

The Body:
The Battlefield
for the Mind's
War Games

"The immune system does not reside solely in the body."

—Patricia Norris, PhD

ere is a startling statistic: More than 80 percent of patients' visits to physicians' offices are associated with stress (unresolved issues of anger and fear). Moreover, 80 percent of workers' compensation claims are directly related to stress. Here is another statistic: Researchers in the field of psychoneuroimmunology (PNI) and energy healing not only suggest that as much as 85 percent of illness and disease is associated with stress, but also note a direct causal link, giving a new perspective on the word *dis-ease*. Anyone who has ever suffered a tension headache knows intuitively how strong the mind-body connection really is.

Rest assured the dynamics of disease and illness are quite complex and yet to be fully understood. This chapter combines the best aspects of both Western and Eastern wisdom for a more comprehensive understanding of mind-body-spirit health and well-being.

Today, it is well documented that stress aggravates several health conditions, particularly Type II diabetes, eczema, and rheumatoid arthritis. Furthermore, many diseases, such as lupus, fibromyalgia, Epstein-Barr, rheumatoid arthritis, and Type I diabetes, are now thought to have an autoimmune component to them. The list of stress-related illnesses continues to grow, from herpes and hemorrhoids to the common cold, cancer, and practically everything in between. Pharmaceuticals and surgery are the two tools of the trade used in Western (allopathic) medicine, yet the trade-offs can include severe side effects. This is one reason why so many people are turning to complementary forms of integrative healing for chronic health problems.

Prior to the discovery of vaccinations and antibiotics, the leading cause of death was infectious diseases. Today the leading causes of death are chronic lifestyle diseases (e.g., most cancers, diabetes, obesity, strokes, coronary heart disease), all of which have a strong stress component to them. Moreover, an increasing number of people suffer from chronic pain that ranges from bothersome discomfort to complete immobility. The Western model of health care (which some people label as "sick care") places a strong focus on symptomatic relief rather than prevention and healing restoration. As we are now learning, the most advantageous approach appears to combine the best of allopathic and holistic healing to address both the causes and symptoms of stress that will return one back to homeostasis, turning the battleground into a peaceful landscape. Exercise 2.1 is a personal stress inventory to help you determine any association between stress and symptoms of stress in your body.

Stress and Chronic Pain

In addition to issues related to chronic disease, an increasing number of Americans suffer from debilitating chronic pain. Muscular pain associated with the lower back, hips, shoulders, and neck is a constant nightmare, so much so that it steals your attention from practically everything else. The connection between stress and chronic pain cannot be ignored. Neither can the connection between stress and obesity. All of these factors are tightly integrated. It may come as no surprise that many of the coping and relaxation techniques in the cadre of holistic stress management used to maintain health and well-being are well-documented as a means to help restore a sense of homeostasis as well.

Stress and Inflammation

Researchers in the field of PNI have now discovered that chronic stress is associated with the body's inability to regulate the inflammatory response. This inability, due in part to the role cortisol has on the immune system, appears to be a strong link in the stress and chronic disease equation. Researcher, Sheldon Cohen at the Carnegie Mellon University found that people with high levels of inflammation (chronic inflammation) were more susceptible to colds and flu. Further research from the Oral Biology lab at Ohio State University reveals that chronic stress, due to the sympathetic nervous system, appears to change the gene activity of immune cells before they enter the blood stream. Inflammation, now confirmed to be a result of stress, is associated with many chronic diseases and the acceleration of the aging process and tied to both the nervous system and the immune system. Inflammation and the pain that results from it is also associated with the use of pain relievers and the opiod epidemic. The association between stress and inflammation highlights just one of many mind-body connections.

▶ Your Human Space Suit

Renowned inventor and philosopher Buckminster Fuller once said that the human body is our one and only space suit in which to inhabit the Spaceship Earth. It comes with its own oxygen tank, a metabolic waste removal system, a sensory detector system to enjoy all the pleasures of planetary exploration, and an immune defense system to ensure the health of the space suit in the occasionally harsh global environment. This specially designed space suit also is

equipped with a unique program for self-healing. Factors associated with this self-healing process include the basic common health behaviors associated with longevity: regular physical exercise, proper nutrition, adequate sleep, the avoidance of drugs, and a supportive community of friends and family. Unfortunately, most people don't take good care of their space suits and many have forgotten the means to activate the program for self-healing.

▶ Fight-or-Flight with a Bite

The fight-or-flight response may begin with a perception in the mind, but this thought process quickly becomes a series of neurological and chemical reactions in the body. In the blink of an eye, the nervous system releases epinephrine and norepinephrine throughout the body for immediate blood redistribution and muscle contraction. At the same time, a flood of hormones prepares the body for immediate and long-term metabolic survival. Similar to the cascade of a waterfall, hormones are secreted from the brain's pituitary and hypothalamus glands as messengers moving quickly downstream to the adrenal gland (cone-shaped organs that sit atop each kidney). Upon neural command, cortisol, aldosterone, and other glucocorticoids infiltrate the bloodstream to do their jobs, all in the name of physical survival.

What works well for acute stress can cause serious problems with chronic stress. Repeated synthesis and release of these stress hormones day after day (the consequence of prolonged bouts of unresolved stress issues) can literally wreak havoc on the physical body. In essence, the body becomes the battlefield for the war games of the mind.

