

Chapter One

Reasons to Have Proper Body Mechanics

Hands-on therapy is one of the oldest healing methods around. Massage therapy became an “official” profession in 1943, when therapists banded together in Chicago to form the American Massage Therapy Association (AMTA). Interest in promoting good health and massage came in the 1960s and 1970s. Since the 1980s, massage and bodywork have grown to include more than 80 different forms. The term “bodywork” developed as a general term; it is now used to encompass various forms of manipulation and massage. A survey published in *The New England Journal of Medicine* in January 1993 acknowledged that massage therapy ranked third among the most frequently used forms of alternative healthcare. The AMTA is one of the fastest growing healthcare associations in this country. More recently, the business of massage has become substantial. In fact, the Associated Bodywork & Massage Professionals (ABMP) estimated in January 2008 that 278,000 professionally trained therapists provided massage and bodywork in the United States.

Many people become massage therapists so they can have a rewarding career or to help people. They want a job that offers free time and decent money. But some of the reasons people are drawn to bodywork are the very same reasons they burnout or leave the profession. When you balance the physical, emotional, and monetary areas of the business, you can have a successful career. Balance in your life allows you to do what you love, control your own destiny, and help people, all at the same time.

The other truth about a career in the manual therapies is that it is strenuous and physically demanding work. You must combine strength, endurance, and coordination to perform a good bodywork session. In the past, massage was an integrated system using movement, exercise, and manual manipulation. It was rarely delivered for a full hour, which is the standard today. To maintain financial stability, most therapists have to complete five one-hour sessions a day. A recent study in the *Journal of Bodywork and Movement Therapies* acknowledges that professional massage therapists have a very high percentage of work-related injuries. Around 78 percent of therapists have had at least one injury in their career. Indeed, manual therapists work for an average of three years and then drop out due to a work-related injury.

Employers, educators and therapists alike must make changes to help this profession. Employers need to realize that a day of performing massage is not like most normal eight-hour jobs.

Bodyworkers are athletes, and the physical work they do takes endurance and strength.

Professional athletes do not perform their sport for eight hours a day. Why do we ask bodyworkers to perform for this many hours? Each person is an individual and has his or her own unique physical abilities and limitations. A large number of bodyworkers push their bodies past what is reasonable and safe. Employers need to encourage their employees to let them know when they are experiencing symptoms instead of ignoring them and working through them.

Refusing to rest and treat symptoms can lead to long-lasting or permanent injury. Employers should realize that injury rates are high for this profession. Employers need to allow employees

Chapter Two

Creating Good Body Mechanics

Good body mechanics require constant awareness while moving and positioning your body in ways that promote health and prevent undue stress or injury. This attentiveness is especially useful for the back, neck, arms, and hands. Practicing good body mechanics is essential to keeping your mind, body, and spirit in good health. To be effective as a massage therapist, this awareness needs to be present in all daily activities so you can take appropriate action to safeguard your career.

The human body is intended for movement and motion, but it is not designed to perform the prolonged compressive forces necessary to do bodywork. Correct body positioning must be maintained to provide sufficient pressure throughout the session. Generally, a full-time, professional therapist should be capable of performing four to five massages a day. If you are not able to keep this pace, it may be time to look at your body mechanics, exercise, and stretching routine.

Some general principles of body mechanics are important to remember. First, develop your sense of touch: allow your hands and fingers to become sensitive on all different levels. Train your fingers to feel diverse textures. Work on yourself to see how certain techniques feel to you. Perform specific techniques on a few honest friends to receive feedback. Palpate, assess, and then manipulate tissue. Apply pressure at an oblique (45-degree) angle to stretch tissue instead of just compressing it. Allow the tissue to draw you in, and let the tissue react before you move on to another area. Manipulate tissue gradually and allow the release to occur. Have clear goals of what you want to achieve and maintain an awareness of the depth at which you are working. Know your Kinesiology. Continuing education classes can be invaluable in helping you develop touch, determine your depth of pressure, and learn Kinesiology on a deeper and more advanced level. Furthermore, receive bodywork from good therapists. Not only will you learn different techniques and sensations but you will also get treatment your body needs.

Your role as a therapist is to release tension in your client's body, which requires you to develop and use pressure. Lubrication, strength, weight, correct biomechanics, speed of stroke, and awareness of tissue response affect the amount of pressure and effort you use to perform your work. Both client and therapist must be able to surrender to the process of letting go for a session to be effective. While working, you need to pay attention to any pain in your own body. If your hands become weak or shaky, it means you are working too hard and that you need to switch up your working tool. If your body feels really tired, it could be fatigued and may need some nourishment or rest.

To think of massage as something you do only with your hands is limited. Working correctly means a therapist uses his or her hands as palpation tools and then transfers the weight of the whole body through to the hands to provide most of the pressure. Massage is very physical, and

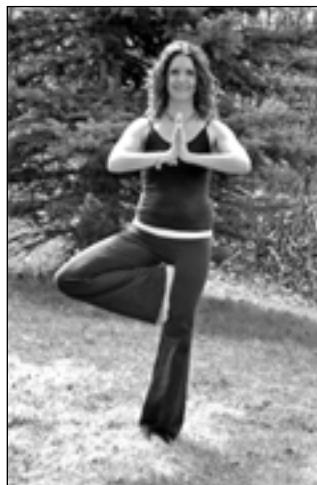
Chapter Three

Preventing Injury by Using Proper Body Mechanics

Understanding and applying good body mechanics is essential for prolonging your career and preventing injury. Using proper body mechanics comprises six main elements: gravity, support, balance, alignment, stabilization, and intention.

It is important to be aware of the relationship between your body and gravity. Gravity influences every movement you make. To shift your weight and create smooth movements, you have to be mindful of the effects of gravity on your body.

Your center of gravity is the point at which your body is physically balanced and your weight is concentrated in a single area. In the standing position, with both feet together and arms at your sides, the center of gravity for most adults is located in the middle of the pelvis, slightly below the navel. The center of gravity can be slightly lower in females than in males. Your center of gravity shifts with each movement you make. When your weight distribution changes, your center of gravity shifts toward the greater weight concentration. One example of a change in center of gravity is when you move your arms out in front of your body. This movement causes your center of gravity to shift slightly forward. Or if you move your right leg out to the side, your center of gravity shifts to the right to compensate. Yoga's tree pose is a great example of using your center of gravity to balance (3.1).



