PASCAS CARE

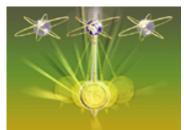
COMPLEMENTARY THERAPIES Volume 1















"Peace And Spirit Creating Alternative Solutions"

PASCAS FOUNDATION (Aust) Ltd ABN 23 133 271 593 Em: info@pascasworldcare.com Em: info@pascashealth.com

Pascas Foundation is a not for profit organisation

Queensland, Australia

www.pascasworldcare.com www.pascashealth.com

PASCAS INTRODUCTION:

Documents assembled by Pascas are provided for your individual assessment and exploration. The contents are sourced from a variety of avenues and publications. Every endeavour is made to determine that the contents are of the highest level of truth and veracity. At all times we ask that you go within yourself, to ascertain for yourself, how the contents resonate with you.

Pascas provides these notes and observations to assist us all in the development and growth of our own pathways and consciousness. Pascas does not hold these contents as dogma. Pascas is about looking within oneself. Much of what we are observing is new to us readers and thus, we consider that you will take on board that which resonates with you, investigate further those items of interest, and discard that which does not feel appropriate to you.

Kinesiological muscle testing, as developed by Dr David R Hawkins and quantified by his Map of Consciousness (MOC) table, has been used to ascertain the possible level of truth of documents. Such tested calibration levels appear within the document. We ask that you consider testing same for yourself. The technique and process is outlined within Pascas documents, such as Pascas Care – Energy Level of Food. From each person's perspective, results may vary somewhat. The calibration is offered as a guide only and just another tool to assist in considering the possibilities. As a contrast, consider using this technique to test the level of truth of your local daily newspaper.

Contents are not to be interpreted as an independent guide to self-healing. The information sourced herein is not from a doctor or doctors, and any information provided in this document should not be in lieu of consultation with your physician, doctor, or other health care professional. Pascas, nor anyone associated with this document, does not assume any responsibility whatsoever for the results of any application or use of any process, technique, compound or potion as described within this document.

The sources of contents are noted throughout the document. In doing so, we acknowledge the importance of these sources and encourage our readers to consider further these sources. Should we have infringed upon a copyright pertaining to content, graphics and or pictures, we apologise. In such cases, we will endeavour to make the appropriate notations within the documents that we have assembled as a service via our not for profit arm, to our interested community.

We offer all contents in love and with the fullness of grace, which is intended to flow to readers who join us upon this fascinating journey throughout this incredible changing era we are all experiencing.

Living Feelings First, John.

"Never can one man do more for another man than by making it known of the availability of the Feeling Healing process and Divine Love." JD

PASCAS HEALTH SANCTUARY COMPLEMENTARY THERAPIES



Complementary T	herapies	Page
Alternative Medicine – list of el Acupuncture Alexander Technique Aromatherapy Ayurveda Biofeedback Chelation Therapy Chiropractic Colour Therapy Diet Therapy Glandular Therapy – Bioterroris Guided Imagery Herbal Medicine Homeopathy Humour Therapy Hydrotherapy		4. 11. 17. 18. 24. 33. 38. 48. 69. 78. 80. 83. 91. 93. 104.
Imagery Light Therapy Massage Meditation Music Therapy Neuro Linguistic Programming Nutrition Pet Therapy Prayer & Spiritual Healing Reiki Shiatsu Spiritual Healing Stress Yoga	Volume 2 NLP within Volume 1 Volume 2	118. 122. 137. 150. 178. 180. 185. 202. 207. 217. 227. 9. 240. 279.

Holistic-online.com

Complementary Medicine

COMPLEMENTARY MEDICINE

Classification of Alternative Systems of Medical Practice

Office of **Alternative Medicine** of National Institutes of Health classifies the following complementary and alternative medical health care practices:

Acupuncture

Anthroposophically Extended Medicine

Ayurveda

Community-Based Health Care Practices

Environmental Medicine

Homeopathic Medicine

Latin American Rural Practices

Native American Practices

Natural Products

Naturopathic Medicine

Past Life Therapy

Shamanism

Tibetan Medicine

Traditional Oriental Medicine

Bioelectromagnetic Applications

Blue Light Treatment & Artificial Lighting

Electroacupuncture

Electromagnetic Fields

Electrostimulation & Neuromagnetic Stimulation Devices

Magnetoresonance Spectroscopy

Diet, Nutrition, Lifestyle Changes

Changes in Lifestyle

Diet

Gerson Therapy

Macrobiotics

Megavitamins

Nutritional Supplements

Herbal Medicine

Echinacea (purple coneflower) Ginger Rhizome



Ginkgo Biloba Extract
Ginseng Root
Wild Chrysanthemum Flower
Witch Hazel
Yellowdock

Manual Healing

Acupressure
Alexander Technique
Biofield Therapeutics
Chiropractic Medicine
Feldenkrais Method
Massage Therapy
Osteopathy
Reflexology
Rolfing
Therapeutic Touch
Trager Method
Zone Therapy

Mind / Body Control

Art Therapy
Biofeedback
Counselling
Dance Therapy
Guided Imagery
Humour Therapy
Hypnotherapy
Meditation
Music Therapy
Prayer Therapy
Psychotherapy
Relaxation Techniques
Support Groups
Yoga

Pharmacological & Biological Treatments

Anti-oxidizing Agents
Cell Treatment
Chelation Therapy
Metabolic Therapy
Oxidizing Agents (Ozone, Hydrogen Peroxide)





http://www.holistic-online.com/

Spiritual Healing

Spirituality involves the recognition and acceptance of a God beyond our own intelligence and with whom we can have a relationship. This God can provide an experience of inspiration, joy, security, peace of mind, and guidance that goes beyond what is possible in the absence of the conviction that such a power exists.

Spiritual healing is when energy is transmitted to the person who needs it. The treatment works on the body, mind and spirit, which are seen as one unit that must harmonize for good health. If a separate healer is involved, the healer will place the hand on the person being treated to channel the energy from the Higher Source. The spiritual healing can help mental and emotional problems and physical conditions such as a frozen shoulder.

What is spiritual healing?

The channelling of healing energy from its spiritual source to someone who needs it is called spiritual healing. The channel is usually a person, whom we call a healer, and the healing energy is usually transferred to the patient through the healer's hands. The healing does not come from the healer, but through him. On the other hand, you don't need a healer to take advantage of spiritual healing. You can pray.

The word "spiritual" refers to the divine nature of the energy, which healers agree comes from one external, invisible intelligent source. The healing energy from this source is available to all.

Healers see the body mind and spirit as one interdependent unit and believe all three must work in harmony to maintain positive health. Any problem – be it a broken leg or depression needs the power of healing to restore the balance of the whole person. It is felt that sickness often starts in the mind, or at the deeper level of the spirit, and it is often here that healing begins.

New Age and The Dawning of a New Era

New Age is a loose term that includes everything from self improvement programs to awareness of mind-body connections. The movement is growing by leaps and bounds.

Time magazine reported that in 1996, about 44 million Americans identified with the healing movement. It is estimated that Americans alone spend about US\$1.5 billion annually on books about spirituality and religion. About 42% of Americans have sought out alternative health care. So, there is no doubt that the movement is catching on.

"There is a hunger for being connected with a divine force. The hunger is not just for philosophy, but for experience," says James Redfield, author of 'Celestial Prophecy'.

"The consciousness I am describing – the perception of synchronisticity, mysterious coincidences – represent great opportunities to grow. That process works whether you are a brain surgeon or sacking groceries. Consciousness has the ability to break cycles of poverty."

Spirituality vs. Religion

Spirituality can be seen as being distinct from religion. Different world religions have proposed various doctrines and belief systems about the nature of a God and humanity's relationship with it. Spirituality, on the other hand, refers to the common experience behind these various points of view. It is an experience involving an awareness of and relationship with something that transcends your personal self as well as the human order of things. This "something" has been given various names ("God" being the most popular in Western Society) and defined in ways that are too numerous to count. We call it simply as the God. You can choose to define what that means for yourself in whatever way feels most appropriate. Your own sense of a God can be as abstract as "cosmic consciousness" or as down-to-earth as the beauty of the ocean or mountains. Even if you regard yourself an agnostic or atheist, you may get a sense of inspiration from taking a walk in the forest or contemplating a beautiful sunset. Or a small child's smile may give you a special sense of joy.

Dr. Herbert Benson of Harvard University and author of 'Relaxation Response' conducted scientific experiments to determine efficacy of prayer or mantra. Benson believed that there is no magic to the mantra. He taught people to meditate using the word *one* or any other phrase they felt comfortable. He studied Christians and Jews who pray regularly. He asked Catholics to use their mantra phrases such as, "Hail Mary, full of grace" or use the Jesus Prayer. Jews used the peace greeting, "Shalom" or "Echad," meaning one. Protestants used the first line of the Lord's Prayer, "Our father, who art in heaven," or "Lord is my shepherd," the opening of the twenty-third psalm. Initially, all these mantras worked equally well in invoking the relaxation response and stimulating the healthful physiological changes in the body as a result of it. But Benson also found that those who used the word one or similar simple phrases that had no particular spiritual meaning did not stick with the program whereas those who used prayers continued because of their belief. It has also been scientifically shown that to be effective, the person using the prayer of mantra has to have an unqualified faith that it will work. This is described by the scientists as intrinsic belief, characterized by profound spiritual commitment, devotion and quest for a truly transformed life. Thus, religious component in the spirituality is certainly very useful, and in fact may be needed, before the full benefits of spiritual healing can be realized.

There is much healing and benefit to be obtained by cultivating your spiritual life. A personal spiritual commitment is the most important ingredient. Spiritual awareness and growth can effect a transformation in your whole being. It can help you to develop a basic trust and faith that is unshakable. Scientists call this intrinsic belief.

Many have experienced major turnarounds in their condition as a result of cultivating their spirituality. They feel that developing a relationship with their God provided the moral support, courage, hope, and faith for them to follow through with their personal recovery program. It provided them with a sense that they are not alone in the universe, and that there is a source of guidance and support that is available at times of confusion and discouragement.

Specific Benefits of Developing Your Spirituality

Edmund Bourne, author of 'The Anxiety and Phobia Workbook,' has described a number of benefits to spirituality as it applies to healing emotional problems. Dr. Burke has personal experience of his patients benefiting from a deep spirituality. He has listed a number of benefits that are gained through spirituality. These are:

Security and Safety

Through developing a connection with God, you gain security through the conviction that you are not all alone in the universe, even at those times when you feel temporarily separated from other people. You feel increasingly safe as you come to believe that there is a source you can always turn to in times of difficulty. As the twenty third psalm says, "God is my shepherd," he will take care of me and won't let me get into trouble if I trust him. There is much security to be gained through the understanding that there is no problem or difficulty that cannot be resolved through the help of God.

Peace of Mind

Peace of mind is the result of feeling a deep, abiding sense of security and safety. The more reliance and trust you develop in God, the easier it becomes to deal without fear or worry with the inevitable challenges life brings. It is not that you give up your self or your will to such a power; rather you simply learn that you can "let go" and turn to God when you feel stuck with a problem in living and don't know how to proceed. Learning how to let go when solutions to problems aren't immediately apparent can go a long way toward reducing worry and anxiety in your life. Peace of mind is what develops in the absence of such anxiety.

Self-Confidence

As you develop a relationship with God, you come to realize that he has created you and hence he has found something good in you. You are part of the universe. You're good, lovable, and worthy of respect just by virtue of the fact that you're God's creation. This realization can improve the way you look at yourself and will help you to improve your ego and what you think of yourself. You are still inherently good and worthwhile. Your own judgments of yourself, however negative, do not ultimately count if you are a creation of the universe as much as everything else. As one person put it: "God doesn't make junk."

The Capacity To Give and Receive Unconditional Love

The most fundamental characteristic of God is that it offers you an experience of *unconditional love*. This is a kind of love which differs from romantic love or even ordinary friendship. It entails an absolute caring for the welfare of another without any preconditions. That is, no matter how another person appears or acts, you have compassion and care for them without judgment. As you develop a deeper connection with God, you come to experience greater degrees of unconditional love in your life. You feel your heart opening more easily to people and their concerns. You feel freer of judgment toward them or of making comparisons among them. Unconditional love shows up both in your increased capacity to give love to others and to experience more of it coming into your life. You begin to experience less fear and more joy in your life and help to inspire others to experience their own capacity for unconditional love. This kind of love also manifests itself through the experience of having everything you need in your life to get on with what you want to do.

Guidance

Developing a relationship with God will provide you with guidance for making decisions and solving problems. God has a universal wisdom that goes beyond what you can accomplish through your own intellect. In traditional religions this has been referred to as the "divine intelligence." Through connecting with God, you can draw upon this greater wisdom to help you resolve all kinds of difficulties. By learning to ask God for guidance, you'll be surprised to find that every sincere request sooner or later is answered. And the quality of that answer generally exceeds what you could have figured out through your own conscious intellect or will. Here, God is like your co-pilot. God is always available in the instant of need to those who have made a habit of waiting quietly before Him for insight and guidance.

Follow these guidelines for an effective relationship with God:

- 1. Be quiet, patient, and open before God.
- 2. Be confident that he will communicate his wishes and help you execute them.
- 3. Do not tempt God or make terms with Him. Gandhi said, "Not until we have reduced ourselves to nothingness, can we conquer the evil in us. God demands nothing less than complete self-surrender as the price for the only real freedom that is worth having. And when a man thus loses himself, he immediately finds himself in the service of all that lives. It becomes his delight and his recreation."
- 4. Be willing to accept what God provides. He knows best. "Thy will, not mine, be done." Have full trust in the wisdom of God.
- 5. Ask for God's help. Do not instruct him on what to do.
- 6. Let God speak to you through his Word. Read spiritual and religious books such as the Bible and learn about the rules of victorious living.

These are some of the characteristics that define a close relationship with God. All of them can significantly contribute to your personal healing process. The extent and sincerity of your commitment will determine the degree of personal healing you experience.

Outside Help: Healing Practitioners, Intercessory Prayers, etc.

Healers:

Healers believe that everyone has a healing mechanism that flows as an energy force around the body, mind and spirit to keep them in perfect order. Unfortunately, stress, an inadequate diet, a negative attitude and other adverse factors can block our healing mechanism so that it cannot function correctly and we get ill. Spiritual healing provides the energy needed to crank our own healing mechanism back into action. When a healer lays his hand on you, he acts as a conductor or channel for the healing energy which he believes has the "intelligence" to go where it is needed.

Healers say that all of us have the power to heal, if we choose to develop it. However, some do seem to have a healing gift.

Healing does not always work at a physical level; the illness may remain but the ability to cope with it improves. Sometimes it does not work at all. This may be because the sick person "blocks" the healing forces – some people subconsciously prefer to be ill. It may also be because we "need" to remain ill.

Healing is not just about living well, but also dying well. People healed when they are dying may die more peacefully.

Typically, to begin the treatment the healer will attune with the healing energy. Then he may scan your body, with his hands hovering just above you. This scanning is to take a reading of your body's energy levels and to locate areas of low or blocked energy where healing is needed. How long the healer spends on each area is determined by your body's needs. Generally, the session lasts about an hour. All healers work in this way, but some employ additional healing tools such as visualization, past lives therapy, aura healing or they may concentrate on using the "chakras" the seven main energy centres of the body.

During the treatment you may feel heat coming from the healer's hands, although some people feel a draught, a tingling sensation, pins and needles, or a feeling of fight-headedness. Afterwards, most people say they feel relaxed and peaceful, although you might feel thirsty or sleepy. Leave a few days or a week between sessions to give the healing time to work.

Intercessory Prayers:

Many Christians ask saints and others to intercede on their behalf. People pray for others. Your chance of healing can be improved substantially if you can get others to pray for you. The scientific evidence for the efficacy of such prayers is described elsewhere.

Which problems can Spiritual Healing help?

Spiritual healing can help with any problem, mental, physical or emotional. Healers are especially effective for musculo-skeletal problems, such as frozen shoulders, stiff necks and bad knees.

What Can You Do To Develop Your Spiritual Life

You can deepen your commitment to spirituality through any of the following means:

- 1. Regular participation in church or your preferred spiritually based organisation.
- 2. Regular reading of inspirational literature of your preference. It's good to do this at least once per day, either upon awakening, during your lunch break, or before retiring.
- 3. Regular practice of meditation.
- 4. Regular practice of prayer or spiritual affirmations.
- 5. Get help from others (Healing practitioners, intercessory prayer, etc.)
- 6. Join a prayer group or get involved in a 12-step program that is relevant to your needs. (The 12-step programs offer many people a well-conceived and effective approach for healing addictions. Although they began with Alcoholics Anonymous 50 years ago, they now include a wide range of programs such as Emotions Anonymous, Co-Dependents Anonymous, and so on. Consult your local chapter of the National Council on Alcoholism for a list of 12-step groups in your area.)

Live true to your feelings, and you ARE living true, not only to your own soul, but also true to God's soul. So doing your Healing by honouring all your feelings, IS living the will of God. And being fully Healed, IS living even more truly the Will of your Mother and Father.

WE ALL ARE BEING GUIDED HOME:

We need the Spirits of Truth of the Avonal Pair to Heal ourselves; then once Healed, (and for support (overshadowing) as well through your Healing), we need the Creator Pair, Mary Magdalene and Jesus' Spirits of Truth to see us through the Celestial spheres., while at all times embracing our Heavenly Mother and Father.

Until Mary and Jesus died and liberated their Spirits of Truth, no one from any of the worlds could leave Nebadon, because no one knew the way to do so. Nebadon is our local universe containing some 3.8 million inhabited physical worlds and their associated spirit worlds.

When we embrace the truths Mary and Jesus are revealing, and start to do our Feeling Healing, or with Divine Love, Soul Healing, we are then freeing ourselves up from our parental and self control.

Thus our journey to Paradise, to the home of our Heavenly Parents, is of our choosing as to when we progress, however, there is only one way:

HUM: Humanity is to ascend. We are self contained. Our soul is always in truth and perfect at all times. By living true to ourself, true to our feelings, we are living true to God. It's that simple.

We are to recognise that being engaged and dominated by our mind is the wrong way for us to evolve and grow in truth. We are to discard the mind enslavement that has been imposed upon as by all of our parents. We are to express our feelings, both good and bad and free ourselves of the indoctrination that humanity has embraced worldwide. Live true to your feelings, and you ARE living true, not only to your own soul, but also true to God's soul. So doing your Healing by honouring all your feelings, IS living the will of God. And being fully Healed, IS living even more truly the Will of our Mother and Father.

AVO: We are to embrace the truths and guidance of the Avonal Pair through their Spirits of Truth. It is the Avonal Pair's guidance that will lead us through our Feeling Healing, and with Divine Love, we will be able to ascend through the 7 spirit Mansion Worlds and enter the Celestial Heavens where we also interact with other world's spirits.

J&M: We are also to embrace the truths and guidance of the Paradise Pair, Mary and Jesus, who will then lead us through the 3 Celestial Heavens that are aligned with Earth, and then further on through Nebadon where we will then depart beyond on towards Paradise.

M&F: Beyond the universal zone of Nebadon, we will be guided by our Heavenly Mother and Father onwards through the universes to Paradise where we will be welcomed by them, home for us all, as we are all Children of God.