Physiology of Stress: The Neural/Hormonal Pathways of Stress and Relaxation

Your nervous system is comprised of both a sympathetic (stress) and parasympathetic (relaxation) tract. The sympathetic nervous system secretes the catecholamines epinephrine and norepinephrine. These two substances are released at the onset of the stress (fight of flight) response via the neural endings to get you to move by increasing heart rate, blood pressure, etc. Through a complex serious of neurochemical reactions under stress (from the pituitary and hypothalamus to the adrenal glands) the

body prepares for survival. There are many hormones secreted throughout the initial and subsequent reaction to stress, but the hormone most closed associated with the stress response is Cortisol, commonly known as "the stress hormone." Other pathways involving hormones (e.g., Thyroxine) for chronic stress also come into play as well. The parasympathetic nervous secretes acetylcholine, a substance used to return the body back to homeostasis, *after* being stressed, a place we all need to be more often.

DNA, Telomeres, Stress, and Aging

At the ends of each DNA strand is a region of repetitive sequences that serves to protect the end of the chromosome from deterioration. These telomeres are associated with DNA replication and become shorter each time the process is repeated. The enzyme telomerase is used to protect the telomeres by ensuring its stability. If the telomeres shorten without restoration, then cell replication is compromised. When cell replication is compromised, the health of the tissue is compromised, as seen in the aging process. In 2009, the Nobel Prize in Medicine was awarded to researchers whose work substantiated the importance of telomeres. Research now substantiates the fact that oxidative stress (free radicals) shortens telomeres; hence, this type of stress compromises health in a number of ways, including cell division and the integrity of our DNA. Speculation is that chronic stress may also have the same effect. Physical exercise is suggested as a means to enhance the integrity of the telomeres. Do other relaxation techniques lead you to the fountain of youth? Perhaps! Although more research is needed, all evidence points in this direction. Stress not only kills but also speeds up the aging process. (Blackburn and Epel, 2017, Pelletier, 2019.)

▶ The Human Microbiome: A Look at Health Through the Gut

One of the newest discoveries of disease and illness is not via viruses or even deep inside the strands of your DNA, but within millions upon millions of bacteria that reside in your stomach and small intestine. Researchers now call the intestinal flora, comprised of trillions of healthy bacteria, the "**Microbiome**." We host a vast and diverse living ecological system within us. When this ecological system is healthy, so are we. When it is compromised, so are we. The 20th-century

approach of wiping out "bugs" via antibiotics has lead to a "deforestation" of essential bacteria. The end result sets the stage for chronic illness of many kinds. Maintaining the integrity of the microbiome, however, is far more complicated than eating yogurt or consuming probiotics to reseed the forest of your intestinal flora.

It is now known that 70 percent of our immune system resides in our gut, yet the gut is often ignored in the treatment of so many chronic diseases, from asthma, obesity, and arthritis to multiple sclerosis, psoriasis to ADHD. Perhaps the biggest take home message about a compromised microbiome is the association between it and inflammation. Inflammation (excessive oxidation of tissues) is associated with a great many chronic diseases, and stress seems to be a major trigger resulting in inflammation. Moreover, abysmal eating habits perpetuate a compromised microbiome, leave one quite vulnerable to chronic disease.

Gross Anatomy and Physiology

Your body is composed of a network of several amazing systems that work together as an alliance for the necessary functions of all daily life activities. For centuries, these aspects were identified as nine separate systems living under the anatomical structure of the human body. Now most health experts agree (through the wisdom of PNI) that this is truly one system, with the whole always being greater than the sum of the parts. The parts are the musculoskeletal system, nervous system, cardiovascular system, pulmonary system, endocrine system, reproductive system, renal system, digestive system, and immune system. If you have a health problem with one of these systems initially, eventually all other systems become directly affected. In union with this "one system" are the many anatomical organs responsible for the integrity of its work, including, but not limited to, the heart, lungs, kidneys, liver, stomach, pancreas, brain, and lymph nodes. Physical well-being is often described as the optimal functioning of all of these physiological systems. What comes to mind when you hear the expression "the picture of health"? For most people this conjures up an image of a physically fit person enjoying some rigorous outdoor activity well into their later years. Sadly, this has now become an image few can relate to. Stress not only can affect the optimal functioning of all of these physiological systems to destroy the picture of health, but also can literally shut down the entire body. Simply stated: Left unresolved, stress kills! Exercise 2.2 is a questionnaire that brings to your attention the health habits that make a composite of your current health picture.

Subtle Anatomy and Physiology

Equally important, yet often less obvious than gross anatomy, are three other systems critical to the operations of the human space suit. These are more commonly known as **subtle anatomy** and physiology, and they are the human energy field, the meridian system, and the chakra system. A holistic perspective of health would be incomplete without mentioning this aspect of health. The following sections provide a more detailed look at the aspects of our subtle anatomy and physiology.

The Human Energy Field

Western science has recently discovered that the human body has a unique field of electromagnetic energy that not only surrounds, but also permeates the entire body. Often called the "human aura" by mystics, it is the basis of Kirlian photography and the diagnosis of disease through magnetic resonance imaging (MRI). Ageless wisdom notes that there are many layers of the **human energy field**, with each layer associated with some aspect of consciousness (e.g., instinct, intellect, intuition, emotions). This and other findings support the timeless premise that our mind isn't located in our body. Instead, our body is located in our mind!