3.1 Tree Pose

Base of support and balance are other essential elements to understand in relation to gravity and the role it plays in every movement you make. Base of support is the point of contact your body makes with a supporting surface. Base of support allows you to oppose the constant force of gravity. For example, your feet touching the floor are your base of support when you're standing, and the ischial tuberosities touching the chair are your base of support when you're seated. Practicing bodywork requires you to keep your base of support over your center of gravity.

Chapter 4

Creating Strategies for Different Scenarios

Bodyworkers must devise a different strategy for each manual therapy session they perform. Many clients get a massage to alleviate a specific problem. Doing your own clinical assessment of the client is essential to devising an intelligent strategy for a session. You need to gather information before you forge ahead. Assess each client for patterns of tension, imbalances, restriction in joints, and dysfunctional patterns in gait and coordination. This lets you determine which type of massage you will perform, what techniques you will use, how you will position the client, and the stroke combinations you will utilize. Whatever your plan is, you must be able to adapt, at any time during a massage, to the needs of your body or the client's.

After you access the client, you should think about what techniques you would use for maximum effectiveness. How you manipulate the soft tissue of the body is important to the outcome. The belief you have about soft tissue affects how you use your body to apply pressure. Muscles and connective tissue respond to touch, and when pressure is applied in an artful manner, a healing response can occur. Massage therapy and bodywork require a comprehensive knowledge of anatomy and physiology as well as a variety of treatment approaches. Successful bodywork involves both intuition and intelligence. You must investigate all possible techniques for manipulation, evaluate the results of your touch, and reevaluate each time you treat a specific body part. Keys to manipulating tissue artfully include using sensitive palpation, understanding how to move through the tissue, and adjusting pressure accordingly.

To effectively treat soft tissue, you must first warm it up and then feel for the point of resistance in it. Before working, determine that the tissue is ready so it will respond appropriately. Be sensitive to the tissue via palpation and work with the tissue to discover what kind of pressure is needed to elicit a release. Stress held in soft tissue has usually accumulated over time, and you can use the art of direct tissue manipulation to release the tension.

Two of the most important concepts about manipulating soft tissue are: (1) that soft tissue is not just muscles; it also includes connective tissue and (2) that the consistency of connective tissue can differ from watery and flexible to thick and gel-like. In some areas of the body, connective tissue is dense and elastic; in other areas it can be as hard as rock. Tissue changes can come from dysfunctional movement patterns, trauma, fatigue, or injury. Connective tissue becomes colder and more gel-like, and can lose the capability to stretch when it is injured or underused. With exercise, stretching, and manipulation, the tissue will stay in a more pliable state. This ability to change states is called thixotropy: the property of certain fluids to change the viscosity of tissues from hard to soft, depending on what the collagen has been accustomed to. Collagen within the deep fascia is a gelatinous substance that organizes itself similarly to the way molecules are arranged in a quartz crystal. Crystal structures are piezoelectric and can transmit energy when compressed. After working on the client's tissue, you will observe the piezoelectric effect when the tissue has spread and become more flexible and supple. Bodywork has a thixotropic effect on connective tissue, helping it to change from a solid to a more pliable state.

Chapter Five

Refining Your Technique

As a massage therapist, your body is your most valuable tool, and it cannot be replaced. Although the human body is resilient, if you suffer an injury, your body can never be restored to exactly the same condition it was in before the injury occurred.

The techniques you choose to do are important for giving a good massage, but more important is how you use and deliver each stroke. As you continue refining your technique, keep in mind that your whole body needs to be used when you work. The upper body comes into play after power is generated and transferred up from the feet and legs. The hands, fingers, knuckles, forearms, and elbows are combined in different ways to make each massage unique.

The human body functions by the laws of motion, especially the law of inertia. If part of your body is inactive, it will stay that way unless something makes it move. You lose efficiency, muscles fatigue faster, and injury can occur if part of your body is immobile when you perform a massage. Remember to move, just as though you are dancing. Grounding, weight transfer, and direction of force will help you make each stroke using your full body.

As discussed in previous chapters, it is essential to use your body weight, not muscular force, to apply pressure. When you make a stroke, take your time and never force your way into the tissue. If you notice you are muscle-powering a stroke, change your positioning, relax, and begin to use your body weight resourcefully. To do so, your feet must face the area you are working on so the direction of force will be a straight line of energy from your feet to your hands. If part of your body is out of alignment and working too hard, this line of energy is broken. You may not feel pain immediately, but repeatedly executing a stroke incorrectly can eventually cause injury.

As discussed in Chapters 1 through 4, creating and implementing direction of force and being centered and present help improve your body mechanics tremendously. Being centered implies that you are in balance on the physical level. Moving from your center of gravity gives you more strength and stamina, and pressure applied to the client's body is more powerful when it originates from your core. Grounding your body keeps your feet connected to the ground and gives you additional strength by moving energy into your core; from there it can be transferred correctly to your arms. When you are in balance with gravity, the tension in your body is distributed. Learning how to work in a relaxed manner with centering and grounding will facilitate a sense of effortlessness when doing massage.

Massage requires using force that is generated forward and downward. To apply this type of force correctly, keep your weight on your back leg and use your back foot to increase pressure using a motion similar to pressing on a gas pedal (5.1). The arm opposite the weight-bearing leg should be the one generating pressure, which prevents twisting of the body. Exerting pressure

Chapter Six

Anatomy

Knowing anatomy is important both for performing massage and for saving your own body from injury. Knowledge of anatomy lets you recognize landmarks of each client's body, which helps you develop exceptional palpation skills. As a massage therapist, you must be able to perform skilled palpation on any body type on your table. Having knowledge of and skills in palpation are important for your confidence and the effectiveness of each session you perform. A skilled therapist must know what action each muscle performs and how the body works as a whole, and you must be able to devise a plan for working on each client's body.

