery eyes

In addition, chronic pains in the pit of the stomach and acid reflux are often related to food reactivity. This also includes a type of bacterial infection called H-Pylori, which we cover in Chapter Thirteen. Sensitivity to wheat has been associated with serious impact to the central and peripheral nervous system with symptoms of extreme neuropathy and mental illnesses. The clinical form of this disorder is called Celiac Disease and is frequently found in infants, but a large segment of the population suffer from sub-clinical Celiac disorders. Food reactivity can be rapid and in some cases instantaneous. In other cases it can be delayed up to several days or weeks. The effect can last for weeks or even months!

The good news is that there is a simple salivary test that can determine reactivity to the four most commonly aggravating foods: grains, milk, eggs and soy. The test will only work if you are still consuming the products. If you have been off of them for a while, the test will be negative.



There are two major reasons why it's a good idea to be tested. The first is that you may not know which specific food sensitivity you have and which food to avoid or desensitize. The other is that even though you have many or some of these symptoms, it might not be food sensitivity that's causing the problem. Getting the test will help establish the source. Later in this book we will cover some of the other causes of gut inflammation such as Candida and parasites, both of which may exhibit similar symptoms. We'll provide a list of natural strategies to take care of these issues as well.

Food Reactivity Test

The simple food reactivity test for wheat, milk, eggs and soy is a salivary test available through Diagnos-Tech Laboratory. It can only be ordered by a health-care practitioner. The price of the test is around \$50.00.

The other food triggers can be tested as part of a comprehensive food reactivity panel offered by Genova Diagnostics Lab. It is a serum test that requires drawing blood. If your practitioner is not familiar with this laboratory, he or she can check their services on the Internet. Your practitioner can also work with other laboratories performing identical or similar tests.

Another technique to determine food sensitivity is bio-resonance testing. This approach identifies the level and location of the reactivity in your body using either a type of feedback instrument or through muscle testing. Many natural health care practitioners do these or similar tests through biofeedback machines or through muscle testing.

If you don't want to get a test and prefer to pursue this on your own, you will need to eliminate all the potentially suspicious foods for three weeks. Then, reintroduce them one at a time every three days and observe how you feel. It takes discipline, but it is frequently very effective. Once the irritating food or foods have been identified, eliminate them from your diet. You will be amazed at the speed at which some of your symptoms will disappear. I have had clients who, within three days, went from being totally dysfunctional to fully functioning. This is a great demonstration of why it's important to stop consuming all the foods that you are sensitive to!



If you do not want to stay off the substances that cause a reaction in your body, try going through a desensitizing process. There are various approaches, both medical and non medical: acupuncture, chiropractic, homeopathic, and the Nabudripad Allergy Elimination Technique (NAET).

The process we use integrates many approaches including allergy desensitization, functional homeopathy, homeopathic pheonolics, and psychoenergetic clearing. To learn more about these techniques, see Chapter Twelve regarding allergies, or work with a natural health-care practitioner who provides these services.

It is possible that you could be reactive to a food and not experience any of the symptoms. Even though you might not have any clue that something is wrong in the gut, you might still have all the secondary effects of chronic digestive tract inflammation such as fatigue, low libido and diminished motivation. Our next chapter will explore the vast impact chronic inflammation can have on our well being.



CHAPTER FOUR: ADRENAL GLANDS – THE CORNERSTONE OF HEALTH

In Chapter Three you learned that inflammation is the body's first line of defense to fight off injury, infection or other types of physical assaults. What you will now understand is that chronic inflammation, as presented by chronic pain, is not only uncomfortable, it is also very detrimental to your health.

CORTISOL

Chronic inflammation produces elevated levels of cortisol, a natural antiinflammatory hormone. Cortisol is created from important endocrine glands called the adrenals. Elevated amounts of cortisol is necessary to relieve inflammation, but if the inflammation is chronic, lasting for months or years, the consequences of the elevated cortisol can wreak havoc on the rest of your body.

In addition to creating cortisol, the adrenal glands also manufacture sex hormones and other stress-related hormones such as epinephrine and nor-epinephrine. These hormones share a precursor with cortisol called pregnenolone, which is derived from cholesterol and regulated by EFAs known as omega 3 and omega 6. The main precursor to the sex hormone is DHEA, sometimes called the youth hormone. One of the big problems with chronic inflammation is that when cortisol is over-produced, it robs the DHEA, which then becomes under-produced. This can disrupt reproductive cycles in both males and females (of any age) and can become a major source of health problems in people over fifty.

Furthermore, elevated cortisol, if maintained for an extensive period of time, will lead to adrenal exhaustion and the inability of the adrenals to continue producing the level of hormone necessary to maintain balance and health. Typical symptoms associated with low cortisol are fatigue, over-reacting to both physical and psychological situations, the inability to respond to stress and inflammation, and disruption of immune functions. Exceptionally low as well as exceptionally high cortisol is a sign of adrenal dysfunction.

THE MANY MANIFESTATIONS OF ADRENAL DYSFUNCTION

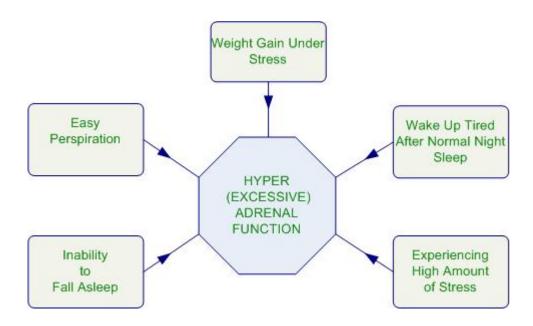
Adrenal dysfunction is responsible for a long list of maladies, including reproductive difficulties. Fortunately, all of them can be treated with naturopathic strategies.

As with inflammation, very often adrenal imbalances are due to food reactivity. If you know food is the source of chronic inflammation, then you can get to the root of the adrenal upset. Treating food sensitivity will not necessarily relieve all health issues, but it would be a very smart first step.

Let's start by looking at the common symptoms of **hypo**, **or low**, **adrenal function**, shown in the diagram below.



Hyper or excessive adrenal function is associated with the factors shown in the diagram below.



If you only have one or two of these symptoms, it is not necessarily an indication of adrenal dysfunction. If, however, you experience a combination of these symptoms, it's a good idea to get tested to determine whether you are at risk of serious health problems.

Some of the possible **long-term consequences** of chronic inflammation and ongoing adrenal dysfunctions include the following.

- Blood sugar disorders, particularly insulin resistance (syndrome X) and hypoglycemia. These can lead to late onset diabetes, increased inflammation, chronic weight gain and cardio-vascular disorders.
- Thyroid dysfunction, especially of T3 (hypothyroid). This can lead to chronic cold extremities, low energy and weight gain even on a low-sugar, lowstarch, and fruit diet.
- Anterior pituitary hypo function causing lack of menstruation, reduced or absent sex drive, and weight gain around hips and waist.
- Impaired liver detoxification which can create general toxicity, heavy metal toxicity, bad breath, bloating, constipation, acne and skin disorders, chronic head aches, blurred vision, sensitivity to light, and hypersensitivity to medications and chemicals.



- Leaky gut syndrome. Increased permeability of the gut leads to chronic toxicity and opportunistic infection in the gut and in the rest of the body causing further aggravation of the adrenal dysfunction and more chronic inflammation.
- Gastric and duodenal ulcers. Elevated cortisol induces thinning of the lining of the stomach and the duodenum and thus can increase the risk of ulceration.
- Decreased bone density leading to calcium mal-absorption and increased risk of bone fracture.
- Depression. There are many different pathways affected by chronic stress that lead to depression. It can be associated with sugar metabolic imbalance, thyroid malfunction or direct impact on neurotransmitters.
- Insomnia. Hyper cortisol leads to difficulty falling asleep while hypo cortisol leads to difficulty staying asleep.
- Neurodegenerative disorders such as MS, Alzheimer and Huntington's diseases.
- Cardiovascular Diseases. Elevated cortisol levels, even in small quantities, have been associated with increased risk for cardio vascular disease. This is due to the effect of cortisol on high blood pressure, insulin resistance, obesity and fat metabolism.

TESTING FOR ADRENAL DYSFUNCTIONS

Adrenal dysfunction is the result of long-term stress and requires immediate attention. The good news is that all the "bad" symptoms provide necessary feedback for us that we probably do have an adrenal imbalance. The first step to correcting the problem involves knowing we have the imbalance. To know for sure, a natural health-care provider can order a simple salivary test called ASI. It measures cortisol throughout the day. That said, it is important to note that because cortisol levels fluctuate throughout the day, hyper and hypo function can be present simultaneously. Your health-care provider will know how to interpret test results so that the information is useful.

The ASI test also measures DHEA; insulin on an empty stomach and after lunch; progesterone; Sig A, an index of salivary immune protection; and giadin, an index of food reactivity to grain. If necessary, other complementary tests can be ordered to evaluate the thyroid and the reproductive functions for males or females.

Getting Tested for Adrenal Dysfunction

To obtain an ASI salivary test that can reveal adrenal imbalances, ask a health-care professional to contact Diagnos-Tech. There are other labs conducting similar tests. This is just the pioneer in salivary testing and the one I use. In addition, they have an excellent tech support team available to practitioners.

It's fairly common to attribute adrenal dysfunction to external sources of stress, but little attention has been placed on the very simple and constant source of intense stress going on inside the body as a result of food sensitivity. But food reactivity is not always the reason for the upset. The other main sources of chronic inflammation include the following causes, already presented in our diagram in Chapter Three: Understanding Inflammation and How to Treat It: Candida Overgrowth, Toxicity, Parasites, Allergies, Infections, Genetic Imbalances, and Auto Immune Diseases.

While all these stressors, in various combinations, play into the problem, remember that adrenal dysfunction is usually secondary to inflammation, sugar metabolic disorders, major traumas or chronic psychological stress.

TREATING ADRENAL IMBALANCES

There are a good selection of nutrients that are beneficial to the adrenals, but before we talk about them, let's look at what makes things worse and what you need to avoid.

When the adrenals are depressed, you feel sluggish. Millions of people turn to caffeine when they need an energy boost. To our psyche and our taste buds, that may fit the bill, but when it comes to optimum health—and especially to reestablishing proper function of adrenal glands—it's a seriously poor choice.

Let me tell you a little story. I was taking a workshop given by the Institute of Bio-Terrain Sciences on a series of adrenal tests that can easily be performed in a doctor's office. I registered for the test at the last minute and did not receive preparatory instructions. Unbeknownst to me, the instructions said to stop caffeine for at least three days before the test. I continued drinking coffee.



I took the test and the results showed high oxidative stress (cellular damage) and depressed adrenal glands. When I realized that I was supposed to stop caffeine prior to the test, out of curiosity, I did the test again four days after stopping coffee. The new test results amazed me. My adrenal glands were back to the normal range and my oxidative stress had decreased by two thirds. So, if you suffer from any adrenal dysfunction, before you add any supplements to your health regimen, do yourself a favor and stop caffeinated drinks first. That step alone could make a world of difference.

The other foods that people tend to abuse when their energy is low are sugar, refined flour, and other carbohydrates. These foods automatically increase insulin in the body, and over time, since they are high in glucose, lead to insulin resistance, obesity and increased cardiac risks. On top of that, insulin tends to cause inflammation and contribute to adrenal stress.

Caffeine and sugar or starches are the worst enemies of your adrenal glands. If you have to have coffee, limit it to one cup in the morning and drink several glass of clear water at the same time. As for sugar and refined flour, indulge in them only on special occasions. Clearly, choosing to stay away from these foods as a new habit will greatly help regulate adrenal function and dramatically improve your general health.

Nature is wise to some of our bad habits and the wide range of stressors in our lives, and so, offers a good menu of supplements that can help with adrenal gland dysfunctions.

Supplements to Achieve Adrenal Balance

The following list of supplements is available at your local health food store.

A good B complex, two or three tablets daily, but not at night

Vitamin C, 2000 to 3000 mg with bioflavanoids

Herbal solutions, including Licorice root extract, $\frac{1}{2}$ teaspoon two times daily or FoTi 500mg two times daily.

Be aware that Licorice root should not be used by individuals suffering from high blood pressure. These homeopathic formulas can be ordered by a practitioner.

Adrenal Support is a very gentle homeopathic from Deseret Biological. It can be used no matter what your condition.

Apex Energetics also offers two products: one for adrenal excess called AdrenaCalm and one for Adrenal deficiency called Adrenastim.



Feeling unenthused and enervated, enduring daily headaches, gaining weight when you try so hard to maintain yourself in optimal shape—and all the other symptoms of adrenal imbalance—are not normal, should not be tolerated, and do nothing to help you feel good about life. If you've been to a medical doctor who wasn't able to help, or told you the symptoms are due to advancing age, give yourself another chance at vitality and test for adrenal dysfunction. Investing in the quality of the rest of your life is worth the effort.



CHAPTER FIVE: SUGAR METABOLISM, DIABETES AND OBESITY

If chronic inflammation and the subsequent release of excess cortisol are not issues that plague you, be grateful. But be mindful that there are other areas that we can explore to make certain that your physiological terrain is in the best possible condition. Deregulated sugar metabolism is one of them.

There are several imbalances or diseases related to poor sugar metabolism.

- Hypoglycemia: a condition of abnormally low blood sugar.
- Diabetes or Hyperglycemia: a serious excess of blood sugar because the body cannot properly use, or lacks, insulin.
- Insulin Resistance: the cells of the body become resistant to the action of insulin.
- Obesity: caused by the cellular resistance to insulin and the conversion of carbohydrates into fat.

To understand how these conditions develop, let's take a closer look at how sugar works inside your body.

GLUCOSE AND THE GLYCEMIC INDEX

The body needs sugar to produce energy - but we're not talking about the stuff that occupies candy and soda pop. The sugar produced within us is called glucose, and it's the main source of energy we rely on. Glucose is a simple sugar that cannot be broken down, and is normally obtained by consuming carbohydrates from grains, vegetables and fruits, sweets, starch and alcohol. It is also produced after protein and fat break down. Essentially, all of these foods break down into glucose. See the sidebar to learn more about the glycemic index, which refers to the amount of sugar derived from specific foods.

Glycemic Index and Glycemic Load

The glycemic index measures the speed at which a certain food is converted into glucose in the body, triggering an insulin reaction. The **glycemic load** is the actual amount of carbohydrates contained in a specific unit of food. The glycemic index is very important in relation to hypoglycemia because foods with an elevated glycemic index burns very fast and do not have an energy sustaining effect. It also tends to trigger a very strong insulin reaction. The insulin released may stay in the body for a long time and inhibit the release of glucagons, another hormone produced in the pancreas that mobilizes energy from glycogen and triglycerides.

The glycemic load actually measures how much blood sugar (glucose) is produced by a certain volume of food. As the cells become saturated with glucose they form resistance to the insulin that transports the glucose into the cells. The more glucose is maintained in the blood stream, the more insulin is produced and the more resistance is built to insulin. When this happens the glucose is converted into triglycerides and converted into fat. Therefore, no fat or glycogen is converted into energy.

The measurement for low glycemic index is below 55, medium glycemic index is measured 56 to 70; and above 70 is high glycemic index. The measurement for low glycemic load is below 10; 11 to 19 is medium; and above 20 is high glycemic load.

As the amount of glucose rises in the blood, a certain area of the pancreas called the Islet of Langerhorn becomes activated and produces insulin. Insulin is a natural hormone that helps carry the glucose from the bloodstream to the cells of the muscles, the fat and other tissues throughout the body. Glucose, which is made of carbon, hydrogen and oxygen, is broken down and converted into adenosine triphosphate, which is the main pathway that delivers energy to the cells.

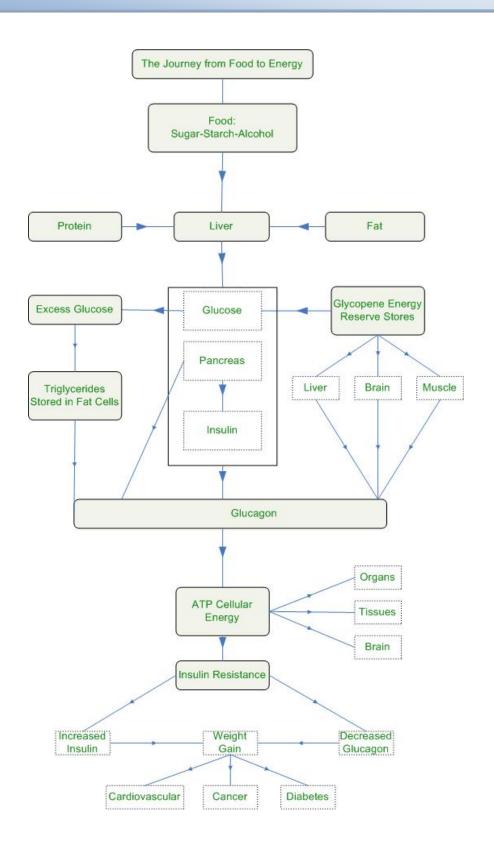
At the same time that glucose is carried into the cells for energy consumption, a certain amount is converted into glycogen and stored in the liver, muscles, and the brain. The stored glycogen acts as an emergency reserve in the event there is a sudden need for glucose or due to normal depletion of blood sugar between meals.

If there is more blood glucose than what is needed for cell activity or for glycogen reserves, the glucose is converted into triglycerides. Triglycerides are the major form of fat stored in the body. About 40% of glucose is converted into triglycerides, and 98% of the body's reserve of energy is stored in fat. Triglycerides



are reconverted into glucose when the blood sugar and the glycogen run low. This conversion, which takes place in the liver, is activated by another hormone called glucagon.

Glucagon is a hormone produced in the pancreas which is activated when blood sugar is low or when extra energy is needed to respond to a stressful situation. It helps maintain the level of blood sugar in the blood.



The Journey from Food to Energy

- 1. The food you eat breaks down and turns into glucose.
- 2. Glucose rises in the blood, which triggers a response in the pancreas, particularly in the Islets of Langerhorn which produce the insulin necessary to drive the glucose into the cells.
- 3. Insulin carries glucose from the bloodstream to cells in the organs, muscles, fat and tissue.
- 4. Glucose breaks down and turns into adenosine triphospate, which delivers energy to cells.
- 5. Some glucose turns into glycogen and is stored in the liver, muscles and brain as an emergency reserve, especially if blood sugar is depleted between meals.
- 6. Glycogen saturation leads to the conversion of glucose into triglycerides, a type of fat absorbed in our fat cells.
- 7. Triglycerides are sometimes reconverted into glucose when blood sugar or glycogen runs low. This is caused by a hormone called glucagon, also produced by the pancreas.
- 8. Whenever insulin is high, glucagon is low and the conversion of fat reserves into energy is inhibited.

Too much blood sugar turns into fat. This explains why eating lots of carbohydrates results in weight gain. Furthermore, fat tissue tends to store water, adding water weight. Of course there may be other causes for excess glucose in the blood stream, such as lack of production of insulin or insulin resistance, discussed later in this chapter.

For now, let's look at one of the conditions caused by an imbalance in sugar metabolism.

HYPOGLYCEMIA

As mentioned earlier, hypoglycemia is abnormally low blood sugar. It occurs when the level of glucose and the level of insulin are out of balance. This can



happen from eating refined carbohydrates or food with a high glycemic index (foods that are high in sugar content). This sudden onslaught of blood sugar triggers an over-reaction of the pancreas which floods the body with insulin in response to a perceived threat. The excess insulin produces a spike in energy which is short lived and blocks the sustaining effect of glucagons.

Glucagon signals the liver to release some of the glucose stored as glycogen. It also signals the liver, if necessary, to synthesize more glucose out of fat, amino acids or protein. Glucagon is inhibited by insulin, and excess insulin has a tendency to stay in the blood for an extended period of time. Because of this, when a large amount of insulin is released into the blood stream it creates a disequilibrium in sugar regulation. This causes the spike in energy experienced by many people throughout the day.

The resulting low blood sugar, or hypoglycemia, manifests as fatigue, dizziness, or mental fog. There can be other causes of hypoglycemia, such as eating too little, delaying or skipping meals, over-exercising, eating too few carbohydrates, drinking alcohol on an empty stomach, and deficiency of glucagon production.

Treating Hypoglycemia

Hypoglycemia is easy to treat. Follow these steps and there should be relief from the symptoms:

Eat regularly. Some people recommend frequently eating several small meals that incorporate protein, vegetables, nuts and seeds.

Start the morning with protein.

Avoid excessive exercise.

If deficient, take 250mcg of chromium picolinate in the morning and early afternoon.

Avoid foods with high glycemic index because they drive the insulin levels in the blood high, but do not have much sustaining power. The most typical of these foods are sugar, fruit juice, dried fruit, cookies, ice cream, and alcohol. The sugar high is usually followed by a deep low and the insulin spike does not allow the body to regulate its energy by utilizing the energy stored into glycogen and triglycerides.

Use herbs that regulate sugar metabolism. For example, rosemary: 500 mg of dried leaves and twigs daily.

For comprehensive information about glycemic index and glycemic load check http://www.mendosa.com/gilists.htm. For a more simplified version, go to http://www.mendosa.com/common foods.htm.

HYPERGLYCEMIA AND DIABETES

Hyperglycemia is the technical term for when the blood contains high levels of glucose. High blood glucose occurs when the body lacks insulin, manifesting as diabetes, or when the body cannot properly use the insulin, referred to as insulin resistance. There are two types of diabetes, Type I and Type II.

Type I diabetes, or early onset diabetes, is the inability of the pancreas to produce any or enough insulin. It often starts in early childhood, but can also be sparked later in life by an infection of the pancreas which causes permanent tissue damage.



This condition is treated by injecting insulin into the body on a regular basis. My experience working with people with Type I diabetes is that maintaining an optimum biological terrain is critical for decreasing the risks associated with the disease. This includes paying close attention to inflammation as well as the following:

- Supporting the adrenals,
- Eliminating insulin resistance so that the body can be regulated with the minimum amount of insulin necessary,
- Clearing toxicity,
- Eliminating excess Candida,
- Eliminating allergies, and
- Supporting absorption of all the basic nutrients.

Type II, or late onset diabetes, may be related to a genetic predisposition or may be the result of poor nutrition and lack of proper physical exercise. It used to be found primarily in people over age 50. Unfortunately, in the past ten years, Type II diabetes has shown up in an increasing number of overweight young people who have sedentary lifestyles and consume large amounts of junk food high in sugar, starch and hydrogenised fat.

One of the main factors leading to this type of diabetes is insulin resistance. Cells lose their ability to absorb insulin and blood glucose. As you may remember, glucose cannot be absorbed in the cells without the presence of insulin. When sugar cannot be absorbed by the cells, sugar spikes in the blood and sets off major inflammation throughout the body. There then follows a cascade of unwanted consequences such as obesity, cardiovascular disease, neuropathy and blindness.

Treating Type II Diabetes

Type II diabetes can usually be reversed through diet, lifestyle changes and supplements. Be diligent with the following steps that will boost your physiological terrain and make way for balanced health:

Manage your stress. See Chapter Sixteen for guidelines on stress.

Manage insulin resistance through diet and exercise, discussed below. Use phyto insulin herbs such as Banaba, Gymnema Sylvestre, and Chinese Bitter Melon, either singly or in combination. These are easily available in health food stores or the Internet. Several combination remedies combining these herbs and others are available from health food stores or from your health care practitioner. Apex carries an excellent formula for Insulin Resistance called Glysen, and one for Type II diabetes called Protoglysen. Physiologics has an excellent formula called Diabest II.

Support the adrenals and balance cortisol by eliminating the major causes of inflammation.

Support the pancreas with Alpha Lipoic Acid available from health food stores or your health care practitioner. A reasonable maintenance dosage is 400 mg..

INSULIN RESISTANCE

Insulin resistance is a condition whereby the cells of the body become resistant to the action of the insulin. Since the normal cellular response to insulin is reduced, higher levels of insulin are needed so that it can have an effect.

The main causes of insulin resistance include the following:

• Genetic predisposition. There seems to be a strong genetic vulnerability to this condition, but if it is identified and treated early it can definitely be delayed and/or reversed. The sooner you are aware of the predisposition the quicker you can act naturally on the specific risk factors. In the early stage, insulin resistance is easily identifiable as a physical manifestation. It's been called the spare tire, but more precisely, it shows up as extra weight around the waist. Typically that means that the waist is equal to or larger than the hips. There are other, less visible, markers as well, including insatiable craving for sweets, fatigue after meals and difficulty



losing weight. The best way to handle all of these issues is by exercising and eating a healthy diet, which we discuss later in the book.

- Metabolic Syndrome is also a genetic predisposition and is a more acute form
 of insulin resistance associated with several other cardiovascular risk
 factors.
- Obesity, particularly in the mid section.
- High cholesterol (above 200) with low good cholesterol (HDL below 40).
- Elevated triglycerides (above 100).
- Insulin resistance or glucose intolerance.
- Elevated fasting glucose.
- Elevated C reactive protein (a measure of physical inflammation).

The Metabolic Syndrome, or Syndrome X as it previously was called, may have a strong genetic predisposition, but it can often be controlled through diet and exercise.

As is true with so many imbalances, chronic inflammation and dysfunctional adrenal glands also contribute to Metabolic Syndrome. Attending to those factors in the ways discussed earlier in this book will help.

In the next paragraphs we discuss obesity and its relationship to insulin and cortisol. In the following chapters we will cover other issues associated with inflammation and its resulting impact on sugar metabolism, including the following:

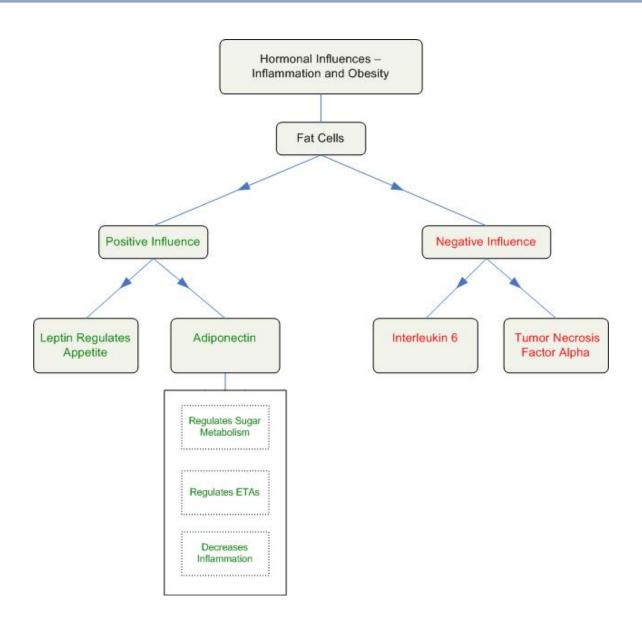
- Identification and treatment of Candida and its causes,
- Impact and treatment of heavy metal toxicity,
- Clearing of allergies and other reactive patterns,
- Natural strategies in addressing some opportunistic infections,
- Management of psychological stress, and
- Treatment of cardiovascular risk factors.



THE GOOD NEWS ABOUT FAT

In this day and age where we hear so much about the evils of fat, it is actually good to know that fat plays an important role in our biological terrain. Originally fatty tissue acted as a reservoir of energy. Adipose tissue, or fatty tissue, is the largest reservoir of fuel, storing energy in the form of rapidly utilizable triglycerides. Adipocytes, or fat cells, synthesize and store energy in periods of nutritional abundance and mobilize lipids during starvation and other times of need. The switch from energy storage to expenditure is finely regulated by a variety of hormones.

In order to accomplish the complex task of energy balance, adipocytes produce the hormones leptin and adiponectin which have been shown to have a profound effect on body weight and sugar metabolism. However three proteins also produced by fat cells have a negative impact on the adrenals and on the cardiovascular and immunological systems: interleukin 6, tumor necrosis factor alpha, and plasminogen activator inhibitor.



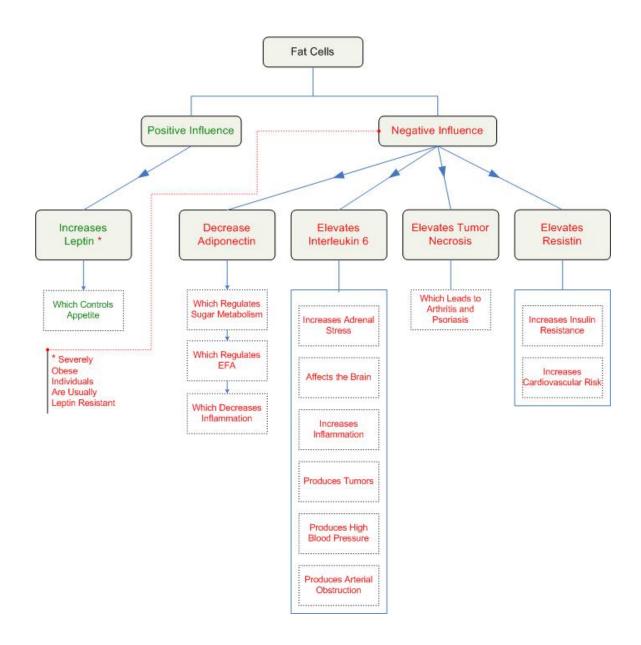
Obesity, Hormones and Herbs

Leptin is a hormone that controls body weight. Contrary to what we might expect, obese people commonly have excess leptin. This indicates that their body is actually resistant to the leptin that they produce. The two herbs that seem to have a regulatory effect on leptin are lavender and holy basil.

Lavender tea is made by steeping one or two teaspoons of flowers per cup of boiling water. One cup of tea can be consumed three times a day. Alternatively, one to four drops of lavender oil can be placed on a sugar cube and eaten once a day. (Watch for possible irritation of the digestive tract.)

Holy basil is easily available in health food stores or the Internet. The recommended dosage is 500 mg daily.

HORMONAL INFLUENCES OF FAT CELLS



Fat cells play a major role in the metabolism of sugar, and the regulation of appetite and weight. The excess or deficiency of specific hormones leads to a profound influence on individual health.



Adiponectin is a protein hormone that modulates metabolic processes, including glucose and essential fatty acid regulation. Individuals with more fatty tissue have lower levels of adiponectin. This hormone is known to play a role in the prevention of Type II diabetes, obesity and hardening of the arteries.