M&F



J&M



AVO



Acupuncture has been a major part of primary healthcare in China for the last 5,000 years. It is used extensively for a variety of medical purposes ranging from the prevention and treatment of disease, to relieving pain and anesthetizing patients for surgery. As in many oriental medicine practices, the emphasis of acupuncture is on prevention. In traditional Chinese medicine, the highest form of acupuncture was given to enable you to live a long, healthy life.

The earliest written account of acupuncture is found in the Nei Jing (The Yellow Emperor's Classic of Internal Medicine). This document is believed to be from around 200 BC and is one of the oldest comprehensive medical text book. Pien Chueh, a famous physician of the fourth century BC, used stone acupuncture needles, moxibustion and herbs to bring a prince out of a coma. The Chinese still celebrate his birthday every year on April 28th.

What is acupuncture?

Acupuncture literally means 'needle piercing," the practice of inserting very fine needles into the skin to stimulate specific anatomic points in the body (called **acupoints**) for therapeutic purposes. Along with the usual method of puncturing the skin with the fine needles, the practitioners also use heat, pressure, friction, suction, or impulses of electromagnetic energy to stimulate the points. The acupoints are stimulated to balance the movement of energy (qi) in the body to restore health.

Acupuncture involves stimulating. In the past 40 years acupuncture has become a well-known, reasonably available treatment in developed and developing countries. Acupuncture is used to regulate or correct the flow of qi to restore health.

To really understand how acupuncture works, it is necessary to become familiar with the basics of Chinese philosophy. The philosophies of the Dao or Tao, yin and yang, the eight principles, the three treasures and the five elements are all fundamental to traditional Chinese acupuncture and its specific role in helping to maintain good health and a person's well-being.

The philosophy of the Dao

Dao is often described as "the path" or "the way of life." Just as its counterpart in ancient India, Ayurveda, the laws of the Dao advocate moderation, living in harmony with nature and striving for balance. Ancient Chinese believed that moderation in all areas of life is essential to a long and fruitful life. We are "fuelled" by three treasures: Qi or Chi (pronounced chee), Shen, and Jing. Chi is energy or vital substance, Shen is the spirit, and Jing is our essence. Qi is both the life force (or vital substance) and the organizing principle flowing through all things and establishing their interconnectedness. Chinese believe that every living thing (both human and non-human) has qi. In the body, qi is found in the heart and lungs in circulating blood and oxygen. Shen is the treasure that gives brightness to life and is responsible for consciousness and mental abilities. Sometimes it is compared to soul. Within the individual shen is manifested in personality, thought, sensory perception, and the awareness of self. Jing is responsible for growth, development and reproduction. Jing represents a person's potential for

development. (comparable to western concept of genetical inheritance). Chinese believed that everyone is born with a finite amount of Jing. As we go through life, we lose or consume our Jing little by little. Once we lose Jing, it cannot be replaced. It is gone for ever. We lose Jing if we live a wrong or careless living. But Jing can be preserved if we live in moderation. Acupuncture can reduce the loss of Jing.

According to the philosophy of Dao, the role of the acupuncturist is to restore your health and enable you to live a little closer to the Dao, thus preserving your Jing and living to a ripe old age. A number of factors can contribute to the depletion of Jing. Living a life of excess, drinking too much, excessive emotional reactions, working too hard, inappropriate sexual behaviour, etc. all were believed to result in the depletion of Jing. Balance in all things was considered the key to good health and long life.

In order to increase their understanding of the Dao, the Chinese developed two concepts that together form the basis of Chinese thought: yin and yang and the more detailed system of the five elements.

Yin and Yang

The idea of harmony and balance are also the basis of yin and yang. The principle that each person is governed by the opposing, but complementary forces of yin and yang, is central to all Chinese thought. It is believed to affect everything in the universe, including ourselves.



Yin-Yang Symbol (Tai Chi symbol)

Traditionally, yin is dark, passive, feminine, cold and negative; yang is light, active, male, warm and positive. Another simpler way of looking at yin and yang is that there are two sides to everything – happy and sad, tired and energetic, cold and hot. Yin and yang are the opposites that make the whole. They cannot exist without each other and nothing is ever completely one or the other. There are varying degrees of each within everything and everybody. The tai chi symbol, shown above, illustrates how they flow into each other with a little yin always within yang and a little yang always within yin. In the world, sun and fire are yang, while earth and water are yin. Life is possible only because of the interplay between these forces. All of these forces are required for the life to exist. See the table below to understand the relationship between yin and yang.

Yin Forces/Aspects	Yang Forces/Aspects
Dark	Light
Moon	Sun
Water	Fire
Passive	Active
Descending	Ascending
Female	Male
Contracting	Expanding
Cold	Hot
Winter	Summer
Interior	Exterior
Heavy	Light
Bone	Skin
Front	Back
Interior of Body	Exterior of body

The yin and yang is like a candle. Yin represents the wax in the candle. The flame represents the yang. Yin (wax) nourishes and supports the yang (flame). Flame needs the wax for its existence. Yang consumes yin and, in the process, burns brightly. When the wax (yin) is gone, the flame is gone too. Ying is also gone at that time. So, one can see how yin and yang depend on each other for their existence. You cannot have one without the other.

The body, mind and emotions are all subject to the influences of yin and yang. When the two opposing forces are in balance we feel good, but if one force dominates the other, it brings about an imbalance that can result in ill health.

One can compare the concept of yin and yang to the corresponding principle of tridoshas in Ayurveda, the ancient remedy from India. Ayurveda proposes that every person has vata, pitta and kapha. When these are balanced, there is the state of perfect health. When there are imbalances then there is disease.

One of the main aims of the acupuncturist is to maintain a balance of yin and yang within the whole person to prevent illness occurring and to restore existing health. Acupuncture is a yang therapy because it moves from the exterior to the interior. Herbal and nutritional therapies, on the other hand, are yin therapies, as they move from the interior throughout the body. Many of the major organs of the body are classified as yin-yang pairs that exchange healthy and unhealthy influences.

Yin and yang are also part of the eight principles of traditional Chinese medicine. The other six are: cold and heat, internal and external, deficiency and excess. These principles allow the practitioner to use yin and yang more precisely in order to bring more detail into his diagnosis.

The five elements

The **yin and yang philosophy** was further refined into the system of the five elements to gain a deeper understanding of how the body, mind and spirit work.

The microcosm of the body is linked to the universe and is affected by the daily and seasonal cycles of nature. (Think about the seasonal affective disorder which manifests itself in winter or when the light is not sufficient). The individual and the world are changing all the time. But Chinese believe that these changes are occurring in certain order and in cycles. (We can think about these like our economic cycles or agricultural cycles. A period of growth is always followed by a period of stagnation or unemployment. In the stock market, a bull market is always followed by a bear market etc.) In the same way, a seed planted in spring blooms in summer, seeds itself in late summer to autumn, dies in winter, and a new seed grows again in spring. It is part of a never-ending cycle and each phase has its role to play in maintaining the balance of nature. The same process of change occurs within the body. Cells grow and die to make way for new cells, and body systems depend upon each other in a similar way to the seasons, working together to ensure the balanced functioning of the body, mind and spirit and the healthy flow of life through the whole person.



Representation of the Five Elements

Chinese philosophy recognizes five distinct elements of cyclical change called water, wood, fire, earth, and metal. These five elements can be related to our four seasons (with a fifth late summer season) as shown in the table below. The elements can also be related to different colours, emotion, taste, voice and various organs. These can also be related to the selection of food and herbs. Notice the

correspondence between the Chinese philosophy and the underlying Indian philosophy, which also classifies everything in the universe under earth, water, fire, air, and ether.

Season	Element	Yin- Yang Phase	Yin Organ	Yang Organ	Energy Pattern	Colour	Emotion	Taste	Voice
Winter	Water	Full yin	Kidney	Urinary bladder	Conserved	Black	Fear	Salty	Groans
Spring	Wood	New yang	Liver	Gallbladder	Expansive	Green	Anger	Sour	Shouts
Summer	Fire	Full yang	Heart	Small Intestine	Culmination, completion	Red	Joy	Bitter	Laughs
Late Summer	Earth	yin- yang balance	Spleen	Stomach	Balance	Yellow	Sympathy	Sweet	Sings
Autumn	Metal	New yin	Lungs	Large Intestine	Contraction and accumulation	White	Grief sadness	Pungent	Weeps

Each person's physical and mental constitution can be described as a balance of the elements in which one or more may naturally dominate. The proportion of the elements in a person determines his or her temperament. Oriental medicine considers the ideal condition as one in which all the five elements are in balance or in harmony. Wood is said to be the mother of fire and the son of water. (Water allows wood to grow, wood provides fuel for the fire). Using these relationships one can describe all possible yin-yang imbalances within the body. The thrust of five element diagnosis is to isolate and treat the imbalanced element, because an imbalanced element is like a weak link in your energetic chain that can undermine the strength of your mind, body and spirit.

How the Five Elements are Manifested Internally and Externally

Element	Universe	Individual	
Wood	Growing, flourishing, rooted yet pushing upward	Striving, controlling, flexible strength, self-assured	
Earth	Productive, fertile	Solid, stable, reliable, tenacious, grounded	
Metal	Hard, structured, symmetric	Organized, substantial, strong, durable	

Fire	Dry, hot, ascending	Dynamic, sparkling, enthusiastic
Water	Wet, cool, descending	Flowing, adaptable, pliant







By living true to ourselves, true to our feelings, we are living true to God. It's that simple.



Alexander Technique

It is now generally accepted that there is a connection between anxiety states and muscle tension. In particular, chronically contracted muscles are associated with mental and emotional imbalances. The Alexander Technique enables a redistribution of muscle tension throughout the body, that can lead to an improvement in mental functioning. It may also teach a person how to react to life's challenges and stresses in a positive way, avoiding overreactions and distress.





What is Aromatherapy?

Aromatherapy means "treatment using scents". It is a holistic treatment of caring for the body with pleasant smelling botanical oils such as rose, lemon, lavender and peppermint. The essential oils are added to the bath or massaged into the skin, inhaled directly or diffused to scent an entire room. Aromatherapy is used for the relief of pain, care for the skin, alleviate tension and fatigue and invigorate the entire body. Essential oils can affect the mood, alleviate fatigue, reduce anxiety and promote relaxation. When inhaled, they work on the brain and nervous system through stimulation of the olfactory nerves.

The essential oils are aromatic essences extracted from plants, flowers, trees, fruits, bark, grasses and seeds with distinctive therapeutic, psychological, and physiological properties, which improve and prevent illness. There are about 150 essential oils. Most of these oils have antiseptic properties; some are antiviral, anti-inflammatory, pain-relieving, antidepressant and expectorant. Other properties of the essential oils which are taken advantage of in aromatherapy are their stimulation, relaxation, digestion improvement, and diuretic properties. To get the maximum benefit from essential oils, it should be made from natural, pure raw materials. Synthetically made oils do not work.

Aromatherapy is one of the fastest growing fields in alternative medicine. It is widely used at home, clinics and hospitals for a variety of applications such as pain relief for women in labour pain, relieving pain caused by the side effects of the chemotherapy undergone by the cancer patients, and rehabilitation of cardiac patients.

Aromatherapy is already slowly getting into the mainstream. In Japan, engineers are incorporating aroma systems into new buildings. In one such application, the scent of lavender and rosemary is pumped into the customer area to calm down the waiting customers, while the perfumes from lemon and eucalyptus are used in the bank teller counters to keep the staff alert.

History of Aromatherapy

Aromatherapy had been around for 6,000 years or more. The Greeks, Romans, and ancient Egyptians all used aromatherapy oils. The Egyptian physician Imhotep recommended fragrant oils for bathing, massage, and for embalming their dead nearly 6,000 years ago. Imhotep is the Egyptian god of medicine and healing. Hippocrates, the father of modern medicine, used aromatherapy baths and scented massage. He used aromatic fumigations to rid Athens of the plague.

The modern era of aromatherapy is dawned in 1930 when the French chemist Rene Maurice Gattefosse coined the term aromatherapy for the therapeutic use of essential oils. He was fascinated by the benefits of lavender oil in healing his burned hand without leaving any scars. He started investigating the effect of other essential oils for healing and for their psychotherapeutic benefits.

During world war II, the French army surgeon Dr. Jean Valnet used essential oils as antiseptics. Later, Madame Marguerite Maury elevated aromatherapy as a holistic therapy. She started prescribing essential oils as remedy for her patients. She is also credited with the modern use of essential oils in massage.

Aromatherapy works the best when it works on the mind and body simultaneously.

How Does Aromatherapy Work?

Essential oils stimulates the powerful sense of smell. It is known that odours we smell have a significant impact on how we feel. In dealing with patients who have lost the sense of smell, doctors have found that a life without fragrance can lead to high incidence of psychiatric problems such as anxiety and depression. We have the capability to distinguish 10,000 different smells. It is believed that smells enter through cilia (the fine hairs lining the nose) to the limbic system, the part of the brain that controls our moods, emotions, memory and learning.

Studies with brain wave frequency has shown that smelling lavender increases alpha waves in the back of the head, which are associated with relaxation. Fragrance of Jasmine increases beta waves in the front of the head, which are associated with a more alert state.

Scientific studies have also shown that essential oils contain chemical components that can exert specific effects on the mind and body. Their chemistry is complex, but generally includes alcohols, esters, ketones, aldehydes, and terpenes. The effect of these chemical components are summarized in the accompanying table.

Name of the chemical component	Properties of the chemical component	Essential oils that contain the chemical
Aldehydes	anti-inflammatory, calming, sedative and anti-viral.	Characteristic lemon-like smell, such as lemon grass, lemon balm, citronella, eucalyptus
Alcohols	bactericidal (kills bacteria), stimulant, energizing, vitalizing, antiviral, diuretic. Our pancreas produce 32 kinds of alcohol for use in human metabolism.	Rose, petitgrain, rosewood, peppermint, myrtle, tea tree, sandalwood, patchouli, and ginger
Phenols	strongly bactericidal, tonic, stimulates immune system, invigorating, warming. Can produce slight liver toxicity if taken high doses for extended periods of time. Used in lip balms and cough drops.	Clove, cinnamon, thyme, oregano, savoury, cumin.
Cetone (Ketones)	wound healing, mucolytic (eases the secretion of	Camphor, rosemary, sage,

	mucous), stimulates new cell growth. Used as a nail polish.	eucalyptus globulus and hyssop
Terpenes	Very stimulating, potential skin irritants, antiviral properties.	Lemon, orange, bergamot, black pepper, pine oils, nut meg and angelica.
Sesquiterpenes	anti-phlogistic (moves fluids), anti-inflammatory, sedative, anti-viral, anti-carcinogenic, bacteriostatic and immune stimulant	Blue chamomiles, immortelle, tansy, yarrow and tagetes.
Esters	anti-fungal, sedative, calming, spasmolytic, fungicidal, anti-inflammatory.	Roman chamomile, lavender, clary sage, petitgrain, bergamot.
Lactones (part of ester group)	anti-inflammatory, mucolitic	arnica, elecampane
Ethers	harmonizing to the nervous system. antiseptic, stimulant, expectorant (increases secretions), spasmolytic, and diuretic.	Cinnamon, clove, anise, basil, tarragon, parsley, and sassafras.

Each essential oil contains as much as 100 chemical components, which together exert a strong effect on the whole person. Depending on which component is predominating in an oil, the oils act differently. For example, some oils are relaxing, some soothes you down, some relieves your pain, etc. Then there are oils such as lemon and lavender, which adapt to what your body needs, and adapt to that situation. (These are called "adaptogenic"). The mechanism in which these essential oils act on us is not very well understood. What is understood is that they affect our mind and emotions. They leave no harmful residues. They enter into the body either by absorption or inhalation.

A fragrance company in Japan conducted studies to determine the effects of smell on people. They have pumped different fragrances in an area where a number of keyboard entry operators were stationed and monitored the number of mistakes made as a function of the smell in the air. The results were as follows:

- When exposed to lavender oil fragrance (a relaxant), the keyboard typing errors dropped 20 percent.
- When exposed to jasmine (an uplifting fragrance), the errors dropped 33 percent
- When exposed to lemon fragrance (a sharp, refreshing stimulant), the mistakes fell by a whopping 54 percent!

Which Problems can Aromatherapy Help? Results of Clinical Studies

Aromatherapy is particularly effective for stress, anxiety, and psychosomatic induced problems, muscular and rheumatic pains, digestive disorders and women's problems, such as PMS, menopausal complaints and postnatal depression. Here is a summary of the results from clinical studies:

Behaviour

Considerable evidence exists that fragrant compounds have a profound effect on our mind and behaviour. Animal studies have found that hyperexcited mice (as a result of consuming a large quantity of caffeine) was calmed by the aroma of lavender, sandalwood, and other oils sprayed into their cages. The same mice were found to become very irritable when exposed to the aroma of orange terpines, thymol, and some other substances. These oils were all detected in their bloodstream after about an hour.

Sleep

In a study reported in the British Medical Journal Lancet, elderly patients slept "like babies" when a lavender aroma was wafted into their bedrooms at night. These patients had complained of difficulty falling asleep and had to take sleeping pills to get sleep prior to the aromatherapy.

Postpartum discomfort

In a double blind study, 635 women applied lavender oil to their perineal area (part of the body between the vagina and the rectum) after child birth. The women reported a distinct improvement between the third and fifth day. (The discomfort is the worst during this time for patients in the control group.)

Colds

It has been well established that chicken soup is good for cold (both historically and scientifically). Studies were conducted to find out whether the effect was due to the action of the hot steam on the lining of the nostrils or whether the aroma of the chicken soup has anything to do with it. The results indicated that chicken soup was more effective than the steam indicating the effectiveness of the aroma.

Stress

In a study conducted at the Memorial Sloan-Kettering Hospital in New York, patients undergoing magnetic resonance imaging (MRI) reported 63 percent less claustrophobic after getting exposed to the aroma of vanilla. There was no change in their heart rate. Obviously, the aroma reduced their anxiety probably by the pleasant memories evoked by the vanilla aroma or by some other physiological response.

In another study, 122 patients who were in an intensive care unit, reported feeling much better when aromatherapy was administered with the oil of lavender (compared to when they were simply given a massage or allowed to rest.) No changes in the patients who were given aromatherapy was observed in the blood pressure, respiration, or heart rate. As we mentioned before, Japanese have reported less mistakes by keypunch operators when exposed to fragrance.

Male Sexual Response

Circulation to the male sexual organ was found to have improved substantially by treatment with liquorice or lavender with pumpkin pie. Doughnut with black liquorice was also very effective. Men who are considered the most sexually active responded well to lavender, cola, and oriental spice; older

males preferred the fragrance of vanilla. These studies prove that aromatherapy is an effective therapy for the treatment of male impotence from the blood vessel disease or from psychogenic factors.

Safety Issues:

If used as recommended, and under the care of a qualified practitioner, aromatherapy is very safe. Please remember that essential oils are very concentrated. Do not use too much. (Too much is not better in case of essential oils.) Also, please be wary of any allergies people have to essential oils. (Try on a small spot to see whether there is any allergic reactions before exposing the whole body). Caution is particularly recommended for patients who are pregnant, have allergy, high blood pressure or epilepsy. Be careful with young children or babies. If you accidentally spill the essential oils on your skin or eye, wash it off immediately with whole milk. Milk with some fat in it is best for reducing irritation and removing the oil actually in the eye. You may also use olive oil or other vegetable oil to resolve any issues if experiencing a burning sensation which would be possible with oils like peppermint. Watch out for inflamed skin if you use essential oils. If you consume the oil by accident, drink lot of milk, eat soft bread, and go to the nearest poison control centre for appropriate action.