The musculoskeletal system is made up of bones, ligaments, joints, tendons, fascia, and skeletal muscles. This system is accountable for posture, movement, and protection of inner organs. The skeleton supports the body and provides places for muscles to attach. Bones work as levers for muscle action and also store and manufacture blood cells in their marrow. Ligaments hold bones together; the place where two bones meet is called a joint. Ligaments are strong and tensile. They stabilize and strengthen joints in a passive manner. Tendons are tough, flexible bands of tissue that attach muscle to bone. Working together, this framework provides form and stability for the human body, and allows it to move.

The body is based on the skeleton, pelvis, and spine. These are the physical center of the body, serving as a base and providing stability. The spine channels its weight through the sacrum and into the pelvis. If the pelvis is rotated or tilted, the natural spinal curves can be thrown off and an imbalance can occur. These types of imbalances can affect posture and alignment of the body as well as muscle balance. The pelvis is an important component in the entire body's performance and must be balanced to initiate movement correctly.

The spine is meant to be flexible and stable at the same time; it allows the body to stabilize itself as it moves. A healthy spine forms three natural curves and extends from the bottom of the buttocks to the base of the skull. The vertebral column can bend and rotate via its 24 vertebrae and 23 intervertebral articulations. Ligament bands and strong muscle tissue connect the vertebrae. The spine helps support the shoulder girdle, and the vertebral column protects the spinal cord. Nerve roots exit between small openings in the vertebrae and supply the muscles and organs with sensory information. The vertebrae need to be properly aligned and stabilized to function properly. The spinal cord needs to be mobile and have space for the body and brain to give and receive messages correctly.

The shoulder girdle is made up of the shoulder blade, collarbone, and the humerus. The shoulder is very mobile. The upper body includes the head, neck, upper back, arms, and shoulders. If your head is aligned on top of the spine, your neck can move freely and use less muscle tension. When you stand correctly, your arms hang freely, your chest is open, and your hands, fingers, and wrists are relaxed. If the muscles surrounding your shoulders are tense, this tension will translate down into the hands and wrists. The most mobile joint in your body is the shoulder

Chapter Seven

Repetitive Strain and Overuse Injuries

If you haven't already experienced a work-related injury, imagine the frustration, fear, and isolation you would feel if you were injured and could not do the work you love. Now see yourself taking care of your body, working without injury, and always being able to do that work. The healthy, injury-free scenario is where you always want to be. If you are healthy, it is hard to imagine the physical pain and depression that comes with an injury. A therapist that has an overuse injury does not always look injured, and the multi-faceted symptoms can be frustrating and confusing.

Repetitive strain injuries (RSIs), also called overuse syndrome, cumulative trauma disorder, or occupational overuse syndrome, generally result from repetitive use, inefficient movement, poor or static posture, and/or stress to the soft tissues of the body. Further injury can happen if insufficient rest and healing time are allowed for the soft tissue to repair itself. Eventually, fascia, or connective tissue, hardens because the soft tissue it surrounds is overused. This is a natural response to prevent injury.

Any repetitive action that places excessive strain on soft tissues can cause damage, including microscopic damage that can build up over time. Soft tissue injuries are common and can include inflammation, strains, sprains, tendonitis, tenosynovitis, bursitis, nerve impingements such as carpal tunnel and thoracic outlet syndromes, shin splints, and tearing. RSIs are rated from Grade 1 to Grade 5. In a Grade 1 overuse injury, pain is present only when performing work and perhaps some daily activities. In Grade 2, pain and tenderness are mild and subside by evening, and daily activities are mildly affected. Therapists with Grade 1 and 2 injuries can still normally work with some modifications. In a Grade 3 overuse injury, pain continues into the evening but is not present upon waking. Signs of pain are evident a short time after you begin working, and daily living is affected. Grade 3 injuries require taking time off work to heal. After an adequate recovery time for symptoms to dissipate completely, you can return to work with job modifications. With a Grade 4 overuse injury, pain is present upon waking, throughout each working day, and at night. Symptoms can subside on weekends or days off, but if you want the injury to heal and not recur, stop work completely, rest and rehabilitate, and let the symptoms dissipate completely. People with Grade 4 injuries usually cannot return to the same work routine unless they are off for months. Finally, Grade 5 injuries cause ongoing pain, and daily life is completely restricted. People with a Grade 5 overuse syndrome rarely return to their line of work, or sometimes, to the workforce at all.

Contrary to what people may think, the hands are not the only body part that can sustain a repetitive strain injury. Many parts of the body can be overused and injured. Injuries are classified as either acute (traumatic) or chronic (overuse). Acute injuries come from a specific impact or trauma and occur suddenly. Symptoms of an acute injury are severe pain, inability to bear weight, tenderness, weakness, or decreased range of motion. On the other hand, chronic

Chapter Eight

My Story

I have been in the massage therapy profession for more than a decade. I really enjoy the physical component of my job and the satisfaction I receive from helping people relax, heal, and rejuvenate. I have had an abundant career and have worked in many facets of this profession. I've worked for myself and for large corporations, and in the educational aspect of massage. One of the spas I worked at was on the Strip in Las Vegas, and it was a great place for me to grow professionally: I learned a lot about professionalism in addition to many great treatments and massage modalities.

A unique type of massage I did at this spa was barefoot deep compression massage. The results my clients achieved were substantial, and I really enjoyed this modality and had fun performing it.

Deep barefoot compression massage is like a dance, and the therapist uses his or her body in a different way than when doing regular massage. Conventional massage uses the hands as the main instrument, whereas barefoot massage uses the feet to deliver pressure. Hand-based massage uses power generated from the therapist's feet pushing off the ground and then transferring the power through to the hands. With barefoot massage, the arms and hands are used to apply oil and to hold onto the overhead bars for balance. Power is generated from the core and is transferred to the legs and through the feet. The feet are used as the hands in this type of massage. This is an extremely effective modality for the client, and the therapist gets to use his or her body in a different way. Barefoot compression massage is performed with oil, so the therapist can glide his or her feet on the client's skin to lengthen connective tissue and increase intervertebral disc space. It is a good way to apply broad general strokes on the client's body, especially those of the back and larger muscles of the legs.