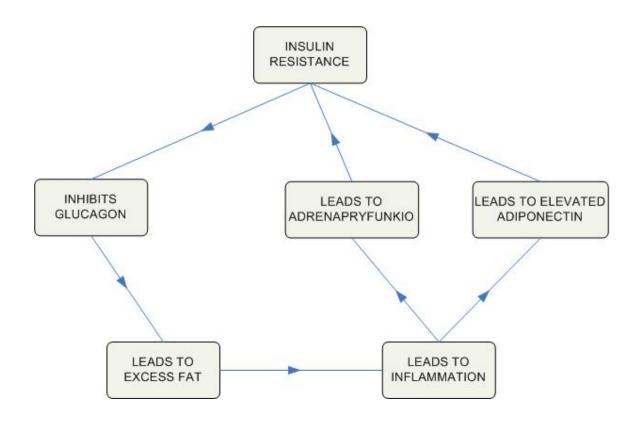
Adiponectin also seems to have a controlling effect on the inflammatory action associated with excessive weight. The three natural products that have a positive impact on adiponectin are turmeric, a well known anti-inflammatory; licorice root, traditionally used to regulate cortisol; and kudzu, renown for its beneficial effect on blood flow and high blood pressure.

The link between fat and cardiovascular risk has been known for a long time. Now we know that two proteins, Interleukin 6 and Tumor Necrosis Factor Alpha, produced by fat cells, have a strong negative effect on the body. They have been linked to the build up of fatty deposits in the lining of blood vessels, high cholesterol, high blood pressure, and insulin resistance. The same characteristics are present in insulin resistance. All of these factors are associated with inflammation and directly impact the production of cortisol in the adrenal glands.

The combination of clogged arteries and high cholesterol can also seriously impact brain functions.

CORTISOL AND INSULIN

Acute stress increases glucagons and mobilizes sugar for a fight or flight response. Chronic stress produces cortisol, a hormone which has a powerful effect on insulin and promotes insulin resistance. Insulin resistance causes high levels of cortisol, and high cortisol in turn causes more insulin resistance. High insulin also inhibits glucagon which, as stated previously, triggers the conversion of glycogen and triglycerides into energy. This results in greater dependence on carbohydrates as a source of energy and increased fat storage in the mid section.



Greater fat storage calls for increased production of adipose cells, which calls for higher conversion of glucose into energy to feed these cells. You can see how it triggers a vicious cycle that increases weight and inhibits proper metabolism. Whether the stress is in response to psychological challenges, inflammation, the effect of sugar metabolic dysfunction, or obesity, the cycle is self perpetrating. In this context it is clear that the issue has to be addressed from four directions:

- Decreasing cortisol by eliminating inflammation and providing nutritional support for the adrenals (see Chapter Three).
- Learning how to deal with ongoing psychological, sociological and environmental stress (see Chapter Sixteen).
- Regulating sugar metabolism through proper diet and nutritional support (see Chapter Six.)
- Also shedding excess weight through proper diet, exercise, nutritional support and lifestyle changes. (See the next Chapter.)

CHAPTER SIX: WEIGHT MANAGEMENT AND THE INTEGRATIVE DIET AND EXERCISE PROGRAM

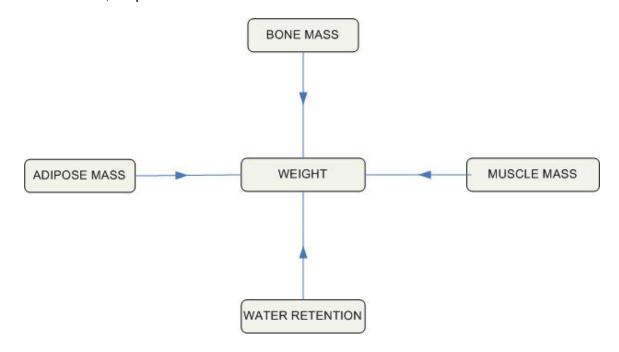
Recently, during a radio interview I was asked about the many fad diets. I reviewed several of the present diet books to evaluate what the authors were saying and how they were unique. In the details, there were great variations among the books. At their core, they were all based on answering the following questions:

- How do people gain weight?
- What is unique about people who become overweight?
- What strategy would be most effective to manage their weight in a sustainable manner?

I will answer these questions one at a time. First, let's look at how an ideal weight is determined. There are many approaches to identifying ideal weight. The most basic approaches consider body fat to be based on gender and height. This is called the Body Mass Index (BMI). The following website will help you determine where you are and where you need to be to reach your ideal weight: http://www.nhlbisupport.com/bmi/.

HOW DO PEOPLE GAIN WEIGHT?

Some of the main components that contribute to weight are bone mass, muscle mass, adipose tissue mass and water retention.



Bone Mass

Once you reach adult height, right around the middle or end of adolescence, your bone mass does not substantially change until the latter part of life. That is when bones may lose some weight through degeneration. When referring to BMI to determine optimum weight, be aware that it does not take into account the specific weight of your bones.

One of the most effective ways to identify the impact of bones on weight is through frame size. The best place to measure it is at the crease of the wrist. For men, a small frame is indicated by a wrist circumference less than 6 ¼ inches; medium frame measurement is between 6 ¼ inches and 7 inches; and a large frame is over 7 inches in circumference.

For women, a small frame is indicated by a wrist circumference of less than 5 $\frac{1}{4}$ inches, a medium frame is measured at 5 $\frac{1}{4}$ inches, and a large frame has a wrist circumference larger 6 inches.

Another way of measuring this is to wrap your thumb and index finger around the smallest part of your wrist: If the fingers overlap you have a small frame; if they barely touch you have a medium frame; and if they are far apart you have a large frame. My ideal weight just using the Body Mass Index for my height and gender is 165 pounds, but because I have a large frame my ideal weight is between 170 and 180 pounds.

Knowing your frame size will help determine ideal weight in a more accurate way than just taking into account height and gender.

For more information on BMIs, go to: <u>http://www.healthcentral.com/dietexercise/ideal-body-weight-3146-143.html</u>.

Muscle Mass

Muscle mass is more difficult to measure because it depends on weight bearing exercises. Obviously, individuals who lift weights on a regular basis will have a greater muscle mass. In fact any exercise program will burn the fat within the muscle and increase muscle mass. Likewise, lack of exercise also impacts muscle mass.

There is a common expression in physiotherapists' circles: "If you don't use it, you lose it." This means muscles that are not used regularly have a tendency to atrophy. Another important fact to know is that when fat accumulates, it is first stored in the muscles and liver before fatty tissues are created in other parts of the body.



Conversely, when beginning a new exercise program, you first burn the extra fat reserves in the muscle while simultaneously building up more muscle mass. This may increase weight, but it will alter muscle definition and usually changes body shape. As the fat is burned out of the muscles and they become stronger, the intensity and effectiveness of the exercise program will increase. When exercising, more calories are burned in a shorter amount of time. In the long run, improved exercise capacity dramatically improves weight loss. For this reason, measuring waist size is a better indicator of overall progress at the beginning of a weight management program.

Adipose Mass

Fat or adipose tissue is produced in the body when our consumption of calories exceeds our expenditure of calories. This is the part of our weight over which most of us can exercise the most control. Calorie intake is determined by what we eat, and caloric expenditure is the result of metabolic processes and kinetic activities (the actions of our muscles).

Your caloric requirements vary according to height, total body weight, ratio of fat to muscle, your gender, your age and your degree of exercise. To help you calculate, this go to the website: http://www.annecollins.com/calories/calorie-needs-men.htm. Click "Calorie Needs for Men." It will open a web box where both men and women can complete several questions and get the exact amount of calories based upon their individual needs.

The normal expenditure of calories through the natural functioning of our bodies within a 24 hour period is on average 2400 calories for the men and 2100 calories for the women. This is without added exercise or excessive stress. Of course, other factors can influence these numbers. As we have seen above, there are dire consequences for excessive adipose weight including inflammation, immune dysfunction, increased cardio vascular risks, increased diabetes risks, increased adrenal fatigue and decreased metabolism. In other words, it tends to be a self perpetuating mechanism.

This example gives you an idea of the speed with which we can accumulate fat. We store one pound of extra fat for every extra 3500 calories which are not being consumed. An extra 350 calories per day causes us to store one extra pound of fat in 10 days, or 35 extra pounds in one year. Extra candy bars, one piece of pie, one extra drink, or 2 scoops of ice cream are enough to add one pound in 10 days. Examples of the worse food choices, high in calories, are shown below:

WORST CALORIE CHOICES FOR DIFFICULT WEIGHT LOSS

TVDE	DODTION	041 00150	E 4 T
TYPE	PORTION	CALORIES	FAT
Cheeseburger	Large, triple	796	51g
Hamburger	Large, triple	693	41g
Pizza, Meat & Veg	12"	1213	35g
Pizza, Pepperoni	12"	1081	41.5g
Nachos, cheese & meat	8 pieces	650	34g
Burrito w/beef, cheese, chili	2	634	25g
Chicken fillet w/cheese	1 piece	632	39g
Taco	1 large	569	31.5g
Fillet fish w/tartar sauce	1 piece	524	28.5g
French fries	Large	400	18g

See the following website for more information: http://www.annecollins.com/calorie_tables/weight-loss-10.htm

The following gives you some idea of sweets and snacks caloric amounts.

- A carob bar weighing 3 ounces is 450 calories
- A bag of M+Ms is 250 calories
- A 4 oz glass of wine is 95 calories
- A beer is 175 calories
- A muffin is 200 to 400 calories

You can see that it is not difficult to exceed our caloric requirements. If you want a detailed list of foods and their caloric content go to the following website: http://www.annecollins.com/calories/calorie-needs-men.htm. At the bottom of the page you will see the information I am mentioning above and much more.

To manage our weight we need to control the ratio between our caloric intake and caloric expenditure. From a food point of view there are many resources available to help you. We will mention some in the Section B of this chapter which also discusses exercise. One thing important to know is that we accumulate fat in our muscles before we create additional adipose tissue. By the time we acknowledge that we are getting fat because it shows on our bodies, we usually have been gaining weight for one year. Conversely, when we lose weight, we start by losing the fat in our muscles and replace it with muscle mass, which is heavier. So we may actually be losing fat and gaining weight.



Be consistent and watch your waist size and your muscle definition, not the scale, at least for the first 2 to 3 months. As you lose fat in your muscles they become more efficient, thus increasing the strength of your exercise program and building your stamina. This will definitely help you burn more calories.

Water Retention

Water retention is not often taken into consideration when assessing weight. However, for some people it is a critical factor and one that not only increases weight but that can also damage tissue. Many women are familiar with water retention because of weight gain before their menstrual periods and weight loss a few days after their periods. For other individuals, water retention is an ongoing pattern. The following questionnaire will help determine if this is an issue that needs to be tackled as part of your weight-management program.

Water Retention Questionnaire

- 1. Have you worked hard to lose weight using conventional methods, and found that you cannot get below a certain weight even if you persevere for months or years?
- 2. Press a fingernail firmly into your thumb-pad. Does it stay deeply dented for more than a second or two?
- 3. Press the tip of your finger into the inside of your shin-bone. Can your finger make a dent?
- 4. Water retention can collect in the legs and ankles. Do you get any swelling there?
- 5. Does your shoe size seem to increase as you get older?
- 6. Do your rings sometimes seem not to fit you any more?
- 7. Is your tummy often tight and swollen?
- 8. If you're a woman, do you ever suffer from breast tenderness?
- 9. Does your weight ever fluctuate by several pounds within the space of only 24 hours?

If you answered yes to any of these questions, part of your weightmanagement program should address water retention.

Given the fundamental role that water plays in all aspects of health, it is good to note that certain genetic types store water as a protection against draught just as some individuals store fat as a reserve against cold weather and limited food supply.



The functional regulation of water metabolism is performed by the adrenal glands. They produce a hormone called aldosterone, designed to regulate sodium metabolism. Sodium plays a significant role in water retention. Too much sodium, such as cooking salt, can result in increased water retention.

Herbal Treatment for Water Retention

The genetic predisposition to storing water is centered in the pineal gland and can be regulated through the regular use of the four following herbal products.

Slippery Elm: liquid extract 30 drops, three times daily for six days; then reduce to 10 drops daily.

Osha Root: capsules 500 mg two times daily or 10 drops twice daily for six days; then reduce to 500 mg daily or 10 drops.

Triphala: 500 mg two times daily for six days; then 500 mg daily; continue the lower dosage for three months.

Gotu Kola: Among many other functions, this herb helps regulate aldosterone. The recommended dosage is 500 mg three times daily and should be avoided for pregnant and lactating women or women wanting to become pregnant.

Allergies are also a frequent cause of water retention. The allergic reaction releases histamines, making the small blood vessels, known as capillaries, leaky and allows the fluids to accumulate in the adjoining tissue. Therefore, treating allergies is an important part of reducing the excessive storage of water in the tissue. Chapter Twelve provides information on allergy eradication.

The integrity of blood vessels is also maintained by proper nutrition and absorption of protein, vitamins and minerals, in particular a group of nutrients called bioflavanoids such as rutin and quercetin.

Hormone production requires more nutrients and when the body does not have proper reserves, it can cause nutritional deficiencies that result in water retention. This explains the water retention associated with some women's menstrual cycle.



Water retention is also associated with heart disease, kidney disease, and is a frequent side effect of using certain pharmaceutical formulas. Check with your doctor to see if this could be the cause of your water retention and discuss any options you might have.

WEIGHT CONTROL THROUGH INTEGRATED FOOD AND EXERCISE MANAGEMENT (IFEM)

The biggest challenge in managing weight is regulating the intake of carbohydrates and fat, and exercising regularly. Body weight results from the absorption of excess calories. When your caloric intake exceeds your caloric expenditure, the result is increased fat.

Most Americans consume more calories than they need, which is approximately 2200 calories daily for women and around 2400 calories daily for men. This represents the average amount of calories consumed in a 24 hour period without a physical workout. Whenever you consume calories above these gender specific levels without expending calories, namely moving around and exercising, the extra calories are converted into fat.

I reviewed several different diets designed to address sugar metabolic disorders, chronic overweight and the corresponding risks for diabetes and cardiovascular diseases. I found that they all had the same common core. While considering these diets, don't forget the relevance of the glycemic index and the glycemic load; they greatly contribute to how the body assimilates fat and sugar. For more information about those, refer to Chapter Five.

When assessing which strategies are most effective to manage weight in a sustainable manner, much depends on the input of calories and output of energy. This is nothing new, but it is the truth. Caloric intake and fat are a direct result of eating too many foods with a high fat or glycemic index content or high glycemic load. An excess of 3500 calories produces 1 pound of extra fat. So you can imagine how quickly it can accumulate. Many of my slightly overweight clients eat 500 to 1000 extra calories per day. You can imagine how easily the pounds will creep up on you. First it will accumulate in the muscles and you will not see bulges. Then it starts building up adipose tissue which is easily visible. To address this, I have created a simple plan, consisting of four phases, called Integrated Food and Exercise Management (IFEM).

The Four Phases of IFEM

Phase One

Eliminate all carbohydrates for two weeks. The diet primarily includes low-fat protein and green vegetables, including collard greens, kale, celery, broccoli, and zucchini. This will ensure that the body moves out of dependence on sugar and high-glycemic foods as a source of energy. The body will start activating glucagon to mobilize the reserves of energy stored in the liver and the muscles in the form of glycogen. It will also start using some of the triglycerides reserves stored in the fat cells.

The frequency of the meals you eat is critical to eliminate any sense of deprivation. Follow these guidelines and you should be fine.

- Start the day with protein or a protein drink
- Mid morning snack nuts, seeds, vegetables, olives, avocado, low fat cheese
- Lunch salad with raw vegetables and proteins
- Mid afternoon snack choose from the same items as morning
- Dinner cooked vegetables and protein
- Evening snack low-fat yogurt, cottage cheese or ricotta cheese with Stevia or Agave Nectar as a sweetener

This phase of the program requires the highest level of cooperation and clarity of purpose, and it is very important not to feel deprived. The snacks are optional and the body consumes more glycogene and triglycerides reserves with longer periods of fasting between meals.

Phase Two

Continue on the same regimen and introduce some whole grain in the evening, such as brown rice, Ezekiel bread, or quinoa. Stay with foods which are on the low glycemic load - below 10, and a low glycemic index - below 55.

Remain on this regimen, maintaining three meals and three snacks until you have lost half of the weight you need to release. Start introducing in moderation bran cereal, apples, chick peas, green peas, kidney beans, oranges, peanuts, pinto



beans, red lentils and strawberries. For a more exhaustive list of foods with a low glycemic index and low glycemic load, check the websites mentioned above.

Phase Three

Follow the same regimen as above but slowly introduce the food with medium glycemic index and low glycemic load. Examples include beets, cantaloupe, sweet potatoes, new potatoes and wild rice. Stay on this restricted diet until you have reached your ideal weight. Avoid all alcohol, wine, white flour, sugar and fruit juice.

Phase Four

Stay on a modified version of the same diet with a glycemic load of up to 20 and glycemic index of 55 to 69. To create more variety, allow occasional exceptions as long as you always return to the same basic principles. Sometimes, taking one day per week off of the plan helps maintain it the remainder of the time. Have wine, have a dessert, or whatever suits your fancy but always come back to your plan the next day. The most critical factor in weight management is to have a clear path that works for you and to stay on track.

Eliminate bad fat such as hydrogenated oil and make sure to eliminate excess fat from all meals. Instead, eat lean cuts of meat and remove skin from poultry. Make sure to have good fat in your diet because it reduces inflammation and supports the brain and the adrenal glands. Cook with olive oil at low to medium temperatures and consume flax seed oil and/or fish oil. Make sure you eat dairy products that are low fat.

If you want to follow a more structured plan that uses similar principles, there are several available.

- Weight Watchers is probably the most structured.
- The South Beach Diet is very effective but I personally disagree with the use of diet soda and synthetic sugar substitutes. I like to eliminate soda. Use Stevia and Agave Nectar to sweeten drinks.
- The Fat Flush Plan by Ann Louise Gittleman is great and restricts fat a little bit more while making sure that you have enough EFAs.
- A more recent fad is the Dr. Oz diet. Some people like the motivational tone of the approach and the web support.
- The Zone Diet is based on somewhat different principles but is also very effective for many people.



Beyond these well known diets, there are hundreds of others that probably work as well as long as you stay on them. Consistency and changing your habitual patterns of food consumption is the key to success.

Supplements for Weight Management

The following supplements could add to the effectiveness of your program.

Conjugated Linoleic Acid (CLA): consume 1000 mg, two times daily with meals. CLA helps convert calories into muscle mass.

Chromium Polynicotinate: helps regulate sugar metabolism and has been shown to be more effective for weight loss than Chromium picolinate.

Hydroxycitric Acid (HCA): is derived from a fruit called Garcinia Cambogia.

Citrimax: is a formula created by combining the previous two products. It is available in most health food stores. It contains 100 mcg of Chromium Polynicotinate and 500 mg of HCA Garcinia Cambogia. The recommended dosage is one to two capsules, 30 to 60 minutes before meals.

L- Carnitine: take 500 mg, two times daily. It is an amino acid, which helps convert fat into energy.

Thermogenics

White willow bark: take 30 mg three times daily. It contains salicylic acid and increases body temperature.

Hoodia Gordonii: take 150 mg, three times daily.

Bitter Orange Extract, Advanta Z: take 50 mg, three times daily.

Green tea.

Some formulas exist that incorporate these products together. Supplementing with EFAs is also critical for effective weight management. The recommendation is for women to take about 2000 mg daily, and men take 3000 mg daily.



The IFEM Exercise Program

During exercise, there is an increase in the use of your energy reserves that restores a balanced sugar metabolic process. As you become more consistent with an exercise program, look for changes in size rather than weight, particularly the waist size. Changes in the waist represent a substantial improvement in health.

The best type of exercise for losing weight and regulating sugar metabolism is cardiovascular and resistance training. Ideally, do these with a trainer who understands your goal and works with you to achieve it. These days, health experts suggest a minimum of 45 minutes, five times weekly. But any exercise of any duration is better than none. If you cannot afford a trainer, start slow with walking or swimming and progressively increase your level of exercise to the optimal level.

Regardless of the method you use to lose weight and restore optimal health, it always comes down to the amount of calories burned within a 24 hour period without exercising. Most people who eat fast food and soda consume several thousand calories per day in excess of the recommended amounts. Unless you are a professional athlete, there is no way you will burn the amount of calories consumed when regularly eating fast foods. Couple that with television, videogames, and the decrease in participation in sports, and it's not hard to understand the obesity epidemic.

Managing diet and regularly exercising are two essential ingredients that will help maintain the health of your body. And it doesn't mean you have to spend hours at the gym. Depending upon your physical shape, a 45-minute exercise program burns 150 to 400 milligrams. It will take approximately three months to see the bulges actually disappear. Once you get in shape, though, you will manage your weight much more effectively because as time goes on, you will burn fat more quickly. Keep at it; your muscle definition and your stamina will increase in just a few weeks.

The key is to exercise long enough so that you become addicted to your exercise program and that you strongly feel the difference in your wellbeing when you do not exercise for a day or two. Like nutrition and meditation or relaxation, creating a regular routine that you adhere to most of the time is what will help you maintain optimal health on an ongoing basis.

The best weight-loss exercise is through cardiovascular activities such as walking, running, swimming, tennis, biking, and band weight training. Exercise is most effective when it includes aerobics, endurance, flexibility, equilibrium, muscle tone, dexterity, optimal lung function, lymphatic drainage and neurological balance. Certain types of Yoga are specifically designed to address all these aspects, as are Pilates, Gyrotonics and Gyrokinesis.



CHAPTER SEVEN: THE IMPACT OF CANDIDA OVERGROWTH ON THE PHYSIOLOGICAL TERRAIN

The invention of antibiotics was, no doubt, one of the most profound of the 20th century. It spelled the end of a host of infectious diseases which had been decimating old and young alike. Antibiotics saved my life on two occasions, and the life of one of my sons.

Even with all they do, antibiotics come with a certain price tag for the body. The two main consequences of antibiotic use are Candida overgrowth and resilient strains of microbes. The second consequence is not within the scope of this book but it is important to know that any use of antibiotics stimulates the growth of antibiotic-resistant bacteria in our gut.

Another fact is that it took approximately 40 years between the creation of the first antibiotic and the existence of antibiotic-resistant infections. Perhaps even more startling is that it took only six months for resistance to occur to one of the newest antibiotics on the market. Very few new antibiotics are being created these days so we are likely headed for a widespread health disaster. Keeping our terrain in optimal health is soon going to be our main protection against new epidemics.

While we are on the subject of antibiotics and its impact, it is appropriate to know that the primary purpose of antibiotics is the elimination of bacterial infection. It is not designed for viral infections such as colds and flu. I constantly see clients using antibiotics prescribed by MD's for infection that could be much more effectively addressed with natural remedies. Most of the time, they come to me after they realize that their problem has not been resolved. Another important point is that the sensitivity to antibiotics often can be restored in antibiotic resistant infections by adding high dosages of fresh or freeze dried garlic to the medical protocol. For some reason this seems to re-sensitize the bacteria to the appropriate antibiotic.

CONTROLLING CANDIDA

Candida is a spore, a microscopic fungus that grows naturally in three areas of the body: the mouth, the large intestine and the vagina. When the physiological terrain is in balance, this fungus stays in check and in controlled amounts. It feeds a population of friendly bacteria that are part of the ecological balance of the body.

Candida overgrowth, however, is a main cause of gastro-intestinal, vaginal, and systemic inflammation. This imbalance can result in serious and sometimes debilitating conditions. I have a firm belief that it is irresponsible for a doctor to prescribe antibiotics without also urging the patient to take a probiotic, such as acidophilus or bifidus that will restore the ecology of the large intestine. The best way to prevent the problem in the first place is to start taking a good live culture



concurrently with the antibiotic, but not at the same time. For example, if you take an antibiotic morning and night, make sure you take the probiotic in the middle of the day. Live cultures of lactobacilus are available in all health food stores in the refrigerated section.

There are many other strands of friendly bacteria that all play a role in maintaining the ecology of the gut. MHP has a very well balanced formula which can be taken by anyone on an on going basis. Please refer to the Appendix for information about MHP. The gut is the first line of immune defense in the body and intestinal balance is critical for good health. If you are not a vegetarian and you do not eat strictly organic foods, you are exposed to antibiotics all the time through the animal products you eat.

A great way to understand how Candida overgrowth plays out is to imagine cows in a meadow. You might wonder what cows have to do with a physical disequilibrium. It is a little analogy that I use with my clients to explain what happens in the gut as a result of antibiotics.

Imagine a herd of cows grazing in a lush meadow. The grass is well cropped and contained within the meadow. Now let's say the cows are taken to a different meadow. Automatically, the grass in the first meadow will start growing wild and progressively invade areas beyond its borders, such as adjacent country lanes.

The same happens with Candida. When antibiotics kill off friendly bacteria along with unfriendly bacteria, there is nothing there to control the growth of the Candida. This seriously affects the biological terrain. The Candida transforms from friendly spores feeding friendly hosts to becoming an invading fungus. It attaches to the walls of the large intestine and progressively invades the small intestine where, among other things, it produces porosity of the small intestine wall. This is called Leaky Gut Syndrome which trips off a long list of inflammatory conditions, including the following.

- Chronic digestive disorders
- · Chronic gas and bloating
- Chronic body pain
- Chronic fatigue due to adrenal exhaustion
- Chronic diarrhea
- Mental fogginess

- Mood swings
- Depression
- Constant, uncontrollable sugar craving, leading to sugar metabolic disorder
- Attention deficit disorder
- Hyper kineticity (particularly in children)
- Autism-like symptoms
- Depression
- Obesity

TESTING FOR CANDIDA

There are several safe tests that can confirm whether Candida is the source of your physical discomfort and how extensive the problem may be. Start by answering the following questionnaire. It was developed by The Yeast Connection. To learn more about this resource, go to: www.yeastconnection.com.

When you answer yes to any question, circle the number in the right hand column. When you are finished answering all the questions, add up the points in the right column. Your score will help determine the probability or possibility that your health problems are yeast related.

Have you taken repeated or prolonged courses of antibiotics?	yes	no	4
Have you been bothered by recurrent vaginal, prostate, or urinary tract infections?	yes	no	3
Do you feel sick all over, yet the cause has not been found?	yes	no	2
Are you bothered by hormone disturbances including PMS, menstrual irregularities sexual dysfunction, sugar craving, low body temperature or fatigue?	yes	no	2
Are you usually sensitive to tobacco smoke, perfumes, colognes, and other chemical odors?	yes	no	2



Are you bothered by memory or concentration problems? Do you sometimes feel spaced out?	yes	no	2
Have you taken prolonged courses of prednisone or other steroids, or have you taken the pill for more than three years?	yes	no	2
Do some foods disagree with you or trigger your symptoms?	yes	no	1
Do you suffer with constipation, diarrhea, bloating or abdominal pain?	yes	no	1
Does your skin itch, tingle or burn; or, is it unusually dry; or, are you bothered by rashes?	yes	No	1

- Women: If your score is 9 or more, your health problems are probably yeast related. If your score is 12 or more, your health problems are almost certainly yeast related.
- Men: If your score is 7 or more, your health problems are probably yeast related. If your score is 10 or more, your health problems are almost certainly yeast related.



Treating Candida with Natural Remedies

If your test scores were high on the questionnaire and you want a more definitive idea of whether or not you have Candida, there is a stool analysis performed by Diagnos-Tech. The cost is reasonable, around \$50. It can be ordered by any licensed health-care practitioner.

If you decide to treat the Candida on your own, we suggest a number of products that have worked well with our clients.

From Mountain States Health Products we suggest AC formula, a broad based herbal anti-fungal. The two main active ingredients are lavender extracts and tea tree oil. The recommended dosage is three tablets, two times daily with food.

Candistatin is another product that we have used with great success from Physiologics. It has a high concentration of caprylic acid derived from coconut. It also contains Pau D'Arco and golden thread, both highly anti-fungal and anti-microbial. The recommended dosage is three capsules, two times daily with meals. You can also create your own formula by combining some of the herbs contained in the supplement mentioned above.

If you are prone to strong reactions, start slowly and build progressively to the recommended dosage and then stay on the protocol for a minimum of three months.

There are hundreds of other anti-fungal remedies available on the market and through the internet. The reason we chose these two is because we have direct experience with their effectiveness and because they come from reputed professional lines. Your natural health-care practitioner may have other ideas or strategies to treat Candida and you can also explore it on your own. You will quickly realize whether your symptoms are being alleviated.



POSSIBLE SIDE EFFECTS OF TREATMENTS

Anti-fungal treatment can have strong die-off reactions for the first week after you start taking the product. If the reaction is too strong, stop for a few days and start again on a lower dosage and build up progressively until you can tolerate the full dose.

A die-off reaction is the effect that decomposition of the fungus can have on the body as it is being destroyed by the anti-fungal. Typical effects are headaches, diarrhea, bloating, gas, aches and pain. After the first week the symptoms usually disappear and the treatment is well tolerated. Obviously, an allergic reaction is always a possibility and if the symptoms do not disappear quickly, stop the treatment at once and consult your health practitioner.

Treating Children for Candida

We recommend Threelac, which is available on the internet at many different websites. Do a search for Threelac. It comes in a powder form in a little satchel, which is added to water. It is easy to take and does not have a taste. One satchel, two times daily for two months is a good protocol for children.

There is also a homeopathic remedy called FNG, produced by Deseret Biologicals. This is also a very good product as a starting point for very sensitive adults who are not tolerating the stronger herbals. Deseret Biologicals also has other homeopathic Candida remedies at various dilution formulas. All of these treatments should be pursued for a minimum of two months. Another Deseret Biologicals product that can substantially decrease the die-off effect is Systemic Drainage. Helping your body eliminate toxins helps decrease the side effects. The recommended dosage is 10 drops, three times daily, not less than 20 minutes before or after eating. Deseret Biologicals products have to be ordered through your health-care provider.

Oftentimes children with ADD, ADHD and autism are prone to digestive disorders and Candida overgrowth. They also have trouble breaking down certain peptides that inhibit the passage of opiates, which are contained in certain food. These opiates have a tendency to cross the blood brain barrier and may be the cause of many on-going symptoms. There is a particular form of probiotics produced by Pharmax that inhibits this transfer of opiates. It is called Mindlynx and must be ordered by a practitioner. It can have a very dramatic impact on the health and behavior of these children. There is also strong evidence that introducing infants to probiotics considerably improves their immune resistance, not only then, but also later in life. Farmax have specific probiotics that can be used for this purpose.



PROBIOTIC TREATMENT

Because so many toxins are moved through the digestive track, many consider the colon our first line of immune defense. In addition to using an antifungal, it is very important to restore the bacterial equilibrium of the large intestine. Probiotics do just that. The most common probiotics are lactobacillus, including acidophilus and bifidus but there are many other strands of bacteria which are helpful in creating a balanced environment in the large intestine.