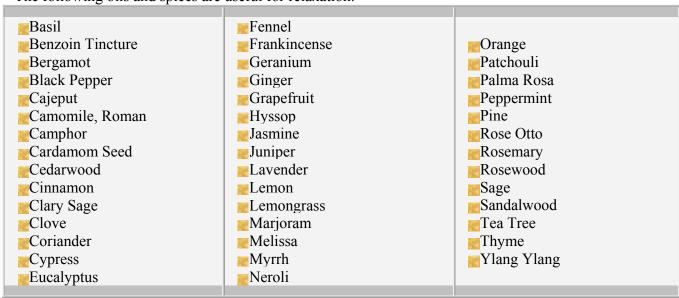
Oral consumption of aromatic oils are strongly discouraged unless you are under the care and supervision of an experienced practitioner. Many of these essential oils are very toxic. You should not apply the undiluted essential oil on your body as these are very concentrated and you may experience discomfort. The exception to this is lavender oil which can be applied safely in the undiluted form for burns and insect bites.

It is a very good idea to keep your eyes closed while inhaling the aromatic oil. This helps build up your imagery which enhances the effect of the essential oil. It also prevents the "fumes" from irritating the eyes at close range. Don't apply any oils close to your eyes.

Certain oils such as mint oil causes insomnia. Do not use it at night (if you want go to sleep.)

Essential Oils for Relaxation

The following oils and spices are useful for relaxation.



Ayurveda Holistic-online.com

Introduction

Basis for Ayurvedic Philosophy Uniqueness of Individuals

Harmony With The Nature and Developing

Perfect Health

Human Body – A Self Correcting

Mechanism and Balance The Concept of Self How Do We Get Sick? The Five Great Elements

The Senses Like And Unlike Concept of Tri-Dosha

■Vata ■Pitta ■Kapha

Balanced Tridosha means a Healthy Person

Concept of Prakruti and Vikruti Key Concepts of Ayurveda

Digestion – The Cornerstone of Health

Agni: Your Digestive Fire

Ojas: The Substance That Maintains Life

Ama – Toxins

Malas: Waste Products Prana: The Life Force Concept of Taste

Effects of The Six Tastes

Sweet
Sour
Salty
Pungent
Bitter
Astringent

Using Tastes To Improve Our Health How Tastes Affect The Doshas **Ayurvedic Treatments**

Panchakarma.

Steps in Panchakarma.

Pretreatment

Therapeutic vomiting (Vamana)

Purgation Therapy Enema (Basti)

Nasal Administration – Nasya Blood Letting (Rakta Moksha) Sweat Treatments (swedana) Oil Massage (abhiyanga)

Purwakarma

Samana (herbal remedies)

Methods of Ayurvedic Diagnosis

Pulse Diagnosis Tongue Diagnosis Facial Diagnosis

Lip Diagnosis (OSTHA)

Nail Diagnosis Eye Diagnosis Diagnostic Tests

Diagnostic Test for Vikruti #1 Diagnostic Test for Vikruti #2 Diagnostic Test for Prakruti #1 Diagnostic Test for Prakruti #2

Ayurveda for Healing Diseases/Conditions

Safety of Ayurveda

Effectiveness: Clinical Studies

Guest Article:

Ayurveda: The Ancient Art of Cure and a

Beautiful Art of Living By Dr. Annie John

Application of Ayurveda: Balancing Doshas

Six Steps to Get Back To Good Health (Balanced Doshas)
Classification of Various Foods in Ayurveda (Dosha, Taste, Digestive effect etc.)

Vata

Characteristics of Vata Types Signs of Vata Dosha Imbalance General Tips on Health and Wellness For Vata Types A Food Plan to Balance Vata Dosha

Pitta

Characteristics of Pitta Types
Signs of Pitta Dosha Imbalance
General Tips on Health and Wellness For Pitta Types
A Food Plan to Balance Pitta Dosha

Kapha

Characteristics of Kapha Types Signs of Kapha Dosha Imbalance General Tips on Health and Wellness For Kapha Types A Food Plan to Balance Kapha Dosha

Basis for Ayurvedic Philosophy

Ayurveda is applicable to every living thing, as implied by its name, the science of life. Vedic sciences attribute life to more things than we normally do – the things such as air, wind, fire, the earth, planets, stars, etc. are all thought to possess conscience like living beings.

The basic premise of Ayurveda is that the entire cosmos or universe is part of one singular absolute. Everything that exists in the vast external universe (macrocosm), also appears in the internal cosmos of the human body (microcosm). The human body consisting of 50-100 million cells, when healthy, is in harmony, self-perpetuating and self-correcting just as the universe is. The ancient Ayurveda text, Charaka, says, "Man is the epitome of the universe. Within man, there is as much diversity as in the world outside. Similarly, the outside world is as diverse as human beings themselves." In other words, all human beings are a living microcosm of the universe and the universe is a living macrocosm of the human beings.

Basis For Ayurvedic Philosophy

Uniqueness of Individuals

Ayurveda views each and every person as unique, with a unique mind-body constitution and a unique set of life circumstances, all of which must be considered in determining either natural healing approaches or recommendations for daily living. This view is in alignment with the modern science which views individuals as unique in the universe with a unique DNA.

According to Ayurveda, because we each have a unique constitution, our health prescription must be unique to us. This means that in order to be healthy, you need to eat certain foods that are beneficial for your body type and stay away from others. Your exercise program must be personally suitable as well.

Your constitution determines very much about you – your body, your personality, even how you relate to other people. Understanding it lets you know what you need in order to be healthy.

Harmony With The Nature and Developing Perfect Health

The theoretical side of Ayurveda provides insights into how to live one's life in harmony with nature and natural laws and rhythms. Its practical side – specifically its guidelines for an intelligently regulated diet and daily routine, its techniques for stress management, and its exercises for increased fitness and alertness-help us take control of our lives and develop radiant health.

The central goal of Ayurveda is nothing less than a state of perfect health, for the individual and for society and the environment as well, in which every man and woman is inwardly in balance and outwardly in harmony with the environment and the laws of nature.

According to Ayurveda, nature is permeated by intelligence. Intelligent laws govern the growth of all living things; kittens grow into cats, acorns into oak trees. Indeed, laws of nature regulate everything, from the tiny world of whirling atoms to the huge, enormous world of galaxies.

Human Body as a Self Correcting Mechanism and Balance

The human body is part of nature, as we discussed before as a microcosm of the universe, and when it runs perfectly, as it was designed to run, it can be perfectly healthy. It is trying to be perfectly healthy all the time, using its innate self-healing, self-regulating ability as it strives for a perfect homeostatic balance. But we repeatedly interfere.

Nature has set us up with all the equipment we need to be perfectly healthy. Health is our natural state, and ill health is unnatural. Every day our systems are exposed to literally millions of bacteria, viruses, allergens, even carcinogens, and yet our immune system has the intelligence and skill to deal with all those invaders and keep us healthy. However, when stress, inadequate nutrition, or just fatigue, weaken the immune system, those same invaders may produce disease.

Every second the body is adjusting to countless thousands of changing parameters, keeping us in homeostatic balance. No matter what comes along to upset the balance, the body knows its own nature, knows what ideal temperature it should be and the correct chemistry it needs to maintain, and keeps referring back to that blueprint to maintain proper balance.

The Concept of Self

The **Self**, as this inner dimension of our nature is called in Ayurveda, is the central point of our being, the hub of the wheel. It is the true inner centre of our diversified lives. Thought, feelings, speech, action, and relationships all originate here, deep within the personality. The whole person-and the whole field of interpersonal behaviour-can be spontaneously enhanced by the process of **self-referral**, or looking within to experience the Self. This is analogous to the natural process by which all the branches, leaves, flowers, and fruit of a tree can be simultaneously nourished and enlivened by watering the root.

The Self can be directly experienced. Those who do experience it find it to be deeply peaceful, yet a reservoir of creativity, intelligence, and happiness that spills over into all phases of living.

How Do We Get Sick?

Ayurveda holds that specific disease conditions are symptoms of an underlying imbalance. It does not neglect relief of these symptoms, but its main focus is on the big picture: to restore balance and to help you create such a healthy lifestyle that the imbalance won't occur again.

Living in health and balance is the key to a long life free from disease.

Perhaps the most important lesson Ayurveda has to teach is that our health is up to us. Every day of our lives, every hour of every day, we can, and do, choose either health or illness. When we choose wisely, nature rewards us with health and happiness. When we persistently choose unwisely, nature, in her wisdom, eventually sets us straight: She makes us sick and gives us a chance to rest and rethink our choices.

The Five Great Elements

Ayurveda believes that everything in this universe is made up of five great elements or building blocks. These are earth, water, fire, air, and ether.

Earth represents the solid state of matter. It manifests stability, permanence, and rigidity. In our body, the parts such as bones, teeth, cells, and tissues are manifestations of the Earth. Earth is considered a stable substance.

Water characterizes change and represents the liquid state. Water is necessary for the survival of all living things. A large part of the human body is made up of water. Our blood, lymph, and other fluids move between our cells and through our vessels, bringing energy, carrying away wastes, regulating temperature, bringing disease fighters, and carrying hormonal information from one area to another. Water is a substance without stability.

Fire is the power to transform solids into liquids, to gas, and back again. In other words, it possess power to transform the state of any substance. Within our bodies, the fire or energy binds the atoms together. It also converts food to fat (stored energy) and muscle. Fire transforms food into energy. It creates the impulses of nervous reactions, our feelings, and even our thought processes. Fire is considered a form without substance.

Air is the gaseous form of matter which is mobile and dynamic. Within the body, air (oxygen) is the basis for all energy transfer reactions. It is a key element required for fire to burn. Air is existence without form.

Ether is the space in which everything happens. It is the field that is simultaneously the source of all matter and the space in which it exists. Ether is only the distances which separate matter. The chief characteristic of ether is sound. Here sound represents the entire spectrum of vibration.

Every substance in our world is made up of these five substances. All substances can be classified according to their predominant element. For example, a mountain is predominantly made up of earth element. A mountain also contain water, fire, air and ether. But these elements are very small compared to the Earth. So, its classification is the earth.

Ayurveda defines a human as the assemblage of the five great elements plus the "immaterial self."

The Senses

The five elements manifest in the functioning of the five senses of man. This allows the person to perceive the external environment in which he or she lives. They are also related, through the senses, to five actions expressing the functions of the sensory organs.

The basic senses and their relationship to the five elements are shown below:

Element	Senses	Sense Organ	Action	Organ of Action
Ether	Hearing	Ear	Speech	Tongue, vocal cords, mouth
Air	Touch	Skin	Holding	Hand
Fire	Vision	Eye	Walking	Feet
Water	Taste	Tongue	Procreation	Genitals
Earth	Smell	Nose	Excretion	Anus

Like And Unlike

Anything that enters our body (microcosm) can exert three possible effects on the organism.

- It can act as food. This nourishes the organism
- It can act as medicine. This balances the organism
- It can act as poison. This disturbs the organism.

The five elements may exert one, two, or all three of these effects. The rule that governs the interaction between the environment and the organism is the Law of Like and Unlike. Like increase like. Unlike decreases like.

For example, when you lie in full sun, your body temperature goes up. Similarly, when you take bath in cold water, your body temperature goes down. Everything you experience, food, medicine, or poison, increases like parts of your microcosm and decreases those parts that are unlike it. Similarly, thought also enters your microcosm. Thought can be positive or negative and will influence your being. Goods thoughts cheer you up. Bad thoughts will poison you and decrease your good feelings.

Knowing what is good and what is not so good for your personal self enables you to make informed choices in your life. Right thoughts and attitudes actually induce prosperity. Evil thoughts and bad deeds will not result in prosperity, but to the ultimate ruin of the microcosm.

Concept of Tri-Dosha

In Ayurvedic philosophy, the five elements combine in pairs to form three dynamic forces or interactions called doshas. Dosha means "that which changes." It is a word derived from the root dus, which is equivalent to the English prefix 'dys', such as in dysfunction, dystrophy, etc. In this sense, dosha can be regarded as a fault, mistake, error, or a transgression against the cosmic rhythm. The doshas are constantly moving in dynamic balance, one with the others. Doshas are required for the life to happen. In Ayurveda, dosha is also known as the governing principles as every living thing in nature is characterized by the dosha.

Dosha	Related Elements
Vata	Air and Ether
Pitta	Fire and Water
Kapha	Water and Earth

The three active doshas are called Vata, Pitta and Kapha.

Vata is a force conceptually made up of elements ether and air. The proportions of ether and air determine how active Vata is. The amount of ether (space) affects the ability of the air to gain momentum. If unrestricted, as in ocean, air can gain momentum and become forceful such as a hurricane.

Vata means "wind, to move, flow, direct the processes of, or command." Vata enables the other two doshas to be expressive. The actions of Vata are drying, cooling, light, agitating, and moving.

Vata governs breathing, blinking of the eyelids, movements in the muscles and tissues, pulsations in the heart, all expansion and contraction, the movements of cytoplasm and the cell membranes, and the movement of the single impulses in nerve cells. Vata also governs such feelings and emotions as freshness, nervousness, fear, anxiety, pain, tremors, and spasms. The primary seat or location of the Vata in the body is the colon. It also resides in the hips, thighs, ears, bones, large intestine, pelvic cavity, and skin. It is related to the touch sensation. If the body develops an excess of vata, it will accumulate in these areas.

The effect of Vata on our body or microcosm is described in the table below.

Pitta is a force created by the dynamic interplay of water and fire. These forces represent transformation. They cannot change into each other, but they modulate or control each other and are

vitally required for the life processes to occur. (For example, too much fire and too little water will result in the boiling away of the water. Too much water will result in the fire being put out.)

Pitta governs digestion, absorption, assimilation, nutrition, metabolism, body temperature, skin colouration, the luster of the eyes, intelligence, and understanding. Psychologically, pitta arouses anger, hate, and jealousy. The small intestine, stomach, sweat glands, blood, fat, eyes, and skin are the seats of Pitta.

The effect of Pitta on our body or microcosm is shown in the table below.

Effect of Constitution Type On Body or Microcosm

	Vata	Pitta	Kapha
Function of the Dosha (or controls)	Movement Breathing Natural Urges Transformation of the tissues Motor functions Sensory functions Ungroundedness Secretions Excretions Fear Emptiness Anxiety Thoughts Life force Nerve impulses	Body heat Temperature Digestion Perception Understanding Hunger Thirst Intelligence Anger Hate Jealousy	Energy Lubrication Forgiveness Greed Attachment Accumulation Holding Possessiveness
Manifests in living things as	The movement of:: nerve impulses air blood food waste thought	The quality of transformation. Pitta controls the enzymes that digest our food and the hormones that regulate our metabolism. Pitta transforms the chemical/electrical impulses in our mind to thoughts we can understand.	Cells which make up our organs and fluids which nourish and protect them.
Characteristics	cold light irregular	whot wlight wfluid	oily cold heavy

	mobile rarefied dry rough	subtle sharp malodorous soft clear	stable dense smooth
Too much of the dosha force can result in	merve irritation high blood pressure gas confusion	wulcers hormonal imbalance irritated skin (acne) consuming emotions (anger)	 Mucous build-up in the sinus and nasal passages, the lungs and colon. ✓ In the mind it creates rigidity, a fixation of thought, inflexibility.
Too little dosha force can result in	merve loss congestion constipation thoughtlessness	■indigestion ■inability to understand ■sluggish metabolism	Experiences a dry respiratory tract burning stomach (due to lack of mucous, which protects from excess stomach acids) inability to concentrate
Where found in a plant	flowers and leaves (the parts which reach farthest into air and space)	Plant's essential oils, resins and sap	Roots (The roots are where water is stored. Roots also stay within the earth.)
Climatic influences	Dry climates or cold autumn winds increases Vata	Hot summers or hot climates will increase Pitta	Wet winters and damp climate add to Kapha.
Predominant during the life stage of	Old age As we get older, we "shrink and dry out".	Teen and Adult. During this stage, our hormone changes transforms us into adults	Childhood years. During this period, we grow or increase in substance of the body.

Kapha is the conceptual equilibrium of water and earth. Kapha is structure and lubrication. One can visualize the Kapha force as the stirring force to keep the water and earth from separating. For example, if we take a pot, fill it to the half with water and then add sand to it, the sand will gradually sink to the bottom of the pot. (It separates from the water). The only way to keep the sand in equilibrium with the water is by stirring the mixture continuously. The Kapha force can be visualized as this stirring force in our body.

Kapha cements the elements in the body, providing the material for physical structure. This dosha maintains body resistance. Water is the main constituent of kapha, and this bodily water is responsible physiologically for biological strength and natural tissue resistance in the body. Kapha lubricates the joints; provides moisture to the skin; helps to heal wounds; fills the spaces in the body; gives biological strength, vigour and stability; supports memory retention; gives energy to the heart and lungs, and maintains immunity. Kapha is present in the chest, throat, head, sinuses, nose, mouth, stomach, joints, cytoplasm, plasma, and in the liquid secretions of the body such as mucus. Psychologically, kapha is responsible for the emotions of attachment, greed, and long-standing envy. It is also expressed in tendencies toward calmness, forgiveness, and love. The chest is the seat of kapha.

Balanced Tridosha means a Healthy Person

Every person (and thing) contains all three doshas. However, the proportion varies according to the individual and usually one or two doshas predominate. Within each person the doshas are continually interacting with one another and with the doshas in all of nature. This explains why people can have much in common but also have an endless variety of individual differences in the way they behave and respond to their environment. Ayurveda recognizes that different foods, tastes, colours, and sounds affect the doshas in different ways. For example very hot and pungent spices aggravate pitta; but cold, light foods such as salads calm it down. This ability to affect the doshas is the underlying basis for Ayurvedic practices and therapies.

A balance among the tridosha is necessary for health. Together, the tridosha governs all metabolic activities. When their actions in our mind-body constitution are balanced, we experience psychological and physical wellness. When they are somewhat unbalanced, we may feel uneasy. When they are more obviously unbalanced – when one or more of the three dosha influences are excessive or deficient-discernible symptoms of sickness can be observed and experienced.

Regardless of the percentages of vata, pitta, or kapha influences, your basic constitution represents your psychological and physical nature. When balance is maintained, health is at optimum.

Concept of Prakruti and Vikruti

According to Ayurveda, your basic constitution is determined at the time of conception. This constitution is called Prakruti. The term Prakruti is a Sanskrit word that means, "nature," "creativity," or "the first creation." One of the very important concept of Ayurveda is that one's basic constitution is fixed throughout his lifetime. The combination of Vata, Pitta, and Kapha that was present in the individual at the time of conception is maintained throughout his lifetime. This is your base point. Notice that different persons can have different combination of Vata, Pitta and Kapha as their basic constitution or Prakruti. This is how Ayurveda can explain the subtle differences between individuals and explains why everyone is unique and that two persons can react very differently when exposed to the same environment or stimuli. Your Prakruti is unique to you just as your fingerprint and DNA. Thus, in order to understand a person, it is necessary to determine his or her Prakruti. HolisticOnLine has developed a computerized diagnostic system that enables you to determine your Prakruti.

