

Spine Patient Outcomes Research Trial

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SPORT does not endorse or advocate any of the following but has assembled a list of available non-surgical therapies and their definitions. SPORT suggests that patients discuss all surgical and non-surgical treatments with their SPORT physician.

#### Introduction

Non-Surgical treatments for low back and leg symptoms include many different options. Your individual physician will recommend what he/she feels is right for you. This booklet is available to you as a reference, providing a brief overview of many of the choices that could be helpful for your back and leg problem.

This booklet includes two main categories:

- 1. Traditional Therapies/Treatments
- 2. Complementary or Non-Traditional Therapies/Treatments

We also have sections on "Taking Care of Yourself," "Learning About Your Lower Back," "Tips for Keeping Your Back Safe," and "Eliciting the Relaxation Response." Two important points to remember when dealing with your back and leg problem: 1) learn to listen to your own body; and 2) nothing in our bodies occurs in isolation. Our bodies are complex systems and individual parts can affect the whole. As you know, your back and leg problem can affect many aspects of your life. Therefore, your recovery and/or improved resilience includes considering all aspects of your health. This means taking an active role in your care.

Let's begin by looking at the components of one's overall health.

### **Taking Care of Yourself**

To take good care of yourself, you need a daily routine that addresses all aspects of your health. What does this mean? A daily routine should include the right attitude towards health, good food, good hygiene, regular bowel and bladder habits, an exercise program, the right amount of rest for you, clothing appropriate for the weather, personal pleasure and challenges, intimacy, time with family and friends, and meditation or another spiritual exercise that may be right for you. Review the following categories, called Functional Health Patterns, and decide which ones make the most sense to you in order to become as healthy and to feel as good as you possibly can.

#### Functional Health Patterns\*

#### 1. Health Perception/Health Maintenance

(Describes your pattern of health and well being and how you manage your health. Also includes your individual health risk management and general health care behaviors, such as following physical and mental health promotion activities.)

- Pick a primary physician with whom you you get along and whom you trust.
- Engage other health care professionals as needed who will help you take care of yourself.
- Become aware of ways to prevent poor health that apply to your age group and past medical/family history.
- Address any substance use/misuse including alcohol, smoking, or recreational drugs.
- Care for your skin, teeth and hair by keeping them clean and in good condition.

#### 2. Nutrition/Metabolism

(Describes your pattern of food and fluid consumption relative to energy needs. The condition of skin, hair, nails, mucous membranes and teeth are indicators of a well-balanced metabolism and good nutrition).

- Choose good food; try to avoid poly-hydrogenated fats. Be aware of saturated fats; eat as little solid fat (butter, margarine, etc) as possible. The safest fat is olive oil (extra virgin).
- Be careful with vitamin and herb supplements. You may want to ask your physician to make sure that the supplements you take work safely with any other medicines you are taking.
- Be cautious with additives, dyes, and artificial sweeteners. Wash your fruits and vegetables well to rid them of the pesticides, herbicides, fertilizers and chemicals found in the environment.
- Increase your intake of fish to at least one serving weekly. Consider soy products as a meat replacement.
- Water Increase intake to 6-8 filtered glasses per day (unless otherwise restricted by your physician).
- Eat whole grains (wheat, oats, rice, etc.).

<sup>\*</sup>adapted from Gordon, Marjory, PhD, RN, FAAN, Manual of Nursing Diagnosis, Mosby, St. Louis, 1995

### **Taking Care of Yourself**

#### **Functional Health Patterns**

#### 3. Elimination (Bowel, Bladder and Skin)

(Patterns related to the body's getting rid of wastes. Includes perception of any changes in regularity, quality or quantity of excretion.)

- Develop patterns of elimination and good hygiene and stick to them.
- Use laxatives with caution.

#### 4. Activity/Exercise

(Patterns of activity, leisure, and recreation. Includes activities of daily living and energy requirements)

- Whatever gives you the most pleasure, do it and do it consistently! Examples: walking, swimming, or yoga.
- Observe your breathing; learn to breathe consciously to elicit the relaxation response (see page 12).

#### 5. Sleep/Rest

(Patterns of sleep, rest and relaxation)

 Individuals vary widely in the amount of sleep they need. Just be sure to get the amount of rest and sleep that's right for you.