Another product that can contribute to the health of the colon is FOS, a type of sugar that feeds the friendly bacteria. It is often incorporated into probiotic formulas. Or try Arabinogalactant, a polysaccharide derived from the bark of the Larch tree that's effective in supporting the immune response which originates in the gut. Arabinogalactant is available on many websites. It exists in powder or in capsule form and the recommended dosage is one teaspoon of powder in water or two capsules. Arabimogalactant does not have a taste distinguishable from water.

There are many effective probiotic formulas on the market. You can use a live culture and keep it refrigerated, or a freeze dried culture. In addition, the Threelac that we mentioned above is an easy formula to use for children and adults alike. Your natural health care practitioner will, no doubt, have his favorite brands.

Another herbal formula which has been used for thousands of years in India for intestinal cleansing and strengthening is Triphala: It comes in 500 mg to 1000 mg and can be consumed in quantities up to 4000 mg per day in separate doses.

Restoring the Biological Terrain in the Gut

Probiotics are available from most health-food stores, or you can search the web. Look for the following.

Probiotics that contain lactobacillus, including acidophilus and bifidus

FOS, a type of sugar that feeds the friendly bacteria

Arabinogalactant, a polysaccharide derived from the bark of the larch tree

Threelac, especially for children

Triphala, providing intestinal cleansing and strengthening that is very effective for individuals with constipation or loose stools

CANDIDA AND DIET

Many practitioners focus their treatment of Candida on a restrictive diet. Adding dietary changes to the Candida eradication program is a very good idea and will speed up the process and decrease the length of the side effects. In my experience, however, trying to rebalance Candida through diet alone is not enough. Compliance is often low and the person involved may feel guilty and discouraged.

The main reason a modified diet alone isn't very effective is that Candida is dependent on glucose for its survival. As you learned in a previous chapter, glucose is always in circulation in our body and exists in some amount in all the food we eat. Candida is neurotoxic, meaning it can affect the nervous system and create uncontrollable craving for sweets. Like an addiction, it will tend to take control of the consciousness and control behavior to obtain what it wants. And what it wants is any kind of sugar or carbohydrate.

While some people can tolerate relatively high levels of Candida in their body with little reaction, other people have major reactions to even minimal levels of Candida. This sensitivity can produce substantial pain and discomfort.

When people don't feel good, they want comfort food, namely all the foods that feed the Candida. This increases the allergic sensitivity and the amount of Candida in their body, creating a vicious cycle. Even so, the main focus of the Candida diet is to eliminate all starch, sugar, fruit, alcohol, and fermented products. To be effective, compliance is critical. And full compliance can be difficult.

Dietary Changes for Candida

Supplementing dietary changes with natural products is the best combination to treat this condition. To learn more about the diet, I would highly recommend the Life Force Plan. For more information about this method, check www.lifeforceplan.com. Dr. Jeff McComb, the developer of this approach, has his own set of recommended supplements.



In my practice, I have found that If Candida has penetrated deeply into the body, as soon as people re-introduce starch, sugar, and alcohol, the Candida will come right back. Because of this I do not make diet a cornerstone of my approach to Candida eradication. It does, however, help and if you feel up to it, reduce or eliminate all the foods that contribute to the growth of the Candida. This will greatly enhance the process of rebalancing. It will also help you lose weight and start regulating your sugar metabolism. If it is too much for you, however, start by eliminating the Candida first and then address the other issues later.

Even though you may have many symptoms that point to a Candida imbalance, be aware that the symptoms of wheat reactivity and Candida are very similar. It's fairly common for an individual to have both Candida and a reaction to wheat, simultaneously. In this case, it is absolutely critical to eliminate all gluten food from the diet, including wheat, oats, barley, rye, buckwheat, and bulgur. Keep away from these grains for at least three months while you treat the Candida.

A simple test that we mentioned in Chapter Twelve can determine if you are sensitive to wheat. After three months of eliminating gluten from your diet, try to reintroduce grains a little at a time. Sometimes when inflammation has stopped and the adrenals are regulated, the body becomes able to accept foods to which it previously reacted. Re-test for food sensitivity a little later to make sure you are not re-starting the inflammatory process. This is particularly true if the other sources of inflammation have been eliminated and if the health of the adrenals has been restored.



CHAPTER EIGHT: WHO SAYS HEAVY METALS ARE UNHEALTHY? BURYING OUR COLLECTIVE HEAD IN THE SAND

In 2001, the Environmental Protection Agency (EPA) increased the tolerable level of arsenic in our water from 10 ppg to 20 ppg. Then, in April 2005 a new regulation resulted in the declassification of environmental mercury as a health hazard and the loosening of industrial emission standards installed by the previous administration. A loophole in this new regulation resulted in the exemption of 58,000 sources of environmental pollution from the requirements of the Clean Air Act

When we look at the potential health damage that arsenic and mercury alone can do to people, we wonder who the government is really serving: the people of this country or special interest groups that act in total disregard for human health across the globe?

In this chapter, we examine the five major heavy metal toxicities, what they are doing to us individually and collectively, and what we can do to keep ourselves as safe as possible. We also acknowledge that there are thousands of chemicals that are released into the environment yearly without the slightest impact study on our health or on our environment, and that there is little we can do about that.

And we wonder why the war on cancer is being lost?

THE DEVASTATING EFFECTS AND SOURCES OF HEAVY METAL TOXICITY

The following symptoms and conditions have been linked to heavy metal toxicity. It is important to note, however, that other factors could cause similar effects, or that more than one factor could be involved.

- Memory loss
- Increased allergic reactions
- High blood pressure
- Depression
- Mood swings
- Irritability
- Poor concentration
- Poor impulse control



- Sleep disorders
- Fatigue
- Speech disorders
- High cholesterol
- High triglycerides
- Vascular occlusion
- Neuropathy
- Autoimmune diseases
- Chronic pain
- Chronic fatigue

The fact that many of these symptoms and conditions are identical to other sources of inflammation poses a problem for the practitioner: it's not easy to pinpoint specifically what is going on and how to best treat it. This is a good case for testing to help identify what is truly going on. Very often, multiple causes of inflammation are present at the same time. Later on, we will establish priorities for the treatment process to help you get the best results.

Heavy metals, by themselves, are not a problem. Metals are buried in the earth. They rarely have an impact on humans when buried. When people began using them in manufacturing, farming, household products, and health-care products, they were no longer buried. Consequently, the metals permeate our environment.

As metal levels increase in the air, water and ground, they progressively enter into the food chain and penetrate through our skin, mouth and lungs. Add to that the mercury in dental fillings and in vaccines, and the toxicity is a serious load. Many of these metals are transmitted to the fetus through the mother and are found in high concentration in children with autism and other character disorders such as ADD and ADHD. The increase of these problems in childhood seems to correlate directly with the increase of heavy metals loose in our environment.

I have found that whenever there is heavy metal toxicity, there is a corresponding level of malabsorption, particularly of magnesium, zinc, calcium and EFAs. That's because heavy metals compete with and displace the essential



minerals of zinc, copper, magnesium and calcium; and, zinc and magnesium are essential for the processing of EFAs. Because of this, the metals interfere greatly with the liver, which is the main organ of detoxification. They also disrupt cellular enzymes, causing cellular rigidity and possibly leading to cellular abnormality. When heavy metals penetrate the brain, they are highly neurotoxic and can cause major psychological disorders.

Furthermore, metal toxicity often causes damage to the intestinal mucosa, creating Leaky Gut Syndrome. This leads to an increase in toxic absorption and opportunistic infections. Heavy metals have also been shown to have a profound negative effect on hormonal function and digestion. A strong connection has also been established between heavy metal toxicity and Candida overgrowth. It appears that Candida might increase by attempting to absorb the heavy metal contaminating the body.

Based on all the symptomatology, it is clear that heavy metals have a very strong inflammatory effect on the body which directly strains the adrenal glands. Many of the symptoms associated with heavy metal toxicity are identical to the symptoms of adrenal dysfunction (see Chapter Four). What is unique to heavy metals, however, is the dramatic effect they have on absorption which impairs liver detoxification function and as a result, creates a vicious cycle. This cycle leads to an ever increasing level of toxicity.

The reactions that people have to these metals —and all toxins— are completely unique to each individual. This is contrary to medical dogma and the supposed tolerable levels set (and upset) by the EPA. The truth is, some individuals have intensely violent reactions to very small amounts, while others seem to tolerate large amounts with no apparent discomfort. A case in point is illustrated in the story of a man who was arrested after his wife exhibited serious levels of arsenic in her system. The authorities suspected the husband of poisoning his wife. They were surprised when the husband's level of toxicity was even greater than his wife's, but he had no apparent symptoms. It was later discovered that the culprit was their well water.

In addition to a symptomatic assessment which can easily be related to other causes, your health care practitioner can use various testing procedures to help determine if what you are experiencing is related to metal toxicity. If so, he or she can provide you with a detoxification process.

THE FIVE MOST TOXIC HEAVY METALS

Mercury

The main sources of mercury toxicity are emissions from silver dental fillings, vaccines, fish and coal burning. Mercury is highly neurotoxic and can be the source of major neurological, cognitive, immune, digestive and cardio-vascular disorders.

Dental Fillings

Who thought of putting poison in our mouths and veins? You may be surprised. While your dentist is unlikely to agree that metal toxicity is related to dental fillings, I would suggest that before you rule it out as a cause of disturbance in your body, you check out the information at: www.amalgam.org. This site gathers scientific evidence on the toxic effect of dental fillings. In particular, experts examine the risk of fetal contamination by mothers who have dental work done during pregnancy. Additionally, they describe the negative health effects on the adult population and illustrate effective and safe methods of mercury filling removal.

I suggest that you do not embark on a program of dental fillings removal until you have restored normal or close to normal biological terrain in your body. That includes liver detoxification, kidney function, and lymphatic drainage. Later in the book, we'll address how to do this since it will apply to all the different types of toxicity.

Vaccines

There is a preservative included in many vaccines called Thimerosal that contains a high concentration of ethyl mercury. This is particularly an issue because vaccines are often given to young children when their detoxification pathways and their neurological systems are still immature. My experience is that the vaccines interfere with liver detoxification function. After the liver has been contaminated, the children have difficulty eliminating toxins. This preservative is still prevalent in many vaccines, including Hepatitis B, diphtheria, pertusis (whooping cough), tetanus, and Hib.

There are two things you can do if you are considering vaccination for a child who has not been vaccinated. Make sure your doctor read the full prospectus of the vaccine, and make sure that it does not contain Thimerosal.

Clearing Mercury from Children

If a child has already been vaccinated and you suspect that the vaccination is creating problems, use a homeopathic remedy called Vaccinosis Nosodes. The drops are available from Mountain States Health Products.

Follow that up with a very gentle chelation process called NDF from Bioray. Try a homeopathic remedy such as Systemic Drainage from Deseret Biologicals to restore drainage, and artichoke extract from Mountain States Health Products to restore liver function. Since the appropriate dosage can vary from one person to the next, make an appointment with your natural health care provider for a specific protocol.

Fish

At this point in time, oceans, lakes, and waterways have been thoroughly contaminated with mercury and the EPA has issued warnings about the possible danger of mercury in fish. There is no doubt that this represents a danger for individuals who have deficient detoxification pathways or who have a compromised immune system.

Once the liver, kidney, and spleen function properly, the body handles the degree of environmental toxicity well. Still, choose smaller fish over larger ones since the degree of toxicity increases with the size of the fish. Also, limit fish consumption to no more than once, or a maximum of twice a week.

Many people who watch their weight have a habit of consuming large quantities of canned tuna as a source of protein. I have found this to be the main cause of contamination in several of my clients. Be aware that tuna is a very large fish and consequently, is likely to have a much higher concentration of mercury.

Treating Fish-Eating Adults for Mercury

If you consume large amounts of fish or are exposed to other heavy metals on a regular basis, take a strong liver support product such as Artichoke Extract (500 mg two times daily) and/or Milk Thistle (250 mg three times daily), and/or Alpha Lipoic Acid (ALA) (up to 400mg daily). All these products are available from your local health food store.

Protection from Mercury Toxicity

There are several ways to protect yourself from metal toxicity.

- Refuse to have metal fillings put in your mouth and the mouths of all your loved ones. Sixty percent of the dentists have not been trained in the application of resin fillings. If your dentist tells you that mercury has no negative effect, do not trust him. Go to another dentist who is aware of the problem and who has been trained in using alternatives.
- Unless you are pregnant, plan on having your metal fillings or those of your loved ones removed as soon as possible.
- If you have your children vaccinated, make sure the vaccine is free of Thimerosal. Also, consider delaying the vaccination until they are a little older and more likely to handle the vaccination without problems.
- Make sure your children do not play with the metallic liquid of broken thermometers.
- Eat fish in moderation and remember that the bigger the fish the higher the risk of high mercury contamination. On this basis, avoid eating canned tuna fish regularly.
- Finally, make sure you keep your liver in perfect health.

Lead

Lead is another heavy metal that belongs in batteries, not in our physiological terrain. The negative impact that lead can have on the human system includes:



- Reduction of cognitive abilities
- Neurological changes
- Behavioral changes
- Hypertension
- Chronic kidney disease

In children, where it is more prevalent, the damage to the brain and neurological functions can be much more pronounced and may involve mental retardation.

The main causes of lead toxicity are lead paint; manufacturing or dumping of lead batteries; leaded gasoline; lead contaminated water; rubber products including tires; lead weights, used to balance motor vehicles wheels; old lead water pipes; and industrial manufacturing.

Serious manifestation in children is most often related to lead paint in old buildings. Children play in the buildings where the paint chips off and gets ingested. Recent studies show that at least in the U.S. lead intoxication in children has decreased significantly. In adults it is usually due to occupational hazards. Compromised detoxification pathways can create opportunities for the accumulation of heavy metals in any age group. It is particularly prevalent in urban areas where environmental pollutants are higher. Again, it is important to mention that the degree of reactivity in an individual is not always directly linked to the degree of contamination. Different individuals exhibit radically different levels of sensitivity.

Two of my clients exhibited serious symptoms that baffled the MD's they consulted: pain, chills, headaches and serious digestive discomfort. I immediately suspected some type of contamination. In one case, we discovered that the source of contamination came from remodeling a kitchen. In the second case, my client had been scraping and sanding the banister of her porch which had previously received many coats of lead-based oil paints. After oral chelation with NDF, all the symptoms disappeared.

The only way to protect ourselves from lead poisoning is to prevent exposure. Some of it is obvious, such as keeping away from building destruction sites without proper protective gear. Make sure that all OSHA regulations are in force at industrial and manufacturing facilities that handle lead. If you do restoration in an old building, be aware of possible contamination through chipping paint and wear an appropriate mask, especially if the work involves sawing or scraping painted surfaces.



If you are going to occupy and bring children into an old building that might have lead paint, be sure all the old paint has been removed or covered up. Look carefully for peeling paint and make sure that it is properly scraped and repainted. Be aware of the risks of dumped batteries and old pipes, particularly if the dump site is close to water sources utilized for human or animal consumption.

There is substantial lead contamination in the air in any major city. No matter what you do, you will never completely eliminate exposure.

Other than the precautions mentioned, the best protection against lead toxicity is to boost the health of your liver so it is in optimum condition.

Aluminum

Aluminum poisoning has been linked to Alzheimer's disease. Post mortem studies of Alzheimer's patients have revealed extremely high levels of aluminum in their brains. Aluminum poisoning has also been shown to affect the kidneys and liver, thus intensifying the problem by interfering with proper aluminum detoxification. It affects calcium metabolism and can lead to osteoporosis, soft bones, and chronic muscular pain. It also impairs mental functions, affecting memory and speech. Aluminum has been shown to displace many minerals and to lead to malabsorption. It has also been linked to headaches and acute nervousness.

There are lots of products that contain aluminum. The most prevalent is municipal water where the water is being treated by aluminum compounds. One of these compounds is aluminum fluoride, which has the ability to cross the blood-brain barrier. Other common sources of aluminum contamination are cooking utensils, soda cans, aluminum foil, and many over-the-counter drugs including antacids, pain killers, anti-inflammatory products, and douche preparation. Other products that contain aluminum are tooth paste (that's right, Mom), amalgams, baking soda and bleached flour.

The best prevention is to avoid products that contain aluminum. Instead, use filtered or bottled water for cooking or drinking. Install a filter on your shower head. And make sure that your kidneys and liver are functioning optimally.

Arsenic

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Arsenic is a naturally occurring element widely distributed in surface soils. There are two types of arsenic: inorganic and organic. The inorganic is used for wood preservation. The organic is used as a pesticide.

Arsenic cannot be destroyed in the environment; instead it changes form. Whether it starts in the air or in the ground, it eventually makes its way into our water and in the food we eat. Apart from occupational hazards, contaminated food and



drinking water is the major source of poisoning. Another source is from sawdust and smoke from treated wood.

Inhaling arsenic can produce an acute sore throat and irritated lungs. Ingesting high levels or recurring exposure to low levels can create nausea, vomiting, chronic gastrointestinal inflammation, decreased production of red and white blood cells, abnormal heart beat, damage to blood vessels and a sensation of pins and needles in hands and feet. Intense long-term exposure produces darkening of the skin and the appearance of corns or warts on the palms, soles and torso.

Equipment on playgrounds made from wood that was treated with arsenic has been shown to be a source of contamination for the children who play on and around the equipment. If you take your children to the park make sure the wooden play equipment does not have a greenish tinge to it. This is usually an indication that the wood has been treated with arsenic. Treated wood is also often used in construction.

Several studies have linked arsenic with an increased risk of cancer in the lungs, skin, bladder, liver, kidney and prostate.

As mentioned earlier, in January 2001, the EPA revised the standard allowable level of arsenic in drinking water from 50 parts per billion to 10 ppb. Many health specialists among the scientific community believed at that time that 10 ppb was not good enough and that 3 ppb should be the standard. The Bush Administration in its first year in office decided to raise the previously enforced standard of 10 ppb to 20 ppb standard to accommodate demands of the industrial interests. This was in complete disregard for the scientific and health community. Based on what you have just read, what do you think about the wisdom of this decision?

Since the wisdom in Washington isn't doing much to protect us, then it's up to each individual to make choices that limit how much arsenic we're exposed to. Keep away from areas where treated wood is cut or burned unless you have protective gear. Well water should be tested. Make sure that your liver and kidney are functioning optimally.

Cadmium

Cadmium is a natural element found in soils and rocks, including coal and mineral fertilizers. It is used in batteries, metal coatings and plastics. It is also used as a pigment for paint and glaze.



Cadmium enters into the air from mining, industry, burning coal and burning household waste. It can travel for long distances before falling to the ground, where it can contaminate the soil and find its way to groundwater. In addition, it enters water from waste disposal, spills, or leaks at hazardous-waste sites. Fish, animals and plants absorb cadmium from the environment.

Cadmium stays in the body for many years and can build up from years of exposure to low levels. The main sources of exposure are from:

- The work place
- Eating contaminated food, in particular shellfish, liver and kidney meat
- Cigarette smoke, which doubles the average daily intake
- Drinking contaminated water
- Breathing the air around municipal waste
- Paint or pottery can also expose the artist to low levels of cadmium

Acute exposure to contaminated air damages the lungs and can cause death. Drinking or eating highly contaminated substances irritates the stomach and leads to vomiting and diarrhea. Long-term exposure to low levels of cadmium can lead to kidney disease, lung diseases and fragile bones. Cadmium is also considered to be carcinogenic.

In my practice I have treated many artists, including my sister, who had typical symptoms of cadmium exposure. The symptoms result from the cumulative effect of absorbing cadmium pigments in paint. In the case of my sister, the effect was so severe that she had to stop using oil paint on a regular basis and shift to another medium.

The best prevention is to limit exposure. Eat a balanced diet. Drink bottled or filtered water. Keep your liver, kidneys and lymphatic system in optimal shape.

CHEMICAL TOXICITY: WHY THE WAR ON CANCER IS BEING LOST

It is impossible to provide a complete list of toxic chemicals. Some of these exist in nature and have become toxic because they have been disseminated through quarrying or manufacturing. Others are the toxic residues of industrialization. Many are the by-product of transportation, electricity and heating.



What's more, approximately one thousand new chemicals find their way into the environment every year in the form of preservatives, food additives, pesticides, fungicides, fertilizers, solvents, packaging, and a slew of new household products, including pharmaceuticals, plastics, recreational drugs, radiation, and gases. Many chemicals are being released in the environment as by-products of industrialization and the breakdown of synthetic products in houses and in landfills. We could go on and on.

Many of these chemicals have detrimental effects on the body and many have been classified as carcinogens. Unless you are healthy enough to deal with this aggression, the contaminants become toxic overload in the most sensitive parts of your body and play havoc.

By now you know that the best way to prevent your body from being contaminated by heavy metals or chemicals is to avoid exposure. Since these contaminants are all over our environment — in the soil of the garden, the street we walk on, the houses we live in, the buildings we work in, the food we eat, the water we drink, the air we breathe and even in the supplements we take — there is no way to avoid them completely.

A recent study showed that, on average, more than 100 contaminants were found in household carpets and floors. They were all brought into the house on shoes and the paws of pets. So, let's face it: even if we are extra careful we cannot avoid contaminants. For more information about chemical toxicity and children, go to: http://www.healthychild.com/pesticide-problems.htm.

It comes down to this: the best protection is to have a perfect defensive system. This includes a healthy liver and kidneys, an effective colon, and a lymphatic system that functions well. I would add healthy, functioning adrenal glands to this list, the key to a strong energy system with a powerful life force.

Later, we will discuss each of these five areas: liver, kidneys, colon and the lymphatic system, with specific information about how to optimize their functions.

CHELATION AS A THERAPY FOR CLEARING METALS AND CHEMICALS

We've said it before and we'll say it again. The main organ of protection is your liver. Chapter Nine: The Liver, Kidney, and Lymphatic System, is devoted to understanding and promoting the health of your liver. Meanwhile, chelation will help you remove the heavy metals from your body and also provides help with the detoxification of accumulated chemical load. Interestingly, the solution to ridding the body of heavy metals is also useful in eliminating chemicals.



Chelation is a process of detoxification for heavy metals, unwanted chemicals and excess minerals. Chelation agents are substances that chemically bond with metals, mineral and chemical toxins in the body. The chelation agent encircles the mineral, metal, or chemical ions and carries them from the body through the urine and the feces.

Chelation was traditionally administered intravenously and required an extensive series of treatment. While very effective, it was also very costly. The original ingredient was EDTA, to which was later added DMSA and DMPS. These are strong binding agents which stayed in the body for a long time. In addition to detoxifying the heavy metals, they also leeched out the good minerals often causing very serious side effects. There were daunting questions as to whether it was prudent to chelate individuals who still had metal fillings in their mouth. Nowadays, EDTA is available in oral form and suppositories. In addition, new plant-based chelations have been developed which are quite effective.

Chelation Products & Treatment

Mountain States Health Products has an oral EDTA called Lipoflow which is safe for general use. The recommended dosage is one ounce, two times weekly. This product must be taken for an extended period of time to have its optimal effect. In addition to heavy metal chelation, EDTA is valuable in breaking down calcium build-up in the arteries.

The products I suggest for detoxifying heavy metals are NDF and NDF Plus. Both are produced by BioRay, Inc, and they must be ordered through your natural health-care practitioner.

NDF Plus is recommended for people who have low energy and are debilitated. Both types of NDF come in liquid form. I would recommend a dosage of three drops of the product in 8 to 10 oz. of distilled water, two times daily, at least one hour either before or after eating. If you still have metal fillings, use the first two mouthfuls to thoroughly rinse your mouth and spit. Then drink the rest.

NDF is totally safe unless you are allergic to chlorella or cilantro, and even then, due to the manufacturing process, **you may not** have an adverse reaction. The toxicity captured by each dose of the product is eliminated in the first two urines after taking the product. For that reason, don't take the product before going to sleep.



CHAPTER NINE: THE LIVER, KIDNEY AND LYMPHATIC SYSTEM

The liver is the primary foundation of our physical health, and perhaps even of our psychological health. As the chemical plant within the body, it performs over 500 functions. It is the largest organ in the body and has the ability to regenerate if damaged. It is often considered the brain of the body. When it is overstressed with toxicity or lacking in nutrients, all the other organs of the body start to malfunction. In the biological terrain, the liver is our vegetation. The amazing range of functions that occur in the liver are reflected best by the equally amazing diversity of the vegetal kingdom: grass, flowers, moss, trees and so on. A healthy liver is synonymous with flourishing health.

This premise is disregarded by most in traditional medicine, which tells us how far western medical thinking has deviated from the care of the body. As we will see later, testing the liver is easy and treating and maintaining a healthy liver could eliminate at least 80% of our most common health challenges.

THE LIVER - FILTERING OUT THE BAD STUFF

We can list only some of the more than 500 functions that the liver performs to keep us healthy, but they will give you an idea of how critically important this organ is to a healthy and vital life.

The liver is the:

- Primary metabolic organ for protein, fats and carbohydrates
- Organ of detoxification in the body (it breaks down both environmental toxins and internal toxins produced as a by-product of normal metabolism)
- Storage facility for vitamins, sugar and fat
- Largest reservoir of blood, containing at any given time 13% of the blood in the body
- Only organ in the body that can re-generate itself, even if it is up to 80% damaged
- A filter through which drugs, artificial chemicals, contaminants, pollutants, insecticides, pesticides, food additives, nicotine and alcohol are broken down and eliminated
- Processor of EFAs such as omega 3 and omega 6, vital for weight control, endocrine, brain and cellular functions



- Producer of cholesterol, essential for cardiovascular health, and a precursor to all steroid hormones
- Main organ for the synthesis of amino acids, the major building blocks of tissues and functions
- Creator of Kupffer cells, special proteins related to immunity
- Converter of digestive enzymes into proteolitic enzymes, and vice versa

Breaking Down Toxins

When breaking down toxins, the liver engages in a two stage process.

The **Phase I** process breaks down certain toxins and transforms them into less toxic substances. These can still be dangerous and, unless we have enough antioxidants in our body, they can attack the liver cells and lead to degeneration and disease. The main antioxidants that we need to protect the liver from damage are vitamin C, vitamin E, carotenoids and bioflavonoids.

The **Phase II** process, called the conjugation pathway, combines the toxins with other natural substances stored in the liver to render the toxins less harmful. As part of this process, the toxins are converted into water soluble substances so they can be excreted through normal channels of elimination without causing harm. Phase II often follows Phase I. However, certain toxins are processed directly through Phase II.

When a build up of toxins overload the liver's ability to properly function in either of the phases, dramatic consequences can result. That is because the toxins can stay in the body for years, even a whole lifetime, and may interfere with vital bodily functions. Some of the toxins are fat soluble and cannot be discharged through natural elimination pathways. Instead, they attach to fat and fatty tissue including cell membranes, endocrine glands and the brain. The result of toxic accumulation can lead to mental illness, endocrine dysfunction and, since many of these toxins are carcinogenic, incidence of various cancers. Toxic overload also leads to opportunistic infections. Opportunistic infections are another major source of inflammation.

Toxicity also interferes with absorption of minerals and EFAs and may result in serious nutritional deficiencies.

Cleansing the Filter

The liver as a filter is designed to remove waste from the blood before returning it to the heart. It is fundamentally important that it be in perfect functional



order to carry out its job. People who truly love themselves should be in love with their liver and be devoted to keeping their liver totally healthy.

The way to keep filters functional is to keep them clean. With our machinery, the way we do this is either to remove filters and wash them or to replace them. Removing the liver and washing it is not an option, and replacing it is a measure of last resort fraught with serious consequences. The best approach is to keep it healthy, and as if by magic, the liver keeps itself clean.

The best way to keep the liver healthy is to decrease toxic load and give the liver everything it needs to carry out its job. Fortunately, that which keeps the liver healthy is the same as that which keeps your body in radiant health.

- Antioxidants
- EFAs
- Essential amino acids
- Enzymes
- Natural anti-microbals
- Carotenoids
- Bioflavonoids

There are many excellent formulas on the market, some based on plants, some based on nutritional supplements such as vitamins, minerals and amino acids.

Simple Steps to a Healthy Liver

All these products are available from Mountain States Health Products, a distributor of professional formulas. Or, go to your local health food store for common brands.

Artichoke Extract, two tablets of 500 mg, two times daily

Milk Thistle, also called Silymarin, two capsules of 250 mg, two times daily

Alpha Lipoic Acids, one tablet of 400 mg, once a day

Carotenoid complex (plant pigments), as directed on the label

Bioflavonoid complex as directed on the label

In addition to toxicity and nutritional deficiencies, common problems associated with the liver are parasites called flukes. One of the best products to address this issue is Micro Defense, available through Mountain Health Products. Take 3 capsules, 2 times daily with meals. The total length of the treatment is two to three months. Another good product is Paraclear from Physiologic.



THE KIDNEYS – THE OTHER MAJOR FILTER

In the same way that the liver can be likened to vegetation that fully expresses the quality of our physiological terrain, the kidneys equate to the irrigation and drainage. The kidneys, like the liver, act in a variety of important and different ways: as a filter and elimination pathway, and they are central to the re-absorption of fluids. If the kidneys do not effectively eliminate certain toxins, they remain in the blood and are redistributed throughout the body. Urea is the primary toxin that the kidneys eliminate. Several metabolic residues such as ammonia and nitrates comprise urea.

Unlike the liver, kidneys have sensitive membranes that do not regenerate when damaged, so protecting them is essential. Ammonia and nitrate are maintained in the body as part of metabolism, but they can damage the kidneys and the liver when present in excess. The kidneys will also retain within their tissues heavy metals, chemicals and minerals that have not been effectively processed and are accumulating in the system. The kidney can also be affected by Candida overgrowth, parasites and opportunistic infections. Clearly, with a "clean" biological terrain, a strong immune system, and no pathological inflammation, we will have the best chance of protecting the kidneys.

To create that clean environment, one of the best things to do is decrease or eliminate alcohol and caffeinated beverages, and to drink plenty of fluids. In particular, we recommend drinking two to three glasses of distilled water first thing in the morning, plus an additional four to six glasses of bottled or filtered water.

Balancing pH Levels

Another way to ensure that your kidneys reside in a healthy atmosphere is to keep your urinary pH balanced. There is always a combination of acid and alkaline in the body. Maintaining good pH balance is key to kidney health, but it also has a profound effect on the health of the whole body.