Ideally, your constitution remain fixed throughout your life. Unfortunately, this is not the case. Every person is subjected to the constant interaction with his or her environment which will affect the person's constitution at any time. The body will try to maintain a dynamic equilibrium or balance with the environment. Your current condition is called your vikruti. Although it reflects your ability to adjust to

life's influences and is always changing, it should match your prakruti, or inborn constitution, as closely as possible. If the current proportion of your doshas differs significantly from your constitutional proportion, it indicates imbalances, which in turn can lead to illness. Farther your Vikruti is from your Prakruti, more ill you are. Ayurveda teaches that your Vikruti can be changed by means of diet and meditation so as to approach your Prakruti or the state where you have perfect health.

The concept of Prakruti and Vikruti can be illustrated by reference to our body temperature. When healthy, we maintain an average body temperature of about 98 degrees Fahrenheit. Although, different persons can have different base temperatures, it does not change much so long as the person is healthy. When we go outside on a winter day, our body temperature may go down slightly; but will pick right back up to the normal if we are healthy. Similarly, jogging on a hot day can temporarily raise our body temperature. When we are sick, or catch a cold, our body temperature will go up. This indicates that we are sick or outside our normal base condition. We may take medicine to bring the body temperature back to the normal range. In analogy to Ayurveda, our present temperature may be considered as Vikruti and the difference between the Prakruti (our normal temperature) and Vikruti (our present temperature) can determine whether any medical intervention is required. Just like an allopathic doctor will take your temperature and blood pressure routinely as the first step in diagnosing your condition, Ayurvedic practitioners will determine your Prakruti and Vikruti as the first step in diagnosing your condition.

Hence prior to embarking on a journey to perfect health and longevity, it is important that you understand your Prakruti and Vikruti and determine how far separated these are. Armed with this knowledge, we can map a treatment strategy. This is the basic premise of Ayurveda. The diagnostic system developed by HolisticOnline can be utilized to determine both your Prakruti and Vikruti.



Biofeedback

Biofeedback operates on the notion that we have the innate ability and potential to influence the automatic functions of our bodies through the exertion of will and mind. Biofeedback has recently been shown to give us what had previously seemed an impossible degree of control over a variety of physiologic events.

For example, a person can be trained in a matter of days to cause the temperature of one hand to rise five to ten degrees higher than that of the other hand, while not contracting the hand muscles. What is amazing is that even animals can be trained. In one experiment, researchers trained a laboratory rat to produce a differential in the temperature of its two ears in order to receive a food reward.

This experiment, although it appears to satisfy science fiction enthusiasts at first, nevertheless has practical applications. When people trained in biofeedback cause their hands to quickly become warmer than normal, this can effectively short-circuit a migraine attack. The blood which ordinarily engorges the blood vessels of the head in migraine is diverted to the hands and arms. This effectively removes the headache. In cases of "pure" migraine, a person can be successfully taught this technique and stop headaches in a week or less. However in 90% of migraine cases, there is chronic tension that must also be treated over a longer period of time by biofeedback relaxation techniques. Biofeedback can also be used to train persons to block the pain of colitis, neuritis, and other conditions. Many of these techniques have been scientifically proven.

Using a special machine and sensors to record muscle contractions and skin temperature, you can learn to control normally involuntary processes such as heart rate and blood pressure that increase under stress. The machine "feeds back" the efforts and eventually you can recognize and control facets of the stress response by yourself. Once viewed with scepticism, the control of "involuntary" responses is now seen to be effective in the treatment of migraine headaches, asthma and other disorders in certain individuals.

Types of Biofeedback Machines or Techniques

Several different types of biofeedback machines can provide information about the systems in your body that are affected by stress.

The electromyogram (EMG) measures muscle tension. Two electrodes (or sensors) are placed on your skin over the muscle to be monitored. The most common muscles that biofeedback practitioners will use are the frontalis (the "frowning" muscle in your forehead), the masseter (jaw muscle), and the trapezium (the shoulder muscles that hunch when you're stressed). This machine had been utilized to rehabilitate patients paralyzed by stroke. Even when a person has no sensation in a paralyzed limb and cannot move it voluntarily, EMG can often detect some electrical activity in the muscles. The EMG machine amplifies the electrical sound emitting from the paralyzed limb, and as the patient becomes aware of the activity, his nervous system may stimulate more muscle activity. Eventually, new nerve endings may grow in the affected muscles and the patient may regain some mobility.

More often EMG is used to promote relaxation in muscles that have become tense in response to stress. When the electrodes pick up on muscle tension, the machine gives you a signal, such as a coloured light or sound. In this way, you can see or hear continuous monitoring of your muscle activity and begin to focus on what the activity (or tension) feels like. As you become more aware of this internal process, you will begin to recognize in your daily life when tension starts to build. You then can use the techniques you learn in the biofeedback training to control the tension before it gets worse or causes other physical problems.

EMG had been used for the treatment of tension headaches, backache, neck pain, and bruxism as well as in the stress related illnesses such as asthma and ulcers.

Temperature Biofeedback: This device monitors skin temperature and can be helpful in certain circulatory disorders. Reynolds disease is an example that can be benefited by this technique. Usually, a sensor is attached to your foot or to the middle or small finger of your dominant hand. When you are tense or anxious, your skin temperature drops as blood is redirected inward to muscles and internal organs. Like monitoring muscle tension, measuring skin temperature is a useful tool in learning how to manage stress. This method may also reduce the frequency of migraine headaches, and is also used to promote relaxation.

Galvanic skin response (GSH) training also known as Electrodermal Response (EDR): This device measures electrical conductance in the skin, which is associated with the activity of the sweat glands. A very slight electrical current (unnoticeable to you) is run through your skin. The machine measures changes in the salt and water in your sweat gland ducts. The more emotionally aroused you are, the more active your sweat glands are and the greater the electrical conductivity of your skin. GSR is effective in treating phobias, anxiety, excessive sweating, and, at times, stuttering since these emotions will affect your skin's conductivity. It is used as a lie detection test. Athletes use this technique to prepare for games – to make sure that they are not too anxious or have pre-game jitters.

Electroencephalogram (EEG): This device monitors brain wave activity. The method is relatively imprecise. The brain emits many electrical signals of various frequencies. Only a very few of these waves have been directly tied to specific disorders or mental states. The following are classification of brain waves:

Beta (awake)

Alpha (calm relaxation)

Theta (light sleep)

Delta (deep sleep)

Since alpha waves are commonly observed during relaxation, the researchers thought that patients could relief from anxiety, insomnia and perhaps epilepsy by learning to increase their alpha wave activity. But further research showed that alpha training is only useful if it is combined with other therapies. These days, insomniacs are taught to control theta waves, and epileptics have found relief by monitoring waves produced during seizures. As technology advances, EEG may be used for other neurological diseases.

Other biofeedback machines can monitor heart rate and blood pressure, both of which change in response to stress, arrhythmia and hypertension. You can purchase biofeedback instruments to use at home, though the most affordable are the type that monitor only one system, such as temperature.

Biofeedback is more effective if you combine it with relaxation techniques, self hypnotism and psychotherapy. In this way you not only learn how to control your reactions to stress but you can explore the causes of the stress and your thoughts and behaviour that contribute to it.

Example of Biofeedback in Action

In case of biofeedback, there are a number of techniques that can be used, but the most basic one is-to attach a GSR device to the person's fingertips. This measures the galvanic skin response, or minute amounts of perspiration on the skin. The more tense you are, the more perspiration there is on your skin. As you become calm, there is less and less.

The electrodes are attached to a machine which converts the electrical information into an easily observable form, such as a light or a buzzing noise. The machine can be adjusted, so that the buzzing sound is moderately audible at the beginning of the session. As the device picks up more perspiration, meaning more tension, the noise gets louder. If the person becomes calmer and there is less perspiration, the noise becomes lower and is finally extinguished.

Usually, the person hooked up to the biofeedback machine and told extinguish the buzz or the light. Since the person has no idea what to do, he or she will start experimenting to stop the annoying sound. If he tenses his muscles, for example, he will find that the noise is getting louder. Then, maybe he figures that if he relaxes, the buzz will go softer. So, he relaxes and the buzz does get softer. But it is not extinguished.

The person now will start putting himself in various frames of mind that he believes will do the trick. There is a delay of several seconds between the feeling and the buzz, because it takes that long for the perspiration to appear on the skin, but he will soon enough find out if the machine is doing what he wants it to do. He tries other frames of mind. He imagines different scenes, different people, maybe different colours. Then, quite suddenly, he discovers that the sound is no longer there. He will start mentally examine what he did to get to that condition. In practice, he will recall it and keeps it up.

The therapist will now readjust the machine so that it has greater sensitivity. In other words, the buzz is going to sound when smaller amounts of perspiration are detected. In another session or two the person would probably learn how to counter this, and the process is continued until a satisfactory degree of relaxation is obtained. Once the person figures out how to do it with the help of machine, he can accomplish relaxation without the help of the machine by doing what he had to do as learned from the biofeedback techniques.

The same technique would be used to teach someone how to warm his hands, such as when we want him to control his migraine headaches. Here, instead of measuring perspiration, skin temperature would be measured. The person would imagine whatever he found necessary to do the trick. Incredibly, some people can not only boost the temperature of one hand over the other, but also to make *one part* of their palm warmer than the adjacent part!

Number of Sessions

Biofeedback sessions usually last thirty to sixty minutes. The number of sessions each week and the duration of the training depend on your condition and the progress you make. It generally should not

exceed 15 sessions. The crucial last step in biofeedback training is taking what you have learned and applying it in your everyday life without the help of the machines.

Practical Applications and Clinical Trials

Once a person has learned to become deeply relaxed, it becomes possible for him to elicit the same state of mind that he uses in the biofeedback laboratory when he is at home or at work. He simply relaxes and tries to precisely recall how he felt when he was keeping the buzzer or the light continuously extinguished.

Or, if the problem is blood pressure, he remembers how he felt when the monitor cuff attached to his arm revealed that his pressure was reduced to normal.

As with all therapies, results vary, but they are often impressive. Several researchers have reported promising results with asthmatics, pointing out that spasms of the airway passages involve muscular contractions, and that these muscular actions are amenable to relaxation training.

Many people suffering from headaches and chronic pain resulting from injuries or operations have learned to greatly reduce their dependency on drugs and sometimes give them up completely.

In an experiment with six patients with cerebral palsy, biofeedback training enabled all six to relax sufficiently to improve both fine and gross motor coordination. Four of the six also improved their speech, and a subsequent study confirmed these findings.

Biofeedback training can also be used to gain active control over our muscles. In such cases, devices measuring very slight muscular activity are attached to the target area and the trick is for the person to do whatever he finds necessary to make the machine go on, instead of off. Many patients discover that they do have some slight control over areas which were thought to be helpless or paralyzed, and with continuing work, a surprising degree of control can be regained. Rehabilitation of stroke and accident victims is one obvious application, although still experimental. One researcher has said that he has been able to train people with fecal incontinence, and no apparent nervous control over their anal sphincter, to become continent again with just one to four hours of training.

When biofeedback is given along with yoga or meditative relaxation techniques, the results seem to be especially gratifying. For one thing, when someone is practicing meditation for relaxation while connected to a biofeedback machine, he can immediately perceive if he is going about it in the proper way.

A study reported in *Lancet* (July 19, 1975) evaluated the difference between six weeks' treatment by yoga relaxation methods with biofeedback with a "placebo" therapy consisting of general relaxation. 34 high blood pressure patients were used in the study. One group was given yoga relaxation techniques with biofeedback. The control group used just relaxation.

Both groups showed some reduction in blood pressure. But while the "general relaxation" group went down from an average of 169/101 to 160/96 mm., the biofeedback group showed an average reduction from 168/100 to 141/84 mm. The drop of 16 points in the blood pressure is extremely significant.

Various field studies and a number of controlled trials have shown that biofeedback therapy is a valid means of inducing relaxation, of treating certain functional disorders, such as irritable bowel syndrome, constipation, and tension headaches, and of speeding recovery following a stroke.

Biofeedback for Healing Diseases/Conditions

Risk, Cautions and Contraindications

Biofeedback therapy is not recommended for persons with severe psychosis, depression, or obsessional neurosis, nor for debilitated patients or those with psychopathic personalities. It is dangerous for diabetics and others with endocrine disorders, as it can change the need for insulin and other medications. Please check with your doctor to see whether this is an appropriate treatment for you.





Chelation Therapy



Introduction

The word chelation is derived from the Greek word chele that means claw (like that of a scorpion or crab). The concept of chelation is based on the observation that when a certain amino acid complex called EDTA (ethylene-diamine-tetra-acetic acid) comes in contact with certain positively charged metals and other substances such as lead, iron, copper, calcium, magnesium, zinc, plutonium and manganese, it grabs them (hence the chele or claw), and removes them. Chelation therapy is the process of removing from the body the undesirable ionic material by the infusion, or taking orally, of an organic compound which has suitable chelating properties.

EDTA is a synthetic amino acid first used in the 1940's for treatment of heavy metal poisoning. It is widely recognized as effective for that use as well as certain others, including emergency treatment of hypercalcemia and the control of ventricular arrhythmias associated with digitalis toxicity. Studies by the National Academy of Sciences / National Research Council in the late 1960's indicated that EDTA was considered possibly effective in the treatment of occlusive vascular disorders caused by arteriosclerosis. EDTA grabs metallic cation such as Lead or Calcium from the body and forms a stable compound that is then excreted from the system. The stability of this bond is vital to success in chelation therapy. If the bond is weak, other chemicals can break this bond to form their own compounds.

One way to think about the chelation process is to compare it to the way we unclog our drains. We add a chemical to our drain. It dissolves the blockage. The resulting compound is removed from the drain using the existing plumbing system. Chelation process works in a similar manner on our body.

Chelation Process Is Very Common in Nature

Our human digestive process is a very good example of how chelation takes place. Digestion and assimilation of foods involves the chelation of protein substances (amino acids) with minerals for transportation to their destinations, or in which blood cells latch on to, and thus acquire, iron. Hemoglobin is a chelate of iron (as is the enzyme catalase, that is used by our bodies to 'switch off' the free radical activity of hydrogen peroxide). When you eat meat or green vegetables which contain iron, after the digestive process has released the iron from the food in which it is bound, it has to be combined (chelated) with amino acids so that it can be carried through the intestinal mucous membranes into the bloodstream.

If you drink tea with your meal, the tannin in the tea will chelate with the iron (forming insoluble iron tannate) before it gets absorbed. In this case, the body does not get any iron from your food. On the other hand, if we take some foods which are rich in Vitamin C (or take Vitamin C supplement) with our iron rich meal, the ascorbic acid (or Vitamin C) will chelate with the iron and enhance and speed its absorption. The iron, once in the bloodstream, is released from the proteins with which it was chelated for transportation.

What Are The Benefits of Chelation Therapy?

Chelation therapy is widely used for the treatment of atherosclerosis and other chronic degenerative diseases involving the circulatory system. It also has other benefits. Many scientists suggest that the beneficial effect of chelation treatment is from the removal of metallic catalysts that causes excessive free radical proliferation. This reduces the oxidation of lipids, DNA, enzyme systems and lipoproteins. The chelation halts the bad effects and initiates the body's healing process, often reversing the damage. It removes the calcium and copper anions from the blood stream. The plaque lining the artery walls are made porous and brittle. Eventually they may get dislodged. Even if only a microscopic layer of the plaque is removed, it, along with a smoothening of the artery wall due to the healing of the cells that line the arteries, can improve the blood flow to the artery muscles substantially. This can prevent artery spasm and minimize or prevent angina pain. Many patients who could not walk due to muscle pain or angina pain have reported that they can walk without pain after chelation therapy.

We will examine how chelation therapy works.

Benefits of Chelation Therapy

Reduces Free Radical Activity in The Blood

We can think of our cells in the body as miniature factories. Inside the cell, the digestive process is going on. That means converting the raw materials into energy and protein compounds. Like in a factory, there are mechanisms to transport material within the cell as well as mechanisms to transport material to and from the cell. In our body, these mechanisms are performed by complex enzyme activity.

The skin that surrounds a cell controls what goes in and what goes out of it. (It is like the shipping and receiving department in a factory.) The active cell membrane is made up of lipids (Cholesterol), proteins and water.

As explained in "The Story of Free Radicals" below, free radicals can cause lipid peroxidation (fat becomes rancid). Like in the factory example, if the shipping and receiving department is not functioning properly, it can cause chaos; the whole factory will go out of synch. It does not get raw materials in time or cannot ship out waste products and finished products out. In the body, this is the beginning of the cell degeneration. (In case of factory, it will go out of business.)

This is what happens when atherosclerosis begins in an artery wall. The majority of lipid peroxidation activity involves the presence of metal ions such as iron, copper or calcium. EDTA effectively locks onto these ions, preventing their destructive action. Proponents of Chelation Therapy claim that EDTA can reduce the production of free radicals by up to a million-fold!

Research over the past 30 years has confirmed the benefits of EDTA. This protective influence of EDTA would be enhanced by an appreciable presence of antioxidant nutrients such as vitamins A, C and E, selenium, and amino acid complexes such as glutathione peroxidase. These not only mop up free radicals but also assist in reinforcing the stability of cell membranes.

The Story of Free Radicals

Free radicals are the highly unstable chemicals that attack, infiltrate, and injure vital cell structures. Most stable chemical compounds in the body possess a pair of electrons. Sometimes, one member of the electron pair gets stripped away. The resulting compound (that is short of one electron) is called a free radical.

In chemistry, the term free radical means that it is now free to combine with another element to form a new stable compound. One way to think of free radical is the way our social system work. In a family there is husband and wife. They are joined together. Both are "tied up" or not available for other partners. Let us assume that they get 'separated'. Now we have two "free" persons who are looking for other partners to partner with. The way free radicals work, one of these free spouse go and break up a stable marriage of another couple, by joining with one of the spouses. This results in the ouster of a person from that family creating a brand new "free radical" who goes around prowling to find another "compound" to attack. You can see that free radicals can do lot of harm by forming a chain reaction.

A similar thing happens with free radicals in the body. When a free radical is born, it goes around the body looking for another compound to steal an electron from. This breaks up the "contented" couple, that results in releasing another free radical, and so on. While on the prowl, these free radicals (which are really the oxidation products from the body) can do tremendous damage to the delicate machinery of your cells. The most studied free radical chain reaction in living things is lipid peroxidation. (The term lipid refers to any fat-soluble substance, animal or vegetable. Peroxidation means the formation of a peroxide molecule. These are the molecules with the greatest proportion of oxygen molecules. For example, a water molecule has two hydrogen atoms and one oxygen atom. Hydrogen peroxide has two Hydrogen atoms and two oxygen atoms. In other words, there is an excess oxygen atom in a hydrogen peroxide molecule.)