### 6. Cognitive/Perceptual

(How you think and make decisions; your memory and speech; and how your senses perceive your environment)

- Care for your eyes, ears, and skin carefully.
- Wear clothing appropriate for the weather; be careful with synthetics, especially if allergies are a factor.

#### 7. Self Perception/Self Concept

(Attitudes about self; perception of abilities [mental, emotional, or physical]; body image; identity; general sense of worth; and general emotional pattern.)

- Take time for pleasure and personal challenges (creative, academic, occupational).
   Budget this time just like you do your work time.
- Consider complementary practices such as massage therapy, reflexology, therapeutic touch, or myotherapy, to name a few.
- Gratitude Keep a journal and list five things daily you are grateful for. This helps you focus on the positive and on the little things that make you happy. You can use this information to make sure you continue doing what makes you happy. Example: buying flowers for yourself, or going to a park and connecting with nature.
- Yoga and Tai Chi have been identified as helpful for enhancing self-esteem.
- Allow healing to happen.

### **Taking Care of Yourself**

#### **Functional Health Patterns**

#### 8. Role/Relationship

(Describes roles and responsibilities that you have at home, work and/or socially.)

- Maintain intimacy, fun, and leisure time with family and friends.
- Have a support system. Establish alternative supports if family is unavailable.
- Be clear, honest, and direct when you communicate. Focus on the positive.
- Reach out to others by considering some service work. Share your gifts.
- Schedule time each week with loved ones and friends. Consider service work, like helping a shut-in; be interested in others.
- If you have experienced a disconnection with someone you care about, reach out to overcome the pain of being separated from a loved one.

#### 9. Sexual/Reproductive

(Describes reproductive patterns and patterns of satisfaction or dissatisfaction with sexuality.)

 Seek appropriate resources if you have need for family planning, referrals for impotence or fertility problems, concerns with sexual issues related to your back/leg symptoms, etc.

#### 10. Value/Belief

(Describes values, goals, or beliefs (including spiritual) that guide choices or decisions. This refers to what is important in your life, your quality of life, and any perceived conflicts in values, beliefs or expectations that are health-related.)

 Some people find value in belonging to a religious community, in meditation or in other spiritual activities.

 Many activities, from visiting an art museum to strolling through a park, can raise your spiritual energy.

#### 11. Coping/Stress

(Describes general coping strategies and the effectiveness of these strategies in terms of stress tolerance. How stress resistant are you? How do you manage stress?)

- Take a stress management class; learn to meditate; try to solve problems before they become overwhelming. See the section on the Relaxation Response regarding breathing techniques (page 12).
- Bring the concept of health into your life by listing illnesses/injuries you have recovered from.
- Newsfast (Skip reading the news or watching the news) for one day a week and as needed.
- Think about people who raise your spirits!
- Consider seeing a professional counselor if you are depressed, or are feeling very angry and hostile at home or in the workplace.

#### **Environment**

(Your personal, home, work and recreational environment)

 Do you have the amount of space and light you need? Is your living environment safe and healthy? Test for radon, carbon monoxide, lead, asbestos, etc.

# **Learning About Your Lower Back**

A healthy low back means you can bend and stretch without pain. The following section describes the components of a healthy spine.

### **A Healthy Spine**

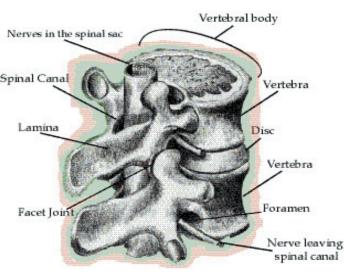
When the spine (or spinal column) is healthy, the parts fit together so you can move around without pain. The spine includes the following:

- Vertebrae, which are the bones that make up the spinal column. Parts of each vertebra include:
  - The **vertebral body**, which is the major portion of the vertebra.
  - The **lamina** of each vertebra, which forms the back of the spinal canal.
  - The facet joints, which are where two vertebrae meet. There are two joints, one on each side.