Too much acid in the system can be detrimental. Acidity in the body can have various causes, some of which we have already mentioned, such as: heavy metal and chemical toxicity, Candida, parasites, pharmaceuticals, any chronic causes of inflammation, sugar metabolic imbalances, diseases, highly acidic diet, lack of sleep, and chronic physical or psychological stress.

Because the kidneys filter all interstitial fluid to keep the blood healthy, they can easily be damaged by the factors that cause a highly acidic biological environment. High acidity in the body is also a major cause of oxidative stress, affecting and damaging cells and leading to degenerative diseases.



Test your first urine pH when you wake up in the morning. To do this, buy some pH reactive paper at your local pharmacy. It comes in the form of a tape with a legend on the box explaining how to assess the acid/alkaline level. Tear off a piece of the tape and place it in midstream of your first urination. A pH that is consistently below 6.6 is an indication that your body is too acidic. You should recheck your pH with your second morning urine. If the pH has bounced back and is above 7, you do not have major cause for concern because your body is balancing out effectively. On the other hand, if your pH stays low below 7, start an alkalinizing process. Many of the strategies we have covered previously will do this, including detoxification, Candida eradication, sugar metabolic and adrenal regulation, weight loss and elimination of inflammation.

Some foods are much more alkaline than others. Eating a diet that is more alkaline than acidic will also help in regulating your body's pH. At the same time, decrease your consumption of acidic food and put lime in your bottled water and drink it throughout the day. To see a list of acidic and alkalinizing foods go to http://www.liferesearchuniversal.com/acid.html.

Chronic stress can also contribute to an imbalanced pH. When you are stressed, you generate the fight or flight response which creates more acidity in the body. It also decreases the parasympathetic activity which makes the body more alkaline. Regular exercise, relaxation, regular sleep, meditation or prayer increases the parasympathetic function and reduces the fight or flight response.

Another important factor in managing stress is to re-think your life in terms of what you love to do rather than what you have to do, and begin doing more of the things you love to do. We will cover in greater detail how to manage chronic psychological stress in Chapter Sixteen.

Be Kind to Your Kidneys

One of the best restorative teas for the kidneys is marshmallow root. If you are concerned about your kidneys or are prone to bladder infections, drink three cups a day. Marshmallow root tea is available at most health food stores or order it online at www.iHerb.com.



THE LYMPHATIC SYSTEM – THE SEWAGE TREATMENT PLANT OF THE BODY

On the earth as in our bodies, there must be pathways and processes through which waste can drain and be released. Within the human body, there are several different pathways and processes that enable this release, and one of them is the lymphatic system. This system is the mechanism for the elimination of a variety of contaminants and micro-organisms. Without a properly functioning lymphatic system, we would die within 24 hours.

The lymphatic system is composed of vessels, nodes and lymphatic organs such as the spleen, the thymus and bone marrow. Furthermore, lymphatic tissue is present in all other major organs with the purpose of draining impurities and maintaining the integrity of the organs. Nearly all the tissues of the body depend on lymphatic drainage.

Although drainage is a critical role of the lymphatic system, it also regulates fluid metabolism by reabsorbing excess fluid and returning it to the circulatory system. As part of this cycle, it also absorbs, processes and destroys all foreign invaders and all unwanted particulates, including large proteins (anything that is discharged by the tissues but cannot be reabsorbed directly into the blood stream), dead tissue, fungus, bacteria, viruses, parasites and abnormal cells. The lymphatic flow is maintained through peristalsis and muscular activity. What interferes with the lymphatic drainage can be attributed to:

- Lack of exercise
- Chronic muscular tension around the neck, shoulder and pelvis
- Lack of proper fluid absorption
- Anything that produces a decreased level of physical activity: low sugar, hypothyroid, low adrenals, physical toxicity, infections and chronic inflammation
- Excess Candida that has moved out of the large intestine, the mouth and the vagina

Assisting the Lymphatic System

Fortunately, there are some simple things you can do to maintain a healthy lymphatic system, including:

 Regular exercise, particularly cardio vascular: walking, jogging, dancing and so on



- Drinking two to three glasses of distilled water each morning, and four to six glasses of bottled or filtered water each day
- Regular structural work for those who need it: chiropractic, Pilates, Gyrotonics, massage, Trager work, Feldenkrais, yoga and so on
- Detoxification and candida eradication as described in Chapters Six and Seven
- Treating physical dysfunctions that cause fatigue, inflammation, sugar metabolic imbalance, low thyroid and adrenal dysfunction

Keeping the Drain Unplugged

Products that boost lymphatic drainage that can be ordered from:

Mountain States Health Products (MHP)

Lymph Liquid, one dropper-full, 3 times daily

Vitamin B complex, I tablet, 2 times daily

Apex

Lymph Terrain, 10 drops, 3 times daily

Deseret Biologicals

Lymph Drainage, 10 drops, 3 times daily.

There is no need to take all of these products. Select one product from one of the three companies and supplement it with vitamin B. I have used all three and they are all excellent. The products from MHP, Deseret, and Apex need to be ordered by a licensed practitioner.



CHAPTER TEN: NATURALLY MAINTAINING CARDIO-VASCULAR HEALTH

Our physiological terrain is as complex as the one we share on planet earth. The liver is like the earth's vegetation, the kidneys compare to the flow of clear water, the lymphatic system is akin to the earth's ability to filter out impurity, and the lungs provide the oxygen needed to sustain life and the heart is equivalent to the sun. Simply put, it provides what human life depends on for survival.

Even though it doesn't take a rocket scientist to understand how important our beating hearts are, the sad fact is that millions of Americans have what I'll refer to as "broken" hearts. To illustrate, more than 50% of the deaths in the U.S. are due to cardio-vascular diseases, and approximately 17% of the population over 20 years of age has a total cholesterol level topping 240 mg/dl (milligrams per deciliter). A healthy number for that age group would be a maximum of 200 mg/dl. And conditions do not seem to be improving: the imbalances that are likely to develop into cardio-vascular diseases such as obesity or diabetes are rising rapidly. Perhaps even more distressing is that Type II diabetes, previously only affecting people over age 50, is now commonly seen in adolescents.

The good news is that certain medications have improved the situation and regular check ups enable us to address individual risks much quicker. It is also true that the actual number of deaths caused by cardio-vascular disease is decreasing. Even so, heart disease is still a major problem that dramatically impacts the lives of millions of individuals at a great cost to everyone.

Although choosing to use pharmaceutical drugs to treat heart disease is understandable, we offer alternatives: diet, exercise, meditation, relaxation, lifestyle counseling, supplements, homeopathy, acupuncture, herbs of various sources and massage.

Let me tell you my own personal story about how I lowered my cholesterol by using natural products.

In 2003, I decided to have a complete physical because, even though I felt excellent, I knew of my genetic risks for cardiovascular diseases and low thyroid. I was amazed to discover that my total cholesterol was over 250 mg/dl instead of the normal of 200 mg/dl. My triglycerides were 257 instead of 100. My homocysteine level was 25, instead of below 13. And my TSH was above 20 instead of below 5. In short, my cardiac risk was high and my thyroid function was low. Of course, the doctor wanted to put me on syntheroid medication for the thyroid and a cholesterollowering drug. I thanked him and decided that I would handle this on my own.



One year later, after some trial and error, my total cholesterol was174. My triglycerides were at 100, my homocysteine at 13, and my TSH measuring my thyroid output was just above 5.89 - just slightly high. Since then, my cholesterol has remained stable and my thyroid has improved further.

I made these improvements entirely through natural means without any pharmaceuticals. In the follow-up tests, I also had my C reactive protein checked, which, at 2.4, was within range. My doctor's comment was that whatever I was doing worked and that I should continue doing the same. Needless to say, my cardio-vascular risk has decreased a great deal and my stamina has improved.

I want to reiterate that we don't think pharmaceutical products are bad or that you should not follow your doctor's advice or comply with his/her recommendations. Still, for those who want it, we can suggest responsible, natural alternatives. This choice often involves a more conscious involvement on your part and much higher personal responsibility. When you choose such an approach, it is also critical to continue having regular medical check ups to monitor your progress and make sure that you are producing the desired results.

THE MARKERS OF CARDIO-VASCULAR DISEASES

Many things contribute to cardio-vascular disorders. Fortunately, we have the power to alter some of the causes by making lifestyle changes. Smoking, obesity, chronic inflammation, sugar-metabolic disorders and long-term stress can all be stopped, altered or remedied before they cause irreversible damage. Even genetic patterns can be identified and controlled through simple natural means. We'll help you learn about risk indicators and what you can do to take the situation in your own hands before it is too late.

While it is critical to address the markers of cardio-vascular dysfunction, it is important to consider them in the context of your overall health. Again, the physiological terrain does not operate as hundreds of separate parts, but rather, as a complex web of interrelated causes and effects. Adrenal dysfunction and chronic inflammation, for example, lead to adrenal stress, which triggers sugar metabolic and thyroid imbalances. Those, in turn, can weaken the cardio-vascular system and prompt heart disease. This should make it clear that we need to view cardio-vascular disturbances in the context of stress, inflammation, sugar metabolic disorders and thyroid dysfunction.

There is a strong connection between thyroid function and high cholesterol, and between adrenal dysfunction and cardio vascular risks. If any of these markers are out of range, we will tell you what natural approach you can use to bring these levels back to where you and your doctor want them to be.



The most common tests ordered as part of your yearly check up are for total cholesterol, comprised of LDL cholesterol (sometimes called bad cholesterol) and HDL (called good cholesterol). Of course there is no good and bad cholesterol. LDL is a lubricant that circulates in the blood stream and protects the walls of the veins and arteries. HDL acts as a solvent that removes the build up of old LDL and prevents the formation of plaque and occlusion.

In addition, cholesterol is a precursor to the formation of the sex hormones and stress hormones produced in the adrenals. The reason LDL is often called bad is because excess LDL increases cardio-vascular risk and high HDL decreases cardio-vascular risk. The present recommended total level cholesterol for all ages is below 200 mg/dl.

Let's take a deeper look at these markers.

- HDL (High Density Lipoprotein): the cholesterol designed to prevent buildup of plaque in the arteries. The normal range for males is 30 to 70 mg/dl and for females is 35 to 80 mg/dl. The ideal for both genders is above 50 mg/dl.
- LDL (Low Density Lipoprotein): this cholesterol is the lubricant of the blood vessels. The normal range is between 100 and 129 mg/dl and the ideal range is below 100 mg/dl.
- Cardiac Risk Factors: HDL and LDL cholesterol are designed to work in relationship to one another to protect the blood vessels. For this reason, cardiac risk factors are determined as a ratio. This ratio is actually more important in calculating your risk than the relative level of each type of cholesterol. It is determined by dividing your total cholesterol by the HDL. The normal range for males is 3.5 to 5.0 and the ideal is 1.0 to 3.4. The normal for females is 3.4 to 4.4 and the ideal is 1.0 to 3.3.
- Triglycerides: refers to the amount of fat circulating in your blood stream. It varies with age: for males the upper level is 130 plus the individual's age, up to 200 mg/dl. For females it is 80 plus the age, up to 165 mg/dl. The ideal for both males and females is below 100 mg/dl. Triglycerides are greatly influenced by what you eat and can stay in your system for over 12 hours after ingestion.

A consistently high level of fat in your blood stream considerably increases your cardiovascular risk. For this reason, consistent consumption of fast food is a cardio-vascular time bomb.

Other markers are important but are often not included in blood test reports:

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- C-reactive protein: this measures ongoing inflammation of the cardiovascular circuit
- Homocysteine: a genetic factor associated with many imbalances and in particular increased risks for heart disease
- Lipoprotein (a): a genetic factor that increases the risks of arterial occlusion
- Ferritin: an indication of excessive iron. It increases the risk for cardiovascular problems as well as affecting immunity and endangering the health of the liver
- Fibrinogen: an indicator of increased risk for arterial occlusion
- Blood glucose: indicates diabetes or sugar metabolic imbalances. It is usually included in a standard blood test
- Insulin: indicates sugar metabolic imbalance
- Hemoglobin A 1 C: an important complementary test to the glucose level.
 It indicates how the glucose level has been for the past three months

To obtain those numbers, you may have to request them specifically from your health practitioner. Depending on who you go to, they may use different laboratories and the values may change from one lab to the other. These tests may not be reimbursed by insurance but they are critical to determine your cardiovascular risks and your genetic tendencies.

Most, if not of all of these tests, are available from www.directlabs.com. If you do not want to go through your doctor or health practitioner, you can order most of the common tests directly. You will be directed to the lab closest to you. They will receive the results and forward them to you with the suggestion that you consult your own physician if any of your tests result is out of range. A comprehensive cardiac panel called Cardio Plus Extended Package would provide most of the key information necessary to thoroughly evaluate cardiac risks.

Natural Remedies for At-Risk Individuals

If your cholesterol is slightly elevated, it can often be controlled through diet and exercise. Certain products also show a profound effect on cholesterol ratio.

Garlic has been shown to have a beneficial effect on practically every aspect of cardio-vascular health. Before taking garlic, be certain that you have no adverse reaction to it since you must consume it in large quantities. There are many garlic formulas on the market. The one I prefer is a freeze-dried formula and is only available through a health practitioner who can obtain it from Pharmax. Take two to three capsules twice daily.

Niacin, take at least 300 mg per day

Fish oil, 2000 mg

Selenium, 200 mcg

Vitamin E. 200 to 400 IU

Tocotrienols, 200 mg 2 times daily

Vitamin C, at least a 1000 mg daily

Nattokinase is a Japanese product which acts as a scavenger for arterial plaques. 100 mg daily is a good maintenance level.

Two new products getting good results are Guggul and polycosanol. They are available separately or in a combined formula called Polilip produced by Health Concerns, a provider of Chinese Formulas.



If your overall cholesterol is high and you have high LDL and low HDL, and if you suspect that it is genetically-based, you may need to use a more radical approach than what we've suggested so far. Presently, the most common treatments for cholesterol are statin drugs, but they are not without potential side effects. There is a natural product called Red Yeast Rice that contains a statin called Lovastatin. It offers similar results as the pharmaceutical versions, minus most of the risks. It has a definite effect on elevated cholesterol and has been used for thousands of years in China

Lovastatin is one of the products I used to regulate my cardio-vascular function in less than one year. Unfortunately since my use of this product and because of the statin content of this product, the FDA has gone to great lengths to control the sale of this product by the herbal manufacturer. It is still on the market but with no information about statin content. This makes it hard to evaluate the effectiveness of the product. I have clients who obtained very good results with it and others who did not, and I suspect that it might be related to the origin of the product. The Chinese name for this product is Hong Qu. It is sold as a formula under the name Xue Zhi Kang directly from China. Because of the uncertainty about the content of the product manufactured in the US I would look for the Chinese formula. The recommended dosage is 1200 mg, 2 times daily. Red yeast rice is a common ingredient in many Asiatic foods and is consumed in much higher amounts by the Chinese population without unwanted side effects.

Because Red Yeast Rice is a statin it may stress the liver and it does decrease Co Q10. As a result, I recommend that all statin users increase Co Q10 intake to a minimum of 100 mg per day and to take Alpha Lipoic Acid on a regular basis to counteract some of the potential negative effects of Red Yeast Rice. Even though it can impact the liver, it is all natural and works beautifully while being much less dangerous than the synthetic counterparts. You may feel more comfortable working with a health-care professional while taking Red Yeast Rice.

Recent research also emphasizes plant sterols for the control of high cholesterol and tocotrienols, a type of vitamin E. An excellent choice is Cardio-Edge produced by Douglas Labs and available at MHP.

If for some reason you do not tolerate Red Yeast Rice, another product which has been used to lower LDL and raise HDL is Niacin. It needs to be taken in high amounts, 1500 mg to 2000 mg, and is not recommended for individuals with high blood pressure. A good brand is Niacitol produced by Pure Encapsulation and available through MHP.



THE RELATIVE IMPORTANCE OF THYROID AND HOMOCYSTEINE

As described in my own story, I did not just have high cholesterol. My thyroid was low and my homocysteine was quite high. These are very often associated with cardio vascular imbalances. Low thyroid output is correlated with high cholesterol, low energy that leads to low or no exercise, and increased weight gain. Most often the blood test measures a hormone produced in the pituitary called TSH. When TSH is low, it is assumed that thyroid production of hormone is low. The normal range for TSH is 0.40 to 5.00.

Low thyroid output is sometimes associated with low iodine. Since salt has been enriched with iodine, deficiencies are very rare, although people on low-salt diets can be deficient. One way to measure if you have a normal iodine level is to purchase an iodine tincture from your pharmacy and apply it to your forearm. If it disappears in less than 24 hours, it indicates some level of deficiency. The quicker it disappears the greater the deficiency. Increase your salt intake and continue applying the tincture until it stays for 24 hours.

You can re-test periodically to make sure you are maintaining the right amount. Low thyroid is often a genetic imbalance that needs to be addressed on a regular basis. Thyroid testing is often incorporated in a regular check up available through your health practitioner. If you want to order on your own go to www.directlabs.com.

Thyroid Boosters and Regulators

There are three natural products that I highly recommend for improving thyroid function.

Thyroxal I restores normal production for people with low thyroid. I recommend two to three tablets daily.
 Thyro CNV is designed to maximize the utilization of thyroid hormones. Take two tablets per day.
 Thyraxis PT is for people who have low thyroid output related to the deficiency of the production of the TSH (Thyroid Stimulating Hormone) by the pituitary. The recommended dosage is 3 per day.

When I used Thyroxal alone, two tablets per day, my TSH went from 25.30 to 5.89. Normal is below 5 so I just increased the amount by one tablet per day.

These products are available from APEX Energetics.



Homocysteine is a genetic factor that increases cardiovascular inflammation and considerably increases the risk for heart attack and stroke. Homocysteine is a result of the improper conversion of an amino acid, methionine, into another amino acid, cysteine. The normal range for homocysteine is equal to or below 13 umgl/L. The ideal is below 8.0 umgl/L.

Regulating Homocysteine

In my first test, my homocysteine was 25 and I brought it down to 13. Lowering homocysteine is usually very simple and only involves using three parts of the vitamin B complex: at least 50 mg of vitamin B6, 300 mcg of vitamin B12 and 500 to 800 mcg of folic acid. A product available from MHP called Homocysteine provides these vitamins in the right ratio. I take two per day and this has brought my Homocystein to the normal level. I intend to take one more to see if I can reduce it further.

Testing for elevated homocysteine is often disregarded by MDs. However, it is part of the Cardio Plus Extended Package offered by Direct Labs.

LESS COMMON BUT SIGNIFICANT TESTS

Beyond the typical tests that determine cholesterol levels and the possible indications of danger to the heart, there are other tests and that can provide valuable insights and corresponding natural treatments that aide in maintaining a healthy heart. Even so, I must emphasize here that my approach to health is treating the terrain before treating specific issues. With that in mind, treating cardio-vascular emergencies are not within the scope of my practice. In addition, I never recommend disregarding your MD's advice. Please look at the following suggestions as alternative approaches to be used at the first indication of an abnormal test. Do not use them in any type of cardiac emergency or wait until your system has broken down.

C-Reactive Protein (CRP)

In recent years, new research has been conducted on the impact of inflammation on the cardio-vascular system. A new blood test has been designed to measure the degree of inflammation in the circulatory system. It is called 'C Reactive Protein High Sensitivity.' Normal range is 1.0 to 3.0 mg/l. The ideal is below 1.0 and elevated is above 3.0. Above 10 is an indication of acute



inflammation. This test is also part of the comprehensive cardiac package from Direct Labs.

Treatment ■ Elevated CRP is always an indication of inflammation.

Consequently, using an anti-inflammatory makes sense. As a result, many MDs suggest 80 mg of aspirin daily or some form of non-steroidal anti-inflammatory. While this may sound like a good idea, I believe that except in the case of an emergency, this should be avoided. Regular use of aspirin or any NSAID can create havoc in the liver, kidneys and digestive system.

A great alternative is a product called Wobenzyme N., which has 30 years of clinical research in Germany. Another product is Boswellia 90, previously covered in our Chapter Three on treating inflammation.

Wobenzyme N. as an Effective Anti-Inflammatory Remedy

Wobenzyme N. is an enzymatic combination of protease, bromelain, papaine and rutin, and acts as a scavenger of abnormal dead tissues and abnormal micro-organism. It's very effective in reducing chronic inflammation. It would probably benefit everyone to take this product throughout their adult lives.

Wobemzyme N. is available on the Internet or in most health food stores. The recommended dosage is three to five tablets, two times daily, between meals or before sleep. Another product, Nutrizyme, is available from American Nutriceuticals.

Lipoprotein a – Lp(a)

Plaque is composed primarily of Lp(a). It is not regular cholesterol. It is a consequence of ascorbic acid deficiency (vitamin C). If the arteries get injured through an inflammatory process, they rely on vitamin C for tissue repair. When there is a lack of vitamin C, the body creates an Lp(a) plaque to cover the injury. Progressively, the scab grows and if the tissues are not healed underneath, the scab can detach and produce an arterial blockage or heart attack. High levels of homocysteine increase inflammation in the vessels, thus triggering increased levels of Lp(a). This blood test can be ordered by your MD or ordered directly from Direct Labs.



Treatment: This condition is clearly a result of vitamin C deficiency, so the logical treatment is to increase the intake of vitamin C and other tissue repair vitamins such as vitamin E and tocotrienols. The amount of vitamin C you can take depends on your level of tolerance. If it gives you diarrhea, you are taking too much for your system. I recommend Pro-Ascorbate C, available through MHP. This vitamin C is in powder form and is buffered to decrease the impact of the acidity on the stomach. One teaspoon is equivalent to 4000 mg. I recommend using ½ teaspoon, three to four times daily. I would also combine this treatment with the Wobenzyme, discussed above, and if appropriate, with the treatment for homocystein. Some of my clients also had good results with Nattokinase, discussed in the previous section.

Serum Ferritin

Serum ferritin is tested in the blood and is an accurate test for iron levels. Elevated iron is more often associated with liver disease and certain types of cancer than with heart disease. Some research has indicated, however, that there is a correlation between high serum ferritin levels and increased cardiac risks. Excess iron can be detrimental to many aspects of health, and iron supplementation should be avoided by men of all ages, as well as post menopausal women. Normal serum ferritin for men is 20 to 300 ng/ml and for women is 15 to 120 ng/ml. Ideal is between 20 and 50 for males and females.

Treatment: Elevated serum ferritin can be an indication of genetic abnormality or is associated with serious liver damage. We will leave the diagnosis and treatment of these diseases to your MD. Assuming, however, that you are dealing with one of these issues, we do suggest that you stop consuming supplements with iron. Apart from menstruating women and people diagnosed with anemia, there is no good reason for anyone else to take extra iron. Detoxifying the liver would be the other recommendation (Refer to Chapter Eight on liver detoxification). Utilization of oral EDTA is also very effective in removing excess iron and calcium in the blood vessel.

Oral EDTA is available from MHP under the name Lipoflow. Take ½ jar, two times weekly, for a minimum of five months. Great results have also been reported with Wobenzyme, mentioned above, and with the use of vitamin C, 5000 mg per day. Elevated iron also contributes to infections because most micro-organisms thrive on iron. Therefore, lowering iron also contributes to lowering inflammation.

Serum Fibrinogen

Fibrin is involved in blood clotting. The reason it is used as a cardio-vascular disease marker is that abnormal elevation increases the risk of developing blood clots. Over time, blood clots could contribute to an increased risk of cardio-vascular disease, particularly if C-Reactive Protein and homocysteine levels are high. Serum



fibrinogem is measured in the blood. The normal range for men is 180 to 340 mg/dL; for woman it is 190 to 422 mg/dL. The ideal for both sexes is between 150 and 300 mg/dL. Serum fibrinogen increases automatically with acute inflammation and may be affected by many drugs.

Treatment: Because elevated serum fibrinogen is usually associated with inflammation, Wobenzyme and vitamin C, E and tocotrienals are highly recommended, as well as fish oil, garlic, niacin, and Nattokinase discussed above.

LIFESTYLE CHANGES

There are mountains of evidence printed in medical journals and even stories in entertainment magazines illustrating how lifestyle changes are a necessary component of living with a healthy heart. No one likes the idea of giving up a habit or lifestyle that has given them pleasure in the past—no matter how bad the habit is. However, if your heart is at stake it's good to know that some of the most effective and proactive measures you can take to create a healthier terrain for your heart are completely within your control.

Personal steps you can take to treat cardio-vascular dysfunction are to stop smoking, change your diet, start exercising regularly, and learn how to deal more effectively with life challenges. People who get angry easily are much more prone to cardio-vascular problems.

Smoking Cessation

If you have smoked in the past 20 years, your cardio-vascular risk is elevated. What's more, smoking also increases your chance of developing lung and stomach cancer, and these are among the least treatable types of cancer. The more you smoke and the more recent the habit, the higher the risk.

There are a great many choices available to help you stop smoking: over the counter products, hypnosis, acupuncture, support groups, etc. Whatever you choose, it will work if you are motivated. So if you don't do it for yourself, do it for whomever you care for: your husband, wife, children, parents, girlfriend, boyfriend, etc. You will improve your health and theirs.

Nutrition

Most cholesterol is produced in the body (approximately 93%), so a low cholesterol diet is not the only answer. Still, reducing homogenized fat and some saturated fat is a great idea. It will help reduce your triglycerides and may help you lose weight. Remember though, not all fats are bad for you or increase your cardiocardiovascular risk. Fat is one of the main sources of energy in the body and EFAs (EFA) are critical for balancing hormones and dealing with inflammation.



Contrary to what you may have heard in the past, the biggest problem is not fat. It is carbohydrates - more particularly, refined carbohydrates, especially bleached flour, sugar, fruit juice, sodas, ice cream and alcohols. The reason these products are more treacherous is because they lead to sugar metabolic disorders, obesity, chronic inflammation, and addiction.

When cells become insulin resistant due to the onslaught of carbohydrates, they have more and more difficulty converting sugar and fat into energy. As a result, the pancreas produces more and more insulin. This insulin creates chronic inflammation that stresses the adrenal glands, and the sugar and fat get stored as extra weight.

Finally the body becomes unable to produce the insulin that it needs and diabetes results. Every stage of this process increases cardio-vascular risks.

For more information about diet and exercise, see Chapter Six on weight management

Stress Management

Stress, and particularly explosive emotional reaction to stress, is one of the factors to watch for while healing your cardio-vascular system. Blowing off steam does not cool the biological system, it actually overheats it. If you find yourself consistently over-reacting and being angry at yourself, your family, the way the world is being run, etc., you had better learn to cool off.

This book mentions many ways to decrease your stress level. I suggest that if it is your temperament, you start examining how to approach situations in your life in a less abusive way. If you need more help and support in bringing your anger under control, look into a system called Non-Violent Communication. It was developed by Marshal Rosenberg and has been used all over the world to improve communication and promote effectiveness. If unresolved issues from the past are interfering with your ability to create the life you want, check out Insight Training Seminars and/or Landmark Education. Information about both of these organizations can be found on the Internet.

There are other ways to relieve stress: meditation is one of the best; therapy can help; exercise will automatically relieve some of it; soothing music, being around animals, there are lots of options. See Chapter Sixteen to learn more.

KEEPING YOUR HEART HEALTHY

I have covered the circulatory system at some length but I have not said much about the heart itself.



The first thing to understand, from a maintenance point of view, is that the heart is a muscle that acts as a pump. Like all muscles, it needs to be oxygenated, it needs to receive the proper nutrients, and it needs to be exercised. For this reason, regular cardio-vascular exercise is vital to tone the heart and maintain it.

The heart functions all the time. Even when it is not challenged, it still needs to be strong enough to send the blood to all the extremities. Every cell in our body is dependent on that blood flow and would die very rapidly without it.

And the Beat Goes On: Healthy Heart Maintenance

Because the heart has to sustain its action, it has to constantly produce energy for itself. For this reason, it is one of the organs that consume the most CoQ10, a co-enzyme which is critical for the production of cellular energy. Dr. Steven Sinatra, a well known cardiologist who has done extensive studies on the natural treatment of cardio-vascular disease, believes that CoQ10 is one of the most critical components of cardio-vascular health. Take a minimum of a 90 mg soft gel capsule or 250 mg of a regular capsule.

A new form of more absorbable CoQ10, called Ubiquinol, is now available and considered even more effective. It is available at MHP and the recommended dosage is 100mg per day. In addition, the most critical nutrients for the heart are vitamin E - 400IU, tocotrienols - 200 mg, Magnesium - 200 mg, Hawthorne - 600 mg, cordyceps - 400 mg, and taurine - 200 mg.

Most of this is provided in a great formula from Physiologics called Vita Cardia, available through Mountain Health Products. Take three tablets, daily with meals.

I have not covered the pathological aspects of cardio-vascular health because it is out of my scope of practice. I provided here the information you need to understand what your doctor is looking for when he examines your cardio-vascular function. I also provided you with the information that you need to maintain, improve or correct your cardio-vascular function. It may be more challenging than popping a pill or two that your doctor prescribed. In the long run, those pills may produce more problems than they solve. I am walking proof that balancing the heart can be done naturally.



CHAPTER ELEVEN: A FEELING IN THE GUT: THE KEY TO HEALTHY LIVING

In the analogy that we have evolved comparing organs and their functions with various elements of nature, we have assigned specific roles to each of them.

In the amazing diversity of the liver and gall bladder, we see the diversity of the vegetal kingdom, the flora on our planet: the trees and their life-giving leaves, the flowers and their pollens, the lush grasses that house and nourish the many creatures of the eco-system.

In the kidneys, we see the varied function of water: rain, streams, ocean, mist and fog with their incredible healing and purifying influences.

In the heart we see the action of the sun without which life could not be sustained. It brings the warmth, the oxygen and the nutrients to all the cells in our body similar to the action of light and photosynthesis in plants.

Moving our analogy forward, we see the stomach and the spleen as the earth that carries all the mineral reserves and provides to the plants their strength, vitality and resilience.

In the lung and large intestine, we see the very cycle of life and death being re-enacted on a continuous basis taking from the environment the most basic nutrients needed by the body, and returning to the earth all the organic matter that we cannot use. In this context the intestinal system plays a very important role of bringing into the body the essential nutrients needed while also eliminating the most unwanted material.

As you can see, the intestinal system is complex and it occupies literally miles of our well-being. So we feel good when it is in balance. When it is out of balance, many areas can be adversely affected.

There are two parts to the intestinal track: the small intestine and the large intestine. Both are vitally important to our health, and each one is subject to the terrible onslaught of our environment.