Ninety eight percent of the oxygen we breathe is used by tiny powerhouses within our cells called mitochondria, that convert sugar, fats and inorganic phosphate by combining with oxygen into adenosine triphosphate (ATP), the universal form of energy we need to live. This energy producing activity of the mitochondria involves a series of intricate, complex and vital biochemical processes that depends on vast numbers of enzymes (estimates vary from 500 to 10,000 sets of oxidative enzymes). These, in turn, depends on dozens of nutrient factors and co-factors. In this metabolism process, a very small amount of left over oxygen loses electrons, creating free radicals. These free radicals burn holes in our cellular membranes. Calcium penetrate our cells through these holes. This excess calcium results in cell death. This, in turn, weakens tissues and organs. As this damage continues, our body become "rusty", less able to fight other invaders such as cancer, hardening of the arteries, premature aging, and other bodily disorders.

Because of the amount of oxygen we breathe every day (our bodies take 630 quadrillion damaging oxygen hits per day, each of our cells takes about 10,000 hits per day and each DNA strand in the cell gets hit 5,000 times per day. This free radical

bombardment causes a typical human cell to undergo thousands of changes or mutations daily. If a DNA strand gets hit and is not repaired before its twin gets hit, we will have the onset of a potentially lethal cancer.

In addition to the oxygen we breathe, the free radicals can also come from such things as environmental pollution, radiation, cigarette smoke, chemicals, and herbicides.

The key to having a healthy body is to repair the damages caused by the free radicals before it is too late, and to protect the body's tissue cells from the free radicals before they cause mutations. Antioxidants are substances that have free-radical chain-reaction-breaking properties. Like a bouncer, the antioxidants deactivate potentially dangerous free radicals before they can damage a cells' machinery. Most of these antioxidants come from plants and are called phytochemicals. More than 60,000 of such plant chemicals are identified. Among the most effective and dedicated antioxidants are Vitamin A, C, and E (known as the ACE trio.). Out of these, Vitamin C is the most powerful.

Each cell produces its own antioxidants. But the ability to produce them decreases as we age. That is why our diet should supply anti-oxidants, phytochemicals (fruits and vegetables are a good source for this.) and additional vitamins and minerals.

Benefits of Chelation Therapy

Blocks Calcium Absorption, Repairs Damaged Muscles, Improves the Cell Energy Production

We have seen that calcium passes through the damaged cell walls into the cells. If calcium gets deposited in arterial walls, it inhibits the enzyme activity which, in turn, affects the production of energy, the movement of raw material, finished products, and waste products from the cell. The cells become energy starved and become acidic as a result. This can lead to premature aging, unbalanced calcium / magnesium ratios, free radical activity, local toxicity, oxygen deficit, nutritional imbalance, etc.

The cells that have become energy starved and acidic start to attract calcium ions, drawing them into the cell. This further blocks energy production. The result is degenerative cardiovascular conditions. When this happens, the muscles that surround the arteries go into spasm. Doctors start treating this problem with calcium channel blockers. The problem is that calcium channel blockers block the calcium intake by the muscles; but it does nothing to cure the underlying problems of cell damage.

This process gets really out of hand in the presence of additional Vitamin D and cholesterol. Free radicals helps to convert the cholesterol into substances with Vitamin D activity. This produces plaque, which, in turn, attracts calcium cementing the material.

How does EDTA infusion affect this scenario? First, EDTA removes the toxic metal ions such as lead, calcium, mercury, cadmium, copper, iron, and aluminium from the blood stream. These are necessary for the production of free radicals. By removing the extra calcium from the blood stream, there is no more free calcium available to produce plaque. It means that the cells can start to repair themselves. Their production of energy increases. As more and more cells rebuild, our body becomes healthier. They can ward off intruders. The result is that we have started a salvage and regeneration activity that repairs previously damaged muscles and heart. And the whole body benefits as a result.

Reduces Blood Stickiness or Clotting

EDTA is believed to reduce the blood platelet formation. This makes the blood less "sticky. The blood can now flow through narrow arteries. It can flow through even partially blocked arteries minimizing the effect of the blockage.

Normalizes Abnormal Cholesterol and HDL Levels

There are two types of cholesterol: the good cholesterol called HDL and the bad cholesterol called LDL. What we want is a high amount of HDL in our blood along with a low level of LDL. We also desire a low total cholesterol. Researchers have found that EDTA infusion, combined with vitamin and mineral supplements, raised the good (HDL) cholesterol and lowered the bad (LDL) cholesterol. If the HDL was low, it was raised; however, if it was already high, its level remains the same. Similarly, the LDL was lowered if it was high. EDTA optimizes the ratio of HDL and LDL.

Removes Calcium from the Plaque

EDTA infusion removes the calcium from the blood stream. In a chemical reaction, if you have an area low in concentration of a substance surrounded by an area that is rich in that substance, the substance will diffuse from the enriched area to that which is depleted of it ultimately levelling the concentration. The same thing happens to our body. When the blood is cleaned off the calcium, the calcium from the plaque and the body tissues (That is enriched with it) migrate into the blood. This gets swept away by the new EDTA infusion. This has the effect of removing most of the calcium from the plaque, making it softer and possibly even breaking away chunks of it from the artery walls.

Many people are concerned that this calcium intake may come from the bones rather than from the plaque and body tissues. Chelation therapists strongly suggest that this is not so.

Cancer Treatment

Free radicals play an important role in the genesis of cancer. By removing the metallic anions from the blood stream, EDTA helps the cells to remain healthy and helps the damaged cells to heal. Research has shown a decrease in the incidence of death by cancer after EDTA treatment. We don't know the mechanism of action. In some forms of cancer, the use of EDTA was found to strip the tumour cells of their protective coat, allowing other mechanisms (such as protein digesting enzymes) to destroy the tumours.

Mental Health

Researchers have noticed that patients who have undergone chelation treatment are less depressed. They were more alert, and had better concentration and memory. Opponents of chelation therapy dismisses this as "placebo effect."

Chelation therapists attribute this improvement in mental health to an improvement in the overall cellular nutrition as a result of better circulation resulted from the chelation treatment. Another possibility is that by removing the harmful toxins from the blood stream, the brain and central nervous system are protected from harmful effects of these toxins. This improves the overall functioning of the brain that translates into better memory and mental conditions.

Other Benefits

Reduction of fatigue in patients who have undergone chelation therapy is another important benefit of chelation therapy. Other improvements are in the reduction of neurological symptoms, cardiovascular symptoms, skin conditions, respiratory symptoms, gastrointestinal, genital and urinary symptoms.

It is only fair to say that in some cases, the benefits attributed to EDTA infusion may be from the adaptation of healthy ways of living prompted by the therapists. For example, the therapists ask their patients to quit smoking, lose weight, exercise regularly, take vitamins and mineral supplements, all of which will have a positive effect on the health. What is quite clear, though, is the effect of chelation therapy on the scooping away of toxins and the metal ions from the blood stream and its effect of reducing the free radical formation or damage from it. This has a great effect on many aspects of our life, something both proponents and opponents of chelation treatment agree.

How Is Chelation Therapy Administered?

Medical Examination:

Prior to administering EDTA infusion, the practitioner will conduct tests to determine whether the patient has a condition that will benefit from the therapy and that it is an appropriate remedy.

A comprehensive personal and family history is taken with special emphasis on all aspects of previous health problems and current status. Patient will be asked questions regarding diet, habits, emotional status, exercise, stress levels and a detailed listing of symptoms. A full physical examination will also be performed with special emphasis on the circulatory and respiratory systems.

This is followed by a series of medical tests such as electrocardiogram, chest XRay, blood tests, urine tests, diet and other tests and hair analysis. Exercise tolerance tests are used to determine how the heart, lungs and circulation responds to activity. A Doppler (sound wave) examination will be carried out to establish a 'before' picture of circulatory system.

EDTA Treatment:

Once it has been established that there is a problem which could benefit from EDTA infusion, a series of treatments are scheduled, about two or three times per week. Most chelation centres treat patients in a group setting.

The infusion will usually be administered in a large room with appropriate seating. A needle is inserted into a vein (usually in the hand or forearm, but sometimes on the lower leg). The needle is attached to the container (hung on an adjustable stand), from which is drip fed about half a litre of fluid over the 3 1/2 hours' duration of each treatment. This liquid will contain 2 to 3 grams of EDTA and whatever additional minerals or supplements the doctor has prescribed for the patient to achieve a balanced blood content.

Other Substances that are administered along with EDTA during Chelation Therapy

During the medical examination of the patient, the practitioner will determine what chemicals, herbs or nutrients can benefit the patient. Accordingly, the EDTA mixture for infusement will be custom prepared.

These additives typically contain a complex of B vitamins, vitamin C, magnesium (extremely useful for cardiovascular health) and heparin (an anticoagulant, which is sometimes used to prevent any clotting at the injection site).

While the infusion is being performed, the arm is kept stable by taping it to a padded board which rests on a cushion for comfort.

In most cases, the EDTA solution is dripped into the bloodstream at a rate of one drop per second. Two to three of such infusions are given each week. The complete treatment consists of anything from 20 (for relatively mild problems) to 30 infusions.

Periodical blood and urine screenings will be done to make sure that the kidney and other organs are operating sufficiently well to cope with the EDTA detoxification.

In rare instances, follow-up infusions will be given. Some patients may undergo as much as 100 infusions.

The EDTA is eliminated from the body, 95% via the kidneys and 5% via the bile, along with the toxic metals and free ionic calcium which it has locked on to in its transit through the circulatory system.

Side Effects of Chelation Therapy

A number of side effects have been observed with chelation therapy. These may include:

- **Headaches**: This is generally from a low blood sugar level. To prevent this from happening, eat before or during the treatment. A common recommendation for the prevention of the 'EDTA-headaches' is to eat a semi to ripe banana during the first hour of infusion.
- **Local skin irritation:** This is generally from a deficiency in zinc and vitamin B6. Supplementation of these nutrients are recommended during the therapy.
- Nausea or stomach upset: Generally due to a deficiency of vitamin B6. It is manifested in less than 1% of the patients receiving chelation therapy. It is best treated by B6 supplementation, although

short term relief (up to eight hours) from nausea can be achieved by acupressure treatment.

- **Diarrhea:** Very very few people undergoing chelation therapy experience this discomfort. Take plenty of rest. Eat a diet that consists of plenty of liquids. Avoid spicy food. Frequency of urination goes up as the kidney efficiency improves. A weight loss (from fluid excretion) of 3 to 5 pounds (1.3 to 2.2 kg) is common after an infusion especially if the patient suffered from fluid retention before chelation therapy.
- Feeling like fainting: This is generally due to a drop in blood pressure. It is common for those who had high blood pressure that returns to more normal levels as a result of the treatment. If the blood pressure was normal to start with, it could drop slightly after the infusion. This may lead to feeling of faintness on standing after sitting or lying. If this happens, rest for an hour or so. Keep your feet higher than your head so as to allow the blood to flow into the brain. Take a supplement containing the amino acid tyrosine to help restore normal pressure levels if this symptom persists.
- Extreme fatigue: This is usually from a general nutrient deficiency of minerals such as magnesium, zinc or potassium. Taking a potassium rich supplements and/or the regular eating of potassium rich foods are suggested before and during chelation (grapes, bananas, peaches, potato skins), as this mineral may be removed during the chelation therapy.
- Fever: Very few people (less than 0.02 percent of those undergoing the treatment) may develop fever during the day after chelation therapy sessions. If this happens to you, make sure you tell your therapist. This condition, left on its own, normally resolves on its own.
- **Cramps:** About 5% of the patients report cramps usually at night. It is treated best by administering supplemental magnesium either orally or as an additive to EDTA infusion mixture. If magnesium is added to the infusion, it is generally in the form of magnesium chloride or magnesium sulfate. Such additions also reduce the chance of local skin irritation at the site of the infusion.
- Pain in the joints: This is generally reported by patients who take frequent (three weekly) infusions. If this happens, reduce the number of infusions to one per week. Your therapist may also reduce the dosage of EDTA administered, if strong flu like aches develop. The symptoms generally disappear if you follow these recommendations.

Safety Concerns

Kidney Toxicity:

In the early 1950s several deaths occurred from kidney toxicity after EDTA treatment. At that time the dosage used was around 10 grams per infusion. The recommended dose now is 3 grams.

Kidney toxicity is related to size (quantity) of the dose and the rate of infusion. Experienced therapists adjust dosage so that the infusion will not harm the kidney. Indeed, research has shown that, properly administered, chelation therapy improves kidney function, especially if there is any impairment present to this vital organ.

However, if the patient is very elderly, or has low parathyroid activity or is suffering from heavy metal toxicity which is damaging the kidney, treatment should be modified to use less EDTA less frequently

(once per week perhaps). Heavy metals damage the kidneys and too rapid infusion can overload them. Heavy metals most likely to produce kidney damage during infusion therapy are lead, aluminium, cadmium, mercury, nickel, copper and arsenic.

Renal function tests should always be performed before chelation therapy is started. In any case of significant renal impairment, lower dosage of EDTA infusions should be used. Use extreme caution. Also make sure that the patient has sufficient periods of rest between the infusions.

Excessive Removal of Calcium

If, through inexperience or error, there is too rapid an infusion (or too much EDTA used), levels of calcium in the blood can drop rapidly, resulting in cramps, convulsions, etc. An injection of calcium gluconate will swiftly rectify such abnormal reactions.

Inflammation of a vein

If an infusion into a vein is performed too rapidly, inflammation may occur. Reduce the dosage and dilute EDTA infusion mix. Administer the infusion very slowly.

Insulin shock and hypoglycemia

During EDTA infusion it is possible that blood glucose may drop, leading to insulin shock. This is more likely to happen to diabetic patients. Patients having EDTA infusions are advised to have a snack before or during the three hours plus treatment period. Avoid dairy products that are high in calcium. Eat complex carbohydrates; avoid foods containing sugar such as ripe bananas. You may eat a fruit during infusion, if needed.

If you are diabetic and is taking zinc-bound insulin, there is a risk of too rapid a release of insulin, leading to hypoglycemia and shock. If this happens, make sure that you are given a rapid introduction of sugar to stabilize your condition. Before further EDTA infusions, you will need to change the form of insulin used. It has been found that, most people need less insulin while undergoing chelation therapy.

Congestive heart failure

If the heart is already unable to cope adequately with the movement of fluids, and there is evidence of congestive heart failure (extreme shortness of breath, swollen ankles) and/or if digitalis-like medication is being taken, extreme care is needed over chelation infusions, since EDTA prevents digitalis from working adequately. Avoid sodium EDTA for such people as it could increase the fluid retention tendency. Use a 5 % dextrose and water instead.

Summary

Chelation therapy, when administered by an experienced therapist at the proper doses, is very safe. A very large study, which had been monitored by the friends and foes of chelation therapy, found that EDTA administered in the proper dosage was no more toxic than a placebo. American College for the Advancement in Medicine estimates that over 500,000 patients have undergone chelation therapy safely nationwide using ACAM protocol. No fatalities have been reported. It is important that the therapist

keep a close eye on your condition for the toxicity and side reactions. Strict adherence to the dosage and rate of administration is very important. Keep an eye on the calcium and magnesium in the blood as these are removed during the treatment. Many suggest the availability of emergency cardiac equipment as a wise precaution.

Clinical Trials / Results

Chelation therapy is backed by a large number of testimonials and experiments that shows the effectivity of this therapy. Many of these were not scientifically conducted (such as a double blind study). Chelation therapists rightfully point out that it is hard to give a placebo when administering the compound (especially from the therapist as is required for the double blind study).

Therapists point out that about 500,000 chelation therapies are being done in the USA alone every year and the patients are very happy, placebo effect or not. Rosenfeld, author of "Guide to Alternative Medicine" talked about two of his patients whose condition has improved substantially after the chelation therapy, although he could not clinically identify what was different about them. Chelation therapy saves considerable amount of money. A typical chelation therapy cost about US\$3,000 compared to a bypass surgery at about US\$30,000. There is not much risk in chelation therapy as compared to the surgery.

A review of treatment results from 2,870 patients in Brazil found significant improvement in patients with heart disease or peripheral vascular disease who were treated with chelation therapy. 76.9% of the heart patients treated reported "marked improvement" and another 16.6% reported "good improvement". The results were even better for the patients who were treated for peripheral vascular disease. 91% showed "marked" improvement and 7.6% showed "good" improvement. So, 96% – 98% of the patients treated reported improvement after chelation therapy.



Chiropractic medicine operates on the theory that the improper alignment of the vertebrae (there are twenty-four verterbrae that make up the spinal column) and the spinal cord they protect is the cause of diseases and disorders. Chiropractors apply pressure in a specific manner to allow the vertebrae in the spinal column to realign themselves. But most chiropractors do more than manipulating the spinal column. They are whole body healers by paying attention to factors such as nutrition, stress management, etc.

Introduction

Chiropractic is neuromusculoskeletal manipulation, especially of the spinal column, and is used for diagnosing, treating, and rehabilitating physical problems or diseases caused by or related to the neuromusculoskeletal system. It is generally accepted as one of the treatments of choice in cases of back pain. One of the fundamental principles of chiropracty is subluxation. Chiropractors believe that most of the ailments they treat are related to the misalignment of the spine.

Chiropractic is based on the concept that the human body has an innate self-healing ability and seeks homeostasis, or balance. According to general chiropractic theory, the nervous system plays an important role in maintaining homeostasis-and hence health. But "subluxations" (misalignments of bones within joints) or "fixations" (abnormalities of motion) interfere with the flow of nervous impulses and diminish the body's ability to stay healthy. Through manipulation of the bones and their associated muscles and joints, particularly the spine, chiropractors work to correct these misalignments, thereby improving the function of the neuromusculoskeletal system and restoring homeostasis.

The word "chiropractic" comes from the Greek words cheiro, meaning "hand," and praktikos, meaning "doing" -so the term means, literally, "doing by hand."

Today's chiropractors are divided into two major camps. On one side are the straights-traditional chiropractors who believe that subluxations are at the root of disease and that manipulation is the best treatment. On the other side are the so-called mixers, whose approach represents a mix of traditional and progressive techniques.

Chiropractic is gaining wider acceptance. Recent clinical studies show that chiropractic is effective in treating a variety of problems such as acute lower back pain and headache. Surveys show that more and more people are turning to chiropractic services.

- A study published in the July 1, 1998 issue of the Annals of Internal Medicine shows that chiropractic treatment is appropriate for low-back pain in a considerable number of cases. This study by the Rand Corporation found that 46% of a sample of low-back pain patients received appropriate care from doctors of chiropractic.
- Poll results released in January 1998 by Landmark Healthcare, Inc., showed that one in every five adults ages 55 to 64 has used chiropractic care.
- A December 1997 report from the Federal Agency for Health Policy and Research (AHCPR) notes

that the chiropractic profession is now the third largest group of doctoral-level providers in the United States (after medical doctors and dentists).

That same AHCPR report shows that fully 80% of American workers in conventional insurance plans, preferred providers organizations (PPOs), and point-of-service plans now have coverage that pays at least part of the cost of chiropractic care.

A March 1998 article in Business and Health magazine observed:

Many companies say chiropractic coverage has lowered their medical and workers' comp costs, while raising overall health and productivity. 'It's one of the best benefits possible from a quality, quantity and pricing perspective.'

Another study found that median work time lost for employees with back injuries who used chiropractic care was only 9 days as compared with 34.5 days for workers who used medical care.