Each layer of consciousness in the human energy field is considered a harmonic vibration. Like keys on a piano keyboard, the frequency of the body's vibrations, and that of the emotional, mental, and spiritual fields, are set at different octaves, yet are within the harmonic range of each other. If a thought coupled with an emotion is left unresolved, it can cause dissonance or imbalance within the layers of energy in the aura. Distortion first appears in the aura outside the physical body. When left unresolved, these emotional frequencies cascade through the layers of energy (which include the chakras and meridians) to pool within various cell tissues. The end result is dysfunction in the corresponding area in the physical body. Dissonance (the opposite of resonance) eventually appears at the cellular level, and the once harmonic vibration is no longer tuned to homeostasis, hence, setting the stage for disease and illness. Medical intuitives including Mona Lisa Schulz, MD; Judith Orloff, MD; Caroline Myss; Donna Eden; Mietek Wirkus; and others describe the initial stage of illness and disease as unresolved emotions (e.g., anger or fear). Through this model of well-being, disease develops outside the body and filters down through the layers of energy. Ironically, physical symptoms in the body are not the first signs of illness, but the last. The body indeed becomes the battlefield for the war games of the mind.

The Meridian System

First brought to the world's attention through the ancient Chinese culture, the physical body holds 12 bilateral rivers (**meridians**) of energy or *chi*. Each meridian connects to one or more vital organs (e.g., heart, lungs, liver, kidneys). When energy is blocked or congested in any meridian, the health of the associated organ will suffer. Acupuncture is the primary modality used to ensure the free flow of energy through these meridians, by placing tiny bulblike needles at various gates (acupuncture points) along the meridian pathways to unblock energy congestion. Acupressure (also known as shiatsu) is another method used for energy regulation. Although Western medicine doesn't quite acknowledge the concept of chi or meridians, it does recognize many remarkable outcomes of acupuncture (without side effects) in the treatment of chronic illnesses, in which Western medicine itself has proven less than effective.

The Chakra Energy System

The human body is said to have seven major energy portals. The ancient Sanskrit word for these energy portals is *chakra*, which translates to mean "spinning wheel," and looks like a small tornado attached to the body. Like the meridian energy system, each **chakra** is associated with the health of vital organs specific to the region to which it's attached. When the chakra shows signs of congestion or distortion, then the life force of energy through the chakra cannot be maintained in its specific region, and the health of those organs is compromised. Each chakra is associated with not only a body region, but also a layer of consciousness in the human energy field, directly linking mind, body, and spirit. Exercise 2.3 explores the concept of chakras and your health status.

The science behind subtle energy provides valuable insight into a problem that has vexed Western health experts who study the area of stress and disease: Why is it that two people who go through a similar stressful experience can contract different chronic illnesses? The answer may appear to be strongly associated with the dynamics of the chakra energy system. The following is a brief summary of the seven primary chakras.

First Chakra. The first chakra is commonly known as the root chakra and is located at the base of the spine. The root chakra is associated with issues of safety and

security. There is also a relationship with our connectedness to the earth and feelings of groundedness. The root chakra is tied energetically to some organs of the reproductive system, as well as the hip joints, lower back, and pelvic area. Health problems in these areas, including lower-back pain, sciatica, rectal difficulties, and some cancers (e.g., prostate), are thought to correspond to disturbances with the root chakra. The root chakra is also known as the seat of the Kundalini energy, a spiritually based concept yet to be understood in Western culture.

Second Chakra. The second chakra, also known as the sacral chakra, is recognized as being associated with the sex organs, as well as personal power in terms of business and social relationships. The second chakra deals with emotional feelings associated with issues of sexuality and self-worth. When self-worth is viewed through external means such as money, job, or sexuality, this causes an energy distortion in this region. Obsessiveness with material gain is thought to be a means to compensate for low self-worth, hence a distortion to this chakra. Common symptoms associated with this chakra region may include menstrual difficulties, infertility, vaginal infections, ovarian cysts, impotency, lower-back pain, prostate problems, sexual dysfunction, slipped disks, and bladder and urinary infections. Third Chakra. Located in the upper stomach region, the third chakra is also known as the solar plexus chakra. Energetically, this chakra feeds into the organs of the GI tract, including the abdomen, small intestine, colon, gallbladder, kidneys, liver, pancreas, adrenal glands, and spleen. Not to be confused with self-worth, the region of the third chakra is associated with self-confidence, self-respect, and empowerment. The wisdom of the solar plexus chakra is more commonly known as a gut feeling, an intuitive sense closely tied to our level of personal power, as exemplified in the expression, "This doesn't feel right." Blockages to this chakra are thought to be related to ulcers, cancerous tumors, diabetes, hepatitis, anorexia, bulimia, and all stomach-related problems. Issues of unresolved anger and fear are deeply connected to organic dysfunction in this body region.