THE SMALL INTESTINE

The small intestine is the elemental center where food is absorbed, and for this reason, it is the very foundation of good health. The function of the small intestine is dependent on pre-digestion in the stomach, the various enzymes produced in the pancreas, and the bile produced in the liver. Small intestines also contain a very important part of the immune system: lymphatic nodules called



Peyer's Patches. These are designed to block bacterial and parasitic infection of the gut.

In the same way that plants need proper nutrients to grow, or a car needs gasoline, water, oil and electricity to function, so it is with your body. If you are consuming a healthy balanced diet and proper supplementation, and if your small intestine is functioning effectively, you should be in excellent health. On the other hand, if your body doesn't get the necessary nutrients and effectively convert them into their usable forms, your health will be impaired.

The process that transforms nutrients into usable energy relies on a series of chemicals that are manufactured from the mouth to the gut. When any one of the chemicals required for effective digestion and absorption is missing, trouble can arise. Three of the most common disorders include lack of hydrochloric acid, zinc deficiency, lack of digestive enzymes, mal-absorption, and leaky gut syndrome. These are discussed below.

Lack of Hydrochloric Acid (HCL)

HCL is produced in the stomach and is responsible for much of the predigestion necessary to breakdown nutrients on their way to proper absorption. It is also a major trigger for the digestive enzymes produced in the pancreas. This means that when HCL is either too high or too low, it can throw off the enzymatic systems that are essential for good digestion.

There are gastrointestinal (GI) tract stool tests that can assess whether you are producing enough HCL. If you are not, and most people with digestive disorders are not, the best supplement to take is HCL Betaine. It is available at any health food store. Take one tablet in the middle of the meal.

The production of HCL tends to decrease with age. Many people with chronic acid reflux are low in HCL. If the membrane of the esophagus or the stomach is irritated or ulcerated you may not tolerate HCL Betaine. A full workup may be necessary to correct the situation before you can restore the proper amount of HCL.

One simple test to determine your HCL level is to swallow a teaspoon of lemon juice or apple cider vinegar when you have an upset stomach. If it feels better, you probably do not have enough HCL. If it worsens the problem, you probably have too much HCL or the lining of the stomach has been irritated by the putrification that occurs in the stomach when HCL is deficient. If it makes you feel better, a simple approach to improve your digestion is to drink a glass of water with two tablespoons of organic apple cider vinegar with your meals. If that makes things worse, a more detailed work up is necessary to identify the cause of the problem.

BABINETICS BUILDING A SOLID HEALTH FOUNDATION

NATURAL STRATEGIES FOR OPTIMUM HEALTH

Zinc Deficiency

The mineral precursor for HCL production is zinc. Zinc deficiency is one of the most prevalent deficiencies in the U.S. population. Zinc is also necessary for immune function, connective tissues, essential fatty acids, metabolism and hormonal balance, particularly testosterone. Zinc is also a mineral which is easily displaced by metal toxicity.

The main source of zinc in our diet is dark green leafy vegetables such as spinach, rabe and kale. Another good source is kelp. Be aware that kelp is very high in iron and can be contaminated with heavy metals, so don't consume a large quantity of kelp if you are a male or post menopausal woman. Kelp is also very high in iodine, which is great if your body needs it, but will actually down regulate your thyroid if there is too much in your body.

One of the simplest ways to check your zinc is to perform a zinc tally test. You can order a product from Apex Energetics called Zinc Check. This zinc is in a liquid form. Take a teaspoonful of this product in your mouth. The worse it tastes, the less you need zinc.

To supplement with zinc we suggest one of three products.

- From Apex: Zinc Zyme
- From Deseret Biologicals: Zinc Plus
- From Mountain Health Products: ProZ+GL.

You can also purchase chelated zinc at your local health food store. The recommended dosage, depending on the level of deficiency, is 30 to 60 mg per day. It is important to know that zinc can neutralize copper, which is an essential metal in our body. For every 30 mg of zinc, take 1 to 2 mg of copper. Some products already combine zinc and copper in the right proportion.

Repeat the Zinc Tally Test every week until you have achieved the proper result.

Lack of Digestive Enzymes

Scores of people are deficient in digestive enzymes and need supplementation. Symptoms that indicate the need for enzymatic help include:

- Constipation after eating roughage or fiber
- Indigestion or a feeling of fullness lasting two to four hours after eating



- Excessive gas
- Undigested food particles in stools
- Habitual foul smelling stools
- Mucous-like, greasy or poorly formed stool

One digestive enzyme that I recommend frequently because it is comprehensive and effective is Digest, available through Mountain Health Products. Equivalent products are available through your health food store. Make sure the product contains at least the following enzymes: Protease, Amylase, Lipase, Cellulase, Sucrase, and Lactase.

Mal-Absorption

Active transport is literally the passage of the nutrients through the surface membranes of the small intestine after the food we eat has been broken down and refined through the digestive process. When the membranes do not allow nutrients to penetrate through their surface, the result is mal-absorption. The problem may be caused by the deficiency of HCL and digestive enzymes, or it could be due to allergies, toxicity or either physical or psychological shock. These last three causes can trigger a strong survival reaction in the body. One of the instinctive physiological reflexes associated with survival is to inhibit the digestion and absorption of nutrients.

Mal-absorption is common with individuals suffering from:

- allergies or poor digestion, particularly the geriatric population,
- people undergoing chemotherapy because the process is toxic and can be very hard on the digestive track, and
- in individuals that have undergone a serious physical or psychological shock.

Dr. Stephen Stiteler is an acupuncturist, homeopath and nutritionist who practices in Santa Monica, California. He has developed a line of products available through Apex which are particularly effective for correcting this mal-absorption problem. Terrain Remedies are targeted to specific organs or specific functions. People I work with have had miraculous results with these products.

Leaky Gut Syndrome

While some people are stricken with the inability to absorb nutrients, those with Leaky Gut Syndrome experience an excess of absorption. This occurs when membranes in the lining of the small intestine lose the ability to filter out what should not be absorbed, thus allowing large proteins, fungus and other micro-organisms to enter into the bloodstream. There are a variety of causes for this, but it's always connected to inflammation and an indication of serious imbalances in the physiological terrain.

Adrenal imbalances can also increase permeability in the digestive tract. All NSAIDs destroy Cox1, a substance which is directly related to the protection of the digestive tract. As a result, whether they are prescribed or over the counter, NSAIDs come with a warning about possible ulceration and bleeding. Chemotherapy also causes serious damage to the epithelial tissue of the digestive track. Some of the main causes of Leaky Gut Syndrome are chronic Candida overgrowth, heavy metal and chemical toxicity, chronic stress allergies, opportunistic infections and overuse of over the counter analgesics and anti-inflammatory products.

Testing for and Treating Leaky Gut Syndrome

There are a variety of tests to determine if you are experiencing Leaky Gut Syndrome. The one I am most familiar with is the Indican Test. It tests for the presence of Candida overgrowth as well as Leaky Gut Syndrome. This test can be done in your practitioner's office or ordered by your practitioner from The Institute of Bio-Terrain Sciences. There is also another test available from Genova Diagnostics. For information about this test, visit their website at www.genovadiagnostics.com. You will need your natural health care practitioner to order this test.

Once tested, you'll know the cause of your condition and can treat it accordingly. Please refer to previous chapters relating to the causes. The side effects of chemotherapy can be decreased by DGL Licorice, Cat's Claw, and Aloe Vera etc. These products can also be used to restore the lining of the gut while treating other conditions that cause inflammation.

THE LARGE INTESTINE AND DYSBIOSIS

The large intestine, or colon, has two primary functions: absorption and fecal elimination.

The colon absorbs water, electrolytes and vitamins produced by friendly bacteria under proper pH conditions. The vitamins produced in the colon and absorbed through the colon are B1, B2, B12 and K. Many toxins are reabsorbed through the colon, processed through the liver, and eliminated through the kidneys.

The colon stores the material that could not be processed by the small intestine and eliminates it. It produces mucus to facilitate the transfer. It also generates a peristaltic action to move the fecal matter along to the rectum.

There are many different factors that can cause chronic inflammation or infection of the large intestine.

- Fungal overgrowth
- pH imbalance
- Abnormal bacterial growth
- Lack or insufficient friendly bacteria
- Parasites
- Food intolerance
- Insufficiency of intestinal immunoglobulin A (IgA)
- Food or water contaminants
- Chronic stress
- Infections
- Auto-immune disorders including colitis and Crohn's disease

The symptoms of colon inflammation or dysbiosis include:

 Chronic or frequent lower abdominal pain, soreness or cramping not related to menstruation



- Feeling of pain or tenderness with touch or massage of the lower abdomen
- Feeling that bowel does not empty completely
- Chronic or persistent diarrhea
- Chronic or persistent constipation
- Alternating between constipation and diarrhea
- Frequently or consistently passing excessive and foul smelling gas
- Thick yellow coating of the tongue
- Persistent bad breath

There are a host of other symptoms that can be associated with inflammation of the large intestine but they could be caused by other imbalances. Some of these include headaches, muscle pain, exhaustion, increased food reactivity, and nausea.

Because there are so many possible causes of dysbiosis, the only way to rule out or identify the real cause is a Comprehensive GI tract test, including stool and salivary samples. Diagnos-Tech, Inc. and Geneva Diagnostics both offer comprehensive exams that can be ordered through your natural health care practitioner.

Treating dysbiosis is determined by the cause of the inflammation. Test results can discern the cause. There is a variety of treatments: herbal, homeopathic, anti-bacterial, anti-fungal, or anti-parasitic detoxifications. Because dysbiosis is often the result of antibiotic use or abuse, probiotic treatment may be necessary to restore the integrity of the intestinal ecology. Parasites and bacterial overgrowth in the digestive track can also be addressed by probiotics and herbal remedies. The three products that I use most frequently are Triphala to balance and strengthen the colon (it is available at most health food stores), MicroDefense for parasites, and A.C. formula for Candida and other intestinal infections. These two products are produced by a Pure Encapsulations, a manufacturer of professional health food products and available through Mountain Health Products.

There may be times when a specific antibiotic is necessary. In that case, probiotics are essential, both while taking the antibiotic and for several weeks afterwards. Probiotic treatments, contrary to what the name may suggest, do not counteract the effect of antibiotics, so they can be used simultaneously. To learn



more, read Chapter Seven: The Impact of Candida Overgrowth on the Physiological Terrain.

Stress is frequently a contributing component to an inflamed gut (Remember, this is where many people first feel fear.) So we also suggest acupuncture, relaxation and massage.

Inflammation of the gut is one of the main contributors of adrenal dysfunction. For this reason, it is impossible to effectively treat adrenal imbalances until intestinal inflammation has been properly identified and addressed. We usually start with food reactivity because it is the most obvious and simple test. However, if that does not provide a clear answer, get more comprehensive tests to identify anything else that may be causing the inflammation and how to address it.

PARASITES

Although your medical doctor may dismiss the idea, one of the common causes of inflammation in the gut is the presence of parasites. They are commonly absorbed through what we eat and drink, although there can be other forms of contamination. Not all parasites are in the digestive tract but many start their journey inside the body through our digestive system.

There are three main groups of parasites: round worms, flat worms and single celled parasites.

The main round worms include the following.

- Ascaris
- Hookworm
- Strongyloid
- Whipworm
- Toxocara
- Pinworm
- Trichinosi

The main flat worms include the following:

Beef tapeworm



- Bladderworm
- Pork tapeworm
- Fish tapeworm
- Dwarf tapeworm
- Rat tapeworm
- Various kind of flukes

The following lists the main single-celled parasites:

- Protozoa
- Toxoplasmosis
- Neospora
- Spirochete
- Trichomonas
- Giardia
- Amoeba
- Lymph parasites

Many of the parasites can be tested through the stool or through a saliva sample.

A good step for identifying possible parasite infection is through the comprehensive GI Panel from Diagnos-Tech. You can also be tested through bioresonance testing. It is a good first step to determine if other tests might be required. Many natural health care practitioners use several variations of this approach.

Treating Parasites

Parasite eradication, like Candida eradication, may cause a die-off effect producing various symptoms such as headaches, diarrhea, cramping, bloating, gas and body pain. Do not stop a parasite cleanse before its completion. It could actually increase the parasite load. This is why I recommend starting slowly and building progressively to the full dosage.

I strongly suggest that you consult your natural health care practitioner before you embark on a parasite eradication program.

There are many herbal treatments for parasites which work with varying degrees of effectiveness. Enzymes are often very effective on Giardia. For this purpose I use a product from Standard Process called Zymex II.

Flukes and many other parasites often respond effectively to Walnut Extract, Wormwood, clove, grapefruit seed extract, garlic, Pau d'arco and Olive leaf extract. One formula that includes most of these herbs is MicroDefense from Pure Encapsulations, available from MHP and Emerson Ecologics. The recommended dosage is two to six capsules in divided dosage before meals, for two to three months. I recommend starting with two capsules and building to three capsules, two times daily.

There are good homeopathic remedies which are often helpful. Deseret Biologicals, Inc. has a group of remedies designed to assist in clearing parasites. One is a homeopathic remedy called VER, which I usually combine with the previous remedy, 10 drops, three times daily. Deseret Biologicals also has a homeopathic formula for amoebas, a new herbal remedy called Parasite Complex, and a type of earth compound that kills the parasites and their larvae on contact. This product is called DIA-VERN. This has to be ordered through a practitioner.

Parasite residues also need to be cleared from the body. To do this, use proteolitic enzymes, Wobenzyme or Nutrizyme mentioned above, during the first two weeks of treatment. The Rx Vitamins Inc. MegaGesic formula available through MHP is also appropriate. Take three tablets, twice daily, at least two hours before or after meals. Another suggestion is the Systemic Drainage formula from Deseret Biologicals.



Even though these approaches can be effective, it's important to note that many parasites do not respond well to herbal or homeopathic medicines and need to be addressed with antibiotics under medical supervision. The MD's or DO's you consult may have their own testing procedures and insist on their own lab work.



CHAPTER TWELVE: ALLERGIES AND PHYSICAL REACTIVITY – WHEN THE BODY GETS UPSET ABOUT NOTHING

Have you ever noticed someone (including yourself) get upset at the littlest thing? An event, a comment, even a turn of phrase that seems trivial to one person can produce severe upset in another. I remember a situation in which someone got upset with me because I referred to her father as her 'dad' and not her 'daddy.' To me, these two words are synonymous, but not to her. For her, the word 'dad' violated the intimate relationship that she had with her father. As a result, my reference to her father as 'dad' was a violation of that relationship, an act of aggression against which she needed to defend herself.

Allergies and physical reactivity are very similar. The body is responding to a substance as if it was attacked, even though that same substance would not create any degree of physical upset in another. In Chapter Three: Understanding Inflammation and How to Treat It, we talked specifically about the four most common food reactions: grains, milk products, eggs, and soy products. It is obvious that for some, these foods produce no problems at all. They may even be a valuable part of their nutrition, while for others they may cause major difficulties.

Traditionally, the word "allergies" is reserved for substances that produce a release of histamine in the body. That's not the only reaction, however. In the same way that we may react with anger in one situation and with fear or depression to another, our bodies have their own menus of responses. The responses could be totally appropriate in one context and dysfunctional in another. Allergies and physical reactivity are like emotional upsets; they are dysfunctional patterns of response. Notice that I said emotional upset, not emotions. Emotions are a natural feed back mechanism that indicates that a need we have is not being met. When we react to this feedback in an ineffective way, it produces an upset.

Like so many things that take place within the chemistry of our physiological terrain, allergies are not necessarily simple to understand. They can be contextual, associated with the environment, climate, level of stress or fatigue, menstrual cycle, or related to more than one substance.

For example, a friend of mine can drink wine or eat shellfish; however, combining both can send him into anaphylactic shock, the most acute form of allergic reaction. It entails serious swelling of the mucus membranes in the throat that can result in asphyxiation and possibly death if rapid medical intervention is not available.

CAUSES AND TREATMENTS OF ALLERGIES AND PHYSICAL REACTIVITY

There can be many different causes of allergies and reactivity:



- Genetic: Often the tendency towards specific allergies seems predominate in one family.
- Lack of boundaries: If the mother is aloof, controlling, overprotective or mechanical during early childhood, especially in the first year of life when the child is starting the individuation process, the child may feel insecure and fail to develop autonomy. The result is an interference with what Chinese Medicine calls the protective energy, or Wei Qi. That lack of boundary tends to promote hypersensitivity that affects both the physiology and the psychology.
- Premature exposure: Introducing substances or situations before the body is capable of producing the appropriate response can also cause allergic reactions. For example, if an infant is given food that its body cannot assimilate, the baby will likely experience long-term or permanent reactivity to those foods.
- Traumatic events: The fight or flight response can subject people to a constant state of survival which increases their level of sensitivity.
- Toxic overload: When the liver cannot cope with the level of toxicity in the body it often generates a state of over reactivity and hypersensitivity to many substances. This may lead to Multiple Chemical Sensitivity (MCS), a condition that affects too many people and turns their lives into a nightmare.
- Candida overgrowth and Leaky Gut Syndrome: Like toxic overload, these conditions may produce similar results as MCS.
- Adrenal dysfunctions: These interfere with general functioning, and can lead to hyper-reactivity.
- Contaminated foods: Exposure to contaminants in food such as bacteria, or chemicals or heavy metals often creates a strong physical reaction which becomes associated with the specific food and turns into an allergic reaction.
- Intestinal Dysbiosis: a chronic state of inflammation in the body tends to over-stress the body, which becomes abnormally reactive to many substances.
- Sugar metabolic imbalances: due to the chronic stress of insulin deregulation, many allergies may not clear until the sugar metabolic issues have been addressed.



Because of the great variety of reactions, it is hard to generalize treatment. We will leave anaphylactic reaction in the hands of the medical profession and talk about the other techniques of allergy and reactivity clearing.

CLEARING OUT THE REACTION

There are always two parts to clearing patterns of reactivity: Identification and reprogramming.

Identifying

First, the individual must identify which substance(s) or context(s) trigger the reaction. There are an infinite number of substances, environments, people and situations that can do this. Even so, allergies are often classified into three groups: food, respiratory and contact. That means we are usually reactive to things we touch, eat or breathe. Just remember that this is the simplest of explanations and reactivity can be much more complex than touching, eating or breathing. One of my clients is so reactive to poison ivy that just getting off the boat at Martha's Vineyard is enough to trigger an attack, even though she hasn't been in direct physical contact with any of it.

It is also necessary to identify where in the body the reaction is occurring and what patterns are recognizable. We are less concerned with the histamine reactions associated with allergies and more drawn to how the reaction impacts the energetic or neurological system as understood through Chinese medicine. We find that every allergic reaction affects the Chinese element system and specific nerves that run along the spine, corresponding to specific organs and meridians. This creates disturbances both in the Yin and the Yang, the sympathetic and parasympathetic nerve pathways.

Reprogramming

The psycho/spiritual context for reprogramming asks: is it linked to previous situations? We have often found that triggering events or certain psychological patterns are associated with allergies or hypersensitivity. By identifying these, we often obtain deeper, more lasting results. In these cases, we pay particular attention to what happened in early childhood. An example would be parents forcing children to eat certain foods that they disliked. Another could be family conflicts at the dinner table.

There is also a genetic influence. We look at genetics, not as a determining factor, but more as a component of cultural response: passivity, aggressiveness, defensiveness, aloofness, self denial, etcetera, that tends to impact our response to challenges.



Fortunately, more and more health-care practitioners recognize and utilize new methods for treating allergic reactions. Following are some examples:

Nambudripad Allergy Elimination Technique

Dr. Devi S. Nambudripad, D.C., L.Ac., R.N., Ph.D. of Long Beach, California created the Nambudripad Allergy Elimination Technique (NAET). Dr. Nambudripad identified that patterns of reactivity always trigger certain imbalances in the energetic system of the body, particularly along two energetic channels on the back of the body: one that follows the spine, and the other that runs 1 ½ inches on each side of the spine, from the shoulder to the pelvis. She also established that behind every allergy there is a pattern of reactivity to basic nutrients. For more information, go to http://www.naet.com. You will need the assistance of a certified doctor to use this technique.

Bio-Functional Allergy Clearing

We are immensely grateful for the ground-breaking work done by Dr. Nambudripad. Using her work as a springboard, we expanded by identifying the psycho/spiritual foundation of allergies and the genetic components, when appropriate. We also examine and include in our treatment the circadian cycles, such as the seasons and lunar cycle for women.

Our method of clearing is based on a psycho/spiritual approach. First, we identify the inner source and use inner peace and breathing as a technique to cancel internal conflicts and restore a more appropriate pattern of response. We have found that our method of identification and clearing is more comprehensive, requires less time, and is longer lasting.

Homeopathy

There's a wide range of homeopathic products that can ease allergic stress. Homeopathics work by desensitizing the allergic reaction. Essentially, they teach the body to respond to infinitesimal dosages of the allergen and progressively handle the same substances in larger amounts.

Apex Energetics has products for specific allergies such as grains, dairy and eggs. Products for non-specific allergies include Allerdrain and Allertotal.

Deseret Biologicals has several comprehensive homeopathics: Enviroclenz for reactivity to petroleum based chemicals, Enviro I for food reactivity and Enviro II for pollen and dust. Deseret Biologicals also has a line of pheonolic homeopathic remedies. Phenolics are certain substances associated with smells contained in plants and other organic materials that have been shown to be a dominant source of



problems for people with multiple sensitivities. They have also added a new series of homeopathics associated with the NAET system of diagnosis and treatment.

I use some of these homeopathic approaches as a complement to Bio-Functional Energetic Clearing or when I am treating people at a distance, when performing my habitual clearing protocol is not convenient.

Perkl-Light

Perkl-Light is a color energy disseminating instrument. By using the preprogrammed frequencies to balance the energy system of the body, some of our clients have had excellent results alleviating or eliminating reactive sensitivities. I can also assist them, at a distance, in finding frequencies to deal with specific issues, both physical and psychological. This is not a panacea. It is, however, a very valuable adjunct strategy to many protocols. For more information about this instrument, go to www.perkl-light.com.

There are many other allergy elimination techniques that involve various nutritional or energetic protocols. The best is to consult your health care practitioner and ask what they recommend.



CHAPTER THIRTEEN: OPPORTUNISTIC INFECTIONS

By now, you are familiar with what we mean by the physiological terrain. We believe, as did the good doctor who swallowed the culture of smallpox (see Chapter 1), that it is the terrain within that we should attend to, not the germs that invade from without. That said, we must admit this approach isn't always the most appropriate.

Minor infections, such as colds and influenza, are challenged by the immune system and ultimately eliminated. More aggressive infections can be virulent and require immediate intervention, and antibiotics are often the treatment of choice.

Certain infections do not necessarily respond well to antibiotics, however. They establish themselves in a system of disequilibrium, and work in synergy with the other toxins and micro-organisms. Jointly, they defeat or inhibit the normal immune response and create a general or highly localized state of dysfunction. In the end, the drugs can do more harm than good.

Infections such as chronic fatigue, fibromyalgia, and many other chronic inflammatory conditions do not lend themselves to traditional methods of identification and treatment, so they are often misdiagnosed or ignored. In the worse-case scenario, the doctor says there is nothing there or that you are making it up. This can be devastating to the one who is absolutely experiencing the imbalance.

A well respected specialist of functional medicine, Dr. Dietrich Klinghart (http://www.neuraltherapy.com) has shown that these types of infections are always linked with localized states of toxicity and fungal overgrowth, and also frequently connected to deep unresolved emotional conflicts. While some of these conditions may respond in their acute states to antibiotics, they often linger on and have to be addressed by clearing everything that is impairing the natural ability of the body to take care of itself. Let's examine some of these disturbances and specific strategies to help the body heal itself.

MYCOPLASM

This is a group of bacteria without walls that act as a parasite on the cells. They can occasionally penetrate in certain cell groups but mostly they stay fixated on the surface of the cells. They can be localized or generalized and mostly tend to grow slowly.

The most common are mycoplasm arthritis or pneumonae, which have been associated with chronic inflammatory conditions of the joints and myofascia. They are often treated by anti-inflammatory drugs that may control the pain but that do



nothing to eliminate the micro-organism. Other identified mycoplasms that affect human beings include the following:

- Hominis
- Penetrans
- Dyrilum
- Fermantans
- Genitaleum
- Ureaplasma Urealiticum
- Incognitus
- Pirum

These bacteria are very often ignored by the medical community since they do not show in any traditional blood tests. Whenever I notice continuous inflammatory tendencies which are still present after candida eradication and removal of toxins, I suspect mycoplasm. I often catch the problems simultaneously and approach all these issues at the same time or sequentially.

Mycoplasms can be identified through a PCR test and other more recent techniques that look for specific immune markers. For all we know, some or most of these micro-organisms may be prevalent throughout the population and simply affect people differently. What is certain is that they seem to be present when the system is out of balance and they are often the cause of chronic inflammation, with all the effects on the adrenal glands and the systemic repercussions.

One lab that specializes in testing for these micro-organisms and other chronic infections is the Immuno Science Lab in Beverly Hills, California. They also did a comprehensive panel of immunological markers. This is the lab I am most familiar with, but there are others that test for these micro-organisms. Unfortunately I have heard recently that the lab was taken over by another company and many of the tests that were previously conducted there have been discontinued. A look at their website indicates that it is presently in construction.

Another way to test is through bio-resonance techniques. Bio-resonance is a non-orthodox method of testing based on the work of Japanese surgeon Dr. Oshawa. He discovered that when a certain substance (or the energetic frequency of a substance) is placed near the body, and if that same frequency is present in the



body, a resonance takes place that affects the body's neuro-muscular response. This was the beginning of what many people know as muscle testing.

Since then, many methods of muscle testing or instruments have been devised to capitalize on this discovery. While this approach is not as reliable or tangible as a biological test, it often provides a direction of investigation. I would certainly not rely exclusively on this as a base to administer antibiotics or other pharmaceutical substances. However as a foundation for natural strategies that have no negative side effects, I think that the approach has it merits. It is fast, comprehensive and in my experience, often confirmed by physiological tests.

Health-care practitioners use variations on this approach. Some rely on machines and computers, and others on different approaches of muscle testing.

Treating Mycoplasm

Consult a practitioner to determine the best way to treat mycoplasm. The list of modalities we provide will give you many options. We will not, however, cover antibiotic treatment since it falls clearly outside the scope of this book and should only be pursued under medical supervision. For the same reason we will not cover intravenous vitamin C and intravenous colloids.

Homeopathic Remedy for Mycoplasm Pneumonae and Arthritis

Deseret Biologicals has a homeopathic remedy for mycoplasm pneumonae and arthritis called Bacteria Combination. The recommended dosage is 10 drops, three times daily, under the tongue, not less than 15 minutes before and after food of any type. Their prostate formula, called Beta Sistosterol Complex, contains the homeopathic for Ureaplasma Urealiticum, often present in prostate inflammation.

They also have a homeopathic series that includes all the frequencies of the mycoplasms we identified before. It is called Mycoplasm Series and is a one month treatment. The protocol is included in the box, which contain 10 small vials to be taken sequentially every three days. Occasionally it is valuable to repeat this series more than once. The second series is usually done in the reverse order from 10 to 1.

Natural Substances

Two natural substances have produced consistent beneficial results when used for mycoplasms, when they are well tolerated.



High Dosage Vitamin C: The dosage is a minimum of 12,000 mg, taken in three separate doses. The product that we recommend is Pro-Ascorbate C available through MHP. This product is buffered and pH balanced and usually well tolerated. One teaspoonful is equivalent to 4000 mg. Side effects may include acid reflux, epigastric pain (in the pit of the stomach) and diarrhea. Tolerance of vitamin C varies considerably from one person to another. What we recommend is that you start slowly with ½ teaspoon, three times daily and build upward. If you experience any of the symptoms mentioned above, back down to the level of tolerance. Often individual tolerance will increase with use. Equivalent products are available at health food stores.

Colloidal Silver: The type that seems to be most effective for mycoplasms is the less concentrated form: 5 ppm or below. This concentration is sometimes difficult to find. Another product from Deseret Biologicals called Smart Silver is also quite effective.

OTHER CHRONIC SYSTEMIC INFECTIONS

There are many other opportunistic infections that are particularly hard to get out of the system, or according to some, impossible. The most common are Epstein Barr (EBV), herpes, and Lyme disease.

Epstein Barr

EBV is often associated with Chronic Fatigue Syndrome. This virus has been shown to be present to some degree in 80 percent of the population, with or without symptoms. Balancing the terrain is always essential in treating Chronic Fatigue and Fibromyalgia.

Natural Remedies for EBV and Herpes

For EBV: Desert Biologicals has a remedy called EBV which impacts some people diagnosed with Chronic Fatigue.

Herpes: Deseret Biologicals has many herpes homeopathics, including a homeopathic series for Herpes Simplex and Herpes Zoster. The latter is often associated with shingles. Another natural product which is often effective for genital herpes is Larreea X. It is available through Herbal Technologies. Some of my clients have been very happy with that product while others did not observe any differences. It contains high levels of Chapparal and vitamin C, so watch for intolerance.

Herpes

There are different types of Herpes: 1, 2, 6, and 9. The symptoms seem to vary dramatically from one person to the next, and outbreaks are often associated with periods of stress. Decreasing stress, including other inflammatory causes, can greatly decrease the impact. Oral and genital herpes also seem to be affected by the level of Lysine, an essential amino acid. Some of the foods that tend to use up lysine are hard cheeses, chocolate and almonds. The food richest in lysine is eggs.

Lyme Disease

Lyme or Borrelia Burgdorferi is an increasingly prevalent infection originally communicated by tick bites. The present medical point of view is that it is a rare and highly treatable disease. The opinion of some specialists, including Dr. Dietrich Klinghart who has studied and treated this disease for over ten years, is that it is a highly prevalent disease which is very difficult to treat. It seems to disappear sometimes for years and then re-appear out of nowhere.

The bacteria, a spirochete similar in form to syphilis, mutate from one form to another and seem to evade the immune system. Because of this it is sometimes very difficult to know whether it has disappeared or simply gone into a less aggressive form.

Lyme is often associated with other tick related co-infections such as Babesiosis, Erlichiosis and Bartonella. Mycoplasm Fermantans is also a common co-infection. Apart from all the major signs associated with chronic inflammation,



Lyme and its co-infections release neurotoxic substances that can cause or aggravate psychological disturbances.

While I have had good results with some of my clients using natural approaches, I feel that considering the complexity of the disease and its co-infection, working with a medical specialist is probably the best approach, if for no other reason than to have the disease properly identified and care covered under your insurance.