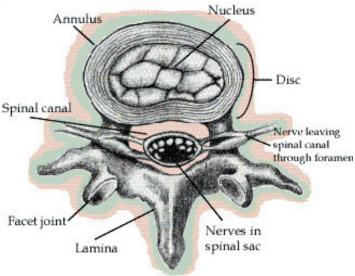
The configuration of the vertebrae forms spaces for the spinal cord and the nerves to go through. These spaces are:

- The spinal canal, which is a tunnel formed by the stacked vertebrae. The spinal canal contains a sac that holds nerves These nerves carry signals between the brain and the rest of the body. When a spinal column is healthy the parts fit together without pressing on the nerves.
- The **foramen**, which is a small opening between the vertebrae. This is where a nerve leaves the spinal canal.
- **Discs**, which act as cushions between vertebrae and allow movement. A disc has a soft, gel-like center (**nucleus**) and a tough outer wall (**annulus**).
- **Ligaments**, which are bands of tissue that connect the vertebrae.

Parts of the Spinal Column



Cross-Sectional View of a Vertebra & Disc



Good body mechanics (how to move) help keep your back safe. They assist with your recovery. They will also help protect your back in the future. The next few pages will explain good body mechanics and how to achieve them.

#### What are Good Body Mechanics?

Each time you bend, twist, reach, or move in any way, pressure is put on a part of your spine. Discs may be compressed, bones rotated, and muscles tightened. Good body mechanics put the least amount of pressure on your spine. If you maintain good posture when you sit, stand, sleep, and move, you can help keep your back healthy.



DO keep your ears, shoulders and hips in line with each other.



DON'T slump or slouch. It pushes your spine out of line.

### **Keys to Good Body Mechanics**

To move your body safely, follow a few simple rules. Whether you sit, stand, or move around, the keys to moving safely are the same. To help protect your back, follow these tips:

- Always try to keep your ears, shoulders, and hips in line with each other.
- When you move, tighten your trunk muscles to support your spine.
- When you bend, bend at your hips and knees, not at your waist, as much as possible.
- When you turn, do not twist your shoulders or waist. Instead, turn your whole body, pivoting your feet if needed.

Follow these guidelines until the movements become natural to you. Also, improve your strength and motion by exercising as directed.

Most people do not have perfect posture all the time. You may not be able to follow this advice continuously. However, these suggestions are simple and can significantly decrease the accumulation of stresses on your spine. Sitting, standing, and lying down properly even 50% of the time can significantly decrease the accumulation of stress. By doing so, your back may be safer if you suffer an unexpected strain. These tips are easy and have no negative side effects. Do your best.

#### **Lifting Safely**

- Get close to the object. Lower your body by bending at the hips and knees. Keep your ears, shoulders, and hips in line with each other.
- Hold the object close to your body.
- Press down with your feet. Allow your legs to lift your body and the object.





### Sitting and Standing Up

- To sit, back up until the front of the chair touches the back of your legs.
- Tighten your trunk muscles.
- Using your leg muscles, lower your body onto the chair. Then, scoot back into the chair
- To stand up, scoot forward to the edge of the chair. Place one foot a little behind the other. Use your leg muscles to raise your body from the chair.





### **Standing and Turning**

- Stand with one foot slightly in front of the other.
- Keep your knees relaxed and your trunk muscles tight.
- To turn you body, move your feet. Do not twist your body at the waist or shoulders.







### Getting Into and Out of Bed

Getting into and out of bed can strain your back. Learn how to do it right. Follow these steps to get into bed. Reverse them to get out of bed.

- Back up until the edge of the bed touches the back of your legs. Tighten your trunk muscles. Bend forward slightly at the hips. Use your leg muscles to sit on the edge of the bed.
- Using your arm for support, lower your body onto its side.
- As your upper body moves down, lift your feet onto the bed. Roll onto your back without twisting at the waist.









#### **Safe Sleeping Positions**

- Lie on your back with a small folded towel to support the hollow of your lower back. Add a pillow under your knees if needed.
- Lie on your side with your knees slightly bent.
- Keep a pillow between your knees.



#### **Improving Strength and Motion**

Take walks regularly. Walking helps to keep your back muscles and the rest of your body strong and flexible. Initially, short, frequent walks are better than 1 or 2 long walks per day. Your doctor may also have you do certain exercises. These exercises can help stretch and strengthen your muscles. Do all exercises exactly as you are told. In some cases, you may also visit a physical therapist (PT) for treatment. Talk with your health care provider about what exercise program is best for you. Always tell your health care provider if exercise causes new or lasting pain.