When I was a practicing barefoot massage, I received regular massage on my upper body but not as much on my lower body. I stretched my whole body, but my legs remained tight. I kept in shape by doing yoga and cardiovascular exercise on the bike, elliptical machine, and treadmill. I felt I needed to be in shape to keep performing barefoot massage, even though it could have contributed to the tightening of my connective tissue. I noticed that the fascia on the plantar surface of my feet was progressively getting tighter. I released the trigger points in my lower legs and feet and the fascia felt looser. The constriction felt better for a month but it came back, accompanied by burning around my medial ankles. I notified a manager and she said to let her know if I wanted to be taken off the book for this type of massage. This treatment was my favorite, so I was not willing to stop, even though it was causing me discomfort. I continued doing barefoot massage even though I knew better. A month later, my muscles, tendons, and fascia constricted further and the pain in my heels and the burning in my medial ankles worsened. A few days later, I could not walk because of the pain and hypertonicity in the soft

Chapter Nine

The Injury Process and Treatment

All injuries are not the same, and healing time is as individual as each person. Utilizing proper mechanics and leverage can reduce your risk of injury. Nevertheless, performing massage means doing many repetitive movements and places a lot of stress on your soft tissue, joints, tendons, and ligaments. The body is not designed to do these kinds of stressful movements over an extended period of time, and an injury is likely to happen when the body is stressed past its limits.

Repetitive stress injuries (RSIs) such as carpal tunnel or thoracic outlet syndrome are common for massage therapists and bodyworkers. Other areas of the body are prone to injury as well. The neck and shoulders are commonly injured because therapists improperly stabilize the shoulders, rotate their shoulders internally, or raise the shoulders from their table being too high. These areas can also be injured from applying pressure using only the strength of the upper extremities. In this career, wrists, hands, fingers, and thumbs are also vulnerable because of constant unsupported use. Knees are prone to injury when they are held in a locked position and when they are twisted while applying pressure. The low back can become injured from bending too much from the waist, overarching when applying a stroke, or twisting while applying pressure. Muscles, joints, tendons, and nerves can be injured and take time to heal once damage has occurred.

When tissues are injured, the body automatically starts to regenerate and repair. The healing process occurs in three phases. Phase one is inflammation, phase two includes tissue regeneration, and in phase three, tissue remodeling takes place.

Phase one sets the stage for repair. This acute phase lasts from the time of injury until 48 to 72 hours after. Inflammation takes place, macrophages help ingest debris, and fibroblasts start to lay down collagen fibers. Inflammation is a defense mechanism for the body and includes redness, swelling, heat, and pain. Swelling restricts circulation, and applying ice at this time is beneficial because it helps reduce pain and swelling. If inflammation did not take place, healing would not occur.

The second phase of healing is called the proliferation or subacute phase. Many new blood vessels and capillaries are formed to bring blood and oxygen to the area. Fibroblasts build up the area, and collagen fibers pull the tissues back together. This phase lasts from two to three days after injury until about six weeks later.

Phase three, the remodeling phase, starts six weeks after injury and can overlap with phase two. Remodeling can last up to or more than a year depending on the severity of the injury. It can also become chronic. During this phase, inflammation has subsided but loss of function is likely. Pain can occur from stress due to scar tissue formation. Scar tissue strengthens as time passes; however, it will be only 70 to 80 percent as strong as the tissue it has replaced. During this last

Chapter Ten

The Healing Process

Physical health is the overall condition of your body at a given time, freedom of disease or abnormality, and a condition of well-being. Health is when your body functions in the most favorable way. Disease, on the other hand, is when certain parts of the body become damaged due to injury or illness. Healing is the physical process of the body repairing and regenerating itself. Healing restores the body to homeostasis and optimal health.

Recovery from an injury is individual and can take time and patience. Techniques such as massage therapy, relaxation, visualization, positive thinking, rest, and sleep can assist the healing process.

Massage therapy helps healing in four stages: pain relief, adhesion reduction, muscle balancing, and maintenance. During the first few massage sessions you receive after an injury, the goal is to reduce tension and relieve pain. When pain is reduced, the underlying cause can be addressed to correct the problem and free up adhesions and scar tissue. Massage can strengthen surrounding tissues so they can provide more balanced support once the injury has healed. Maintenance is preventive care for the future.

Specific types of massage can help with the healing of an injury. The following types of massage can be beneficial for the healing of an injury. Friction massage is perhaps the best technique to help injuries heal. Friction massage works deep into muscles or around bony prominences. It breaks down scar tissue and fibrosis, and increases circulation to soft tissue. Friction increases heat in the tissue and raises the rate of exchange between cells and interstitial fluid. This heat and energy make connective tissue more pliable and efficient. Friction massage involves short, deep strokes using solid contact with the underlying tissue. Superficial tissues are massaged against deeper tissues. Friction is done using the fingertips, palms, and knuckles. The therapist presses down at an oblique angle and rubs back and forth in a parallel, transverse, or circular manner. Little or no oil is used with this type of massage.

The different types of friction massage are longitudinal fiber, local cross-fiber, and circular. Longitudinal friction massage moves in the same direction as the tissue, stretching muscles and separating collagen fibers. Local cross-fiber massage is performed either transverse or crosswise to tissue, and is used on muscles, tendons, and ligaments. Cross-fiber friction helps increase blood flow, smoothes out scar tissue, and breaks down adhesions. Cross-fiber massage is the favored massage technique for rehabilitation, although an injury has to be sufficiently healed and scar tissue has to be formed to utilize this technique. Complete scar tissue formation is very important because the support it provides has to be formed before realigning it. After an injury is adequately healed, transverse friction helps realign fibrous tissue. As a result, adhesions are broken down and the area will have more strength and pliability. Flexibility reduces the chance of re-injury.

Chapter Eleven

Using the Power of Water and Temperature to Heal

Hydrotherapy, or water therapy, is using water to maintain health and treat disease. Water is one of the oldest therapies known and has been used by many cultures, including the Egyptians, Chinese, Greeks, and Native Americans. Hippocrates used hydrotherapy extensively around 400 BC. Hydrotherapy is an easy and effective way to perform temperature therapy, the practice of using varying temperatures to heal. Temperature therapy usually involves heat (thermotherapy) or cold (cryotherapy). Hydrotherapy and temperature therapy are holistic and are advantageous for the whole body, helping it heal by restoring energy flow and harnessing its responses to changing temperature.