In a recent Gallup poll, 90% of all people who visited a chiropractor agreed that their care was effective. Successful outcomes in both effectiveness and patient satisfaction, have paved the way for chiropractors to enter the mainstream of health care services. Some chiropractors have begun to collaborate with medical doctors in integrated health care practices.

May/June 1998 issue of Health magazine reported that the prestigious Texas Back Institute (TBI) at one time included only surgeons and other M.D.s. Then, about ten years ago, when TBI's medical doctors discovered chiropractic's success with lower back pain, they hired their first chiropractor. Now about 50% of the Institute's patients see a chiropractor first when beginning their treatment.

"What the health care and medical communities are just beginning to accept is what our patients have known all along -- that our treatment is safe, effective and highly successful at improving their quality of life."

Dr. Michael Pedigo, President of the American Chiropractic Association

History

The modern-day system and theory of chiropractic was founded in 1895 by Daniel David Palmer, a longtime student of physiology and anatomy in Davenport, Iowa.

In the fall of 1895, a janitor named Harvey Lillard entered the office of Palmer. Lillard had been deaf since straining himself seventeen years earlier while working in a cramped position. Upon examining the man, Palmer discovered a painful prominent vertebra in the upper spine, which Lillard confirmed had been the source of the original injury that had led to his deafness. Palmer applied a sharp thrust, repositioning the bone, and Lillard's hearing returned better than ever. Thus chiropractic was born.

Manipulation of the spine had been a part of the healing repertoires of virtually all traditional cultures, from the ancient Greeks to the Pacific islanders to the Native Americans. What Palmer pioneered was the modern theory of joint-oriented nerve interference that quickly brought supporters. The first

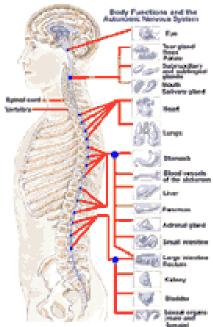
chiropractic college was formed by Palmer in 1897. The first state licensing law for chiropractic was passed in 1913.

Palmer described his approach as a means of connecting "man the spiritual" to "man the physical" by eliminating interference to the flow of "innate intelligence" through each individual. All living beings are endowed with this "innate intelligence." Palmer believed that this intelligence regulates all the vital functions of the body as it flows through the central nervous system. Because of this belief, Palmer felt that the primary task of the chiropractor was not to treat conditions but to remove nerve interference caused by subluxations so that the innate intelligence could carry out its role of maintaining the body's health and equilibrium without obstruction.

Palmer was very fascinated with Innate Intelligence and its relationship to the nervous system. This philosophy formed the basis of his chiropractic theory. Chiropractic, he said, embraces "the science of life, the knowledge of how organisms act in health and disease, and also the art of adjusting the neuroskeleton." Any disease process anywhere in the body is affected, at least in part, by the ability of the nervous system to enervate and enliven that area. Hence, any disease process can potentially benefit from chiropractic.

What Is Chiropractic?

Chiropractors focus on dysfunctions that can result from irregularities of spinal structure or movement. Hands-on procedures are usually preferred by most chiropractors to determine structural and functional problems. Manipulation is used to promote normal bodily function thus correcting or preventing these structural deviations. Chiropractic "adjustment" refers to a variety of manual mechanical interventions.



- **Manipulation** is movement of short amplitude and high velocity that moves the joint beyond where patient's muscles could move the joint by themselves but short of ligament rupture.
- **Mobilization** is movements administered by the clinician within physiologic joint space in order to increase overall range of motion.

Chiropractors have developed and refined a variety of manual therapies, particularly those known as high velocity and short amplitude. A number of systems have been developed and refined and may be used in a chiropractic session. These include:

- activator technique
- applied kinesiology
- diversified technique
- flexion-distraction technique
- Gonstead technique
- Sacro-Occipital Technique, or SOT
- Thompson terminal technique

The Vitalistic Principle

Vitalistic principle holds that the human organism can keep itself healthy if there are no barriers to full expression of all its vital functions. The body has the innate ability to heal itself from within.

The life force (or Innate Intelligence) emanates throughout the body through the nervous system. The nervous system, in a sense, is the conduit of the life force. By manipulating the spine and other joints through which the life force passes (the spine itself is a series of joints), chiropractors see themselves as removing barriers or obstacles to the full expression of this life force, thereby allowing the functioning necessary for health.

The vitalistic model distinguishes chiropractic from the conventional medical model. Unlike in allopathy and western medicine, chiropractors do not directly treat disease. They facilitate the body's own restorative powers. The vital force cannot be measured scientifically. But it is something chiropractors believe in. Like chi in Chinese medicine, prana in Ayurveda, and the vital force in homeopathy, vital force is a major premise of chiropractic.

Holism

Another important principle of chiropractic medicine is the notion of holism. Holism suggests that the body is a network of systems all interpenetrating and influencing one another. Within this context, the nervous system is the master system that mediates the functioning of all other systems. Any obstacles to perfect function of the nervous system can have potentially far-reaching effects. Chiropractic's focal point of concern is the integrity of the nervous system.

Key Principles

Subluxation

The focus of treatment of chiropractors is subluxation.



A subluxation (or Vertebral Subluxation) is when one or more of the bones of your spine (vertebrae) move out of position and put pressure on or irritate spinal nerves. Spinal nerves are the nerves that come out from between each of the bones in your spine. This pressure or irritation on the nerves causes the spinal nerves to malfunction and interfere with the signals travelling over those nerves.



Your nervous system controls and coordinates all the functions of your body. If you interfere with the signals travelling over the nerves, parts of your body will not get the proper nerve messages and will not be able to work properly.

The American Association of Chiropractic Colleges has defined subluxation as "a complex of functional and/or structural and/or pathological articular changes that compromise neural [nervous system] integrity and may influence organ system and general health." The cause of this spinal misalignment is considered to be anything from poor posture, a muscle spasm, an accident, or a sports injury to a birth defect.

Thus subluxation refers to a partial dislocation in a joint comprised of two vertebra. There is a misalignment of the vertebra in the joint, but not severe enough to cause a complete dislocation.

The basis of chiropractic theory is that subluxations alter the normal neurophysiologic functioning in the person. D. D. Palmer, founder of modern chiropractic, coined the term subluxation to describe a misalignment of vertebra that results in undue pressure on the spinal cord or nerves. Another term sometimes used to describe this condition is "segmental dysfunction," referring to a segment of the spine.

To Palmer a subluxation was a joint problem in the spine in which the flow of Innate Intelligence is disturbed or impeded.

The inappropriate pressure on nerves (nerve "reflex") caused by subluxation is what causes disturbance in the bodily functions supplied by those nerves and can make the person more vulnerable to disease processes.

Chiropractors look for interferences in the nervous system in the form of subluxations and remove those interferences to allow the nervous system to function at a higher level. When the nervous system functions at a higher level, the body will begin to heal itself.

This is how the International Chiropractors Association (ICA) sees the role of subluxation in chiropractic:

The Subluxation

Chiropractic is concerned with the preservation and restoration of health, and focuses particular attention on the subluxation. A subluxation is a complex of functional and/or pathological articular changes that compromise the neural integrity and may influence organ system function and general health. A subluxation is evaluated, diagnosed, and managed through the use of chiropractic procedures based on the best available rational and empirical evidence.

A subluxation is a complex of functional and/or structural and/or pathological articular changes that compromise neural integrity and may influence organ system function and general health. A subluxation is evaluated, diagnosed, and managed through the use of chiropractic procedures based on the best available rational and empirical evidence.

Vertebral Subluxation Complex or VSC

Although we described subluxations as a partial dislocation of the vertebra, in practice, it is more complex than that. In actuality, subluxations are a combination of changes going on simultaneously. These changes are not limited to your spine. They occur both in your spine and throughout your body. For this reason chiropractors often refer to vertebral subluxations as the Vertebral Subluxation Complex (VSC).

In the VSC, various things are happening inside your body at the same time. These changes, known as components are all part of the vertebral subluxation complex. There are five categories of components present in the VSC. These five are:

The osseous (bone) component is where the vertebrae are either out of position, not moving properly, or are undergoing physical changes such as degeneration. This component is sometimes called **kinesiopathology**.

The Nerve Component is the malfunctioning of the nerve. Even a small amount of pressure on spinal nerves can have a profound impact on the function of the nerves. This component is scientifically known as **neuropathology**.

The third component is the Muscle Component. Muscles help hold the vertebrae in place. Nerves control the muscles. Thus, muscles are an integral part of any VSC. Muscles effect, as well as are affected by the VSC. This component is known as **myopathology**.

The Soft Tissue Component is when you have misaligned vertebrae and pressure on nerves resulting in changes in the surrounding soft tissues. This means the tendons, ligaments, blood supply and other tissues undergo changes. These changes can occur at the point of the VSC or far away at some end point of the affected nerves. This component is also known as **histopathology**.

The Chemical Component is when all these components of the VSC are acting on your body, and therefore causing some degree of chemical changes. These chemical changes can be slight or massive depending of what parts of your body are affected by your subluxations. This component is often known as **biochemical abnormalities**.

To be truly healthy it is vital that your nerve system be functioning free of interference from subluxations.

Key Principles

The Role of the Musculoskeletal System

The musculoskeletal system and the viscera or internal organs can in a sense be thought of as two sides of the same coin. Of course they are interdependent, but there can be different points of view about the nature of their relationship.

The traditional chiropractic view is that biological function is a manifestation of living structure. Any disturbance in structure causes a corresponding disturbance in function. Vertebral subluxation is a disturbance in the structural relationship of the vertebra and the nerves they protect, which reduces the body's ability to maintain its own health.

The Causes of Illness

Chiropractic tradition holds that much of illness occurs as a result of disturbances in the nervous system. Such disturbances are caused by derangements of the musculoskeletal structure. These disturbances may cause or aggravate disease in various parts or functions of the body.

Subluxations occur as a normal part of living in any culture. Our bodies were not designed to sit for long periods of time. The modern sedentary lifestyle consisting of little exercise and long periods of sitting, either at desks, in cars, or at home, puts an unnatural strain on the spine and contributes to subluxations. The spine does not receive the degree of daily movement with which it evolved. Modern lifestyles often impede a normal, healthful degree of flexibility.

Many chiropractors also hold that health is further compromised by other aspects of lifestyle, such as inadequate nutrition, pollution and chronic stress. All these factors together create a situation in which the flow of vital force through the nervous system is impaired at a time when it is needed to be at its optimum. This results in the variety of chronic and degenerative illnesses we face today.

Chiropractic and many other natural health disciplines recognize that to be truly healthy and alive you must be a clear conduit to your inner wisdom (also referred to as your "source," the "wisdom of the body", your "inner doctor", your innate (inborn) intelligence and other terms).

The goal of chiropractic is to help you better connect to your source so your inner doctor may work its miracles. A complete disconnection from your source results in death; a partial disconnection results in disease or disharmony. Many people are in this state; with less than 100% connection they are less than fully alive.

Our very word health derives from the old English word hale meaning whole. You are healthy when you are whole, unified, integrated and complete – not fragmented, disintegrated, disconnected or incomplete.

(Source: Tedd Koren, DC: "The Connections of Health")

Chiropractic Treatment Techniques

There is a wide variation of techniques used by different chiropractors. Chiropractors focus on dysfunctions that can result from irregularities spinal structure or movement. They rely heavily on hands-on procedures to determine structural and functional problems, and they use manipulation to promote normal bodily function correcting or preventing these structural deviations. The principal procedure used by many chiropractors is a form of manipulation known as **adjustment** that refers to a variety of manual mechanical interventions. There are about 55 adjustments in a chiropractor's repertoire. Some of them are:

- Manipulation is movement of short amplitude and high velocity that moves the joint beyond where patient's muscles could move the joint by themselves but short of ligament rupture.
- Mobilization is movements administered by the clinician within physiologic joint space in order to increase overall range of motion.

There are hundreds of ways or techniques to adjust the spine. Each chiropractor becomes highly skilled in a variety of adjustment procedures that are most suitable for your age, body type and condition. Some of the most common chiropractic techniques used today are:

Gonstead Technique:

Detailed analysis of spinal X-rays is used to determine correct adjustments to be administered.

Activator:

Detects and corrects dysfunction using a small tool which delivers a light and measured force to correct misalignments. It is used to gently and painlessly move the vertebrae.

Bio-Energetic Synchronization Technique (BEST):

A non-force technique using subtle, yet precise pressure applied by hand to remove blocked nerve energy, eliminate physiological interference and balance sensory signals to the central nervous system.

Cox Flexion Distraction:

Involves traction or stretching of the spine designed especially to correct lower-back pain.

Applied Kinesiology:

Applied KInesiology deals not only with the placement of bones, but with the muscles that hold them in position. Chiropractors employing applied kinesiology use special techniques to help balance opposing muscles attached to a misaligned bone. Light massage is given to various reflexes and sometimes to acupressure points. This restores normal muscle function, in order to allow the adjustments to be more effective.

■Thompson Terminal Point:

A full spine technique using a special drop table.

Palmer Toggle Recoil Technique:

A speed and precision adjustment in which the hands are placed over the subluxation and the elbows snapped to give sudden pressure. There is no joint cracking.

Sacro-Occipital Technique (SOT):

Padded blocks are placed under the patient in the pelvic area to allow the body to adjust itself, since muscle tension at the pelvis affects the neck.

Logan Basic Technique:

A gentle, sustained pressure is exerted at the base of the spine. Correcting the sacrum corrects the rest of the spine.

Nimmo Technique:

Application of simple pressure to tender areas to release muscles from localized spasm.

Orthotics:

Custom-made devices placed in the shoes to treat posture problems, such as uneven leg length, spinal curvature and tilted pelvises.

Motion Palpitation:

Joints felt as they are moved to determine fixations.

In general, an adjustment consists of a sudden, short, controlled thrust against a joint. The chiropractor will move the affected joint to the limit of its range of movement and then make a rapid thrust beyond this point to stretch the joint capsule and surrounding tissues.

While undergoing adjustment, it is important that the patient remain relaxed for this to be effective. A certain speed of the thrust is employed to ensure that the patient's muscles have no time to contract and so restrict the movement. Cracking or popping sound may be heard during the thrust: this is caused by gases in the synovial fluid (the lubricating fluid inside each joint capsule) and is harmless.

Most chiropractors will treat only a joint that they believe is misaligned or subluxated. Some, however, may treat the whole spine or concentrate only on one area.

It is important to remember that all manipulations involve a degree of risk, however small. So undergo adjustments only when necessary and then by experienced practitioners.

If an adjustment is contraindicated for any reason, such as the possibility that it might cause the patient excessive pain or anxiety, a joint can be stretched by placing a roll or wedge in the correct position beneath the spine when the patient is lying down. However, doing this takes time, and the results are not achieved as quickly as those brought about by manipulation. Chiropractors also use a number of soft-tissue techniques (such as massage, heat, ice, and kneading) to relax a patient's muscles before a manipulation, to release trigger points (painful knots of muscle fibres), and to lengthen tendons and muscles.

Two Schools of Chiropractors

Straight and Mixers

The group of chiropractors who believe in subluxations can be subdivided into two groups, the "straights" and the "mixers."

The **straights** follow Palmer's doctrine that subluxations of the vertebrae can cause or contribute to most disorders, but they do not claim to be able to diagnose or treat diseases -only to detect and cure subluxations. Only about 15% of all chiropractors can be called "straight" chiropractors.

Straight chiropractors consider their scope of practice limited to:

- The anatomy of the spine and immediate articulations
- The condition of vertebral subluxation
- Addressing vertebral subluxations
- Educating patients and advising them about subluxations.

Mixers believe that diseases can develop from other causes, like bacteria and viruses. But they believe that subluxations affect the body's health by lowering resistance to disease. The deviation or malposition of a spinal vertebra may cause a neurological imbalance within the body, setting the stage for a lowered resistance.

Mixers comprise the majority of practitioners. Their practice extends beyond the narrow focus on vertebral subluxation. They use a wider range of modalities as well as concepts from diverse health care traditions in their practice. Many integrate methods from other traditions. The most common are: nutritional supplementation, vitamins, homeopathic drugs, and nutritional advice. Some integrate Chinese medicine, Ayurveda, naturopathy, homeopathy, massage or bodywork, mind / body approaches, or other healing methods into their offerings. Individual chiropractors often develop their own unique reputation and synthesis of different traditions.

Network Chiropractic

Network chiropractic is an approach that has been developed by Donald Epstein, D.C. It draws upon chiropractic's traditional adjustment techniques and works with the body's Innate Intelligence. Its uniqueness lies in its use of a unified system of twelve techniques with special attention to their timing and sequencing. Using light, supple movements, practitioners adjust each vertebra in relationship to the rest of the spine, since they believe that spine protects an essential channel of energy and information to the body.

Dr. Epstein's system of Network Spinal Analysis integrates points of agreement from diverse chiropractic approaches. He observed from clinical experience that not all subluxations of the spine are the same. There are two types of subluxations, structural (arising from physical stresses) and facilitated (arising from emotional stresses). The practitioner addresses them in different ways.

Network chiropractic combines a variety of chiropractic techniques to enable the practitioner to adjust subluxations with the precise amount and type of force suggested by clinical findings. This is different from attempting to match the vertebra being adjusted to a specific technique. The difference lies in the sequence of the adjustments and the networking of the various methods.

Main Uses

Spinal misalignmentMuscular stiffnessStress

Improved well-being

McTimoney Chiropractic

John McTimoney founded the McTimoney method of chiropractic in Banbury, Britain, in 1951.

Mc Timoney, an adherent of Palmer's holistic view of chiropractic, believed that subluxations impair nerve function and affect the correct functioning of the body. His approach altered to a "whole body" one. He came to the view that although the spine was the primary source of misalignments, or subluxations, the other joints of the body could also be put out of alignment by everyday stresses and strains, and that, in order to achieve a complete realignment, all the joints of the body should be treated not just the spine. Mc Timoney also treated animals with his technique and is considered to be a pioneer in this field.

Followers of the Mc Timoney school of chiropractic use the same techniques as other chiropractors, but in a much more gentle way. They favour a technique known as the "toggle-recoil" thrust. In this, the practitioner pushes the joint in the desired direction with one rapid movement and then releases it. The tendons and ligaments of the joint are stretched by the rapid push and their natural elasticity is thought to assist the bones to realign as they recoil when released.

McTimoney practitioners examine and treat the entire body in the course of each session to ensure correct skeletal alignment. They rarely use X-rays or other diagnostic tools, preferring to rely on what they feel with their hands.

Mc Timoney Chiropractic is seen as a safer option than ordinary chiropractic because of its lighter touch.

McTimoney-Corley Chiropractic

Hugh Corley was a student of John McTimoney. He developed McTimoney's whole body approach further by incorporating gentle fingertip manipulations of the vertebrae and self-help exercises for patients to perform at home between treatment sessions.

The gentleness of these two kinds of chiropractic therapy makes them especially suitable for babies and the elderly.

Safety and Precautions

Chiropractic is safe if administered by a qualified, experienced professional. Do not attempt to do any manipulations yourself. You can do major damage to yourselves. However, a chiropractor may well recommend that certain exercises and relaxation techniques be performed at home between sessions and after a course of treatment has been concluded.