The person that I would most warmly recommend is Dr. Dietrich Klinghart and his associates. To contact his office, call 425-688-8818. For those of you that cannot avail yourself of the opportunity to work with Dr. Klinghart, I would recommend the following protocol under the supervision of a health-care practitioner.

Systemic Clearing

- Fungus detox see Chapter 7 about candida
- Heavy metal detox see Chapter 8
- Restoring liver function see Chapter 9
- Systemic drainage a Deseret Biologicals homeopathic remedy of the same name

Specific Treatment

- Pharmax, freeze dried garlic in large quantity; take four capsules, three times daily on an empty stomach
- The Borelia Series from Deseret Biologicals and the Mycoplasm series, if mycoplasm are present
- Pro-Ascorbate C; take 12,000 mg daily or above if tolerated, from Mountain Health Products
- Artenisinim, particularly if Babesia is present; start slowly and take as much as you can tolerate, from Allergy Research
- Cats Claw (TAO reduced); start slowly and build as tolerated, from Allergy Research
- LYM remedy: take 10 drops, three times daily, from Deseret Biologicals



Systemic Drainage; from Deseret Biologicals

Dr. Klinghart emphasizes that often times in treating Lyme and its co-infection, it is necessary to clear deep-seated psychological issues before any long lasting positive results can be obtained. There are many different methods that approach psychological disturbances, from traditional psycho-analysis and psychotherapy to Neuro-linguistic Programming. Even though these approaches may produce profound changes, they lack the ability to identify genetic conditioning. By attempting to justify everything in terms of what has happened in this lifetime, these traditional approaches lack a degree of precision and consequently can take a long time to surface the core issues and the compensatory behaviors.

We have created an approach for clearing past traumas that is dramatically different. It relies on a specific psychological matrix that incorporates your present life, your genetics on your mother's and father's side, and other aspects of deep conditioning that inhibit your physical health and your freedom of expression. This method enables us to determine accurately, and to clear rapidly, the specific issues associated with a present limitation. In just one session, we can help you identify your core issues and help you create a strategy for transformation.

Occasionally short term additional coaching is necessary to implement the transformational strategy and produce tangible measurable results. For more information on our approach, check our website at www.babinetics.com. Another approach that you can pursue on your own is EFT (Emotional Freedom Technique). Check their website at www.emo/free.com.

STEALTH VIRUS

Stealth virus is a type of virus that mutates by stealing genetic material from bacteria or from your own cells, and in this way, evades the immune system. They were initially detected in patients with Chronic Fatigue Syndrome. They have since been positively correlated with a wide range of neurological, psychiatric, auto-immune and malignant diseases. The presence of stealth virus has been found in the blood of 90% of the patients tested with a diagnosis of chronic Lyme disease. To get more information on stealth virus and how to be tested or treated, contact the Center for Complex Infectious Disease at www.ccid.org.

NANO BACTERIA AND OTHER MINUSCULE MICRO-ORGANISMS

There is a whole group of microscopic organisms that are highly detectable through bio-resonance, yet are totally undetectable by other means. Some of these are well accepted, such as viroids and fungoids. Others like nano bacterium are newer in the field of identification. I have found that these infinitely small microorganisms are often very damaging to the body. Through bio-resonance we can



identify their presence, their locations, their effects and their natural methods of eradication.

Because they are opportunistic infections, they cannot maintain themselves unless the body is in a state of disequilibrium. The best form of treatment is to clean up the body and restore a healthy terrain. Beyond this, more specific information is needed to suggest other forms of treatment since it depends on the location and action of the micro-organism involved. If you suspect this type of infection because you have the signs of chronic inflammation that evade detection, contact a practitioner who uses bio-resonance.

H-PYLORI

At one time stomach ulceration was primarily associated with psychological stress until the h-pylori bacterium was identified that strongly correlated with GERD and ulceration. This infection of the digestive tract is easily detectable through a standard salivary test through Diagnos Techs. Another test discerns the presence of certain antibodies in the blood. There are various tests offered by DirectLab.com. The most definitive test comes from Genova Diagnosis which is a Urease test on biopsied material. The traditional treatment is with antibiotics.

It is important to note that it often recurs and that it is most likely associated with low hydrochloric acid in the stomach. Natural treatments usually include Mastic Gum. This product is available from Allergy Research it is also included in a product offered by Apex to treat GERD called Gastro ULC. Treatment with these natural products is very effective and should be followed while addressing other factors that are affecting the digestive tract.



CHAPTER FOURTEEN: UNDERSTANDING AND INTERPRETING BLOOD TESTS

It's common, and even wise, to have an annual check up with a medical doctor. As part of that visit, your doctor will take some blood and order several tests that can help determine the state of your health. Patients typically don't see the results of the tests and, if you did, you probably wouldn't have the foggiest idea what they mean. You would rely completely on your doctor's knowledge to deliver to you the appropriate pharmaceuticals to address your specific problems.

If you are happy with this approach, this chapter is not for you. If, however, you don't like the fact that there is a long list of side effects for many pharmaceutical products and that taking them probably means that your comfort and well-being could be dependent on them for life, then read on. In this chapter, we'll help you understand the meaning of the tests your doctor performs and the natural options available to maintain or restore your health.

For the most part, blood tests assess the basic quality and function of the vital organs and other essential systems. That said, they do not effectively measure your overall state of health, even though that type of knowledge can avert major impending disasters. Still, blood tests are critical for establishing the viability of your body and can help your doctor evaluate from year to year how you are aging and which organs or functions are weakening.

USUAL CLINICAL RANGE VERSUS FUNCTIONAL RANGE

The usual clinical range (UCR) used for these tests is based on an average. That may sound reasonable, but averages include a population of both healthy people as well as those people who had been diagnosed with a disease or dysfunction. This "dirties the water" since healthy standards should reflect truly healthy people—not healthy **and** sick people. In response to this, the American Society of Chemists came up with a different standard which is based only on a healthy population. This new standard is referred to as a **functional range** and is more refined for determining how healthy you are.

When blood tests reveal ranges that deviate from the UCR, it's usually indicative of a pathology that needs to be addressed medically. If you consider the functional range when reading test results, you can detect a disturbance that can be "caught" before it reaches a pathological state. In these early stages of detection, the imbalances can typically be brought back to a healthy status with natural remedies and simple lifestyle changes.

In the following pages, we reference both the UCS and the functional range. When reading your tests, you now have another point of view as you assess your



health. A natural health-care provider is probably more interested in the functional range and can assist you in making decisions about alternative options if treatment is necessary. We also provide you with simple natural strategies. Remember that if a test indicates a deviation from the usual clinical range, you do not want to discount the suggestion of your MD.

I review each major test, explain its purpose, and the natural approaches you can use to restore your body to optimal health. We have organized the information in a logical way that goes from the simple to the more complex. This is not always how that information will be presented to you in the lab that is sent to your health-care professional. The order of the report varies greatly and often has no obvious logic. We follow the following sequence.

Reading the Foreign Language of Blood Tests

It's smart to request of a copy of your blood test, but if you can't actually determine what it says then you might as well burn it! Chances are, the lab results you get will use a host of abbreviations that are, for the most part, impossible to figure out. We won't include the obvious terms such as 'sodium' or 'calcium.' Rather, we'll stick with the totally mysterious ones. Here's the translation.

Electrolytes are mineral substances that regulate fluid function throughout the body. The three main electrolytes are sodium, potassium and chlorides. The balance of the electrolytes in our bodies is essential for normal function of cells and organs.

Here are some of the abbreviated symbols and what they mean.

- K: Potassium
- CL: Chloride
- Na: Sodium
- CO2: Carbon dioxide is used to measure an additional electrolyte called bicarbonate which is used to regulate the pH of the blood
- Anion Gap: Measures the relationship of sodium and potassium and chloride and bicarbonate concentration
- Bun: Related to urea produced in the liver as part of protein metabolism; it is a functional test for the kidneys



- CR: Creatnine Related to muscle activity and is a test of kidney function
- Bun/CREAT: Predictive of renal failure or gastro-intestinal bleeding
- T Bili: An indicator of liver function
- Alk Phos or Alk P: An enzyme which can be indicative of bone or liver disease
- Ast (SGOT): An indicator of tissue damage in the body in particular after heart attack or stroke
- ALT (SGPT): Liver function test
- Uric Acid: Indicative of kidney function
- ALB: Albumin, a protein made in the liver that helps retain an element like calcium and hormone in circulation in the blood
- TP: Total protein in the blood these proteins are albumin and globulin
- A/G: A ration of albumin to globulin that measures liver function
- Globulin: Another blood protein larger than albumin divided into three main groups, alpha, beta and gamma, each associated with various functions
- CBC: Complete blood count
- WBC: White blood cells
- NEU: Neutrophils, white blood cells involved in the regulation of inflammation
- Lymph: White blood cells produced in the bone marrow; there are two types, B lymphocytes and T lymphocytes, and both are involved in immune protection
- Mono: Monocytes, which act as scavengers that remove foreign elements and prevent them from penetrating into the blood
- EOS: Eosinophils, active in later stages of inflammation; they respond to allergic and parasitic diseases
- BASO: A white blood cell which contains serotonin, histamine and heparin



- RBC: Red blood cell; carries oxygen from the lungs to the body tissue and then transports carbon dioxide from the tissue to the lungs
- HGB: Hemoglobin; within the red blood cells, it is the vehicle for the transport of oxygen and carbon dioxide
- HCT: Hematocrit, the proportion of blood volume occupied by red blood cells
- MCV: Mean corpuscular volume, measures the size of the red blood cell size
- MCH: Mean Corpuscular Hemoglobin, measures the concentration of hemoglobin in the red blood cell
- MCHC: Mean Corpuscular Hemoglobin Concentration, the same as above but in addition it also measures the hematocrit
- RDW : Red Cell Size Distribution Width; used to differentiate anemia
- PLT: Platelets, the smallest of the formed elements in the blood, essential for blood clotting
- MPV: Mean platelet volume; the volume occupied by platelets in a unit of blood
- PSA: Prostate Specific Antigen, a measure of prostate inflammation
- TSH: Thyroid Stimulation Hormone, produced in the pituitary; elevated levels indicate low thyroid function.

First - Basic Nutrients

These nutrients are a foundation for the rest of our health. MD's are mostly interested in pathological states rather than optimal functions, so their list of nutrients will probably be limited. Traditional blood tests usually emphasize electrolytes that include sodium, potassium and chloride. There may be others included such as iron, calcium and phosphorus. Of course this is far from a global analysis of minerals in the blood and cells, which a complete functional analysis would provide.

Second: The Quality of the Blood

- Red Blood Count (RBC)
- Hemoglobin (HGB)



- Platelets
- Hematocrit (HCT)
- Mean Corpuscular Volume (MCV)
- Mean Corpuscular Hemoglobin (MCH)
- Mean Corpuscular Hemoglobin Concentrate (MCHC)

Third: Immune Response

 White Blood Cells (WBC) subdivided into Neutrophils, Basophils, Eosinophils, Lymphocytes and Monocytes

Fourth: Organ Functions

- Kidneys: Uric Acid, Creatnine and Blood Urea Nitrogen (BUN)
- Liver: Alkaline Phosphatase (ALP), Lactic Dehydrogenase (LDH), Serum Glutamic-Oxaloacetic Transaminase (SGOT), Serum Glutamic-Pyruvic Transaminase (SGPT), Glutamyltransferase (GGTP)
- Pancreas: Glucose
- Cardiovascular: Low density Lipoprotein (LDL), High Density Lipoprotein (HDL), Total Cholesterol, Triglycerides, Cardiac risk ratio
- Thyroid: Thyroid Stimulating Hormone (TSH), Thyroxine (T4),
 Thriiodothyronine uptake (T3)

BASIC NUTRIENTS

Electrolytes and Basic Minerals

SODIUM

- Usual Clinical Range: 135 145 mmol/L
- Functional Range: 135 140 mmol/L

Sodium, potassium and chlorides are regulated by the kidneys and adrenal glands. They are important for healthy nerves, muscles and cells. Sodium dysfunction may be an indication of a problem and if it is seriously out of range, your doctor will certainly want to do more tests to determine what's going on.



 What you can do: If it is slightly high, increase water consumption. If it is slightly low, increase salt intake and support the adrenals. Chapter Four: Adrenal Glands – the Cornerstone of Health, will tell you how.

Potassium

Usual Clinical Range: 3.5 to 5.3

Functional Range: 4.0 to 4.5

Sodium works in relation to potassium. High sodium may lower potassium and high potassium may lower sodium. Potassium is decreased by adrenal hyperfunction, diuretic use, renal dysfunction and diabetes. It is increased by adrenal hypo-function, renal dysfunction, tissue destruction and dehydration. In either case adrenal support is recommended. See Chapter Four: Adrenal Glands – the Cornerstone of Health.

Kidneys carefully control potassium. That's a good thing because potassium is important for the proper functioning of nerves and muscles, particularly the heart. Any serious imbalance should be handled at the medical level.

What you can do: Slight elevation may indicate dehydration and low adrenal function. In this case drink more water and support the adrenals. If the potassium is slightly low, support the adrenals and be mindful of sugar metabolism. You can also take one of the electrolytes formulas available in health food stores. Excessive sweating can also affect sodium/potassium and chloride levels.

Chloride

Usual Clinical Range: 96 - 106

■ Functional Range: 100 – 106

Chloride has an effect on the level of fluid maintained in the blood vessels and also regulates the pH level of the blood and water balance. It is driven upward by adrenal hyper function and excessive aspirin or salt consumption. It is driven downward by adrenal hypofunction and B1 deficiency.

 What you can do: Decrease salt intake and aspirin if the chloride is high and strengthen the adrenal and take Vitamin B1 if it is low.

All electrolytes are involved in electrical exchange and work in relation to one another. The main cause of electrolyte disequilibrium is excess sodium in



relationship to low potassium - typical markers of a junk food diet. But this imbalance can also be cause by an abnormal loss of fluid through diuretics, vomiting or acute or chronic diarrhea.

What you can do: These problems can be corrected by drinking plenty of fluids, eating salt in moderation, and enjoying bananas which have a 440 to 1 potassium/sodium ratio. Oranges are a close second with 260 to 1 ratio, and apples have a 90 to 1 ratio.

Calcium

Usual Clinical range: 8.5 to 10.6 mg/dL

Functional Range: 9.2 to 10.1

If there a noticeable calcium excess associated with an increase in level of thyroid or parathyroid hormones the problem should be addressed medically. If there is a decreased level, it may be due to pregnancy, osteoporosis or adrenal stress or low thyroid or parathyroid functions.

What you can do: Increase calcium supplementation.

Phosphorus

Usual Clinical Range: 2.5 to 4.5

Functional Range: 3.5 to 4.0

Increased levels indicate bone fractures, renal dysfunction, and parathyroid hypo-functions. Decreased levels indicate Low HCL (stomach acid) deficiency of protein and amino acids.

What you can do: With high levels, further tests are needed to determine the cause and medical treatment. For decreased levels: supplement with HCL Betaine, take an amino acid complex and change your diet if necessary.

Serum Iron

Usual Clinical Range: 40 to 155 ug/dL

Functional range : 50 to 100



Increased levels indicate homochromatosis, liver dysfunction and improper supplementation. Males and non-menstruating females should not supplement with iron unless they have been diagnosed with anemia. Seek medical attention if your levels are seriously elevated.

What you can do: Low levels indicate iron anemia and internal bleeding, during and after menstruation. Further testing is necessary to differentiate the type of anemia. Supplementation with liquid iron is often appropriate during and after menstruation.

BLOOD FUNCTIONS

Red Blood Cells

Red blood cells (RBC) or Erithrocytes make up most of our blood.

- Usual Clinical Range: approximately 4 to 5 million per cubic milliliter in women, and 5 to 6 million in men.
- Functional Range: 3.9 to 4.5 for women and 4.2 to 4.9 in men.

Non pathological increases are due to high altitude and dehydration. Obviously there's not much you can do with high altitude, and dehydration can be treated by increasing water consumption. Be mindful, however, that certain diseases can also cause continuous high RBC: polycythemia (the production of too many red blood cells), emphysema (a lung disorder) and hemochromatosis (an abnormal level of iron). These are serious disorders that require medical attention

 What you can do: Decreases of RBC are associated with iron anemia and after menses. Supplementation with iron is the treatment of choice.

Hemoglobin (HGB)

- Usual Clinical Range: for men 12.5 17.4 g/dl and for women 11.5 16.0 g/dl.
- Functional Range: for men 14.0 15.0 g/dl and for women 13.5 14.5 g/dl.

Hemoglobin (HGB) is the part of red blood cells that carries iron and transports oxygen from the lungs to the cells. One gram of HGB can carry 1.34 ml of oxygen.

What you can do: When HGB is high, it may be due to altitude, dehydration or excess iron. These problems can be solved with an increase of fluid intake, taking vitamin K, and donating blood. If HGB is



low, check for blood loss during periods. Iron supplementation might help. You may also be anemic and other tests may be necessary to differentiate the type of anemia you have.

Platelets

- Usual Clinical Range: 150,000 to 400,000 per cubic millimeter of blood
- Functional Range is 250,000 to 260,000 per cubic millimeter of blood

Platelets are produced in the bone marrow and are cell fragments which circulate in the blood stream. They are activated when damage occurs to the integrity of blood vessels. At that point, they contribute to clotting. Serious dysfunctions need medical intervention.

What you can do: Low levels predispose one to bleeding; the recommended supplement is Vitamin K. High levels can increase risk of thrombosis (internal blood clotting). There are many natural remedies that thin the blood, including vitamin E, Ginko Biloba, Omega 3, and Echinecea.

Hematocrit (HCT)

- Usual Clinical Range: men 42 52 %, women 36 48%
- Functional Range: men 40 48%, women 37 44%

Hematocrit is the measurement of blood volume occupied by the red blood cells. Excess hematocrit may indicate excess iron, which could be a serious medical condition endangering the liver. Deficiency can be related to menses or anemia.

 What you can do: For excesses, dehydration and high altitude can contribute to the problem and can be addressed by drinking more water.
 For decreases: the type of anemia needs to be differentiated to determine treatment.

Mean Corpuscular Volume

- Usual Clinical Range: 80 98 cu microns
- Functional Range: 85 to 92 cu microns

Mean corpuscular (MCV) volume is an indicator of red blood cell size which is critical in classifying anemia. Elevated MCV indicates a pernicious type of anemia while low levels indicated an iron deficiency.



 What you can do: For elevated numbers, increase vitamin B-12 and folic acid. For low levels, increase intake of iron.

Mean Corpuscular Hemoglobin

Usual Clinical Range: 26.3 - 33.8cu microns

Functional Range: 27 - 32 cu microns

Mean corpuscular hemoglobin (MCH) is the mass of hemoglobin contained by a red blood cell. It is computed by dividing the total hemoglobin by the red blood cells. This number is used to identify mycrolytic anemia which is due to an iron deficiency.

- What you can do: If it's low, iron in meat is more easily absorbed than in supplements or vegetables, so increase your consumption of meat. Macrocytic anemia is also usually related to B-12 and/or folic acid deficiencies which can be remedied by taking more vitamin B 12 or folic acid.
- A sub-category of macrocytic anemia is pernicious anemia, an autoimmune disorder of the lining of the stomach that inhibits the absorption of Vitamin B 12. The recommended medical approach is regular intravenous injection of B 12.

Mean Corpuscular Hemoglobin Concentration

Usual Clinical Range: 32 - 36 %

Functional Range: 32 - 35 %

MCHC provides the most specific measurement to differentiate and monitor treatment for anemia. It is calculated by dividing the hemoglobin by the hematocrit. Elevated MCHC indicates a deficiency of B-12 and Folic Acid while low levels of MCHC indicates iron deficiency anemia

 What you can do: For increased numbers, take more Vitamin B-12 and Folic Acid. For low numbers, eat more meat to increase iron or take an Iron supplement

IMMUNE RESPONSE

White Blood Cells

Usual Clinical Range: 4 - 11,000 in cubic millimeters of blood



Functional Range; 5.0 to 8.0

An increase in white blood cells (WBC) suggests an active viral or bacterial infection and decreased WBC indicates a chronic viral or bacterial infection or strict vegetarianism.

- What you can do: Many herbs are used to fight viral and bacterial infections, including olive leaf extract, Echinecea, astragalus, goldenseal, Osha, as well as many combinations on the market. There are also many homeopathics that address these issues and are specific to viral or bacterial infection. Some that I use frequently are:
 - From MHP: Viral Immune Stimulator, Bacterial Immune Stimulator
 - From Deseret I use the Influenza/ Grippe Nosode and an herbal combination called Echinaplus
 - From Seven Forests I use an herbal combination called Astragalus 10 plus.
 - For chronic infection and immune deficiency use Immpower (AHCC), available from MHP or on the internet. It is a patented formula of mushrooms which strengthens the immune system as a whole.

The WBC is a component of the blood produced in the bone marrow and designed to help protect the body from infections, diseases and foreign materials. It is a major contributor of the immune system. There are two main parts of WBCs: Granulocytes have a granulated appearance under the microscope. They comprise the Neutrophils used to fight bacteria, and the basophils that react to antigens. These produce histamines and the einosinophils that react to parasites.

Neutrophils

Usual Clinical Range: 40 to 74%

Functional Range: 40 to 60%

Neutrophils are the most abundant white blood cells. They are usually found in the blood, however in acute inflammation resulting from bacterial infections they migrate outside of the veins to the site of the inflammation. They are a very fast responder. When there is an increase, it's usually due to bacterial infection and some viral infections. Decreases are typical to most viral infections.



 What you can do: Natural treatment for elevated levels is through antibacterial herbs, adrenal support, and antibacterial homeopathics. For decreased levels, treatment is Vitamin C, 3000 mg with bioflavanoids.

Basophils

Usual Clinical Range: 0 - 3%

Functional Range: 0 - 1%

The basophils are the least common of the white blood cells and a main source of inflammation in response to allergies. When activated, they produce histamine, leukotrienes and cytokines, all involved in allergic reaction.

Low basophils, in combination with low neutrophils, is nearly always an indication of leukemia and requires immediate medical attention

 What you can do: Elevated basophils are an indication of allergic reaction. See Chapter Twelve: Allergies and Physical Reactivity, for natural strategies to deal with allergies.

Eosinophils

Usual Clinical Range: 0 - 7%

Functional Range: below 3%

Eosinophils comprise 2.3% of the white blood cells and they are responsible for combating infection by parasites. They also play a role in allergies, asthma and some viral infections. Imbalances usually reflect disorders that are better handled through medical attention. Agranulocytes include the Lymphocites (B cells, T cells and NK Cells and the macrophage) and the Monocytes (macrophage).

Lymphocytes

Usual Clinical Range: 14 to 46%

Functional Range: 25 to 40%

Lymphocytes are granulated leucocytes and are a key to the immune system. The three different types are the large granular, the NK cells and the T cells and B cells. They are all involved in viral immunity and fighting tumors.

Elevated amounts indicate a viral infection and on rare occasions the presence of cancerous tumors. A low count is indicative of a depressed immune system.



 What you can do: Treatment may involve herbal supplements of vitamin B, Vitamin C with bioflavanoids and Beta Glucans, and other immune boosters including homeopathics.

Monocytes

- Usual Clinical Range: 4 13%
- Functional Range: below 7%

Monocytes are a secondary level of defense against infection. They are large macrophage capable of digesting dead and damaged cells, foreign particles and microorganisms circulating in the blood. They are increased as a result of inflammation, after infection, as a result of parasites and with prostate enlargement.

What you can do: Take anti-inflammatory herbs; see Chapter Three: Understanding Inflammation and How to Treat It. If it's caused by prostate enlargement, there are many products on the market that incorporate Saw Palmetto, Pygeum Africanum and Stinging Nettles. My favorite formula is from Deseret Biologicals and is called Beta Sitosterol Complex.

ORGAN FUNCTIONS

Kidney Function

Blood, Urea, Nitrogen (BUN)

- Usual Clinical Range : 7 18 mg/dL
- Functional Range: 13 18 mg/dL

BUN is a waste product resulting from the liver's metabolic function and excreted by the kidneys. Higher levels are indicative of poor kidney function. High protein diets and very strenuous exercise can raise the level while pregnancy will tend to lower it.

- What you can do:
 - Increase fluid intake, especially water: 1 8 ounce glass for every 20 pounds of body weight.
 - Decrease protein or take a proteitic enzyme between meals such as RX Megagesic from MHP, 3 tablets, 3 times daily; or wobenzyme available on the Internet and many health food stores.



 Take a homeopathic drainage formula: Systemic Drainage or Kidney Drainage from Deseret Biologicals, 10 drops, 3 times daily.

Low BUN levels do not indicate a health risk.

Creatinine

- Usual Clinical Range: 0.6 to 1.3.
- Functional Range: for an adult, between 0.7 1.1 mg/dL.

Creatinine is a waste protein produced in the muscles and released through blood. It has nothing to do with the amount of protein you eat; rather it is dependent on muscle mass. High levels, especially with high BUN values, require more thorough medical tests to evaluate kidney function.

What you can do: Follow the same protocol as outlined for high BUN levels. This is not an alternative to further tests but can work as a complement.

Uric Acid

- Usual Clinical Range 3,0 to 7.0
- Functional Range: 3.0 6.0 mg/dl for men and 3.2 5.5 for women.

Uric acid is normally excreted in the urine. Higher levels suggest acidosis, alcoholism, diabetes, gout and low parathyroid function. Low levels are not significant.

What you can do: Liver detoxification, particularly for heavy metals, is what we recommend for balancing uric acid. Read Chapters Seven and Eight about treating candida overgrowth alkaline diets. Also, drink more water and exercise regularly.

Liver Function

Alkaline Phosphatase (ALK . PHOS or ALP)

- Usual Clinical Range: 30 -100 U/I
- Functional Range: between 70 and 90 U/L (units per liter) but may vary according to the test methodology



ALP is an enzyme that's manufactured in the liver and bones and is important to detecting serious abnormality within these organs. Levels are higher during bone growth and during pregnancy or due to injury.

 What you can do: If the level is only slightly elevated, detoxify the liver (see Chapter Nine on the liver and Chapter Eight on heavy metals.) If levels are low, increase zinc and or vitamin C.

Lactic Dehydrogenase (LDH)

Usual Clinical Range: 100 to 250 IU/L

Functional Range: 140 to 180 IU/L

LDH is an enzyme present in all the cells of the body. The test is done to identify possible tissue damage. An extremely elevated range indicates some level of tissue damage affecting the heart, liver, kidneys, skeletal muscle, brain, and blood cells. Short of knowing the cause and location of the tissue damage, no natural treatment is applicable. Let your MD handle it since it could be serious

- What you can do:
 - If you are slightly above 180, detoxify the liver. See Chapter Nine.
 - If you are slightly below the range, take more Essential Fatty Acids (flax oil. fish oil and primrose oil), support the adrenal glands (see Chapter Four), and support sugar metabolism by taking Chromium Picolinate 250 mcg 2 times daily.

SGOT (AST): Serum Glutamic-Oxaloacetic Transaminase

Usual Clinical Range: 0 to 45 U/L

Functional Range: 10 to 26 U/L

SGOT and SGPT are enzymes that aid in various chemical activities within the cells. An injury to the cell releases these enzymes to the blood. If your ranges are beyond the Usual Clinical Range, things need to be handled medically.

 What you can do: If your numbers are outside of the functional range but within the Usual Clinical Range, it indicates a need for liver detoxification and adrenal support. See Chapters Three and Nine.



SGPT (ALT): Serum Glutamic-Pyruvic Transaminase

■ Usual Clinical Range: 10 – 60 U/L

■ Functional Range: 10 – 26 U/L

These tests are often used to diagnose damage or inflammation in the liver. A test result that is out of the medical range is an indication of a serious medical condition. Consult your physician.

What you can do: If your numbers are outside of the functional range but within the Usual Clinical Range, do a liver and cellular detoxification and support program. See Chapter Nine.

GGPT: Glutamyltransferase

- Usual Clinical Range: 5 85 U/L for men and 5 55 for women
- Functional Range: 10 26 U/L for both men and women

GGPT is an enzyme found in the liver. High levels tend to indicate some kind of biliary disease. Even moderate intake of alcohol and some common medication may cause higher levels to be present.

- What you can do: Elevated levels of the previous liver enzymes (AP, LDH, SGOT, SGPT, and GGPT) may indicate a serious liver problem. The fact that they are elevated usually warrants further testing. If serious problems are ruled out, the level of liver enzymes can usually be easily brought into the norm by a combination of the following:
 - Milk Thistle, 250 mg, 2 times daily
 - Alpha Lipoic Acid, 400 mg, 2 times daily, and
 - Artichoke Extract, 2 tablets of 500 mg, 2 times daily with meals. Other liver detoxifying herbs can be added for more information. Check Chapter Eight on heavy metal detoxification and Chapter Nine on the liver.

Pancreatic Function

Glucose

Glucose level reflects the basic function of your pancreas and determines whether you have diabetes. It measures blood sugar, but only at the time the blood was taken. Several different tests determine the consistent functional level of glucose in your blood. It should be between 85 and 100 milligram per deciliter (mg/dL). It may vary depending on the time of the day the blood is drawn and can reflect the amount of starch or sugar that you consumed in your last meal.

Consistently high glucose levels at various times of the day are a cause for concern and indicate the possibility of diabetes. Another test is used to confirm this finding.

 What you can do: Late onset diabetes can often be treated with nutritional supplementation the most common are Gymnema Sylvestre, Chinese bitter melon and Banana Leaf extract.

Cardiovascular Function

Cholesterol and Triglycerides are fats circulating in the blood stream that may have a negative effect on circulation and increase cardiovascular risks.

Cholesterol

There are two main types of cholesterol. LDL is often called the bad cholesterol because it deposits itself on the wall of the arteries for the purpose of lubrication, and under certain conditions it can create plaque. HDL is often called the good cholesterol because it dissolves the LDL in the arteries to prevent plaque.

Usually the blood tests your doctor will perform provide three numbers:

- Total Cholesterol: around 200 is desirable, 200 to 239 is borderline, above 240 is high
- LDL: below 129 is optimal, 130 to 159 is borderline, 160 to 189 is high, above 190 is very high
- HDL : below 40 is low, above 60 is high
- LDL/HDL ratio: ideal is below 4; as an indicator of risk, the ratio is the most important.



If your cholesterol is very high or your LDL/HDL is very high, you may at one point or another consider a pharmaceutical answer.