Water has unique properties that enhance its effectiveness as a healing modality: it is cheap, widely available, easily applied, has no side effects, and can be used internally or externally. A great conductor of heat and cold, water is an easy and effective way to provide temperature therapy because water changes states within a limited temperature range, so it can be used as a solid (ice), liquid (cool to warm), or vapor (warm to hot). Another special quality of water is that its density is similar to that of the human body. When the body is immersed in water, its hydrostatic effect causes the body to float and increases venous and lymph flow.

Water therapy helps reduce stress and revitalize the body by toning, stimulating digestion, encouraging the immune system, and relieving pain by calming the skin, muscles, lungs, heart, stomach, and endocrine system by affecting nerve reflexes on the spinal cord. Water is a valuable tool for self-care and should be included in your daily health routine. Drinking clean, pure water helps hydrate and flush the body, maintains muscle tone, keeps skin healthy, and suppresses the appetite. Professional athletes know they need to drink water frequently to perform optimally. When performing a massage, you can lose two to three percent of your body's water. Drinking water before, during, and after a massage can help fight fatigue and improve concentration and muscle performance.

Hydrotherapy can affect the entire body or it can be used locally, and it can be applied directly or indirectly. An example of direct application is submersing the body in a bathtub; indirect application can be done in many ways, including a hot footbath or cold compress.

Water and temperature therapy affect the circulatory system in positive ways. The circulatory system transports blood among cells and various organs. Blood supplies oxygen and nutrients to cells, removes waste products, and is vital to your survival. Blood flow can be increased to a constricted area of the body or through an organ, or decreased in a congested area of the body by using water to apply temperature therapy.

Hydrotherapy's physiological effects on the body are thermal, mechanical, or chemical. Thermal effects are created by applying water at temperatures above or below the body's resting

Chapter Twelve

Posture and Stretching

Posture is the position you hold your body in while standing or sitting upright. Posture, the relative position and alignment of various body parts, enables us to counteract gravity and provides a solid base for movement. Posture is a pattern that develops by repeating movements over time. Posture reveals your life story, the environment around you, your feelings, and your responses to stimuli.

Correct posture involves correctly aligning body parts and using the right amount of muscle tension to oppose gravity so your body supports the entire spine, shoulders, hips, and ankles. Proper posture puts less stress on your joints and the muscles of your back, hips, and neck. Good posture is important because muscles can work more efficiently, so you can expend less energy. Upholding good posture helps your body function better, have more endurance, and contributes to your general well-being. Good posture can give you a renewed sense of self-esteem, prevent injury, and increase oxygen flow to the lungs. Good posture enhances your breathing and circulation. It also contributes to your outward appearance: when you have good posture, you will exude poise, confidence, and pride. Posture is a holistic concept that consists of the way you move, breathe, think, feel, and observe. Posture has to do with the way you feel in your body. If you are feeling down your body will sag, and when your mood is lifted, you will hold your body more upright.

Posture is important to keep in mind whether you are sitting or standing because incorrect posture can cause muscle strain, fatigue, pain, and compression of blood vessels. When your body shifts into an incorrect posture, bones are improperly aligned and your ligaments, joints, and muscles take more stress than is normal. For example, if you stand leaning forward or slouch when you sit, you increase stress on your joints and spinal discs.

Good posture requires your spine, muscles, and joints to be in excellent shape. Strong, balanced, flexible postural muscles are key to maintaining a neutral spine, the spine's inherent alignment including its three natural curves: a slight forward curve in the cervical area, a slight backward curve in the thoracic spine, and a slight forward curve in the lumbar spine. Your hip, knee, and ankle joints must balance the natural curves of the spine when your body is in motion. Weak, inflexible leg, hip, and abdominal muscles cannot do this. Normal joint motion is essential, or muscle imbalance can occur.

Good posture also requires you to maintain body awareness, because that awareness allows you to correct any old dysfunctional patterning. Relaxation, deep breathing, and stretching all work together to bring more awareness to your body. Awareness helps you discover areas of stiffness and habitual tension zones and to be mindful of where those areas are so that you can erase them.

Chapter Thirteen

Strength Training

Strength training is an important part of a bodyworker's balanced exercise routine, which also should include flexibility exercises and aerobic activity. Regular aerobic exercise helps your muscles use oxygen more efficiently while strengthening your heart and lungs. When you strength train, your muscles work against resistance, which helps tone, strengthen, and increase muscle mass.

Muscular fitness, strength, and endurance are essential components of a healthy career in bodywork. Indeed, maintaining good physical condition is a part of your job. Increasing baseline strength enhances the quality of your work and lowers your risk of injury.

Resistance training helps improve muscle strength and endurance. Strength training involves an overload of the amount of resistance, whereas building endurance requires an overload in the number of repetitions. When developing your strength, perform each exercise to fatigue/failure with resistance for no less than six to eight repetitions in one to three sets. Precise and specific training improves bodywork performance. If you perform mostly sports massage, strength or power exercises should include more resistance and bursts of speed with slow eccentric contraction. On the other hand, if you carry out more Swedish and deep tissue strokes for eight hours a day, you want to build stamina by using less weight and more repetitions. Fit therapists should have the ability to use their muscles repetitively, over a long period of time, without excessive fatigue.

The type of resistance you use to build and tone your muscles depends on your individual goals. You can use your body's own resistance, exercise tubing, elastic bands, physioballs, free weights, and machines. Relying solely on doing massage and bodywork to build your strength is detrimental because certain muscle groups are overloaded, which creates muscle imbalance that can lead to injury.

Proper posture and body alignment are crucial when performing strength training exercises. Carry out all exercises in a slow and controlled manner. Breathe evenly and exhale during the most difficult phase of the repetition, making sure not to hold your breath. The exercises listed below are for your arms, shoulders, back, forearms, abdominals, and legs. Always consult your doctor before beginning any physical fitness program. Your doctor should evaluate and clear you of any medical conditions. It's a good idea to work with an exercise physiologist, certified personal trainer, or physical therapist when you begin any exercise program. Either professional can help you rehabilitate any injuries, meet your fitness needs, and help you with specific problems. After an injury, strength training should not be done until inflammation has subsided and nerve compression has dissipated.