Fourth Chakra. The fourth chakra is affectionately known as the heart chakra, and it is considered to be one of the most important energy centers of the body. The heart chakra represents the ability to express love. Like a symbolic heart placed over the organic heart, feelings of unresolved anger or expressions of conditional love work to congest the heart chakra, which in turn has a corresponding effect on the anatomical heart, as noted by renowned cardiologist Dean Ornish. The heart, however, is not the only organ closely tied

to the heart chakra. Other organs include the lungs, breasts, and esophagus. Symptoms of a blocked heart chakra can include heart attacks, enlarged heart, asthma, allergies, lung cancer, bronchial difficulties, circulation problems, breast cancer, and problems associated with the upper back and shoulders. Also, an important association exists between the heart chakra and the thymus gland. The thymus gland, so instrumental in the making of T cells, shrinks with age.

Fifth Chakra. The fifth chakra lies above and is connected to the throat. Organs associated with the throat chakra are the thyroid and parathyroid glands, mouth, vocal cords, and trachea. As a symbol of communication, the throat chakra represents the development of personal expression, creativity, purpose in life, and willpower. The inability to express oneself in feelings or creativity or to exercise one's will freely inevitably distorts the flow of energy to the throat chakra and is thought to result in chronic sore throat problems, temporomandibular joint dysfunction (TMJD), mouth sores, stiffness in the neck area, thyroid dysfunction, migraines, and even cancerous tumors in this region.

Sixth Chakra. The sixth chakra is more commonly known as the brow chakra or the third eye. This chakra is associated with intuition and the ability to access the ageless wisdom or bank of knowledge in the depths of universal consciousness. As energy moves through the dimension of universal wisdom into this chakra it promotes the development of intelligence and reasoning skills. Directly tied to the pituitary and pineal glands, this chakra feeds energy to the brain for information processing. Unlike the solar plexus chakra, which is responsible for a gut level of intuition with personal matters, the wisdom channeled through the brow chakra is more universal in nature with implications for the spiritual aspect of life. Diseases caused by dysfunction of the brow chakra (e.g., brain tumors, hemorrhages, blood clots, blindness, comas, depression, schizophrenia) may be caused by an individual's not wanting to see something that is extremely important to his or her soul growth.

Seventh Chakra. If the concept of chakras is foreign to the Western mind, then the seventh chakra may hold promise to bridge East and West. Featured most predominantly in the Judeo-Christian culture through paintings and sculptures as the halo over saintly beings, the seventh chakra, also known as the crown chakra, is associated with matters of the soul and the spiritual quest. When the crown chakra is open and fully functioning, it is known to access the highest level of consciousness. Although no specific disease or illness may be associated with the crown chakra, in truth, every disease has a spiritual significance.

Although not everyone can see or sense the human energy field, meridians, or the chakras, you can be trained to do so. Exercise 2.4, "Energy Ball Exercise," is an introductory session to the perceptions of the human energy field. Exercise 2.5 includes several ideas for maintaining a healthy flow of personal energy or chi.

Stress and the Immune System

It's no surprise to learn that under chronic stress, the immune system is greatly compromised, beginning with the immunoglobulins in the saliva down to the natural killer cells that scan the body for unwanted pathogens and mutant cancer cells. Chances are if you were to look back to the most recent time you became ill, right before it (days, even weeks) you'll find a stressful experience that triggered a cascade of unresolved stress emotions, in turn washing a flood of stress hormones through your body.

What physiological factors are responsible for a suppressed immune system? At first, the finger was pointed at the central nervous system (e.g., epinephrine, norepinephrine). Then attention soon turned to cortisol, the stress hormone secreted by the adrenal glands responsible for a host of metabolic survival activities. Apparently, when cortisol gets done with its fight-or-flight duties, for some unknown reason, it has a nasty habit of attacking and destroying white blood cells, the front-line defense of the immune system. Research suggests that cortisol is not the only culprit when it comes to an immune system compromised by stress. Landmark research by Candace Pert (1997) and others determined that various neuropeptides, secreted by the brain and other cells in the body, are triggered by emotional responses. Pert calls these "molecules of emotion," and they can either enhance or detract from the efficacy of the immune system. In essence, thoughts are energy—they can kill or heal.

Recently, a significant discovery was made linking the brain to the immune system, revealing a distinct connection among our thoughts, emotions, and health. The connection between the brain and lymphatic system is through the meningeal lymphatic vessels, cites Antoine Louveau, researcher at the University of Virginia School of Medicine's Department of Neuroscience.

Through the lens of holistic wellness, it is important to realize that the immune system does not reside solely in the body. The aspects that comprise your subtle anatomy also constitute your immune system.

The Stress and Disease Connection

Through the eyes of Western science, which views each human being as a machine, stress is often described as "wear and tear" on the physical body. Like a car that has covered more than 200,000 miles, the body has parts that typically break down and need to be fixed or replaced.

In this paradigm, these parts are often called "target organs," because they seem to be specifically targeted by neurochemical pathways produced by chronic stress. Any organ can be a target organ: hair, skin, blood vessels, joints, muscles, stomach, colon, and many others. In some people one organ may be targeted, whereas in others many organs can be affected. First, we'll take a look at disease and illness from a Western perspective and then conclude with a holistic view of the healing system. Western science has categorized stress-related disorders into two classifications: **nervous system-related disorders**. The following is a brief listing of chronic diseases from each of these two categories.