### **Eliciting the Relaxation Response**

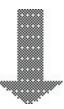
When one is **exposed to stress** (environmental, emotional, physiologic), the "fight or flight" response is triggered and the following physiologic changes occur:

- Metabolism increases
- Heart rate increases
- Blood pressure increases
- Breathing rate increases
- Muscle tension increases



When one **elicits the Relaxation Response**, by utilizing any of the techniques mentioned below, these physiologic functions reverse themselves:

- Metabolism decreases
- Heart rate decreases
- Blood pressure decreases
- Breathing rate decreases
- Muscle tension decreases



One simple exercise to elicit the Relaxation Response is **Diaphragmatic or Conscious Breathing.** The following exercise will help you learn how to achieve a state of relaxation.

- 1. Relax and take a deep breath using your diaphragm to inhale. Relax your stomach and allow it to expand.
- 2. Breathe in to a count of 4 (count "1-1000, 2-1000, 3-1000, 4-1000").
- 3. Hold for 7 (count the same way until you get to 7).
- 4. On 8, exhale or breathe out slowly.
- 5. Repeat this cycle 4 times and you can achieve the above physiologic changes.

This is a quick and easy exercise you can do anytime, anywhere. When learning to breathe consciously, practice in a quiet, relaxing area until you can do it easily. It sometimes helps to have another person count for you to understand the timing of your breaths.

Other techniques which elicit the relaxation response are the following:

- Meditation
- Yoga
- Body scanning
- Mindfulness

- Repetitive Prayer
- Repetitive Exercise
- Imagery
- Progressive Muscle Relaxation

Adapted from Benson, Herbert, M.D., The Relaxation Response, Avon Books, N.Y., N.Y., 1974.

It is easier to see, after reviewing the Functional Health Patterns, that everything is interrelated and your body functions as a whole. Your back/leg problem is not isolated from your entire body's integrated functions. Therefore, start a program and address any of the areas mentioned in the previous section that you feel need some attention. Taking care of yourself by working to connect your mind, body and spirit is a first step to feeling better.

The following is a list of many of the non-surgical therapies and treatments available. Some are not well studied, while others have been shown to be effective to varying degrees.

### **Activity Restriction**

Bedrest 1-3 days

Lifting/driving/sitting/work restriction

### **Counseling/Psychological Treatments**

#### Patient education/Counseling

Individual and /or group programs are available.

#### **Back School**

A patient education program that teaches back safety strategies.

#### Coping skills training

A multiple-session behavioral pain treatment group.

#### Psychological assessment/counseling

Provides coping/stress reduction and pain management strategies.

### Functional Restoration/Rehabilitation program

A multi-disciplinary back rehabilitation program that includes all aspects of managing your back condition effectively. Varies in length from one facility to another.

### Vocational counseling

### Devices

Devices are ordered according to individual and functional needs.

Brace Shoe Inserts

Corset Cane

Walker

### **Ergonomic Evaluations**

A multidisciplinary evaluation of the interactions between a person and his/her total working environment. It includes assessment of tools and equipment of the workplace, as well as review of the environmental aspects such as atmosphere, heat, light, and sun. (From American National Standard ANSI Z794.1). This definition can be expanded to include the home environment.

### **Manipulation**

#### Chiropractic

The spinal cord is the primary pathway for the nervous system, therefore misalignment and/or pressure on nerves can cause various problems. Chiropractors use spinal manipulation and structural adjustment to correct spinal/nerve problems.

#### Osteopathic

A system of therapy based on the theory that the body is capable of making its own remedies against disease and other toxic conditions when it is in normal structural relationship and has favorable environmental conditions and adequate nutrition. It utilizes generally accepted physical methods of diagnosis and therapy while emphasizing the importance of normal body mechanics and manipulative methods of detecting and correcting faulty structure.

#### Physical Therapy - Mobilization/Manipulation

**Mobilization** is passive movement applied to a spinal joint throughout the full or partial range of motion for that joint. It tends to involve slow, rhythmic maneuvers that the patient can restrict.

**Manipulation** is a passive movement applied to a spinal joint at the end range of available motion. Involves a short, brisk maneuver that the patient cannot stop.