- What you can do:
 - Get your thyroid checked and under control if necessary using a combination of Thyroxal and Thyro CNV, 2 tablets of each, 2 times daily. These are available from Apex.
 - Use our Metabolic Assessment Questionnaire at www.babinetics.com to determine if you are insulin resistant and correct the situation.
 - Use a combination of policosanol and Gugulipid to lower your LDL and raise your HDL. It is available from MHP as Cholestame or Polilipid.
 - If necessary, take Red Yeast Rice, a natural statin and the product used in cholesterol fighting medicine. Make sure you supplement with at least 90 mg of CoQ10 soft gel or 300 mg tablets. You can also take some non flush Niacin at least 1500mg daily (do not take niacin if you have high blood pressure or palpitation)
 - Start a regular aerobic exercise program to raise your HDL.
 - Take at least 3000 mg of fish oil per day.

Serum Triglycerides

Normal Range: 150.

Borderline Range: 150 to 190

High Range: 200 to 499

Very high Range: above 500

What you can do: To decrease your triglycerides, go on a low "bad fat" diet, excluding from your diet homogenized fat in cookies and snacks and commercial fried food of any sort, and increase your fiber intake. For more information go to Chapter Ten: Naturally Maintaining Cardio-Vascular Health.

Thyroid Function

Thyroid Stimulating Hormone (TSH) this is the most frequent thyroid function test ordered by MDs



Usual Clinical Range: 0.35 to 5.50

Functional Range: 1.8 to 3.0

- Elevated TSH: it is an indication of primary thyroid hypo-function (low thyroid)
- Low TSH level: in an indication of low Pituitary function which can also result in thyroid hypo function (low thyroid)
- What you can do:
 - The doctor will recommend a thyroid medication, usually Syntheroid. While it is usually well tolerated, a more natural form is Armor Thyroid. Both products need to be prescribed by an MD or DO.
 - Often low thyroid is an autoimmune disorder called Hashimoto's disease and a further test is necessary to determine this diagnosis. In this case addressing the inflammation is necessary and usually not addressed by an MD. There is a natural product from Apex called Thyroxal which is very effective in dealing with this issue. Thyraxis PT, another product from Apex, addresses the pituitary deficiency.

Thyroxine (T4)

This is a precursor hormone produced in the thyroid gland.

Usual Clinical Range: 4.5 to 12

Functional Range: 6.0 to 12

- Elevated: Thyroid Hyper-function should always be addressed medically.
- Low: Hypo-thyroid the treatment is the same as for elevated TSH

Triodothyronine Uptake (T3)

This is the hormone which is actually used throughout the body.

Usual Clinical Range: 24 to 39

Functional Range: 28 to 38

 Elevated: In thyroid hyper-function and elevated testosterone. This condition requires the attention of a doctor.



Low: Thyroid hypo-function (see above for suggested treatment)

There are many other blood tests that your doctor could and probably will prescribe for you. My objective is to demystify blood tests and show you that with a little bit of information you can know and understand what they are. You also know now that, in many cases, there are healthy alternatives to pharmaceutical drugs. Be aware though that many conditions diagnosed through blood tests are serious and require treatment by a trained practitioner.



CHAPTER FIFTEEN: REMEDIES FOR THE PHYSICAL AND PSYCHOLOGICAL IMPACT OF AGING

There are many different functions of the body that are affected by aging. The degree of impact varies greatly depending on the individual's health, lifestyle, genetics and the environmental conditions in which she lives. Unlike what some people want to believe, aging is not a disease that can be cured. Rather, it is a natural stage of development that can be managed.

Nature has designed us to be healthy long enough to have children and care for them until they are capable of caring for themselves. After you are past age forty, you are on your own and can no longer take for granted that your body will take care of you. Now that we're living well into our 70's and 80's, that means you have your work cut out for you!

To age gracefully, you must progressively increase how much energy you put into caring for your body. In earlier years, you can get away with regular exercise and supplementing with vitamins and minerals. As time goes on, you need to more carefully monitor what you eat and assess the impact of lack of sleep, smoking, abusive alcohol consumption and compulsive use of coffee. Indeed, caring for your body will become more specific to the unique way you respond to aging. After fifty, being aware of your genetic tendencies is critical. Fortunately, you can manage those tendencies with natural remedies.

In this chapter we will review the effect of aging on all the major body systems and the remedies you can take to limit the aging process. That said, don't take supplements just for the sake of taking them. Only use them if they apply to what's showing up in your system.

We classify aging in three categories: minimal aging, normal aging, and accelerated aging.

- Minimal Aging applies to people who do everything they can to stay in shape: exercise, stress reduction, good nutrition, appropriate supplementation, attending health retreats and so on. Those people often look 10 to 20 years younger than their chronological age. If that is the type of aging you want for yourself, this chapter is for you. The sooner you get your health back on track and commit to taking care of yourself, the more likely you are to age this way.
- Normal Aging applies to individuals who lead a good life and use some nutritional support. These people usually age gracefully without major



problems unless they are exposed to serious physical or psychological health threats. Unfortunately, they may not have the wisdom to know what is impacting them in the highly polluted and toxic world we live in.

 Accelerated Aging applies to people who rely exclusively on traditional medical approaches for their health, or for those who disregard any medical advice whatsoever. They have no awareness of healthy habits, continue drinking and smoking, and have a high-stress lifestyle. These people may look older than their age and are often increasingly handicapped, and they depend on larger and larger amounts of pharmaceuticals to keep functioning.

As we touched upon before, genetics play a significant role in the aging process. Unless you have inherited challenging genetics, the major genetic dysfunction probably won't show up before your 50's. If you know what your genetic predispositions are, however, you can start palliating their negative impact in your 30's or 40's. It's never too early to start - but it's also never too late to use the remedies I've suggested. I have worked with people in their 60's, 70's and 80's with great success.

I am a great example of taking preventative measure. By the time I was in my 60's, I had gone through the clearing and restoring strategies in this book. Now, the only product that I take to maintain good health is Babinetics Prime Formula that I have specifically designed for this purpose. Your own combination of vitamins, minerals, Essential Fatty Acids, probiotics and herbs could provide you with the same support. However, because of my genetic tendencies on my mother's side, I also take natural support for excess cholesterol, hypothyroid and elevated homocysteine.

NATURAL REMEDIES FOR THE AGING PROCESS

Face lifts, tummy tucks and fashionable clothing can help create a youthful façade, but they won't do anything for what's going on at the core of your physical body as you age. A great many things contribute to what ails us and expedites the aging process, but nature is generous and provides a host of herbs, homeopathics, and common sense that can slow down the aging process and keep you healthy and active.

There's no need to adopt every remedy we suggest here. Consider both your genetics and what you currently believe are your weaknesses. Then pick and choose accordingly to support the things you believe are aging you most. You'll be able to tell where you may need help by the symptoms that are outlined.



Integrating these suggestions into your daily life will go a long way in keeping your energy up and maintaining good health for many years to come.

To start, review the recommendations below. They've already been covered in the book, but if you take these steps, they will retard the aging process and set up your biological terrain for optimum health.

- Eradicate Candida overgrowth. See the section on the colon and dysbiosis in Chapter Seven for details.
- Remove metal fillings.
- Decrease exposure to other sources of contaminants, including heavy metals, chemicals and excessive use of over-the-counter pharmaceuticals.
- Do a thorough liver detox. See Chapter Nine on how.
- **Eliminate exposure to smoking, first or second hand, and limit alcohol intake.
- Eat nutritiously. Decrease fat intake and eliminate homogenized fat from your diet. Use olive oil or butter for cooking. Eliminate refined sugar and refined flour from your regular diet. Limit the consumption of carbohydrates, grains, starch and fruits and eat an abundance of vegetables, raw and cooked. Start your day with proteins. Make sure that you eliminate all junk food and sodas from your regular diet. Instead, consume foods high in minerals and vitamins. Choose organic produce, eggs and meat when you can.
- Exercise regularly. Include stretching, toning and aerobics, at least 20 to 40 minutes, five times weekly.
- Work with a health-care professional or refer to this book to establish a comprehensive protocol of health supplements

SPOTTING AGE-RELATED SYMPTOMS

The impact of aging shows up in different ways for everyone. Below is a list of areas where most people notice their aging process. We've also provided suggestions on what you can do to can help improve conditions you're experiencing.



Skin, Nails and Hair

When you lose the strength and luster in your skin, nails and hair, it's typically due to a loss of the fat layer, collagen, oil glands and cellular activity. This, in turn, reduces nourishment and detoxification.

What You Can Do

Beneficial Steps

Maintain good skin pH. Make sure you take enough essential fatty acid, such as flax seed oil, fish oil, borage, and primrose. Make sure that your liver is producing enough bile salt for fat absorption. See Chapter Nine on liver function.

Toxicity and Candida seriously affect the health of the skin and nails so make sure you review Chapter Seven. Antioxidants also play an important role in aging of the skin, nails and hair in particular. Eat a balanced diet, drink at least eight ounces of water for every 20 pounds of body weight, and exercise at least five times a week for a minimum of 20 minutes.

Hyaluronic acid can help build collagen and retard the aging of the skin. Make sure that you only use natural skin care products, free of hormones.

The following natural resources have been shown to improve skin quality. Use natural ingredients like Aloe Vera, olive oil, milk cream, lavender, honey and powered orange peels to maintain good skin. Aloe Vera is one of the magical herbs that can solve all types of the skin problems, remove wrinkles, and help resume its natural glow. Milk and curd helps the skin in retaining the skin moisture. Honey and lemon can also be used for moisturizing as well as cleansing purposes.

Use cosmetics and skin products that contain natural ingredients.

Detrimental Actions

Avoid alcohol consumption, overworking, sleep deprivation, smoking, junk food, and skin products with a lot of synthetic ingredients.

CARDIO VASCULAR SYSTEM

The cardiovascular system is dependent on the heart, a muscular pump and vessels, to distribute and retrieve blood. Like all other muscles, the heart needs to be exercised or it will slowly lose its ability to perform. Nourishment throughout the body is distributed through blood. Decreased blood flow results in decreased nutrition of the cells, which also impacts cellular detoxification. This slow deterioration usually starts in the 40's and progresses as we get older.



This process shows up as hardening of the arteries. Clogging often occurs due to cholesterol and other deposits as well as inflammatory conditions related to homocysteine and bacterial infection. A further complication is that veins can become weaker or porous creating spider veins or varicose veins.

What You Can Do

Include in your supplements the best nutrients for the heart:

- Magnesium
- Potassium
- Vitamin E, B6, B12 and folic acid
- CoQ10
- An herb called hawthorn
- A mushroom called cordyceps
- An essential amino acid called Taurine

Ask your doctor to test your homocysteine and C reactive protein levels in addition to your cholesterol and your triglycerides. See Chapter Fourteen for more about these tests.

Homocysteine is the result of an incomplete transformation of one essential amino acid, Methionine, into another, Cysteine. Homocysteine in the body is normal and even beneficial at a certain amount. If it is too high it may cause serious inflammation in the blood vessels, resulting in plaque and possible vessel obstruction.

Treatment for homocysteine is simple: vitamin B12, B6, and Folic acid and Trimethylglycine Betaine. Several formulas combine these ingredients to treat Homocysteine. Consult your natural health-care provider for a suggestion.

There are other causes of inflammation in blood vessels. Some people believe that certain bacterial infections can cause blockage in the arteries and contribute to a serious of cardio-vascular problems. This is most likely an opportunistic infection resulting from systemic imbalance. However, a recent report suggests a strong correlation between gum disease and cardio-vascular incidents. New research also suggests that H-Pilori, a bacterial infection often associated with



GERD (gastro esophageal reflux disease), can also be a source of cardiovascular inflammation. A product called Mastic Gum can help alleviate this problem.

It is common protocol among MD's to suggest taking an aspirin a day to decrease systemic inflammation and increase fluidity of the blood. Unfortunately, this approach affects protection of the digestive tract and can result in bleeding. It can also increase risk of Macular Degeneritis, a common degenerative condition of the eyes.

As an alternative, for blood thinning, use vitamin E, 400 IU, Ginko Biloba in small amounts and fish oil. There are many plants that decrease the inflammatory factor COX2 while maintaining the protective factor COX1. One product that combines all these plants together is Zyflamend, a product from New Chapter. See Chapter Three for a review of this product and other anti-inflammatory products.

Another effective choice for superficial circulation of veins and capillaries is Vein Guard from Natural Care. This product is particularly effective for people who have circulatory problems related to swelling and broken capillaries from traveling in airplanes.

If your cholesterol is too high, try to correct the situation on your own before accepting any medical treatment. There are many things that you can do that can dramatically improve the situation. First, read Chapter Ten for a comprehensive approach.

Ask your doctor to check your thyroid. Low thyroid function can increase the level of bad cholesterol (HDL) and decrease the good cholesterol (LDL). Taking Thyroid extract and one kelp capsule per day, as well as eliminating heavy metal could regulate your thyroid. Taking synthetic thyroid medication often improves the test but not always the symptoms.

Next, regulate sugar metabolism. If your cells are insulin resistant, the excessive production of insulin can lead to high cholesterol and high triglycerides and considerably increase you cardiovascular risks. Increased weight in your midsection is one of the main indicators that your cells are becoming resistant to insulin. Many diets have been designed to address this problem: the South Beach Diet, the Fat Flush Plan and Dr. Oz diet.

Finally, there are many products that affect cholesterol level: Red Yeast Rice, Niacin or Niacinamide, fish oil, Lecithin, Polycosanol and Gugulipids and prickly pear. I have tried many products to control cholesterol. I've had the best results with:

• A Tibetan herbal supplement called Abana, 2 capsules 2 times daily



- Red Yeast rice, 2 tablets 2 times daily to which you add Co Q 10 because it is a natural statin; all natural or synthetic Statin remedies decrease CoQ 10, a vital cardiac nutrient
- Polilipid, available on the Internet

Work with a natural health-care provider to find the appropriate program for you.

Respiratory System

Aging decreases the elasticity of lungs and the ability of the alveoli to absorb oxygen. These two factors greatly reduce lung capacity and the quantity of oxygen that's carried by the blood and transported to the cells. This in turn greatly affects strength and stamina.

What You Can Do

There are many products that support the lung functions, including Eucalyptus and Osha. They are particularly helpful to inhale when there is chronic infection in the sinuses or chronic bronchitis in the lungs. They can also be used as a preventive measure.

I discovered a food that has phenomenal regenerative effects on the lungs: the juice of Chayote Squash. This is a type of squash grown in Mexico. It may sound labor intensive, but it's really not. Simply take two Chayote Squash and juice them. They can be juiced with other vegetables or fruits without decreasing effectiveness. The juice also strongly supports the thymus gland. I have seen dramatic improvement with this product in individuals who have been diagnosed with serious chronic conditions. The juice should be consumed every day.

The most critical way to support the lungs is through regular aerobic exercise. There are many pieces of equipment on the market designed to increase lung capacity.

Immune System

One of the main reasons that the immune system breaks down is because of a progressive atrophy in the thymus gland. This is where natural killer (NK) cells are activated. These cells represent one of the main lines of defense in the body against abnormal cell growth. As we age, the number of NK cells and their degree of activity tend to decrease, which poses an increased risk of cancer.

What You Can Do

The most effective products to strengthen the amount and activity of NK cells are zinc and beta glucans. The latter are derived from Chinese mushrooms. Sometimes zinc is hard to absorb and requires the aid of digestive enzymes. Some products combine the two in the same formula and add the copper necessary to maintain proper mineral balance. Three zinc products are particularly effective:

- From Apex Energetics: Zinczyme
- From Deseret Biologicals: Zinc Plus
- From MHP: ProZ+GL

To obtain mushroom extracts:

- MHP carries a product called Ummpower which strongly boosts NK cell level and activity
- A product from Physiologics called Immunene combines the mushroom with Cats Claw and Astragalus, two powerful immuno stimulants

As we age, our level of oxidative stress, or free radicals, tends to increase. Anti-oxidants are the best defense against free radicals. There are many antioxidant formulas available which combine minerals, vitamins, bioflavonoids and carotenoids. One formula that I like is Ultra Nutrients, available through MHP. Even though their recommended dosage is 6 capsules per day, I usually recommend 3 per day. For the best support, add Bioflavonex, two capsules daily, and a carotenoid complex, 2 capsules per day.

Another new cellular anti-oxidant is Oxicell, available from Apex. This is a powerful transdermal glutathione. Glutatione is the most effective intracellular anti-oxidants. The recommended dosage is ¼ to ½ teaspoon on the soft skin of the inner thighs, forearms, and under the breast for women.

Endocrine System

The production of certain hormones starts decreasing in our 20's. The production of Human Growth Hormone (HGH) and DHEA decreases progressively as we get older. At the same time, accumulated stress has a profound effect on cortisol, the long-term stress hormone, and insulin, our sugar regulating hormone. Around menopause, estrogen and progesterone also drop dramatically in women while in men there is a drop in testosterone, often accompanied by an increased conversion of testosterone into estrogen. Decreases in thyroid production are also



extremely frequent and most likely related to environmental toxins. All this causes profound changes that need to be addressed to maintain a high level of health.

What You Can Do

Before supplementing with hormones, it's critical to attend first to the underlying imbalances. The more typical approach is to start taking hormones that we think are deficient and that perpetrate a sense of wellbeing at the expense of shoring up a more solid base. I suggest the first step is to walk through the Metabolic Assessment developed by Dr. Dotis Karazian and available on our website www.babinetics.com. Or, you can order tests through your practitioner to determine what is going on. Based on these results, your health care practitioner can outline for you a natural approach to restore the hormonal balance of your body.

Uro-Genital System

Let's face it: the older you get, the more frequently you have to urinate. This is due, in part, to changes in bladder control resulting from hypertrophy of the prostate in men and prolapse of the uro-genital organs in woman. Thinning of the mucous membranes in the vagina, a progressive atrophy of the vagina or a decrease in vaginal secretions may also interfere with intercourse.

What You Can Do

The best (and only) remedy for prolapse and urine leakage in women is to maintain good muscle tone through regular exercise and the Kegel technique. For more information about the Kegel technique, check the Internet. Proper intake and absorption of essential fatty acids is critical to help with vaginal atrophy and thinning vaginal walls. Correcting hormonal imbalance is also important. Using natural lubricants can also help with intercourse.

Minor prostate enlargement generally responds well to certain natural products, including Saw Palmeto, Pygheum Africanum, pumpkin seed and Beta Sistosterol. Two products that reduce the conversion of testosterone to estrogen are Stinging Nettles and Chrysine.

Many male support formulas contain most or all of these products. The one that has provided me with the best result is from Deseret Biologicals called Beta Sitosterol complex. I take 2 tablets daily. This product also contains a homeopathic for Ureaplasma Urealiticum, a type of Mycoplasm often associated with chronic prostate infection.

Neurological System

It's no surprise that aging compromises coordination, attention, memory, sensory input and reflexes. That's all due to the destruction of nerve cells and decreased nerve transmission. Certain factors tend to increase or exacerbate these limitations: stress, Candida, diminished brain circulation, accumulated toxicity and poor absorption of basic nutrients essential for proper neurological functions including, minerals, amino-acids and essential fatty acids. Lack of exercise and intellectual stimulation can also contribute to these conditions.

What You Can Do

There are many remedies designed for different purposes to support neurological functions and to improve brain circulation. The main products are

- Ginkgo Biloba, up to 60 mg 2 times daily;
- Vimpocetin, 10mg 3 times daily with meals;
- Vitamin E, 400 to 800 IU per day; and
- Omega 3, 3000 mg daily

For neurological enhancement you can use the following:

- Phosphatidyl Complex, 200mg 3 times daily
- Herbal combination of Astragalus, Fo Ti, Chlorella,
- Galantimine, used in early stages of cognitive impairment associated with Alzheimer's, but also very effective in enhancing attention and focus; it is available through various web sites.
- Lecithin Choline increases neurotransmitters activity, 1200mg 2 times daily
- Ginkgo to improve blood flow to the brain, 1 to 300mg daily (watch for a blood thinning effect)
- Huperzyme: for improved cognitive ability, 120mcg 1 to 2 times daily
- Melatonin to improve sleep pattern, 1 to 3 mg 20 minutes before bed time
- Amino Acid complex helps maintain neurological functions.



There is a product available on the Internet that incorporates many of these products. It is called Memory Enhancer Brain Connector Plus. It is produced by Life Source Nutrition.

Digestive System

The digestive system suffers as we age because of a decrease in the secretions that supports proper digestion. This is due, in part, to the fact that exocrine glands, which support these secretions, do not function as effectively as they did when we were younger.

Every step of the digestive system produces secretions designed to encourage good digestion: saliva, hydrochloric acid (HCL), enzymes produced in the small intestine, and pancreatic enzymes and bile from the liver. Each one acts as a trigger for the next.

In addition to diminished secretions, there may also be an adrenal dysfunction. This results in the thinning of membranes in the digestive track that may lead to chronic inflammation. Other problems may be associated with sugar metabolic imbalance, including late onset diabetes.

What You Can Do

If you start noticing difficulty with digestion, gas, pain in the stomach after eating, acid reflux, or food intolerance that you did not have before, get a comprehensive GI test so you can rule out infection and identify the specific deficiency. This test is available at DiagnosTech Labs and Genova Diagnostics and can be ordered through your natural health care practitioner.

To treat this on your own, increase your hydrochloric level with HCL Betaine. A common visible sign of HCL deficiency is rosiola, red spots appearing on the cheeks. If you take a tablespoon of vinegar when your stomach is upset and it reduces your upset, it is a strong indicator that you are deficient in hydrochloric acid. Another step is to take a broadband digestive enzyme before meals. See Chapter Eleven for more information.

Difficulty digesting fat is usually related to a deficiency of bile salt production that you can correct by taking artichoke extract, 1 tablet of 500 mg before each meal. There are many other products that help support bile function and that you can get through your natural health care practitioner, including but not limited to Bilemin from Apex Energetics and Cholacol from Standard Process.

If your body does not tolerate HCL Betaine, it is probable that there is some degree of sensitivity or ulceration of the esophagus, stomach or duodenum. Having



a comprehensive GI test done is critical to rule out infection. One product which is very effective to restore the lining of the digestive tract is Deglycerized Licorice (DGL). The recommended dosage is 1 tablet, 3 times between meals or at least 20 minutes before eating or before going to sleep. Other products are Cat's claw, Aloe Vera and Turmeric.

Cellular Functions

Age affects cells in two major ways: Through the actual number of cells produced, and the integrity of cellular metabolism.

Productivity: Cells are programmed to reproduce a certain amount of times and then die. This is called the cell cycle. When we get older, the population of cells that are dying outnumber the cells being born. This promotes aging and weakens the body. Cell regeneration is called the anabolic process. Cellular death is called the catabolic process.

Metabolism: Mitochondria, the part of the cell in charge of transforming glucose and fat and producing energy, produce a series of by-products that you've heard of many times: free radicals. These free radicals generate oxidative stress that attacks the structure and particularly the DNA of the cell and the mitochondria. This oxidative stress decreases cell effectiveness and can result in the production of abnormal dysfunctional cells.

The cell itself has a very effective way of repairing its DNA. Unfortunately, the power house of the cell, mitochondria, does not posses an effective ability to repair its own DNA. This decrease in cell effectiveness can be exacerbated by two other factors associated with aging: decrease in the production of insulin, critical in delivering glucose to the cell, and the frequent deficiency of L-Cartinine, an amino acid critical in the transport of fat to the cells.

So, the two major factors impairing energy production of our cells are damage to mitochondria and impaired transport of raw material to mitochondria. The result is that all of our physical and psychological functions become progressively restricted.

What You Can Do

Maintain a healthy lifestyle so that you keep stress at a minimum. Proper exercise, good nutrition and a positive attitude are truly helpful in maintaining healthy cells.

Take anti-oxidants. This is critical for decreasing oxidative damage and maintaining the effectiveness of cells. Here is a review of the best supplements.



- Vitamin B1, 2, and 3 are very important in the energy production cycle; take a good multi-vitamin or a vitamin B complex
- Alpha Lipoic Acid (ALA), a powerful antioxidant that recycles other critical anti-oxidants, also helps in cellular energy production; take 100 to 200 mg with meals
- CoQ10 plays a key role in the energy production cycle, take a 200mg tablet or 60 mg soft gel
- Other anti-oxidants, selenium, bioflavonoids and carotenoids
- Regulate sugar metabolism, particularly insulin resistance and insulin deficiency. Several herbal supplements used to regulate and restore your sugar metabolism are: Gymnema Sylvestere, Chinese Bitter Melon and Banaba Leaf Extract. Other products that help regulate sugar metabolism are Chromium, Normalose and Vanadyl Sulfate. We have utilized the following two products, available through your natural health care practitioner, with excellent results including eliminating early stages of Type II diabetes:
 - from Physiologics, take Diabest 2, 1 tablet 3 times daily with food,
 - or from Apex, take Glysen, 1 to 2 tablets, 2 times daily with food. Do
 not combine these with standard diabetic medicine. Modification in
 diet is a must to obtain optimal results, primarily consisting of low
 carbohydrate intake and weight reduction. See Chapter Six on diet.
- Regulate the conversion of fat into energy, take L-Carnitine, 250 mg, 2 times daily with meals
- Take cilantro and chlorella to eliminate heavy metals (or NDF a product that we have mentioned before) and allow normal cellular absorption of mineral
- Take NAC to increase glutathione, 500 to 1000 mg daily
- From your practitioner you can also obtain Oxicell or Super Oxicell, a transdermal cream that allows the Glutathione and the Super Oxide Dismutase to bypass digestion and be absorbed directly into the blood stream

Musculo/Skeletal System

Muscle tone is maintained through a constant output of energy. When the ability to produce energy decreases, stamina and muscular resistance diminish. What follows is a loss of muscle tone, strength, and a tendency toward atrophy. "Use it or lose it" corresponds particularly well to the effect of aging on muscles. As we lose muscular energy, we tend to exercise less and our motivation falls away. Many older people become more sedentary at the very time in their life when regular exercise becomes most critical.

What You Can Do

While regular exercise is an essential part of health maintenance at any age, after the age of 40 it is no longer an option. Exercise determines the quality of life you will experience until you die.

Three types of exercise are critical as we age:

- Stretching to maintain flexibility and balance
- Toning to maintain structural integrity and balance
- Aerobic exercise to maintain endurance, to support the cardio/vascular and respiratory system, and to maintain a healthy weight

Commit to an exercise program five days a week for at least 20 to 40 consecutive minutes, and alternate the different types of exercise.

During and after exercising, maintain electrolytes by drinking plenty of fluids. Exercise within the appropriate cardiac level for your age and shape. Look for a heart monitor to make sure that you are staying within your appropriate rhythm. To know what your ideal exercise heart rate go to: http://www.hydroxycut.com/calculators/index.shtml .

Creatnine helps with muscle mass and muscle activity. Produced by Jarrow, it is available at health food stores. It comes in capsules of 800 and 1000 mg. It is also available on the Internet from www.iHerb.com.

Pyruvate Complex helps with the production of cellular energy. It is available at iHerb. The amount depends on the strength of the product and the intensity of your workout. Start with 1 capsule per day and do not exceed 4 capsules per day.

Of course, healthy nutrition and supplementation dramatically helps in maintaining the health of your muscles.

Bones

We begin losing calcium in our mid 30's so regular exercise and proper mineral balance is very important. A great deal of calcium is lost through stress, so monitor chronic stress resulting from chronic inflammation, psychological situations, sugar metabolic imbalance and obesity.

Weight training of any type will help maintain healthy bones. Calcium level in the bones is also dependent on the amount of weight bearing exercise so make sure you include weight exercises as part of your exercise routine.

Osteoporosis usually occurs later in life and is often associated with postmenopausal women. However it is quite frequent in older men too. Osteoporosis is not dependent on calcium alone. Bones have a mineral matrix which includes many minerals and specific vitamins.

What You Can Do

Healthy bones are dependent on a balance of vitamin D 3, vitamin K, calcium, phosphorus, magnesium, zinc, manganese, silica, boron and strontium. There are many good formulas on the market. I usually recommend Pure Encapsulation + CAL+.

Because bone density tends to decrease naturally, it is very important to have a baseline. So if you are over 50 years old, ask your doctor to prescribe a bone density test. Different individuals respond differently to bone support formulas, so try a formula, see how it works, and move on to another if the initial one doesn't.

Bone loss is slow and may not appear on a bone density test for several years. To test for bone loss on a more regular basis, get a simple urine test called a Pyrilink D test, priced under \$50.00. It is available from Diagnos-Techs and must be ordered by your practitioner.

Joints

Joints take a serious toll with aging. This is from chronic tension, trauma and its cumulative effect, mineral deficiencies, and chronic inflammation and degeneration due to mycoplasmic infection. Whatever the problem, keeping joints healthy is a very important aspect of any anti-aging program.

What You Can Do

There are many joint health formulas that address the effect of sulfur deficiency, a common reason for joint pain. They usually contain a combination of Glucosamine, Chondroitin and Methylsufomylmethane (MSM). Other common



ingredients are Cetyl Myristoleate and sea cucumber. Various combinations of these products are offered by Physiologics. Their products need to be ordered through a practitioner; however similar products are available in health food stores.

Hyaluronic Acid is used to increase collagen. The usual dosage is 70 mg per tablet and the recommended dosage varies form 3 to 6 tablets daily depending on the severity of the joint problem. Because Hyaluronic acid is a collagen enhancer it is also great for the skin's aging process and it can be purchased in the form of ointment for the skin.

Joint pain and inflammation can also be caused by Mycoplasms, particularly Mycoplasm Pneumonae and Mycoplasm arthritis. There are medical tests to determine the presence of these micro-organisms and the standard medical treatment includes specific antibiotics.

One natural approach that you can pursue with your health practitioner is Mycoplasm Series, a homeopathic series available through Deseret Biologicals. The series is comprised of 10 very small bottles. The full content of one bottle is taken under the tongue every three days. Before starting the process, read carefully the directions that come with the product. If no other approach has worked and your joint pain persists, I would definitely ask your natural health care practitioner to order this product for you.

Sense Organs

It may be easy to stop as you get older, but it's not as easy to smell the roses. That's because all of our senses become duller in time. The most obvious is worsened eyesight while hearing loss is a close second. Taste buds and olfactory receptors decrease as well. While you may not be able to do too much about decreased eyesight, you can protect your eyes with nutrients that can prevent degeneration or minimize the damage. There are also some formulas designed to prevent or reduce hearing loss. At this time, however, I am not aware of any remedies to maintain the quality of smell and taste, but most of the formulas I'm suggesting could help all of the senses in a general manner.