Most of the concern around the safety of chiropractic treatment centres on manipulation of the neck. About 110 cases of complications allegedly due to chiropractic manipulation of the neck have been reported. Most of these were strokes. The connection has never been proven. In one large study involving 150,000 manipulations performed by 460 physicians showed no serious complications at all. According to the RAND Corporation, the overall rate of complications of chiropractic manipulation to the neck is approximately one in one million attesting to the safety of chiropractic treatment.

The most common complication of chiropractic treatment is a temporary worsening of discomfort.

Precautions

- Manipulation of the spine, and especially of the cervical area, can be dangerous. If the neck is twisted too far, it is possible to tear the walls of the vulnerable vertebral arteries where they pass up to the neck. The result can be an aneurysm or blood clots, which, in turn, can cause a stroke or other neurological symptoms, such as vertigo and slurring, or even be fatal.
- There have been cases of neurological damage following chiropractic manipulations of the neck. In 1992, researchers at Stanford Stroke Centre found that 55 people had been referred to neurologists in California following manipulation. They were suffering from permanent nerve damage, and one died. The vast majority of chiropractic manipulations are safe, but any manipulation carries a risk, so it is important that it is not undertaken lightly or unnecessarily.
- The spine should never be manipulated if there are any signs of a neurological involvement, such as a loss of sensation in the legs or impaired bladder control. Bone diseases, such as osteoporosis or cancer, a recent fracture, or serious circulatory problems, such as aneurysms or a history of thrombosis, are also contraindications for the use of spinal manipulations. If in doubt, consult your doctor.
- Chiropractic is not recommended for disorders of other than musculoskeletal origin, and should be avoided for certain musculoskeletal problems as well. For in- stance, it is not recommended for osteoporosis, bone or joint infections, bone cancer, acute rheumatoid arthritis, and diseases of the spinal chord or bone marrow. It should also be avoided in an area that has been operated on, such as a

spinal fusion, and near acute fractures and dislocations or healed fractures and dislocations with signs of ligament damage. Chiropractors do not treat fractures.

Scoliosis, a condition in which the spine curves to the side, is generally considered a target for chiropractic therapy. However, idiopathic scoliosis, which develops over time instead of being present at birth (congenital scoliosis), is not appropriate for treatment by a chiropractor.

Effectiveness Of Chiropractic

The best available scientific evidence for chiropractic concerns acute back pain, chronic neck pain, and tension headaches. Some of this evidence is fairly convincing. It is generally stronger than the evidence for conventional physical therapy techniques.

The greatest strength of chiropractic is in treatment of neuro- musculoskeletal conditions such as sprain or strain-type injuries of the back and adjacent structures. Their strongest suit is low back conditions. This is followed by neck, head, and arm problems, especially migraine headaches, tension headaches, stiff necks, and torticollis. The next strongest area would be extra spinal conditions such as problems in the knees, wrists, elbows, ankles, and other joints.

For low back pain, research has helped make it possible to predict fairly reliably which individuals will benefit. For conditions with more vague complaints or with visceral manifestation like gastritis, asthma, or allergies, the predictability of benefit is lower, although there is much anecdotal evidence that these conditions too can benefit.

Acupuncture and/or movement therapies can be combined with chiropractic manipulation for an amplified effect.

Animal studies showed that spinal manipulation can produce a number of physical responses, such as decreased blood pressure and renal and adrenal nerve activity. It may also enhance immune function by increasing metabolic rates of certain white blood cells and increasing other substances that play a role in immune regulation and inflammation. These studies also show that spinal adjustment can reduce levels of inflammatory Prostaglandins and possibly increase levels of beta-endorphins, the natural painkillers in the body.

Chiropractic has been believed to be useful in treating the following conditions:

Arthritis

Asthma

M Back problems

M Bedwetting

M Bronchitis

M Bursitis

Carpal tunnel syndrome

(Cervical disk herniation

(h Chronic Fatigue Syndrome

Coughs

(h Dizziness

(h Earache

- **h** Fainting
- **M** Headache
- High Blood Pressure
- **(1)** Hyperactivity
- **Indigestion**
- **Infant colic**
- **(h** Infertility
- Menstrual problems
- **Migraine**
- Multiple sclerosis
- Muscle Cramps
- **M** Neuralgia
- **(** Osteoporosis
- A Pain, Chronic
- **(**) Pneumonia
- Pregnancy problems
- Premenstrual Syndrome
- Repetitive strain injury (RSI)
- **(** Sciatica
- **Sprains and Strains**
- **(**h Tendinitis
- TMJ Syndrome

"Chiropractic care is a cost-effective alternative to the management of neuromusculoskeletal conditions. It is also safer, increasingly accepted by the public as reflected in the growing utilization and high patient retention rates and there is much and repeated evidence that patients prefer chiropractic over other forms of care for the more common musculoskeletal conditions. The integration of chiropractic into the health care system should serve to reduce health care costs, improve accessibility to needed care, and improve health outcomes. There is an extensive body of literature demonstrating that chiropractic care for NMS disorders is effective though there (are) studies that question or dispute this finding. Suffice to say that there is not nearly as much nor as convincing evidence for the effectiveness of medical management of these conditions. Additionally, there is a strong and compelling consensus that chiropractic is safer, and patient satisfaction is higher than for other professions."

"The Economic Case for the Integration of Chiropractic Services into the Health Care System", by Pran Manga, Ph.D., University of Ottawa, Ottawa, Ontario, Canada.

Chiropractic and Addiction

The University of Miami School of Medicine and the Florida Chiropractic Society is currently conducting the first large-scale human population study to prove the effectiveness of the chiropractic adjustment in dealing with chemical addiction. Preliminary results from the triple-blind study shows

that a person receiving chiropractic care is ten times more likely to complete a drug program. This equates to about a 97% retention rate which is very remarkable if it is retained to the end of the study.

Dr. Holder, the lead researcher in the program stated that, "By removing subluxations that interfere with the normal functioning of the nervous system, a person in a drug treatment center is more likely to complete his or her term of stay because the person now can meet the needs of all the other modalities that are offered as treatment"

People who have undergone chiropractic care have less drug detox or withdrawal symptoms. Their physical complaints are almost eliminated. Chiropractic care allows them to concentrate on dealing with their addiction rather than being distracted by other problems.

Asthma

A study published in the November / December 2000 issue of Today's Chiropractic gives some insight into the use of chiropractic in combating asthma. Forty seven patients were observed for a two year period. They had been medically diagnosed with persistent asthma ranging from mild persistent in 11 cases, moderate persistent in 28 cases, to severe persistent in 8 cases. The care rendered consisted of specific chiropractic adjustments. The range of visits was from 14 to 44, with the average being 26 during the study period.

All 47 of the study patients showed "a marked improvement ranging from 87% to 100%." Their symptoms improved as well as a decrease in their usage of acute asthma attack medication. Even more impressive was the fact that all of the patients in the study reported maintaining their improvement after a two-year follow up.

Childhood Asthma and Chiropractic

Chiropractors suggest that there is a strong link between people who suffer from childhood asthma and nerve interference from subluxation. Subluxations are when bones in the spine pressure or irritate nerves causing abnormal nerve function.

An article published in the Journal of Vertebral Subluxation Research (Vol. 1 No. 4) showed positive effects of chiropractic care on 81 children with asthma. It concluded that "Based upon information currently available, chiropractic care represents a safe non-pharmacological health care approach, that may be associated with a decrease in asthma-related impairment, reduced respiratory effort, and a decrease incidence of asthma attacks. The correction of vertebral subluxation could reduce or eliminate the need for medication, and potentially ease the severity of the asthmatic condition."

This was verified in another study. In a study conducted in 1996 by the Michigan Chiropractic Council (MCC), a panel of doctors performed an out-come assessment study to test the qualitative and quantitative effectiveness of chiropractic care on children with asthma. There was an overwhelming interest in the study. More than 500 parents called the MCC seeking to get their child involved in the chiropractic study.

The study, which took place during May and June of 1996, examined the chiropractic effectiveness in correcting the cause of asthma in patients from birth to age 17. The average age of the participant was 10 years. After 30 days of chiropractic health care, patients averaged only one attack, whereas prior to

the study they were experiencing more than four attacks. Medications were decreased by nearly 70%. Patient satisfaction was rated 8.5 on a scale of 10. More than 70 chiropractors from 62 cities in Michigan participated in the study involving more than 80 children suffering from asthma.

The International Chiropractic Paediatric Association cites several studies when coming to the following conclusion discussing the benefits of chiropractic for children with asthma:

76.5% of patients with bronchial asthma said they benefited from chiropractic treatment. Peak flow rate and vital capacity increased after the third treatment. Significantly lower quality of life impairment rating scores were reported for 90.1% of children after 60 days of chiropractic care. During this same time period the average number of asthma attacks decreased an average of 44.9%, and asthma medication usage was decreased an average of 66.5%. Among parents of asthmatic children who had received chiropractic treatment, 92% considered this treatment beneficial.

Autonomic Nervous System and Chiropractic Adjustments

Researchers found that chiropractic adjustments have an effect on the Autonomic Nervous System. They measured the changes in "Edge Light Pupil Cycle Time" (ELPCT) which is one of the light reflexes of the eyes. This reflex is controlled by the Autonomic Nervous System. A decrease in the Edge Light Pupil Cycle Time was observed with chiropractic adjustment implying a direct link between a chiropractic adjustment and a response in the Autonomic Nervous System. The study was published in the September 2000 issue of the Journal of Manipulative and Physiologic Therapeutics.

If this is true, it will have implications well beyond vision problems. The Autonomic Nervous System is that part of the nervous system responsible for the control and function of internal body organs. Chiropractors believe that interference to the nervous system creates a situation whereby various parts of the body will not be functioning at their full potential. This research shows a link between chiropractic adjustments of the spine and the part of the nervous system responsible for the control of internal organs. Chiropractors suggest that this shows conclusively that chiropractic care can have a positive affect on organ system health problems.

Back Pain

Eighty percent or more of the people who visit a chiropractor, do so because of back pain.

Back pain can arise from a variety of conditions. The chief among them are:

Pinched Nerves
Slipped Discs
Ruptured Discs
Scoliosis
Arthritis
Muscle Pain

A chiropractor can pinpoint the cause of the back pain. He or she can make the necessary spinal adjustments to relieve the problem. In some cases, a chiropractor will recommend that you seek medical attention for your situation.

The 1994 Federal Agency for Health Policy and Research (AHCPR) guidelines for low-back pain concluded that spinal manipulation, chiropractic's primary treatment technique, is one of only three treatments whose effectiveness is substantiated by rigorous research.

According to a 1992 RAND Corp. study, patients see a chiropractor primarily for low back pain and neck pain. Because back pain is so pervasive in our society, a recent study published in the British Medical Journal pointing out that back pain doesn't go away that easily confirmed what chiropractors have always known. Only 25% of low back pain sufferers had fully recovered 12 months after their first visit to a general practitioner, the study said. This low number is in conflict with the commonly-held notion that low back pain episodes go away by themselves after a month. Doctors of chiropractic have long understood the cyclic nature of low back pain.

In 1999, Blue Cross/Blue Shield of Kansas in August 1999, presented a study aimed at determining the cost and effectiveness of treating back pain with chiropractic compared with other techniques. The results showed that 38% of the patients chose to seek chiropractic care rather than medical care. The results showed that chiropractic was more cost-effective than anaesthesiology; neurosurgery; neurology; registered physical therapy; orthopaedic reconstructive surgery; physical medicine and rehabilitation; and rheumatology. The study also showed that most of the chiropractic expenses 89%, were related directly to patient care, while only 45% of the medical costs were related to treatment of the condition with remainder of the costs being for diagnostic procedures. The study had excluded any costs for hospitalization, surgery, or any fees paid to orthopaedists or neurosurgeons for costs associated with surgery. Without these additional costs being included in the study, the costs related to medical care were reported much lower than they actually were, and the savings from chiropractic care was actually much larger.

Chiropractors points out this study as vindication of their long-held view, "Patients suffering from back problems are in much better, and cost effective hands with chiropractic care."

Satisfied Customers

A research journal, the "Journal of Manipulative and Physiological Therapeutics" published a study that showed high levels of patient satisfaction for those who went to chiropractors with what was classified as severe to moderate pain in either the back or neck. A total of 369 patients were sampled who had gone to chiropractors with these problems. These individuals were asked to complete surveys tracking all kinds of information from the type and severity of their problem to their level of satisfaction with care.

The results showed a very positive response from the study group in both the results they felt and their overall level of satisfaction with their care. The results of the published study summed it up best; "Based on the results of this survey, it seems that patients suffering from back and or neck complaints experience chiropractic care as an effective means of resolving or ameliorating pain and functional impairments. Moreover, the patients surveyed demonstrated a high degree of satisfaction with the care they received. Numerous other studies have demonstrated that chiropractic is as effective, if not more effective than conventional medical management of such complaints."

Preventing Low-Back Pain

Exercise regularly

- Keep objects close to the body when lifting them.
- Place a pillow or rolled-up towel behind the small of the back when driving long distances.
- Put work tables at a comfortable height.
- Use a chair with good lower-back support.
- Wear comfortable, low-heeled shoes.
- Wear a lumbar corset if you lift things frequently at work.
- When you sit for a long time, rest your feet on a low stool.

Back & Neck Problems

High levels of patient satisfaction was reported by those who went to chiropractors with severe to moderate pain in either the back or neck. In a clinical survey, a total of 369 patients who had gone to chiropractors with these problems were sampled.

The results showed a very positive response from the study group in both the results they felt and their overall level of satisfaction with their care. This was reported in the Journal of Manipulative and Physiological Therapeutics.

Based on the results of this survey, the researchers concluded that patients suffering from back and or neck complaints experience chiropractic care as an effective means of resolving or ameliorating pain and functional impairments. The patients surveyed demonstrated a high degree of satisfaction with the care they received. They further stated that, "Numerous other studies have demonstrated that chiropractic is as effective, if not more effective than conventional medical management of such complaints."

A three-year study showed that chiropractic care is more effective with higher patient satisfaction than outpatient medical care for lower back pain. The study involved 741 men and women with low back pain. A 3 year follow up showed that there was 29% higher improvement in those receiving chiropractic care over those receiving out-patient medical care. (Source: The British Medical Journal.)

Bedwetting and Chiropractic

Children suffering from "Nocturnal Enuresis" more commonly known as bedwetting benefit from chiropractic care. Several studies have shown marked improvement in children with bedwetting who have undergone chiropractic care compared to those who did not receive chiropractic care.

In one study, 171 children suffering with enuresis averaged 7 nights of bed wetting per week prior to the study. After the children were given some initial chiropractic care the average child reduced the number of "wet" nights to 4 nights per week. A full 25% of the children receiving chiropractic showed a 50% reduction in wet nights.

In another study, 46 primary enuretic children were studied. Of this group 31 were placed under chiropractic care while 15 were in the control group and did not receive any chiropractic care. The results of this study showed a 17.9% decrease in wet nights for the chiropractic group. Over the same period of time no change was noted for the control group who did not receive any chiropractic care. Improvements were observed immediately after the first adjustment and remained stable thereafter.

Source: Journal of Manipulative and Physiological Therapeutics

Cancer and Chiropractic

An article published in the January 2001 issue of the Journal of Manipulative and Physiological Therapeutics followed two case studies of patients with various types of serious cancer. The article examined the role of chiropractic care in improving the quality of life of cancer patients.

The first patient was a 57-year-old man with serious terminal pancreatic cancer. He received chiropractic care during the later stages of the disease. The chiropractic care was able to provide significant pain relief, reduce the amount of pain medication being taken (as well as the potential side effects), and temporarily improve the quality of life for a patient with terminal cancer.

The second patient was a 54-year-old man recovering from surgery for lung cancer. He was suffering from upper back pain for over one year. After the patient started on the chiropractic care, he experienced immediate relief and was able to discontinue all pain medication after two chiropractic visits.

Obviously, the sample is very small to make a generalized conclusion as to the effectiveness of chiropractic care in improving the quality of life of cancer patients. But the results are very encouraging.

Infantile Colic

Having to deal with a child that is suffering from colic is very frustrating to new parents. Typical response from doctors is, "if it is colic, it would run its course in three months." Recent studies show that chiropractic care may be useful in managing the situation.

In a study conducted in South Africa by Mercer and Cook, thirty infants who had been diagnosed medically with colic were randomly divided into two groups. One group received chiropractic care while the other group did not. All infants in this study were newborn to 8 weeks old and had been diagnosed with colic by a paediatrician.

The infants in the chiropractic group received care for a two-week period with a maximum of six adjustments (spinal adjusting). In the group that received chiropractic care, there was complete resolution of symptoms in 93% of the infants within the two-week period. What is more impressive, though is the finding that in a follow up survey performed one month later, none of the infants had experienced a reoccurrence of problems from colic.

In another study, the National Health Service in Ballerup (Copenhagen, Denmark) conducted a study involving 50 infants diagnosed with infantile colic. Half of the group was given the drug dimethicon while the other half was given chiropractic care. In this study, nine of the 25 taking the drug dropped out of the study because the infants were getting worse. These infants were then not counted in the final results which would have shown a worse result for the drug than published.

After 4 to 7 days into the study, the infants remaining in the drug group had reduced their hours of crying by only one hour while the entire chiropractic group had reduced crying hours by an average of 2.4 hours. After 8 to 10 days, the study continued to show the drug therapy infants at a one hour improvement while the chiropractic group further improved to 2.7 hours less of crying. The researchers noted that the removal from the study of the infants that got worse from the drug made the results from the drug look better than they actually were.

Ear Infections (Otitis Media, OM)

Reoccurring ear infections account for over 35% of all paediatrician visits in the United States. Sometimes these infections are due to bacteria and sometimes these are due to a virus. The most common medical care for this situation has been antibiotics, even though antibiotics have no effect on viruses. The antibiotic may be effective in an acute bacterial infection; but it does nothing to stop repeat infections. It is also possible that repeated use of antibiotics may contribute to future infections by creating drug-resistant infections. Another conventional approach to repeated ear infection is the surgical implantation of a drain tube. These tubes often come out and usually require a child to be put under general anaesthesia to do the surgery.

Several studies showing the effectiveness of chiropractic care for preventing re-occurring ear infections were reviewed in the October 1998 issue of the Ladies Home Journal in an article entitled, "Chiropractic Adjustments for Chronic Ear Infections." Chiropractic care is useful in preventing recurrent infections by correcting misalignments and allowing normal fluid drainage from the middle ear. What was more important was that 6 months after the chiropractic care was given to the children in the study, 80% had not suffered a recurrence of ear infections.

In the March 1998 edition of Alternative Therapies and authored by Fallon and Edelman reported a study involving 401 Children with Otitis Media. The authors found a strong correlation between chiropractic adjustment and the resolution of otitis media for the children in this study.

If your child is between ear infections and his doctor suggests ear-tube surgery, ask if you can try chiropractic treatment first.

Glaucoma and Chiropractic

The July / August 2000 edition of the Journal Of Manipulative and Physiological Therapeutics contained a case study of how a patient with glaucoma was helped by chiropractic. A 25 year old woman who went to a chiropractor for back pain. She was also suffering from congenital glaucoma that had severely affected her vision.

A comprehensive ophthalmologic examination before the initiation of the chiropractic care showed that the patient had severe eyesight impairment due to her congenital condition.