Chapter Fourteen

Conscious Breathing

Breath is fundamental to life; without it we cease to exist. Breathing consists of an inhale and expansion, and an exhale and contraction. Like other movements, breathing can be done with ease and efficiency, or it can be performed incorrectly, and sometimes painfully. How effectively you inhale and exhale correlates with how you think, feel, and function. How you breathe on a daily basis is both voluntary and involuntary. Most people rarely pay attention to their breath unless a problem occurs. Paying attention to your breath is very useful: it reminds you to be present and more conscious in your body.

Basic breathing is about receiving and expelling air from your lungs. *Correct* breathing, however, is about proper inhalation and exhalation. Breathing is accomplished by the expansion and contraction of the diaphragm and chest muscles, which allow the lungs to expand and contract. Inhalation is an expanding movement that draws air inward, and exhalation is a constricting movement that forces air out. Most people breathe in a shallow manner, especially those who are stressed and nervous. Shallow breathing increases the level of carbon dioxide in the bloodstream and can reduce the oxygen supply to the brain and other cells of the body. The average person only uses a portion of their lung capacity because they are not fully utilizing their diaphragm and chest muscles.

The purpose of the lungs is to bring oxygen to and remove carbon dioxide from the blood. Your physical and mental health both depend on how much oxygen is delivered throughout your body. The left lung is divided into two parts, and the right lung is divided into three. The diaphragm is a muscle that separates the chest and the abdominal cavity. The chest contains the lungs and heart, and is protected by the rib cage. During the inhale phase, the intercostal muscles move the ribs upward and outward to expand the chest wall as the diaphragm contracts and pulls downward. During an exhale, the intercostal muscles relax, allowing the ribs to move downward and inward to contract the chest wall as the diaphragm relaxes and moves upward. Most sedentary people breathe into only the top portion, or superior lobe, of their lungs on a daily basis. Individuals who breathe shallowly breathe more often and their chest wall does not expand very much. Shallow breathing is less productive because it does not fill the lungs with air. More fit individuals usually breathe into the middle of the lungs, therefore increasing lung capacity. Still, only half of the total lung capacity is used. Only deep, correct breathing uses the full capacity of the lungs. Deep breathing completely fills and empties the lungs with each inhalation and exhalation. Deep breathing accesses the lower lobe of the right lung so more stale air is expelled and more oxygen is available to the bloodstream.

The ideal breathing rate for adults is around 12 to 15 breaths per minute. When you breathe deeper and more consciously, you deliver more oxygen to your bloodstream and you get rid of larger volumes of carbon dioxide, which gives energy to your body and keeps your mind

Chapter Fifteen

Yoga

The practice of yoga originated in India. The word *yoga* translates as *union*. This union is of the body, mind, and spirit. For thousands of years, yoga has been used to open the mind and body to bring transformation and self-awareness.

Your physical body tightens as you live daily life, exercise, and age. As your body becomes less flexible and more rigid, it becomes less efficient and more prone to injury and disease. If you are tight physically, you become internally constricted as well. By reducing the constriction of bodily tissues, yoga can help slow and even reverse the aging process.

Many people think that yoga is simply stretching. Stretching is essential, but yoga creates balance by developing strength and flexibility in the body with breath and movement combined. Achieving this balance is done by performing a series of postures, or poses, called asanas. Each pose has a particular benefit. The poses can be done either quickly or at a slower pace. A fast-paced, steady rhythm helps create heat in the body. A slow, flowing pace perfects the alignment of each pose, increases stamina, and releases each stretch point in the tissue. Postures are done in succession, but the approach depends on what tradition is being followed.

Many physical benefits come from a regular yoga practice, including increased strength, flexibility, and better balance. When you feel energetic and strong, you feel light. When you feel tired and weak, you feel extremely heavy. A steady yoga practice makes you feel stronger and lighter and gives better tone to your muscles. Doing yoga erases tension in your muscles. With a regular yoga practice, your body becomes more fluid, moves more efficiently, and is more flexible. Consequently, pain and tension are less likely to be stored. Yoga creates symmetry in your body in a balanced manner. As a result, balance is likely to happen in many areas of your life.

Yoga gives strength and flexibility for physical activity, and on a deeper level, yoga generates energy. The energy yoga brings has a focused quality. Practicing yoga keeps you in the present moment and helps with your body awareness. The art of yoga allows you to accept your limits, and listen to and honor your body. It also teaches you how to balance many aspects of your life.

Yoga helps train your mind in a concentrated way and helps keep your mind focused. Yoga brings mental clarity and increased peace of mind. Yoga gives feedback from your physical body to your mind, and you can use this body awareness when you practice bodywork. The body has its own built-in intelligence. Doing yoga teaches you to listen to the intelligence of your own body. Great side effects of practicing yoga are learning to focus your energy and cultivating feedback sensitivity. You learn to feel the difference between pain and intensity. This awareness helps you counter the tendency to ignore your body's feedback messages. Pain is feedback. Notice and make mental notes of slight pains or twinges, numbness or tingling. Any sensations you notice should be paid attention to because they are warning signals.

Chapter Sixteen

Traditional Chinese Exercises

Every culture throughout history has recognized the presence of some type of life force energy in the human body. In Western culture, we usually refer to this as human electricity. In India, this energy is called prana, in China it is chi, and in Japan it is ki. In both the East and West, energy is perceived as an animating life force that allows humans to attain certain physical goals and maintain good health. Chinese exercises supporting chi have been around for more 2500 years, and they have helped prolong the health and increase the longevity of millions of people's lives, including, in the last half-century, many Americans'. Research has confirmed the effect these exercises have on human physiology.

Traditional Chinese Medicine (TCM) is based on the flow of chi, an electromagnetic energy that runs through your body and affects everything you do. TCM conceives that the unrestricted flow of chi through energy pathways is essential for good health and that the more chi that is moving freely throughout your body, the more energetic and active you will feel.

Chinese exercises combine slow and gentle movements with mental concentration. By performing these exercises, your heart, muscles, and lungs are strengthened, and your emotional and psychological states are improved as balance and a sense of harmony develop between your body and mind. Chinese exercises improve physical fitness and are gentle enough for the elderly and those with injuries. These movements can correct posture, increase blood circulation, assist with flexibility, and calm the body and mind. Chinese exercises can improve posture, body awareness, and flexibility of bodyworkers' joints and spine by helping their energy system stay clear and flow freely.