What You Can Do

For the eyes: Certain nutrients are specific to the health of the eyes: bilberry, lutein, quercetin and rutin. There are many formulas in health food stores and on the internet designed to support the eyes and that incorporate these basic nutrients. They also usually add other minerals, vitamins and antioxidant to complete their formula.



In traditional Chinese Medicine, the eyes are related to the liver so we can infer that chronic frustration, emotional repression and chronic toxicity would have a profound impact on the health of the eyes. Dealing effectively with stress and committing to an on-going detoxification will greatly decrease the aging process of the eyes.

Conversely, everything that negatively impacts the liver, such as frequent consumption of alcohol, smoking, drugs and many pharmaceuticals including Tylenol and aspirin, will seriously increase the risk of degeneration. Of course diabetes is another critical risk factor affecting the eyes. The following are a few professional formulas that I have used with my clients.

Physiologics has many different formulas. The two main formulas are:

- Ocular Defense plus Lutein, recommended dosage is 2 to 4 capsules daily
- Macucare, 1 capsule 1or 2 times daily

MHP has a product called Macular Support. Take 1 to 2 capsules daily.

For the ears: A product from Natural Care called Hearall is designed to improve or maintain auditory function, hearing clarity and to protect the hearing cells. Another common hearing disorder associated with aging in ringing in the ear, or Tinitus. Natural Care has a product to assist this problem called Ringstop.

I have had clients who responded well to these products and others that did not experience much improvement. In Traditional Chinese Medicine, the ears are connected to the kidneys and the quality and strength of the life force. Balancing and strengthening the adrenals and the nerves which are related to the same energetic sphere is a critical part of decreasing degeneration affecting hearing. On an emotional level, fear, insecurity and authoritarianism will impact this sphere negatively.



CHAPTER SIXTEEN: HOW PERSISTENT PSYCHOLOGICAL STRESS AFFECTS THE BODY, MIND AND EMOTIONS

Throughout this book, we have referred to how psychological stress contributes to or exacerbates whatever physical conditions are present. Indeed, it's quite common that emotional stress is the cause of disturbances, and the stressors behind the symptoms are often neglected. While we are all aware that psychological stress has a negative affect, few are fully aware of how deeply devastating stress can be on overall health. And the longer stress is present, the more likely it is to affect us at a deeper level.

There are all kinds of reasons for psychological stress: finances; physical handicaps that limit us or our loved ones; loss of job, property or a significant relationship; overwhelm; trauma; the list goes on and on. These situations are simply woven into the fabric of life, but they leave most of us with a feeling of loss of control, fear, frustration, grief, worry, jealousy, or anger. The ongoing harping of politicians and the media about security issues, real or imagined, also contribute to a general climate of social stress. The competitive nature of the society we live in also plays a part. I find the people most profoundly affected by these issues are the elderly, women, minorities, adolescents and children. So much for the golden age of childhood and retirement!

Regardless of what triggers psychological stress, humans are wired to cope by either fighting or fleeing, widely recognized as the fight or flight response. This response produces a discharge of adrenaline, a primitive survival mechanism that prepares us to either run, or confront the enemy and fight. Unfortunately, most of our modern-day situations of psychological stress do not warrant such a physical response. This means that all that powerful mobilization of energy has no outlet and is in fact, introverted, creating a cumulative impact that renders our body increasingly tighter, or less flexible as we get older.

ADRENALINE'S BIG BANG

The release of adrenaline is powerful and elicits several reactions:

- Blood rushes to the largest muscles, the ones necessary for fight/flight
- The heart beat and arterial pressure increase
- Food absorption and digestion are inhibited
- The immune function shuts down
- Peripheral circulation that conserves energy gets blocked



Sensory awareness is heightened

The short-term consequences of these responses are benign. But if we experience the fight or flight response on a regular basis, we suffer physical and emotional consequences including:

- Exhaustion and possibly chronic fatigue.
- Malnutrition. When the immune system is compromised malnutrition can occur, causing a long list of problems, including premature aging.
- Hyper reactivity to noise and light. The increased sensory awareness, or hyper-vigilance, stresses the sense organs.
- Decreased sexual drive. Chronic psychological stress on cortisol demand progressively interferes with DHEA, the precursor to the sexual hormone testosterone.
- Chronic muscular contraction. Stress wrecks the structure of the body.
 This can lead to spinal distortion or lack of movement. The lymphatic and vascular flow systems can also take a hit.
- Mental fatigue.
- Inability to relax, resulting in sleep deprivation. The lack of sleep or restful sleep produces impaired concentration and a high level of mental distraction. Recent studies on health indicate that approximately 50% of the population is sleep deprived. This promotes absent mindedness or dissociation that easily results in mistakes and accidents.
- Social dysfunction, disconnection from responsibilities and long-term depression.
- Self medicating with alcohol, recreational drugs or over the counter remedies.
- Mood swings, fearfulness, anxiety, depression, paranoia, despondency, and over reactivity.
- Addictive tendencies, particularly with sugar, starch, alcohol, and caffeine but also other a substances such as pharmaceutical products.



HOW TO DEAL WITH STRESS

Everyone reacts differently to external stressors. While we may all be affected by similar events, the way we respond is greatly dependent on how we feel about ourselves and how we see the world. Some people respond with despondency and over dependence on others; some blame others; some are in a constant state of bracing themselves; some choose avoidance and escapism; and finally others indulge in worry and over-analysis.

Whatever the pattern of response--whether the stress is acute, as in a death or sudden loss of income, or chronic as found in a dysfunctional relationship or a sick child - there is a long-term cost. Survival mechanisms kick in as the normal way of life. Learning how to minimize or release that reaction determines how effectively the individual recovers from the impacts of stress.

The objective of stress reduction is not to help create less stress in life. Rather, it is to help us cope with the stress that exists in life. The five main tools for stress reduction are relaxation, exercise, laughter, proper nutrition and stress management.

Relaxation

There are hundreds of approaches to relaxation and all probably have advantages and drawbacks. We will not review them all, but I will recommend a technique taught by one of my health mentors, Dr. Stephen Stiteler, whom I introduced in Chapter Eleven. Dr. Stiteler calls this technique the Hawaii Pause.

It's easy: Lie on your back with a small pillow supporting your head and place the lower part of your legs on the seat of a chair. Your calves should be fully supported with your feet loose and your thighs should be close to a 90° angle from your pelvis. This pause induces an automatic relaxation response. It disengages your sympathetic nervous system, the one that controls the fight or flight response, and activates the parasympathetic nervous system that promotes rest, relaxation, regeneration and healing.

Ideally, do this twice a day for 20 minutes each time. If you cannot possibly do two sessions, do one before going to bed. When you do the Hawaii Pause, do not engage in any other activity. Listening to soothing music or a soothing meditation is alright but absolutely no conversation, radio, TV or phone interruption.

Exercise

All forms of exercise, unless they are abusive to the body, have a stress reduction effect. Running in moderation, walking, swimming, jumping on a trampoline, jumping rope, yoga, Nautilus, Pilates, Jyrotonic or Jyrokinesis are all



great forms of exercise. My favorites are Jyrokinesis and recumbent bike. Just choose any form of exercise that you enjoy doing and commit to doing it at least 20 minutes daily.

A good exercise program should include stretching, aerobic and resistance training with weight or Nautilus equipment or the equivalent. Certain techniques like Pilates or Gyrotonic have the resistance built into the stretching and allow for great stretching while engaging the opposite muscle group. There are private or semi private sessions with a thoroughly trained instructor. Choosing a personal trainer may also insure a good workout and may commit you to a program.

Laughter

We've all heard the expression "laughter is the best medicine." That's no joke. Laughter relaxes the physical body and has a multi-faceted affect on the immune system. Plus it relieves psychological concerns. No wonder comedy clubs and comedy shows are so popular. Interestingly, it doesn't matter whether you have a good reason to laugh; the impact is the same. Laughing of any kind releases stress so that you can better handle whatever situation you are in. In a nutshell, a good sense of humor is worth pursuing! And so is practicing the tones that comprise the healing energy of laughter.

There are five tonalities of laughter, each with their specific purpose. I have taught the laughter tone in workshops to hundreds of people around the world with great success. Each one of these tones affects the body differently. The effects in part are due to the tonality and for this reason a tone can be used silently to strengthen various areas of the psyche.

- HO-HO-HO: Restores strength and physical power. Exercise this tone when you feel intimidated and want to stand in your strength.
- HAY-HAY: Creates stronger emotional boundaries. It will help you care for others without getting caught up in their "stuff."
- HA-HA-HA: Brings you back into your heart, the true center of your being. Helps recover peace.
- HE-HE-HE. Restores mental clarity and personal freedom.
- HU-HU-HU: Generates greater receptivity to Spirit. Whatever your spiritual alignment is, this tone connects you to it.

Laugh each tone separately for 30 seconds. Then go from one tone to the next for one minute: for example, HO-HAY-HA-HE-HU, HO-HAY-HA-HE-HU,



etc. If you are concerned about how you will appear to others, do it in a place where nobody can see you or hear you, such as in your car.

Nutrition

Nutrition plays a big role in handling stress. Take the time to eat regularly and avoid eating too much or too little. Choose foods that are low in starch, sugar or fat. Include adequate amounts of protein, vegetables, legumes, fruits and whole grains. Avoid heavy consumption of caffeinated beverages and alcohol. Take good multi-vitamins and minerals, as well as EFAs, such as fish oil or flax seed oil.

Multivitamins sold in health food stores are usually of adequate quality. Better yet, ask your health practitioner to suggest a favorite brand. I would not choose the products sold in drugstores or large wholesale stores. Many of their products are synthetic, contain unwanted fillers, are not subjected to high quality control and are of unknown origins.

STRESS MANAGEMENT: USING SYMBOLS TO CALM

When we are in a positive state of mind, the hard stuff of life doesn't trigger the fight or flight response. We react mildly, or don't react at all. We are able to allow the stressors to exist without becoming unhinged by them. We do what we can to mitigate the consequences of the stressors, but life goes on relatively smoothly. In the best of circumstances, stress can awaken our creativity and resourcefulness which gives way to valuable personal growth. Stress, therefore, can be an opening door rather than something we resent. It all depends on our state of mind.

When we are out of emotional balance, little things can become a big deal. Spilling milk is not only something to cry about - it's something that trips off a full-fledged tantrum. Those who experience this contrast may wonder why sometimes they can handle stress calmly, while other times they "lose it."

In my perspective, it's all about conditioning. We have all been programmed with survival or protective mechanisms that were originally designed to guarantee our safety and well being. These mechanisms are part of our education, our genetics and our culture. In specific contexts, these reactive mechanisms may be very effective. In many others, they are quite ineffective and just add insult to injury. For example if your boss makes a remark that you do not like and your reaction gets you fired, everyone loses.

It may be hard to understand how certain reactions serve as survival mechanisms. The truth is they very often do not. Anger, fear, confusion, guilt or shame are not typically constructive; they do nothing to help us move through the



problem at hand. We've all seen this demonstrated when a person's negative reaction sets off a chain reaction that elicits more negative responses in others. At the same time, those who inhibit their reactions are no better off. They may internalize their upset or simply become apathetic and blasé. In this case, chronic negative energy simply moves into the body and can create serious disequilibrium and eventually disease.

We have developed a method to cancel the unwanted reactions that gets triggered automatically through our conditioning. By doing so, you will naturally increase your personal effectiveness in handling life challenges. We call this approach "Managing through Peace" and we have shared it with many individuals and organizations in the U.S. and abroad.

What we've discovered is that, for some reason, when there is a focus on music, nature, pets, babies or placing attention on the center of the chest, a state of greater calm or relaxation surfaces. For lack of a better word, we call these **symbols** because the Latin root of the word means "to reconnect." We have found that each one of these symbols is a natural way to disconnect from knee-jerk reactivity. They then help you reconnect to your inner peace and help you reclaim your power so that you may choose the most effective response to any given situation. Evidently, these symbols are pre-programmed inside of you and just thinking about one of them brings you back into internal balance.

Each person must determine which of the five symbols resonates within. Some symbols may not work for you at all - and may even have an adverse effect. Still, we have never found a single person among the thousands that we have worked with that did not respond to at least one of the following symbols. To elaborate, they are: nature; music, babies, pets, and concentrating on or touching the center of the chest

To determine which symbol is yours, focus on each one individually while closing your eyes. Identify which one calms you the most. Be mindful that you are not looking for the one you are most attached to or that brings about your most passionate response. Seek, instead, the one that elicits in you the deepest sense of inner peace. You may discover that you resonate with more than one symbol. In that case use the one you have the most affinity for but do not try switching from one to another in the same session. Once you have discovered it, use it in this way:

- 1. Close your eyes and give your full attention to your peace symbol.
- 2. Once you have connected to the inner calm, take a minute to absorb as much of that calm as possible as if you were a sponge and your life depended on that calm.



- 3. When you are one with the calm and you have restored your peacefulness, extend the peace to the situation that is throwing you out of balance until you are at peace with the situation. It does not mean that you are resigned to it, only that it is no longer running you. You may have to repeat the process several times until you reach that state of inner peace. Strong attachment to being right or wanting revenge will delay the process, so let it go. Remember that from their point of view, the people involved in your upset are right and you are wrong. Or, just as likely, they have no reaction to what's going on at all; you are carrying the load of the negative reaction while they are busily going about life without upset.
- 4. From that place of peace, explore and choose the best possible strategy to deal with the situation in a way that's beneficial to all. What positive values can you bring to it and how could you do this? By values I mean specific qualities like acceptance, patience, cooperation, courage, flexibility, follow through, humor etc.

Use minor annoyances to practice this approach every day until it becomes totally familiar and you can do it easily with your eyes open and without losing focus. Then start applying it to more challenging situations. Daily practice consistently promotes positive transformation - unless you are caught in a trap. Common traps include the following:

- You've decided that you are right and your way is the only way
- You don't want to take responsibility for transformation
- You are entrenched in a position: victimization, indignation, contempt, or vindictiveness
- You don't care about others as long as you get what you want
- You've been hurt and want to make others suffer or make them pay

If you realize that you are caught in one of these traps, let it go and start again from a more authentic point of view.

We have used Managing through Peace in thousands of situations, including settling major conflicts. As long as there was a minimum of willingness and cooperation on the part of those involved, we were successful in creating dramatic, positive, long-term results.

To our knowledge this is the simplest, most effective stress management strategy. This approach goes beyond settling conflict. It is also applicable to any



situation where you are committed to dramatic transformation. My wife and I do it before embarking on any major new project or whenever something shows up that seems to interfere with what we are creating in our lives.

Give it a shot. You have nothing to lose and a world of peace to gain.



CHAPTER SEVENTEEN: 90 DAYS TO OPTIMAL HEALTH

While the media is full of tips on how to achieve physical or emotional health, there are few resources that provide a map for integrating the journey of both physical and emotional wellness into one package. This book wouldn't be complete without a map of how you can negotiate your way to optimum health - physically, spiritually and mentally.

I have written this book with the hope that people will turn to certain chapters and embrace them as valuable and reliable reference materials whenever they find themselves physically or emotionally out of balance. My hope is that people will perceive their bodies as interconnected terrain rather than body parts with separate and unrelated problems and needs. My hope is that readers will become more aware of how their emotional stress feeds physical stress, and do what's necessary to create harmony in both. My hope is that you will use the following 90-day program to know yourself better and develop a lasting relationship with being well.

While it is not possible to provide a detailed and specific program for every reader without a proper evaluation of each person's health, we can at least offer the following guidelines as a simple foundation to improve the quality of your entire life.

TEN STEPS TO OVERALL WELLNESS

After three months of following the ten steps below, I can promise that you will find renewed energy, improved health and other benefits.

Step 1: Learn how to deal with personal issues in a way that produces positive results. Read Chapter Sixteen and learn the stress management techniques that we outline. Introduce these tools into your life until they become an automatic part of your daily routine. Stress management is critical for learning how to manage

Step 2: Start a regular exercise program including stretching, toning and aerobic movement. It can be one discipline such as Gyrokinesis, or three different programs that you alternate. The program needs to last at least 20 consecutive minutes and you must exercise at least five times weekly. If you know that you won't follow up on your own, hire a coach or enlist a least a friend to exercise with you. Set up a schedule of what you are going to do and when and stick with it. If for some reason you do not keep your word, your friend can help talk you through the blocks. Setbacks are not a reason to stop. Your physical needs are still the same, so get back on track. Read Chapter Six to help motivate this type of lifestyle.

Step 3: Eliminate from your diet the regular or frequent consumption of sugar, white flour, sodas, chips and other starchy treats including ice cream, French



fries, pizza and so on. In general, eliminate all fast food from your diet. Try to stick to regular meals and start your day with protein. Keep coffee to a minimum and avoid regular use of alcohol. Read Chapter Six for more information about the important role of good nutrition and health.

- Step 4: Get tested for food sensitivity to gluten, soy, milk and eggs and any other foods you think you may react to. Eliminate them from your diet for three months. When you reintroduce them in your diet, do it one at a time, slowly, so that you can see whether you can handle it occasionally in small quantities. See Chapter Twelve for more specific guidelines.
- Step 5: If you are experiencing digestive problems, take a digestive enzyme combination and or HCL Betaine. If either one of those create pain consult a natural health care practitioner for evaluation or treatment. Or, take a high grade probiotic to restore the intestinal flora damaged by antibiotic use or certain traumas. Further support of the intestinal track can be obtained from FOS, arabinogalactant and regular consumption of fiber including ground flax and psylium. Go to Chapter Eleven to get the inside story on digestive disorders.
- Step 6: Detoxify the liver. There are many products that can be used for this purpose: artichoke extract, milk thistle, turmeric, rosemary, garlic, water cress, broccoli, cabbage and organically grown berries. Chapter Nine refers to the liver and how to properly clean it up.
- Step 7: Eradicate Candida overgrowth. Refer to the 90 Days to Optima Health Plan, presented later in this chapter, to determine if this is a necessary step for you. The main substances for that purpose are caprylic acid, Pau d'arco, garlic, barberris extract, grapefruit extract, lavender extract, tea tree oil and red thyme extract. You do not have to use all these products and many Candida eradication products on the market combine several of these. This can be a long and challenging process, but Chapter Seven will clarify priorities so you can succeed.
- Step 8: Regularly take a good multi-mineral and vitamin complex, an essential fatty acid complex containing omega 3 and gamma linoleic acid.
- Step 9: Let go of any grudges you hold against people, including yourself. Grudges only hurt you and they are rooted in perception and interpretation only, not necessarily fact. Give up being right and replace it with being healthy. Start everyday with a positive attitude and finish everyday on a note of gratitude. Before getting up or while in the shower, I decide on three qualities that will form the foundation for my day.
- Step 10: Everyday, anytime of day, say aloud ten times, "I love myself." Don't be bashful; it's powerful medicine and speaks to all parts of you the ones



you're conscious of and those you don't even know exist. It can radiate a calming, peaceful effect that fosters feelings of safety and wholeness. Given that it's free, boosts your spirits and can be done anywhere, go ahead and say it 20 times. Or 30! There's no measure to the reward.

IMPLEMENTING THE 90-DAY PLAN TO ACHIEVE RADIANT HEALTH

Using the following 90-day chart will help you achieve radiant health. The chart includes a restorative plan for physical health; some suggestions for stress reduction and stress management; and affirmations for a positive life direction that you can use at the beginning and end of each day.

Transformation can involve releasing stubborn physical or emotional patterns, and that's not always easy. Some of the physical restorative processes can produce short-term reactions. Candida eradication, for example, may provoke die-off effects (cramping, bloating, nausea, or head aches). They do not last long, just a few days. Given that long-term quality of life is at stake, it is worth a few aches and pains. Be courageous and be patient. If necessary, reduce the amounts of supplements when you start a program or if you experience reactions, and build up progressively to decrease the severity of the reaction. Detoxification through the artichoke extract is usually very gentle. The rest should not be a problem.

Before you get started, make 12 copies of the chart, one for each week, and keep one copy on your bedside table for easy access. Take one minute before going to sleep and fill in the form. Forgive yourself instantly for anything you did not do, and praise yourself for anything you did do. Do not drag today's shortcomings into tomorrow. Tomorrow is a brand new day full of possibilities for total success. If you travel a lot, you may want to put the chart in your computer or Palm Pilot. Remember to fill the chart everyday. This makes a dramatic difference.

If you find yourself resisting or sabotaging the process, you may need some coaching. For example, you may do great for a few days and then go crazy and do everything that does not support your health. More than likely, you have some underlying patterns that interfere with your ability to take control of your life. Find a Life Coach or join a program like Weight Watchers to help you stay on track.

Best of luck as you go on your way to optimum and radiant health!



90 DAYS TO OPTIMAL HEALTH PLAN

Place an X in the column when you meet the goals of your plan.
Step 1 - Stress Management: On a scale from $1 - 10$, $(1 = low, 10 = high)$
Today, my level of stress was a I was stressed out by
I want to forgive myself for

I want to forgive for
I feel great about myself for
I am grateful for or appreciate



I helped myself manage my stress by doing the:
Hawaiian Pause for relaxation: It was effective because
Laughter exercises: HoHoHo, HayHayHay, HaHaHa, HeHeHe, HuHuHu (Do each for 30 seconds) I found most effective because it made me feel
Peace Process –My symbol is: The experience I had today by focusing on it was
Meditating (every day is optimal). What happened today when I meditated was:
Step 2 - Exercise - Optimally, do some form of exercise five times per week for at east 20 minutes per day: Today my exercise included: After exercising, I felt
did not exercise today because
felt about it because



I am excited about trying
and hope to do it
When it comes to exercise, I have learned that:
Step 3 - Nutrition: Optimally, eliminate refined sugar, white flour, caffeine and
alcohol.
The foods I ate today included:
I felt about what I ate today because
The nutritious foods I ate today were
I especially like
Step 4 - Food Elimination: Today, I learned that when I eat
I feelwhich clues me into the fact that it would be good for me to eliminate it from my diet. I feel
about that because



The best way I can support myself in eliminating it from my diet is to	- .
	he
other foods I do not eat or eat little of include	
Today, I ate one of the "forbidden fruits" because	_
I fo about it because	∍lt ——
Step 5 – Support my Digestive System: Optimally, take enzymes or probiotics enday or each meal, depending on the product	ach
Today, my digestive system was	_
I took	to
support it.	_
Today, I didn't not take any digestive supplements because	_
	_
The result was	_
Step 6 – Detoxify liver: Today, I took	_
Today, I did not take a liver detox because	_



Step 7 – Eradicate Candida: Today, the steps I took to eradicate Candida were:
Consequently, I felt
I did not take any steps to eradicate Candida because
Step 8 – Take a Multi Vitamin with Minerals
Today, I did did nottake a Multi vitamin with minerals.
Step 9 – Give up being Right; Choose to be Healthy.
Today, when I awoke, I chose three positive qualities that would be the focus of my day. They were They made a difference in my day because
I did not choose three positive qualities because
The result of that choice was
Today, I felt strongly that I was right about
Instead of positioning myself to be right, I let it go and
I felt about it because



Today, rather than letting it go, I defended my position be	ecai	use .					
I felt about it because							
I think taking a strong and defensive position on things ir							se
I see the connection between my state of mind and my p	ohys	ical	hea	lth th	- ırou	gh	
At the end of the day, I expressed gratitude and apprecia	atior	n for			_		-
I realize how blessed I am!							
You can also keep track of your weekly progress by fillin each night:	ıg oı	ut the	e fol	lowi	ng c	hart	
ACTIVITY	s	М	Т	W	Т	F	S

HuHuHu

#1 Stress Management

Relaxation - Hawaiian Pause

Laughter - HoHoHo, HayHayHay, HaHaHa,

Hehehe,

Peace Process – Used symbol				
Meditated				
#2 Exercised				
#3 Nutrition				
No Sugar, white flour, Caffeine etc				
#4 Eliminated Foods You Are Sensitive to				
#5 Took Digestive System Support				
#6 Took liver detox supplements				
#7 Take Candida Elimination Products				
#8 Took Multi-Vitamin with Minerals				
#9 Gave Up Being Right - Chose to Be Healthy and Happy				
Upon Waking - Recited three Positive Qualities				
Before Sleep- Recognized and spoke of Gratitude				



CHAPTER EIGHTEEN: CONCLUSION

We started this book by introducing you to Dr. Claude Bernard and his passion for proving that good health is disrupted, not by the invasion of germs, but because of individual weaknesses within each physical body. This point of view was—and remains—well established in Traditional Chinese, Ayurvedic, and Tibetan Medicine. These systems create the foundation for a comprehensive system of healing that incorporates body, mind and spirit in relation to the internal and external environment.

Dr. Bernard also affirmed a principle that was founded in the ancient Greek tradition of medicine. This principle gave equal emphasis to the psychological factors represented by Asclepius, considered the father of mental health, and his two daughters Hygia, representing healthy lifestyle, and Panacea who stood for treating diseases with a special warning to the physician of "Do no harm." But Dr. Bernard's point of view lost favor to the idea that averting germs, rather than maintaining optimal health, was the best approach to being healthy. Especially since the discovery of antibiotics, the focus of modern medicine has moved almost entirely away from a healthy physical, psychological and spiritual lifestyle to what is easier to measure and control: the identification and treatment of symptoms.

For the most part, the problem is that symptoms are the body's attempt to correct itself. If the symptoms are life threatening, managing the symptoms makes perfect sense--but should only constitute the first step of treatment. Identifying the deeper causes and correcting those should be the second step to regaining good health, as well as correcting the negative impact treatment itself can have on the body.

In Chinese Medicine, producing relief and treating the cause is expressed in an analogy. They call this *treating the branches and treating the root*. In western medicine, we treat only the branches. We treat the branches over and over again, but we never address the roots. As a result, the pathology gets driven deeper and deeper but is never addressed. This doesn't do much for the well being of the individual, but it is greatly beneficial to the pharmaceutical companies that control most of the health-care industry. This approach maintains individuals in a relatively functional state, but it never quite cures anything. As a result, it is common for people in their later years to be on five or ten different medications, each directed at a different set of symptoms and prescribed by different specialists.

A deeper look at the root of various issues often reveals one common cause that can easily be addressed through natural means. I give many examples of this throughout my book. Typically, problems are associated with specific toxicities, lack



of absorption, Candida or chronic food intolerances. I have discussed how these highly treatable issues can be the source of multiple symptoms and pathological disorders.

The lack of attention to the root of pathology was particularly clear to me when my wife was diagnosed with breast cancer. It is not difficult to understand that cancer is an immunodeficiency, yet nothing in the present medical approach to cancer addresses the immunodeficiency. The tumor is assaulted aggressively with powerful drugs and radiation, but there is no follow-up to detoxify the body after treatment or to look at the immune system and identify what went awry physiologically and psychologically.

In studying health before and after my wife's cancer, I deliberately chose to focus on the foundation of health and not let myself be caught in the temptation to confuse health care with disease care. I continue with that commitment. While I am often consulted about specific pathologies, my focus is to always first examine the very foundation of what makes up good health: absorption, transformation, elimination and protection. Once I assess and correct the imbalance in these areas, most diseases are greatly improved. I may use various strategies to alleviate the pain and discomfort, but never at the expense of a more fundamental strategy.

I have designed this book as a source of information about health, the body and natural strategies to health and well being. I am aware that there is much more, very valuable information out there that I have not covered, and in fact, probably do not even know about. I have shared my present knowledge honestly and in a language that I deliberately made accessible to all.

It is my desire that this book will empower you in taking greater responsibility for your health. Particularly, I would like you to entertain the notion that taking care of yourself is an on going process that belongs in your hands. It is simple and affordable. You may elicit much support from the medical profession and other health care practitioners. However, remember that in the final analysis your body and your well being is your ultimate responsibility.

You have to live with yourself every day; your practitioners do not. Make sure that what you use to make yourself feel better in the short run does not become the source of increasingly bigger problems later.

Your body is a natural environment, just like the earth's environment, and similarly, will thrive if the ecological terrain is kept clean and in balance. Synthetic chemicals and high-priced pharmaceuticals may be necessary in extreme cases. But to prevent those extremes, it's exciting to know that you can keep your ecological terrain in check with simple lifestyle choices and natural remedies.



Mother Nature, and a few good natural health-care practitioners, will provide all the support and all the materials you need.

It's your choice.



APPENDIX: REFERENCES

A Good Vitamin

http://store.agoodvitamin.com/apenoxcr2oz.html

Apex Energetics Oxicell Cream

888-572-4580

American Nutriceuticals, Inc.

http://www.888vitality.com

888-848-2548

Apex Energetics

http://www.apexenergetics.com

800-736-4381

Bio-Terrain Institute

http://www.terrainmed.com/seminars.html

866-204-9026

BioRay

http://bioray2000.com

888-635-9582

Compassio Net



www.compassionet.com

800-510-2010

Crane Herb Company

http://www.craneherb.com/web/home.aspx

508-539-1700

Deseret Biologicals

www.deseretbiologicals.com

800-827-9529

Diagnos-Tech Inc.

http://www.diagnostechs.com/main.htm

800-878-3787

Genova Diagnostics Laboratory

http://www.gdx.net/home

800-522-4762

Mendosa.com

Glycemic index and glucose info

http://www.mendosa.com/gilists.htm

http://www.mendosa.com/common_foods.htm



No phone number available

Emerson Ecologics

https://www.emersonecologics.com

800-654-4432

Mention Dr. Babinet's Name

Good Health Naturally

http://www.goodhealthnaturally.com

0-870-241-4237 in U.K.

Health Concerns

http://www.healthconcerns.com

800-233-9355

Herbal Technologies

http://herbaltechnologies.com

Toll free 732-617-7416

iHerb

www.iherb.com

866-328-1171

Immuno Laboratory

www.immunolab.com

800-231-9197

Immuno Science Lab

www.immuno-sci-lab.com

Website under construction

Landis Revin Nutraceuticals

http://www.trevinol.com/hyenco.html

800-770-6507

Life Source Nutrition

http://www.lifesource4life.com

800-567-8122

Mountain States Health Products (MHP)

http://www.mhpvitamins.com

800-647-0074

Denver area: 303-823-9338

Natural Care

www.enaturalcare.com



800-475-9811

New Chapter

http://www.new-chapter.com

800-543-7279

Pharmax

http://www.pharmaxllc.com/index.asp

800-538-8274

Physiologics

http://www.physiologics.com

800-765-6775

True Botanica

www.truebotanica.com

800-315-TRUE (8783)

Yeast Connection

www.yeastconnection.com

No phone number available