### Massage Therapy

Gentle manipulation of the muscles to stretch, calm and revitalize.

### **Medications**

### **Non-Prescription Medications**

Pain Medications (Examples: Acetaminophen (Tylenol), Aspirin).

Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) (Examples: Advil, Motrin, Nupren, Aleve, Feldene, etc.)

### **Prescription Medications**

Steroids Pain Medications Muscle Relaxants Antidepressants

#### **Non-Traditional Medicines**

Homeopathic

Herbs (Examples: Arth, Una da Gata [Cat's Claw])

Natural food supplements (Examples: Glucosamine, Chrondroitin Sulfate)

### Nursing Evaluation/Consultation

Evaluation of functional health patterns and establishment of a mutually agreed upon plan to address individual goals.

### **Nutritional Therapy**

Avoid additives and artificial ingredients.

**Basic nutrition** 

#### **Environmental influences**

Air and water pollution, food chain degradation, electrical and radiation pollution

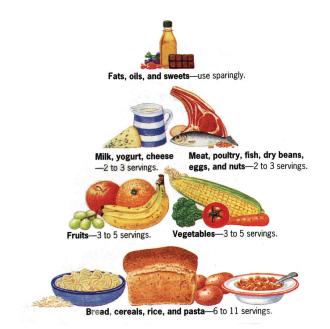
Natural food supplements, such as alfalfa, aloe vera, bee pollen, fish oil

Nutraceuticals

Organic foods

Supplementation of vitamins, minerals, amino acids, enzymes and other nutrients.

Water, carbohydrates, proteins and fats



### **Pain Management Techniques**

**Biofeedback** 

**Epidural injections** An injection into the space outside of the dura mater of the spinal cord.

Facet joint injection An injection into the areas where two vertebrae meet.

Hypnosis and Psychological Therapy

**Nerve Blocks** 

Patient education

PCA or Patient Controlled Analgesia

Referral for non-traditional therapies including acupuncture, chiropractic and nutritional therapy.

Relaxation techniques

**Trigger point injection** An injection of an anesthetic into a trigger area of pain.

Food pyramid adapted from *Eating for Good Health*, Reader's Digest Association, Inc, Pleasantville, NY, 1995.

### **Physical Therapy**

### **Educational programs / Literature**

#### **Active Physical Therapy Treatments**

Initiated and taught by the physical therapist, the individual patient takes responsibility for his/her own exercise prescription.

*Aquatic Therapy* Passive and active physical therapy in the water.

Conditioning

*Cyriax* An examination process; the treatment tends to be manipulation.

Flexibility

Functional Stabilization

Maitland Graded mobilization and manipulation of spinal joints.

*McKenzie* The McKenzie method of assessment and individualized treatment consists of the use of repeated spinal motions and sustained positions. Occasionally, the use of therapist mobilization and manipulation is required; however, the hallmark of the methodology is the empowerment of the patient with self-generated activities based on the concepts of directional preference and centralization/peripheralization.

Strengthening

### **Passive Physical Therapy treatments**

Treatments initiated by the physical therapist.

Heat/Ice

*Iontophoresis* The introduction of chemical substances (typically a steroid medication) into the body for therapeutic purposes by means of a direct current.

Massage

Mechanical traction

*Phonophoresis* Similar to iontophoresis in concept but different in the physical chemistry involved. This technique provides the clinician with the ability to introduce molecules (typically a steroid medication) into the tissues by means of sound waves. Molecules used for phonophoresis are available in ointment or cream form. The technique involves massaging ointment into the area and then ultrasound is administered.

*Ultrasound* Sound waves are delivered via a medium which assures sufficient transmission of therapeutic sound waves. The aim of ultrasound therapy is to heat deep tissues and/or make them more pliable.

# Non-Traditional or Complementary Remedies and Therapies



Before embarking on a non-surgical treatment regimen that incorporates any non-traditional treatments, it is important to commit to knowing as much as you can about the therapies you choose and to communicate your choices to the health care provider who oversees your care. The goal is to choose therapies that are complementary to each other and positive for you as an individual. Often, a particular therapy will not work in combination with another, and they may even work against each other. Your total health picture must be taken into consideration. So, it is essential to listen to your body and to get the proper medical supervision.