There are various Chinese exercises you can do to keep your energy flowing and maintain your health. Exercises suggested for bodyworkers include Tai Chi Chuan, Chi Kung, and Ba Duan Jin. All exercises should be used in combination with slow breathing. Most of the movements are symbolic, so try to imagine what each represents for you as you do each exercise. Begin each exercise by visualizing yourself protected by a cocoon of golden light. Start and end the exercises by gathering and storing chi in your Dan Tien (an energy center located about two inches below your naval). Chinese exercises can be done any time, but sunrise is preferable. These exercises are best practiced in loose clothes, barefoot in the grass, and close to a tree. How long you practice depends on your health and enthusiasm. Beginners can start with 15 minutes every morning and every evening. Intermediate exercisers can practice for 30 minutes two times a day, and advanced practitioners can exercise as long as they feel comfortable.

Tai Chi Chuan

Tai Chi Chuan is an ancient martial art whose foundation comes from Taoist philosophy. Tai Chi is done by performing slow, fluid movements. This type of martial art combines yin and yang in a balanced way. Gentle and relaxing, Tai Chi is also a breathing exercise. It is comparable to moderate Western exercise. Tai Chi offers great advantages to people of all ages

Chapter Seventeen

Nutritional Considerations

The basic information that follows is what I have found works for me. Consult your physician or a clinical nutritionist before making changes to your diet or if you have any health conditions.

To sustain your health and energy as a bodyworker, you must eat properly. Because you do hours of physical activity each day, you need to think of yourself as an athlete and fuel your body as an athlete would. You are what you eat, and you want to give your body nutrients it can use efficiently.

Nutrition involves the ingestion, digestion, absorption, transport, and metabolism of nutrients. All organisms need a variety of nutrients to survive. Food provides the nutrients your body uses to create energy to maintain your health. Major nutrients serve three basic functions: providing energy (carbohydrates and fats), promoting tissue growth, development, and repair (protein), and helping to regulate metabolism. For your body to function efficiently, you need more than 40 essential nutrients in specific amounts. Hippocrates acknowledged that food must be your medicine and medicine must be your food. What you eat plays an important role in the development or progression of a variety of diseases.

Carbs, Fats, Protein, and Sugar

A balanced intake of carbohydrates, fats, protein, vitamins, minerals, and water are necessary for proper performance. The three keys to maintaining a healthy diet are variety, balance, and moderation. A balanced proportion of foods from all different food groups are recommended. Select whole, natural foods that will provide the proper amount of nutrients for optimal functioning.

Generally speaking, 50 to 60 percent of your calories should come from carbohydrates, which are the main source of energy for endurance athletes. Eat larger amounts of complex carbohydrates, such as whole grains, legumes, fruits and vegetables, and fewer simple carbohydrates, such as cakes, pastries, chocolate, and table sugar. Eat raw fruits and vegetables whenever possible, especially ones high in beta-carotene and vitamin C. Some foods containing vitamin C are citrus fruits, strawberries, peppers, and kiwis. Beta-carotene is found in carrots, peaches, squash, sweet potatoes, and dark, leafy greens. Also, increase your intake of cruciferous vegetables such as cabbage, broccoli, cauliflower, and brussel sprouts. Aim for three to five servings of fruits and vegetables a day.

Although carbs and fats are your body's main energy sources, protein is used as an energy source under certain conditions. Maintain your intake of protein at adequate and moderate levels. Most of the protein Americans consume is from animal sources. Plant proteins are healthier because they are lower in saturated fat. Three to six ounces of meat, fish, and poultry,

Chapter Eighteen

Energizing Your Chakras with Food

As a bodyworker, you have to think about nutrition for both your physical body and your energetic body. What you eat affects your life and your ability to function effectively and efficiently. People need three basic substances to sustain life: food, air, and water. Air and water were taken for granted in the past when there was no pollution, but now need to be taken into consideration. Food takes up quite a bit of time, as we have to gather it, prepare it, eat it, and digest it. You should come to some type of understanding about your relationship with food. The relationship some people have with food is not a conscious connection, and it should be. Your diet is an important part of your lifestyle because many illnesses result from poor food choices.

Nutrition not only sustains your physical body but also your energetic one, which is made up of the seven major chakras and your aura. Chakras are energy centers associated with your mental, emotional, and physical activities that also revitalize your body's physical energy. Balance must be maintained among the chakras for energy exchange to take place and for optimal health to occur.

Each person's energy field contains the aura and the chakras. The aura surrounds the human body and is composed mostly of electromagnetic radiation. The aura has seven layers and extends up to four feet away from the body. Each layer represents a different part of your energy and exudes a different color. Your aura constantly changes and is affected by your thoughts, intentions, creativity, and emotions.

The human aura has regions that serve as energy warehouses. These depots store energy and transmit that energy to your organs and meridians (energy pathways). Your aura is a force field made up of an energy rising up through your body and another energy moving downward. These two energies cross when moving through the body. Main energy centers, or chakras, are located where these energies cross.

The seven major energy centers are located in the energy body from the top of the head to the lower torso (18.1). These chakra energy centers connect to major nerve ganglia. Chakras transmit energy and are like whirling vortices. These vortices can be sucked in or pushed out if they are out of balance. A chakra that is spinning too fast or too slow is not in balance. A balanced chakra is in harmony when it spins at an appropriate rate relative to the others and takes only the energy it needs. Chakras reflect the physical, mental, and spiritual parts of a person. When negative emotions are stuck in your energy field, a chakra can become dysfunctional. Physical injuries and moral issues can also create imbalances in the chakras, which can cause disease.

Chapter Nineteen

Protection for Body, Mind, and Spirit

Energy is an aspect of matter that makes something change, move, or happen. Everything you do requires energy. The energy of molecules moving in and around you takes place in many different ways. Energy can be expressed as effort, or it can be used for the basics of living. You spend a particular amount of energy on certain things in your life. If you spend little or no time or energy on something, you are not giving it much energy. If you spend a lot of time and energy on something, you are giving energy to it. You can give energy positively by doing something kind for yourself or others or you can give energy negatively by worrying or not being nice to someone. It actually takes more effort to give your energy in a negative way than it does to give it in a positive way.