Nervous System-Related Disorders

- Tension headaches: Tension headaches are produced by contractions of the muscles of the forehead, eyes, neck, and jaw. Increased pain results from increased contraction of these muscles. Lower back pain can also result from the same process. Although pain relievers such as ibuprofen or Advil are the most common source of relief, tension headaches have also been shown to dissipate with the use of meditation, mental imagery, and biofeedback.
- Migraine headaches: A migraine headache is a vascular headache. Symptoms can include a flash of light followed by intense throbbing, dizziness, and nausea. Migraines are thought to be related to the inability to express anger and frustration. Although several medications are prescribed for migraines, biofeedback, mental imagery, and the herb feverfew can be equally effective and used with fewer side effects.
- Temporomandibular joint dysfunction: Excessive contraction of the jaw muscles can lead to a phenomenon called temporomandibular joint dysfunction (TMJD). In many cases, people are unaware that they have this illness because the behavioral damage (grinding one's teeth) occurs during sleep. Like migraines, TMJD is often

- associated with the inability to express feelings of anger. Relaxation techniques, including biofeed-back and progressive muscular relaxation, have been shown to be effective in decreasing the muscular tension associated with TMJD.
- Bronchial asthma: This is an illness in which a pronounced secretion of bronchial fluids causes a swelling of the smooth-muscle tissue of the large air passageways (bronchi). The onset of asthmatic attacks is often associated with anxiety. Currently drugs (e.g., prednisone) are the first method of treatment. However, relaxation techniques, including mental imagery, autogenic training, and meditation, may be just as effective in both delaying the onset and reducing the severity of these attacks.
- Irritable bowel syndrome (IBS): IBS is characterized by repeated bouts of abdominal pain or tenderness, cramps, diarrhea, nausea, constipation, and excessive flatulence. One reason IBS is considered so directly related to stress is that the hypothalamus, which controls appetite regulation (hunger and satiety), is closely associated with emotional regulation as well. Relaxation skills, including thermal biofeedback, progressive muscular relaxation, mental imagery, and reframing, can help to reduce existing levels of anxiety with promising results.
- Coronary heart disease (CHD): Elevated blood pressure (hypertension) is a significant risk factor for CHD. Stress hormones are often responsible for increasing blood pressure. When pressure is increased in a closed system, the risk of damage to vascular tissue due to increased turbulence is significantly increased. This damage to the vessel walls appears as small microtears, particularly in the intima lining of the coronary heart vessels, which supply the heart muscle (myocardium) itself with oxygen. As a way of healing these tears, several constituents floating in the blood bind with the damaged vascular cell tissue. Paradoxically, the primary "healing" agent is a sticky substance found floating in the blood serum called cholesterol, resulting in atherosclerosis, which can eventually lead to a heart attack.

Immune System—Related Disorders

■ The common cold and influenza: Stress hormones (specifically cortisol) tend to destroy members of the white blood cell family, suppressing the immune system, hence leaving one susceptible to cold and flu.

- Allergies: An allergic reaction is initiated when a foreign substance (e.g., pollen, dust spores) enters the body. However, in some people, allergic reactions can occur just by thinking about a stimulus that provoked a previous attack. Allergic reactions are also more prevalent and severe in people who are prone to anxiety. Over-the-counter medications containing antihistamines and allergy shots are the most common approaches to dealing with allergies. Relaxation techniques also help minimize the effects of allergy-promoting substances.
- Rheumatoid arthritis: Rheumatoid arthritis, a joint and connective tissue disease, occurs when synovial membrane tissue swells, causing the joint to become inflamed. In time, synovial fluid may enter cartilage and bone tissue, causing further deterioration of the affected joint(s). The severity of arthritic pain is often related to episodes of stress, particularly suppressed anger. The treatment for this disease varies from pain relievers (e.g., ibuprofen or Advil) to steroid injections (e.g., cortisone), depending on the severity of pain and rate of joint deterioration. Relaxation techniques offer a complementary modality to help reduce these symptoms.
- Ulcers and colitis: More than 75 percent of ulcers are caused by the bacteria known as *Helicobacter*, creating an open wound that stomach acids only worsen. Treatment with antibiotics is now shown to be highly effective for a large percentage of people who have ulcers, yet two questions remain: What makes some people more vulnerable to *Helicobacter* than others? Why are antibiotics effective in only 75 percent of the cases of people with ulcers? Stress is thought to be the answer.
- Cancer: Cancer has proved to be one of the most perplexing diseases of our time, affecting one out of every three Americans. The body typically produces an abnormal cell once every 6 hours, but the natural killer cells of the immune system roam the body to search for and destroy these mutant cells. Stress hormones tend to suppress the immune system, allowing some mutant cells to become cancerous tumors. The treatments for cancer include chemotherapy, radiation, and surgery. However, coping skills involving cognitive restructuring, art therapy, and relaxation techniques including mental imagery and meditation are being used as complementary healing methods. Although these methods are not a cure for cancer in themselves, in some cases they seem to have a pronounced effect when used in combination with traditional medicine.