**Acupuncture** is based on the theory that there are two complementary energy flows (yin and yang). Health is dependent on the balance of yin and yang. These energy flows circulate in the body along paths or meridians. Along the meridians are 800 points known as acupuncture points which have been found to affect the energy flow when acupuncture needles are placed on them.

<u>Bodywork</u> is a broad term covering many different techniques of physical touch and manipulation.

Eastern Bodywork is energy-based.

*Acupressure* is a noninvasive aspect of acupuncture and can access certain acupuncture points with similar beneficial results.

*Biokinesthetic therapy* is a body-centered therapy based on the theory that every experience that we have ever had is stored in our bodies (in cellular memory), and that therefore emotions can be accessed through the body and then healed.

Energy healing The Barbara Brennan method utilizes the use of touch, on and/or off the body, to work with the energy systems of the client in order to restore harmony and balance to all levels of being, and help the client to self-heal.

Jin Shin Do "The Way of the Compassionate Spirit" is a type of acupressure. It has been described as a combination of shiatsu and polarity because energy is channeled between two held acupressure points. The practitioner presses more firmly, eventually working quite deeply. Jin Shin Do utilizes ancient oriental meridian theory and modern psychology. As physical tensions are released the emotional aspects are also processed. Jin Shin Do is a tool for resolving our past and present tensions and conflicts, and for accessing our ability to create optimal physical, emotional and spiritual development.

*Polarity* Energy must flow freely between the negative and positive poles of the body to maintain a state of mental and physical health. Stress, tension, and pain are blocks in this energy flow, blocks which will create more tension and pain until disease sets

### Non-Traditional or Complementary Remedies and Therapies

in. Polarity therapy releases blocked energy through the use of gentle manipulations of pressure points which feels soothing and relaxing. Counseling on developing positive thoughts and attitudes, awareness of eating patterns, understanding the principles of food combining, easy stretching, and movements designed to increase the energy flow are other parts of the healing process.

*Reiki* is Japanese for "universal life force energy." Reiki therapy activates and balances the life force energy and is applied to the whole body. It involves the gentle laying-on of hands to direct the energy flow.

*Rolfing* is a specific kind of structural integration technique which involves hands-on therapy to lengthen and loosen – stretching and moving the connective tissue to balance the body along its natural, vertical axis.

*Shiatsu* means finger pressure, and is a Japanese healing art equivalent to acupressure. It is based on the same theory as acupuncture in terms of Qi (energy flow) and the meridian networks.

Therapeutic touch is a hands-on healing technique. It is a healing practice concerned with human energies such as vitality, emotion, thought, altruism and spirituality. Therapeutic touch is a contemporary interpretation of several ancient healing practices that are concerned with the knowledgeable use of the therapeutic functions of the human vital energy field.

#### Western bodywork is structure-based.

Deep tissue massage

Sports massage is not only for the professional or amateur athlete, but for anyone interested in reducing the strain or discomfort sometimes associated with intense physical activity. Sports massage, which incorporates programs of strengthening and stretching exercises, education, and pre- and post-event work, can greatly reduce the risk of injury. Additionally, certain sports related injuries respond well to the increased circulation which massage brings to the site of injury.

Swedish massage is based on European folk massage, techniques from the Middle East, and knowledge of anatomy and physiology. One of the primary goals is to speed the venous return of unoxygenated and toxic blood from the extremities.

<u>Homeopathy</u> is system of medicine based on the principle that "like is healed by like." For example, if a substance produces cramping in a healthy individual, it may be used to alleviate cramps in someone already experiencing them.

<u>Naturopathy</u> is a practice arising from many differing cultural origins. Basic principles of naturopathy are based on the concept that the body is a self-healing organism. Naturopathic physicians enhance the body's own healing responses through noninvasive measures and health promotion. Naturopathy includes the use of nutrition, herbal or botanical medicine, homeopathy, Chinese medicine, physical medicine, exercise therapy, counseling

## Non-Traditional or Complementary Remedies and Therapies

and hydrotherapy.

### Other Mind / Body / Spirit Therapies and Treatments

**Aromatherapy** The therapeutic use of essential oils.

**Art & Color Therapy** The use of art, light, and color have been used since ancient times to evoke certain responses. Colors have an effect on moods and attitudes.