As a therapist you need to be aware of the energy in and around you. Energy is all around you; everything in this world vibrates at different rates and is giving off energy. An exchange of energy occurs when two people interact. You have to be aware of all energy exchanges when doing bodywork because you run energy when you do bodywork.

Energy Toolbox

Good health occurs when your energy field is strong and the energy is moving freely. Your aura is healthy when it is balanced and when its protective layer is elastic and flexible. If you keep your energy balanced and flowing, your aura will remain strong and run at a high vibrational level. If you do not protect your energy field, it can run at a low vibrational level and your protective layer can become porous and vulnerable. Protecting your energy field and learning how to conserve your energy are important when you are holding a therapeutic, healing environment. A myriad of tools are available to help you protect your vital energy, including centering, grounding, decording, cleansing, and shielding.

Centering is essential for being present in the here and now. Being present is crucial for healing energy to flow. Your core, or center, is not only your center of gravity but also the point that leads your intuition and helps your whole body move more gracefully and effortlessly. To locate your center, place your palms on your belly. Create a triangle with your thumbs touching above your belly button and your fingers touching below your belly button. You can also put one hand under your belly button and one hand directly opposite on your back while breathing into this area. If you notice that you feel off balance, take a moment to breathe into this area and bring yourself back to the center.

Connect with the earth's energies by grounding your feet into the earth by sending roots or tubes down into the earth from your feet. As you ground yourself into the earth, also draw the earth's energy up. Another way to ground yourself is to stand with both feet flat on the ground and to visualize a cord dropping from above you and down through your crown chakra. Feel the other end of the cord connecting through your feet down into mother earth. Let white light flow down the cord and travel from the top of your head through your feet. Inhale and breathe green light

Chapter Twenty

Self-Care for Bodyworkers

Being totally healthy and having a more fulfilling career — and life — require your energetic, physical, psychological, social, and spiritual aspects to be balanced and working together harmoniously. Your success or lack of success in your career depends on how you expend your energy, how you care for yourself, and how you learn to receive and give back to yourself. Burnout is likely to occur if you don't practice self-care.

Your relationship with yourself is the basis for all your energy exchanges. When you define your needs and wants and attend to them first, you feel more free and empowered. Making time in your life to practice meditation, breathing, and yoga is a gift to yourself and provides you the time needed for self-reflection.

Basics of Self-Care

Balance happens when different parts of your life are in proportion to each other. Make an effort to balance your physical self first. The physical aspect of your job can cause wear and tear on your body. Important components of caring for your physical body include correct body mechanics, exercise, proper nutrition, and plenty of rest.

Use your body wisely when doing massage. Inefficient body mechanics can lead to excessive muscle tension in the upper trapezius, erector spinae, wrist extensors, and finger flexors. An asymmetric yoga stance such as warrior pose is an excellent way to counter these imbalances. When applying pressure during massage, make sure your joints are stacked to conserve your energy and to reduce muscle overuse and misuse. Keep your body as relaxed as possible, and stay behind each stroke as you lean into the tissue beneath you. These techniques also feel better to your client while you are performing them. Increase the number of massages you do gradually, and take adequate breaks in between sessions.

Another key to career longevity is getting the proper amount of appropriate physical activity. Exercise increases circulation and delivers more oxygen to your body's cells, boosts your energy, and reduces your chance of injury. It also builds strength gradually and helps you develop and maintain the endurance you need to perform your job. Begin a strengthening routine early in your career, while you are still in school. Walking and doing lunges strengthen your legs, and weight-training slowly strengthens your arms and hands. The small muscles of your hands and arms must do lot of repetitive motions and need endurance to perform them. Always warm up, lengthen, and stretch before you exercise.

Psychological self-care, including grounding and centering, are essential anytime you share personal space with a client. Grounding connects you to the earth and creates a barrier between you and your client. Centering helps you stay focused with your client in the moment. When grounding yourself prior to a session, remind yourself that you are only a facilitator of the

Conclusion

The attention you pay to the physical, spiritual, and emotional aspects of yourself are important for durability in this career. Take care of yourself physically by practicing proper breathing, yoga, connecting to the earth, and providing yourself with proper nutrition. You can diminish the possibility of burnout by exercising, receiving massage, getting more education, and giving back to yourself. Self-care allows you to continue loving what you do as a profession and continuing to do the work you love.

On the physical level, using good body mechanics is essential for the longevity of your career. The main components of good body mechanics are having awareness of your body, which helps shed light on the parts of your body that need attention; practicing with ease; and keeping your body moving. Other key components are observing areas of discomfort and adjusting to more comfortable positions, restoring your body, preventing injury, and employing all the self-care techniques mentioned in this book. Receiving some form of touch or energy therapy is extremely important because you need to feel what is happening in your own body. Getting some type of bodywork every week is good for your sensorimotor education. Feeling your body as you receive bodywork teaches you how to live in the present moment and gives you sensory awareness. If you feel the difference between muscular tension and a relaxed muscle, you can be armed with more self-awareness.

Keep your body in alignment and your joints stacked as you work. Use leverage and leaning instead of muscle strength alone. Remember that power is transferred from your feet to your hands as you deliver each stroke. Any stroke that does not begin with the feet means you are using strength solely from the upper body. This can lead to excessive strain and possible injury. Do yoga every day to maintain awareness of your body in alignment. Yoga also keeps your joints loose and your muscles and tendons supple. Use your breath to keep your energy flowing and to supply oxygen to your muscles. As you work, keep your feet relaxed and connected to the ground so you can stay integrated with the earth's energies.

Injury can happen because of the physical nature of giving massages. If you are injured, do not be ashamed. Stand up and say something. It may help other therapists feel more comfortable if it happens to them. Take time off to heal, nurture your body, and be gentle with yourself. Allow the injury to heal completely and do not resume work until it has.

Many adjunct therapies can assist with your work. Hydrotherapy and thermotherapy are great additions that save your hands and ease the pain and tension in your client's (or your own) body. Cryotherapy is essential for preventing and treating injury. Heated stone therapy helps release your muscles or your client's tight muscles. Stretching and range of motion release your client's tension patterns. There are also many handheld tools that you can utilize to reduce strain on your hands.