▶ The Dynamics of Self-Healing

All things being equal, the body craves homeostasis and will do all it can to maintain a sense of balance. The body has a remarkable ability to heal itself, when given the chance to do so. Exercise, nutrition, and sleep play an essential role in the healing process, but so do our thoughts and feelings. Ultimately, disease, in all its many forms, is a sign that something is clearly out of balance among mind, body, and spirit. Chronic illness suggests that the body's attempt to regain that inner balance is compromised, most likely by lifestyle behaviors that don't support the healing process.

In his acclaimed book *Spontaneous Healing*, Dr. Andrew Weil documents the unique **self-healing** process of the human body, from the body's wisdom to kill germs by raising the body's core temperature clear down to the role of a specific enzyme to repair DNA. Deepak Chopra approaches the topic in a similar way in his book, *Quantum Healing*. For instance, Chopra explains that every cell in the body regenerates itself; some regenerate within a matter of days, others take years. The life span of red blood cells, for instance, is approximately 37 days. Nerve cells, it seems, take the longest. We know now that even brain cells have the capacity to regenerate. Consequently, within a 7-year time period, you have a completely new body of cells.

Most cancerous tumors take years, even decades, to grow. So why is it, then, that with a new body we have old tumors? Perhaps the answer resides in the vibrations of consciousness that surround and permeate each and every cell and that get passed on from generation to generation of cells through a process called entrainment. Entrainment is a physics term used to describe sympathetic resonance between two objects. It's commonly known in physics circles as the law of conservation of energy. The classic example of human entrainment is observed when women who live or work together begin to see a synchronization of their menstrual periods. Where there are neighboring energies, there is entrainment as well. Every cell vibrates with energy, as do tumors.

Unlike conventional wisdom that states that only brain cells hold some level of consciousness, it now appears that every cell in the body contains a vibration of consciousness. It is suggested that this imprint of conscious frequency is then transferred via entrainment from cell to cell, thus allowing a tumor to develop and keep growing, long after the original aberrant cells have died off. Can changes in one's thoughts change the vibration of cells? The answer

appears to be yes, in a critical mass of people—those who demonstrate "spontaneous remission" of cancerous tumors.

Which emotions are prone to compromise the integrity of the immune system? In simplest terms, any lingering unresolved emotion associates with the fight-or-flight response. It would be too hard to single out anger and fear as the only culprits; however, both of these serve as umbrella emotions for literally hundreds of other emotions, which along with joy, love, and happiness constitute the full spectrum of feelings. As was mentioned earlier, when used properly, none of these emotions are bad, not even anger or fear. However, when left unresolved, anger or fear and all the many ways in which these two survival emotions manifest, over time, will suppress the immune system. In doing so, they open the door wide to a multitude of health-related problems.

Just as a preponderance of unhealthy emotions can suppress the immune system, positive thoughts and feelings can enhance it. Although all aspects of the inherent self-healing program are not fully understood, one thing is clear: Effective coping skills that help to resolve the causes of stress in tandem with effective relaxation skills that strive to return the body to homeostasis offer the best opportunity to engage the healing process to its fullest potential.

Chapter Summary

- An extended stress response beyond "physical survival" creates wear and tear on many physiological systems of the human body including the cardiovascular, digestive, and endocrine systems.
- Just as there is gross anatomy, there is also subtle anatomy, specifically the human energy field and the meridian and chakra systems, all of which are connected to the mind-body-spirit continuum.
- Prolonged (chronic) stress definitely has an impact on the immune system—in essence, suppressing it—thus making one more vulnerable to disease and illness.
- The stress and disease connection is very real. Chronic stress is now related to a number of health-related problems from the common cold to cancer.

■ The body actually needs some stress (e.g., exercise), but also craves homeostasis. Many, if not all, stress management techniques promote self-healing dynamics by helping the body return to homeostasis.

Additional Resources

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EXERCISE 2.1: Physical Symptoms Questionnaire

Please look over this list of stress-related symptoms and enter a value for how often they have occurred in the past week, how severe they seemed to you, and how long they lasted. Then reflect on the past week's workload and see if you notice any connection.

		How Often? (number of days in the past week)	How Severe? (1 = mild, 5 = severe)	How Long? $(1 = 1 hour, 5 = all day)$
1.	Tension headache			
2.	Migraine headache			
3.	Muscle tension (neck and/or shoulders)			
4.	Muscle tension (lower back)			
5.	Joint pain			
6.	Cold			
7.	Flu			
8.	Stomachache			
9.	Stomach/Abdominal bloating/distention/gas			
0.	Diarrhea		<u> </u>	
1.	Constipation			
2.	Ulcer flare-up			
3.	Asthma attack			
4.	Allergies			
5.	Canker/cold sores			
6.	Dizzy spells			
7.	Heart palpitations (racing heart)			
8.	TMJD			
9.	Insomnia			
20.	Nightmares			
21.	Fatigue			
22.	Hemorrhoids			
23.	Pimples/acne			
24.	Cramps			
25.	Frequent accidents			
26.	Other (please specify)			

Score: Look over this entire list. Do you observe any patterns or relationships between your stress levels and your physical health? A value over 30 points may indicate a stress-related health problem. If it seems to you that these symptoms are related to undue stress, they probably are. Although medical treatment is advocated when necessary, the regular use of relaxation techniques may lessen the intensity, frequency, and duration of these episodes.