<u>Biofeedback</u> is a technique by which we can detect biological information from our own bodies.

**Body-Mind Centering** is an approach to movement training and analysis developed by Bonnie Bainbridge Cohen. The foundation of the work is the exploration of the major body systems (skeletal, muscular, organ, endocrine, nervous and fluid), to discover how each system can support and initiate movement, and how each contributes different qualities to our movement and touch. At its most fundamental level, BMC is the study of mind and its relationship to the body. According to the BMC approach, while the mind is the force which moves the body, the body can be used as a lever to work with the mind.

Craniosacral Therapy is a gentle, noninvasive technique which works with the client's natural self-corrective body mechanism. The craniosacral system consists of the bones of the skull, face and mouth, the dural membrane (surrounding the spinal cord and brain), and the sacrum. By feeling the subtle movement of these bones, the therapist can facilitate a release, which allows for greater symmetry and amplitude of the craniosacral system. The theory behind this is that it can affect the energy flow throughout the whole body, which is thought to affect a client's feeling of well-being as well as helping to release areas of pain.

<u>Feldenkrais Technique</u> Movement, which is intrinsic to our growth, is the vehicle Moshe Feldenkrais ingeniously used to improve organic learning. Organic learning is learning at our own rate, with playfulness and ease, and without judgment or boring repetitions. Gentle combinations of movements, guided by the teacher's touch in individual Functional Integration lessons and by verbal instructions in Awareness Through Movement classes, enhance ease of movement and flexibility.

**Hydrotherapy** Various ways in which water can be used therapeutically.

**Hypnotherapy** A commanding form of guided imagery.

<u>Imagery</u> is a form of human thought that employs pictures and symbols. Guided imagery is a therapeutic technique.

**Kinesiology** Applied kinesiology is the name given to a system of muscle testing.

**Light Therapy** The use of full spectrum light benefits.

**Magnet Therapy** is the use of magnets to redirect energy fields, which is felt by many to

### Non Traditional or Complementary Remedies and Therapies

relieve pain.

Manual Lymph Drainage MLD uses a precise, light and soothing massage technique developed by the Vodders in the 1930's in France. It is used to treat edema and sprains, post-surgery mastectomies, and paralysis. It is pleasant to receive, and promotes normal functioning of the lymph system. It stimulates parasympathetic responses, breaks pain cycles, and increases immunological reactions. Draining the connective tissues removes their metabolic wastes. MLD also tones the smooth muscles of the body. Scar tissue, burns, trauma myofibrocitis, and headaches are treated by this lightly pressure-pumping technique.

<u>Meditation</u> is the attempt to quiet one's mind in order to establish a state of hyper-awareness and peace.

Music Therapy aims to soothe, entrance and touch the deepest parts of our being.

Myofascial release The fascia is tough connective tissue which forms a 3-dimensional web throughout the entire body. When there is a binding-down or restriction in the fascia (due to trauma, posture, or inflammation), pain and dysfunction may result. By using the senses in his/her hands to discover this restriction, a therapist works to facilitate a release in hopes that a permanent, positive change in the body tissue takes place, which is thought to relieve excess pressure on nerves, blood vessels, muscles, and bones.

**Myotherapy** is a pain relief technique that alleviates muscle spasm and cramping. The therapist locates and deactivates trigger points, tender areas where muscles have been damaged from injuries, accidents, ailments, poor posture, or stress. Pressure is applied to trigger points. Then the muscles are gently stretched to complete the relaxation process. Myotherapy is felt to relieve pain and ease tightened muscles. People with acute or chronic muscle tension and the associated pain may benefit from this treatment.

**<u>Prayer</u>** Connecting, interacting or communicating with a creative force in or of the universe.

<u>Progressive Muscle Relaxation</u> is a guided form of contracting and relaxing muscle groups (in a head to toe fashion) that teaches patients how to consciously relax.

<u>Reflexology</u> treats various areas of the body through corresponding reflex points on the foot, stimulating energy to promote healing.

**Tai Chi** has been called meditation in motion. It consists of various form or movement sequences made up of postures connected in such a way that a continuous chain of movement occurs.

**Yoga** is a philosophy embracing every aspect of life-spiritual, mental, emotional and physical. It is a system of self-improvement.