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EXERCISE 2.2: Your Picture of Health

We all have an idea of what ideal health is. Many of us take our health for granted until something goes wrong to remind us that our picture of health is compromised and less than ideal. Although health may seem to be objective, it will certainly vary from person to person over the entire aging process. The following statements are based on characteristics associated with longevity and a healthy quality of life (none of which considers any genetic factors). Rather than answering the questions to see how long you may live, please complete this inventory to determine your current picture of health. In the far right column, enter the number that corresponds to the frequency of these health habits.

3 = Often	2 = Sometimes	1 = Rarely	0 = Never
1. With rare exception	, I sleep an average of 7 to 8 hours	each night.	
2. I tend to eat my me	als at the same time each day.		
3. I keep my bedtime	consistent every night.		
4. I do cardiovascular	exercise at least three times per we	ek.	
5. My weight is consid	ered ideal for my height.		
6. Without exception,	my alcohol consumption is in mod	deration.	
7. I consider my nutri	tional habits to be exceptional.		
8. My health status is	considered excellent, with no pre-e	xisting conditions.	
9. I neither smoke, no	r participate in the use of recreation	nal drugs.	
10. I have a solid group	of friends with whom I socialize re	egularly.	
		TOTAL SCORE	

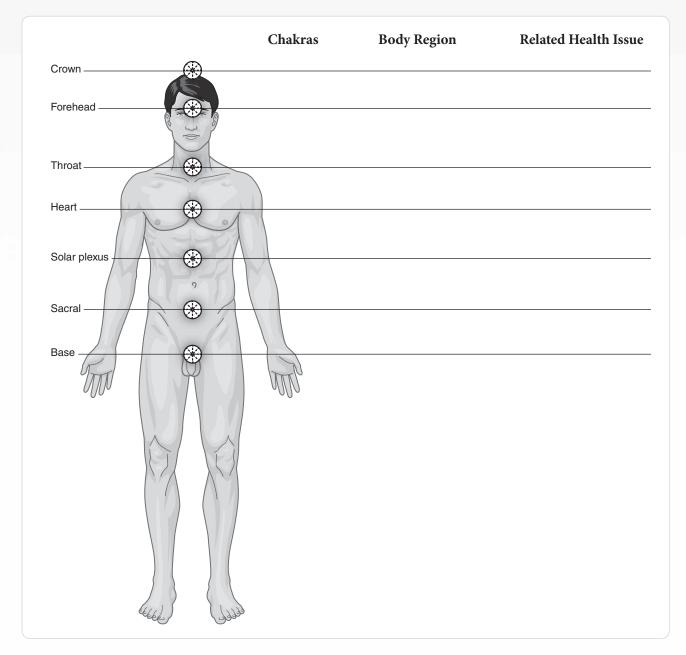
Score: 26–30 points = Excellent health habits 20–25 points = Moderate health habits 14–19 points = Questionable health habits 0–13 points = Poor health habits

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EXERCISE 2.3: Subtle Anatomy Energy Map

The accompanying figure is an outline of the human body highlighted with the seven primary chakras. Note the body region associated with each chakra and then take a moment to identify any health issues or concerns associated within this specific region of your body. Write your observations on the following pages. Once you have done this, refer back to earlier in this text and ask yourself honestly if you happen to recognize any connection between the important aspects of the chakra(s) associated with the region(s) in which you have indicated a specific health concern.



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EXERCISE 2.4: Energy Ball Exercise

This is a relaxation technique taught to me by the renowned bioenergy healers Mietek and Margaret Wirkus. I have adapted and taught this technique many times in classes and workshops throughout the country with great success. Although it was introduced to me as the first of many healing techniques in bioenergy healing, first and foremost, this is a relaxation exercise. This technique is done through the following steps:

- 1. Begin by sitting comfortably with your legs crossed and your back straight. You may wish to sit up against a wall. In this exercise, it really helps to keep your back straight. Close your eyes and focus your attention on your breathing. Take a moment to clear your mind of distracting thoughts and feelings. Place your attention on your breathing. If it helps to have some soft instrumental music in the background, then try this as well. Sometimes, to set the tone, it helps to think of a happy moment in your life, when you were filled with utter joy. Allow this feeling to resonate within every cell in your body. Then take a couple of comfortably slow deep breaths to let it be absorbed.
- 2. Unlike belly breathing, which is typically taught in relaxation workshops, this particular exercise requires that you focus your attention on the upper lobes of your lungs. Take a moment to place your hands on your upper chest to become fully conscious of your upper lungs. Then take five breaths, breathing comfortably slow and deep into your upper lungs.
- 3. Once you have completed this, then place your hands on your knees and repeat this breathing style by taking five slow deep breaths. As you exhale, repeat this phrase to yourself, "My body is calm and relaxed." As you say this, feel a deep sense of relaxation throughout your body with each exhalation.
- 4. Next, being fully conscious of your hands resting on your knees or thighs palms up, take five more deep breaths, but this time as you exhale, repeat this phrase to yourself, "*I am my hands*." With each breath, place all of your concentration, all of your attention, on your hands. Sense what your hands feel like. Are they warm? If so, where? On the palms, fingertips, or backs of your hands? Where? Again, remind yourself of the phrase, "*I am my hands*."
- 5. Using your imagination, picture a small window in the center of each palm, about the size of a dime. Imagine now that as you breathe, air comes not only into your nose or mouth, but also into your hands. If you prefer, you may use the image of light coming into your palms. Imagine that as you inhale, air or light enters your palms and moves up your arms, to the center (heart space) of your upper chest. As you exhale, feel the energy return from where it entered through your hands. Try repeating this several times, again taking several slow deep breaths and again repeating to yourself, "I am my hands."
- 6. Next, slowly lift your hands off your knees or thighs so that they rest comfortably in the air, suspended in front of your chest, with the palms facing up, toward the ceiling.
- 7. Next, fully conscious of your hands, take five more deep breaths. As you exhale each breath, repeat the phrase, "I am my hands." With each breath, place all of your concentration, all of your attention, on your hands. Again sense what your hands feel like. Are they warm? If so, where? On the palms, the fingertips, the backs of your hands? Do your hands feel heavy? If so, how heavy? What other sensations do you feel? Again, remind yourself as you exhale, "I am my hands." As you do this, notice if you see any colors.
- 8. Now, keeping your hands about 10–12 inches apart, allow the palms of each hand to face each other. Again using your imagination, picture or sense that between your hands is a large sponge ball. As you hold this ball, slowly press in and then release. What do you feel as you do this? Again, bring your hands closer together without touching, then begin to separate them farther apart. Ask yourself, what do you feel? At what distance is the sensation the strongest?

EXERCISE 2.4: Energy Ball Exercise (*Continued*)

- 9. Now, placing the palms of your hands about 6–12 inches apart, imagine that there is a beam of light from palm to palm, window to window. Take a slow deep breath and as you exhale, slowly compress the beam by slowly bringing your palms together without touching. Then, during the next inhalation, allow your hands to separate again slowly. What do you feel as you do this? Is the sensation between your hands stronger when you inhale or exhale?
- 10. Again, return to the sensation between your hands. Between your hands is a ball of energy, the healing energy ball. Take this ball of energy and place it into a region of your body that feels stressed or desires healing. If you are completely relaxed, try placing this energy in your heart. Take five slow deep breaths and repeat the phrase, "My body is calm and relaxed." Feel a sense of relaxation throughout your entire body. Take one final slow deep breath and enjoy this sensation again.
- 11. When you are done, slowly place your hands back on your knees or thighs. Recognize that although you feel relaxed, you feel energized. When you are ready, open your eyes to a soft gaze in front of you. Then make your self aware of your surroundings so that you may continue on with your daily activities.

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EXERCISE 2.5: Subtle Energy System "Vitamins"

Donna Eden is a renowned energy healer with a gift for not only observing subtle energies, but also teaching others how to regulate their subtle energy for enhanced health and well-being. Integrating the flow of energy through the human aura, chakras, and meridians, Donna combines a variety of self-help techniques so that, in her words, "You keep your energies humming and vibrant." The following are ideas and suggestions that Donna teaches in her energy medicine workshops, exercises that she calls energy system vitamins. She recommends that you do this short routine daily.

Three Body Taps: There are various acupuncture/acupressure points that, when stimulated, will help direct the flow of energy, and thus increase your vitality and help boost your immune system.

- 1. *Chest bone tap*: Known to acupuncturists as KD-27 (from points on the kidney meridian), gently tap on the top of your chest bone just below the medial ends of the two clavicles for about 15–20 seconds. This should open your breathing, relax the chest, and tonify the immune system.
- 2. *Thymus gland tap*: Your thymus gland (an important gland of the immune system) resides between your throat and your heart, but the point to tap is in the center of your chest bone about 2 inches below KD-27. Once you have found this point, tap on it with your fingertips for about 15–20 seconds.
- 3. *Spleen points tap*: The spleen is also an essential organ to your immune system. The spleen points are located on the rib cage, directly below your nipples. Once you have found these two points, tap vigorously with your fingers for about 15–20 seconds.

Cross Crawl Movements: To do the cross crawl, first you must understand that the left side of the brain controls the right side of the body, and vice versa. Many people's energies are not vibrant or harmonized due to stagnation from the lack of neural energy from the right to left or left to right sides of the brain. Poor energy movement is referred to as a homolateral pattern, and this will affect thought processes, coordination, and vitality. Sitting or standing, raise your right knee and your left arm (you can touch knee to elbow if you'd like). Follow this by raising your left knee and your right arm. Twist your torso so that your arms cross the mid-point of your body. Try this movement pattern for about 30–60 seconds.

The Crown Pull: Placing your hands on top of your forehead and crown of the head, imagine that your fingers are pulling from the center down to your ears, in a motion starting from the front of your head and working to the back of your skull. The purpose of this exercise is to move stagnant energy from the top of your head, and it helps to open the crown chakra. This exercise can be helpful in relieving headaches, too.

Zip Up: The central meridian (in the front of your body), also known as the conception vessel, can easily become congested, open, or exposed to others' energy. This technique invites you to close your auric field as a means of health and protection. Start by tapping the KD-27 point again and then reach down to the top of your thighs with your right (or left) hand, take a deep breath, and pull up as if you were pulling up a zipper, clear up to your chin. Repeat this three times. By pulling up, you trace the directional flow of the central meridian and strengthen the flow of energy. This technique is recommended before making speeches or dealing with someone who is very angry.

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