Almost immediately after she started on her chiropractic care, (one visit), the patient noticed an improvement in eyesight. After four adjustments, the patient's monocular visual field had increased from approximately 2% to approximately 20% of normal. Although the patient would never regain total eyesight, the ten-fold improvement in just one week was very significant.

Although several other reports of this type have been made by chiropractors in their practices, this case was unique because it was verified by an ophthalmologic examination performed by an independent medical ophthalmic surgeon before, and after the treatment. Although the sample size of 1 is not sufficient to conclude anything statistically, the results are certainly very encouraging.

Chronic Migraines

Chiropractic care can help people suffering with migraine headaches. According to the American Chiropractic Association 14% of the public who see chiropractors presently go for headaches.

A study conducted in Australia at the Chiropractic Research Centre of Macquarie University studied 177 volunteers who had migraine headaches for over 18 years on average. Many of the participants also suffered from neck pain. The results of the study were published in the February 2000 issue of the Journal of Manipulative and Physiological Therapeutics.

The average response of the group that received chiropractic care showed a statistically significant improvement in migraine frequency, duration, and disability. Those who received chiropractic care were able to reduce or eliminate their medication use. Additionally, 59% had no neck pain after a period of two months, and another 35% had a decrease in neck pain.

Researchers at Northwestern College of Chiropractic in Minnesota, compared chiropractic care to certain drug therapies used for tension and migraine headaches. The study, published in the Journal of Manipulative and Physiological Therapeutics, followed 218 headache sufferers who were given either chiropractic care or drug therapy or both. Pain was reduced 40% - 50% in all groups initially. However, four weeks after all care was stopped, only the chiropractic group still retained the benefits, while those who received the drug therapy lost about half of their improvement.

Premenstrual Syndrome and Chiropractic

The November / December 1999 issue of the Journal of Manipulative and Physiological Therapeutics contained a clinical study on the effects of chiropractic on the symptoms associated with premenstrual syndrome.

The study involved 25 women. They have undergone chiropractic adjustments for a ten day period prior to the beginning of their cycles.

The women were asked to monitor and rate their symptoms. The results showed a reduction in symptoms from between 42% and 32% for the group that received chiropractic for only a short time. The results support the hypothesis that the symptoms associated with PMS can be reduced by chiropractic.

What the Critics of Chiropractic Say

- Some medical doctors maintain that misaligned vertebrae-the chiropractor's clue to health problemsare common, often harmless, and do not require treatment.
- Critics charge that frequent visits to a chiropractor are useless, whether as a preventive measure or to treat a specific condition such as back pain-which, they say, usually clears up on its own.
- Those critical of chiropractic often point out that quadriplegics can have healthy internal organs despite their extensive nerve damage. This fact, they maintain, disproves the assertion that a sound nervous system is the key to overall health.
- A number of critics argue that chiropractors should restrict their practice to treating back pain, since there is insufficient evidence to show that manipulation provides relief from any other condition.

Colour Therapy



Colours affect moods and emotions. Colour therapy uses this sensitivity to colour to identify and correct any imbalances in the body's internal energy patterns that might lead to emotional or physical ill health. Therapists believe that each organ and body system has its own characteristic vibrational energy, and disorders can be healed by applying colour of the corresponding vibrational energy, either to the whole body or to the organ concerned.

For example, the red spectrum affects our physical energies. It is stimulating and warming. Blues are cooling and cleansing, affecting our spiritual energies. The yellow shades serve to bridge them, affecting our mental energies. The three colours together provide opportunities for healing our body, mind, and spirit.

We recommend that you start your investigation into colour therapy by reading the review article submitted by Dr. Greenfield and then read the chapters of interest. You may also want to read light therapy that covers in depth the white light therapy.



Incorporating Colours Into Your Life

You can do simple technique to derive the benefits of colour for your mind, body and spirit. Here are few suggestions:

- Use coloured lamps. Place coloured glass over light bulbs or by buy coloured bulbs.
- Use soft lights instead of fluorescent or neon.
- ■Use full-spectrum lights in the winter (when there is less sunlight) to alleviate seasonal affective disorder.
- Use mild and harmonious shades.
- Paint with colours
- Choose the colours of your surroundings- clothes, home furnishings, car, office, bedroom-with care.

- Take advantage of natural colours. Nature's own colours are the most beneficial, nourishing and strengthening. Colours that appear naturally are: sky blue, ocean blue/ green/ turquoise, white snow or moonlight, plush green trees, shrubs and grass; colourful flowers.
- Meditate on colourful flowers such as a white lily, red rose or hibiscus, yellow chrysanthemum, or sunflower, blue iris.
- Meditate on stained glass, art, mandalas.
- Visualize colours in your mind.

Rainbow Healing or Technique of Solarized Water

This is a simple and cheap way of applying colour to the body. Water, when exposed to sunlight in a coloured container for at least an hour become irradiated and takes on some of the vibrational energy of that particular colour. This is called solarized water. Special coloured containers can be bought, but they can easily be improvised using coloured cellophane. Simply drink (solarized water should always be sipped) this water at regular intervals throughout the day.

A red vessel will give red solarized water; a blue vessel, blue solarized water, etc. The longer the water remains exposed to the sun, the stronger is its potency. Solarization depends on temperature, geographical location and the time of the day. One simple way to determine if the water has absorbed the sun's energy is to drop an ice cube in the glass of water to be solarized. When the ice cube has completely melted, the water is charged. Obviously, it will take more time in winter as opposed to in summer.

Storing Solarized Water

Fresh solarized water is preferred if practical. But you can solarize the water and store it for few days at a time. Blue solarized water can be kept safely for a week or ten days in hot or cold weather. But red, yellow, and orange solarized water should be changed every two days in warm weather and every ten days to two weeks in cold weather.

Colour Breathing

Colour breathing is a form of meditation or visualization, in which you imagine yourself inhaling and exhaling colours. It can be practiced in bed before going to sleep, or when waking in the morning.

- 1. Find somewhere comfortable to sit or lie down and relax.
- 2. Keep your breathing deep, regular, and calm.
- 3. Breathe rhythmically from twelve to eighteen times a minute. If possible, use the colour of the spectrum or its nearest equivalent. Imagine the self engulfed by a white light that enters through the head from the cosmos down to the extremities and floods the entire organism from within and from without. Keep this image for two minutes.
- 4. Imagine yourself surrounded by intense light of the colour you choose. Be aware of the healing properties of the light.

Red, yellow and orange, whichever one is used, is visualized as being drawn up from the earth through the soles of the feet to the various organs. The length of time for visualizing the red part of the spectrum is two minutes.

Blue, violet, and indigo should be visualized as coming down from the atmosphere as vertical rays into the anterior fontanel to the various organs. The length of time for visualizing colours in the blue part of the spectrum is three to four minutes.

Green should be visualized as coming into the navel on the horizontal plane. The length of time for visualizing the colour green is one minute in a waving motion upward from the umbilical cord and one minute downward from the umbilical cord, but always on a horizontal plane.

- 5. As you breathe in, imagine that you are inhaling this colour, and follow it as it spreads from your lungs to your solar plexus and then throughout your body as discussed for each colour.
- 6. As you breathe out, imagine that you are exhaling the complementary colour.
- 7. Now mentally bathe the body and allow the entire self to be engulfed in a white light for two minutes.

Clothes and Decoration

We often wear clothes that reflect our moods. The colour of the clothes we wear can alter the way we feel. Wear bright clothes to counteract depression, lack of self-confidence, or low self-esteem. Wear calming colours to suppress irritability or stress.

You can also decorate your home to take advantage of colour. For example, a new bedspread or pillow covers, a new lampshade, or a new set of drapes to take advantage of the needed colour can make a great deal of difference in your mood.

Colour Through Food and Diet

One simple way to introduce your chosen colour is through selected foods in your diet. For example, if you need yellow, eat bananas and foods such as yellow-fleshed fruits, corn, butter, saffron rice, and so on. Make sure you eat a balanced food. Given below are some recommended foods to get the colour you desire.

Foods and Their Colour Equivalents

Red	Yellow	Blue	Orange
Beets Cabbage Cherries Eggplant Grapes	Apricots Beans Butter Carrots Cantaloupe	Blueberries Blue-Skinned Fruits and Vegetables Grapes Plums	Carrots Orange-Skinned Fruits and Vegetables Pumpkins Rutabaga
Meat	Corn		-

Onions Grapefruit Peppers Lemon Radishes Mangoes **Red-Skinned Fruits** Melon and Vegetables Onion Strawberries Orange Tomatoes Papaya Peach Watercress Watermelon Persimmon Yams Squash **Tangerines Turnips** Yolk of egg

Technique of Visualization and Meditation: Projected by Healer and/or patient

An advanced technique is to derive the benefit of colour therapy without having the colour physically. Instead, the person meditates and visualizes the colour. Then it can be directed to self for healing or to transferred to another person to heal that person.

For example, the healer visualizes mentally the feelings and thoughts to be transmitted to the patient and then picture vividly the exact colour which corresponds to these thoughts and feelings. The vibrations of the healer affect the vibrations of the patient's physical and mental bodies which in turn, affect the "aura" or the electromagnetic field force.

There seems to be an electrical circuit from the healer to the patient, and a similar colour vibration is set up in the patient, a vibration that affects his mental body. At the same time, the colour vibrations in the healer's aura set up a similar vibration in the patient's aura and this changes the vibrations from abnormal to normal. This reaction from mind to aura and from aura to mind has powerful healing properties if done correctly. In some cases, cures have been instantaneous.

Of course, the patient can visualize the colour without the help of the therapist. Here, the patient apply to self the same principles used by the healer in healing others. The patient heals self by his or her own mental vibrations, the wave length of which is changed through the technique of visualization and meditation. A person who is knowledgeable in meditation can flood any weak organ with the colour indicated for normalizing that organ if he projects that colour in his mind before and during his meditation.

Here are the steps to do the colour therapy by meditation / visualization. (Also see colour breathing.)

First, determine the colour necessary for healing your condition. Now do the following.

- 1. Relax and centre yourself.
- 2. Begin rhythmic breathing. As you do, visualize energy filling your body and gathering at your hands. Visualize this initially as a pure, crystalline white energy.

- 3. Project this energy throughout the individual's or your body, to strengthen all systems.
- 4. Now pause briefly and shift your concentration to that of the healing colour needed specifically for the individual's or your condition. As you continue your breathing, see and feel yourself filling with this energy.
- 5. As you inhale, draw this energy into you, and as you exhale visualize this energy streaming forth in the colour you are focusing on. Remember that all energy follows thought. When we focus upon a specific colour, the energy we project takes on the frequency of that colour.
- 6. Continue this etheric touch till you feel this problem is being balanced and healed.
- 7. Pause and project through your hands that same pure crystalline white energy you used in the beginning. This will further strengthen the healing colour you projected and further stabilize the body's health.

Aura-Soma

The Aura-Soma remedies are a collection of small 'balance' bottles, each containing a layer of coloured essential oil on top of a layer of coloured spring water containing herbal extracts. Most contain two colours, and there are about 90 combinations in all.

You will be asked by your therapist to pick out the four bottles that most appeal to you, and then to splash the mixtures onto your skin (or around your aura) every day. There is no set length of time for treatment. You continue to do it as long as the therapy appears to be doing you good.

Aura-Soma remedies were developed in 1984 by Vicky Wall, a British chiropodist who was said to have acquired psychic powers after going blind. It is described as 'non-intrusive, self- selective soul therapy.' It is practiced mainly in the U.K. A small number of therapists practice it in the U.S. and Australia.

Illumination Therapy

A computer-controlled colour therapy machine directs coloured light at the patient as he or she sits or lies in a darkened room. The main treatment colour is alternated with its complementary colour and each dose is precisely timed.

Colour Therapy Techniques Colour Therapy for the Chakras

There are seven chakras in our body. They control our emotions, mental attitudes that can cause or reflect and imbalance within that particular centre. The first step in colour healing through chakras is to determine which chakra is out of balance. This can be determine by a self evaluation of our condition and comparing it with a chart of the chakras such as given elsewhere. Once we determine the chakra(s) most likely to have been adversely affected, we can then take measures to correct them. Colour therapy is simple and effective in this process.

Colours can be used to balance and strengthen the chakras on a daily basis. One way of doing this is through colour breathing. Another method is through making coloured slides and sitting in front of a slide projector while the colour is projected upon us.

One of the easiest ways of accomplishing this is with simple coloured swatches of fabrics. Felt or other cloth squares can be found in all the colours of the rainbow. They can be used to balance the seven chakras. This is an inexpensive tool for quick daily chakra therapy and colour healing.

Once we have acquired the necessary tools, here is a very simple method of balancing our chakras:

Correcting Chakras Which are Out of Balance

- 1. Select a quiet place where you will not be disturbed for about fifteen to twenty minutes.
- 2. Lie down on your back on the floor or on your bed. Have seven cloth swatches corresponding to the rainbow colours with you (red, orange, yellow, green, blue, indigo, and violet), one for each of the seven major chakras.
- 3. Close your eyes and relax. Take several slow, deep breaths.
- 4. As you begin to relax, look back over the day's events, in reverse order. Start with the moment you laid down and review the day backward until the moment you woke up.
- 5. Identify the major emotions and attitudes that you experienced or were exposed to in other people. What chakras were most likely to have been affected by them? Use the table if necessary.
- 6. When you have completed this evaluation, take the colour swatches for the chakra(s) you have identified, and lay them on the part of the body associated with the chakra.
- 7. As you lie there, with the colour swatch upon your chakra point, visualize the colour being absorbed and drawn through the chakra and into the body. Let your awareness focus on the fact that, as you lie there, the chakra is being balanced, along with all organs and systems of the body associated with it.
- 8. Take several deep breaths, focusing on drawing the colour through the swatch into the chakra and restoring balance. Continue this for three to five minutes, or until you feel it is balanced.

Repeat these steps with any and all other chakra you have determined may be out of balance.

Full Chakra Colour Therapy

Now that we have balanced all chakras, that were unbalanced, we need to strengthen all the chakras with colour therapy. This is how we do this:

- 1. Place all seven colour swatches upon the chakra points of the body.
- 2. Breathe deeply and simply allow your body to absorb the rainbow energies.

- 3. As you lie there and breathe in the colours, let your awareness focus on the fact that each chakra is being strengthened, balanced, and harmonized with the others. Know, feel and experience that your entire energy system is strengthening. Feel yourself coming into complete balance. Know that all of the physiological aspects of your body are being balanced and healed as you absorb these colours through your chakra centres.
- 4. Leave the swatches on for five to ten minutes or until you feel yourself fully balanced, charged, and aligned.

Monochromatic Red Light Therapy

Monochromatic red light therapy involves red light to stimulate acupoints to treat various illnesses. In some cases, the treatment is followed by gentle massage of the area.

Monochromatic red light therapy is used to treat a range of problems, including shoulder pain, endocrine problems, dysmenorrhea, diabetes, gastrointestinal problems, depression, impotence, and frigidity. Therapists use monochromatic red light therapy to treat the acupoints of the ear as well as points elsewhere on the body.

Monochromatic red light therapy is also useful for headaches (applying the light across the brow), arthritis, allergies, sore throats, sinus problems, stress reduction, and wound healing. The red light is also applied to acupressure points or to sites of localized pain. For localized pain such as tendinitis, two five-minute applications directly to the painful area are followed by ten to fifteen seconds to the surrounding area. This is followed by a gentle massage of the area. Treatment is repeated two to three times a day for a week, then twice a day for a week followed by once a day for another week.

There are virtually no side effects to this treatment, and it can be done at home.

Clinical Studies

Several medical trials have shown that colour therapy is helpful in treating different ailments.

A San Diego State University School of Nursing controlled study in 1982 involved 60 middle-aged women suffering from rheumatoid arthritis. They were exposed to blue light. The patients placed their hands into a box with a blue light and were exposed for 15 minutes. This resulted in significant pain relief which improved with further exposure.

A 1990 study examined the effects of shining flashing red lights into the eyes of migraine sufferers at the start of an attack using special goggles. The light intensity and the frequency of flashing could be altered. Ninety-three percent of patients had some relief from the treatment with 72% reporting that severe migraines could be stopped within one hour. Lights of a higher intensity and greater flashing frequency were found to be the most effective.

Safety

Colour therapy is safe provided you receive treatment from a qualified practitioner. Too much of one colour can adversely affect your health. Red, in particular should be used with caution. It can lower your resistance to pain and raise blood pressure causing changes in heart and brain function. It is also

important to be careful during pregnancy as colour can affect the embryonic cell structure. Most therapists will use silks rather than lights during this time.

Precautions

Colour therapy should not be used as a substitute for conventional treatment of physical diseases. It may be a useful adjunct to such treatment in certain cases, but you should always consult your doctor before embarking on any course of colour therapy.

Treatment Of Specific Diseases With Colour

The main areas in which colour therapy has proved successful are those that involve mood, emotion and some aspects of mental performance. However, adherents of the therapy claim that it can be used to treat a variety of conditions, including the following:

Allergies

Anemia

Anxiety

Arthritis

Asthma

Depression

High Blood Pressure

HIV and AIDS

Hyperactivity

Insomnia

Low Blood Pressure

Migraine

Nausea and Vomiting

Neuralgia

Obsession

Stress

The practice of colour therapy for various conditions are described alphabetically. In order to understand the description, it is important to recognize that in most of the cases, the therapists will try to influence the chakras by shining light at them directly. This is augmented by light at other parts of the body. We have given the chakras and the colour to be use don the chakras as well as the augmentation therapy. The concept of chakra therapy is covered elsewhere. But we will summarize the key concepts here for your review.

Key - Chakras



- (C1) Muladhara Chakra, The Root Chakra or Sacral plexus.
- (C2) Swadhishatana Chakra, The Personality Chakra or Prostatic plexus.
- (C3) Manipura Chakra, The Sexual Chakra or Solar plexus.
- (C4) Anahata Chakra, The Heart Chakra or Cardiac plexus.
- (C5) Vishuddha Chakra, The Expressive Chakra or Laryngeal plexus.
- (C6) Ajna Chakra, The Knowledge Chakra or Cavernous plexus.
- (C7) Sahasrara Chakra, The Crown Chakra or Pituitary-cerebral cortex.

For more information about Chakras, please refer to Chakras in Holisticonline.com

Key Colours

Violet, Indigo, Blue, Green, Yellow, Orange and Red are the primary colours. Colour practitioners also may work with combination of colours.

Rules About Colour Interchange

- 1. Red, orange, yellow can be used interchangeably
- 2. Blue, indigo, and violet can be used interchangeably
- 3. Green can be used where blue is beneficial; (blue and green are interchangeable).

Diseases and their colour treatment

Diseases are classified alphabetically. Click on a letter to go to the corresponding page.



http://www.holistic-online.com/Color/color diseases and treatment.htm

Diet Therapy Holistic-online.com

Alternative Diets

A variety of alternative diets are offered for treating cancer, cardiovascular disease, and food allergies. Virtually all these interventions focus on eating more fresh and freshly prepared vegetables, fruits, whole grains, and legumes. Allergy to food has become a major area of research. Food intolerance is being studied as a causal or contributing factor in rheumatoid arthritis, and there is evidence that food-elimination diets may help many hyperactive children.

Some alternate dietary lifestyles are believed to offer a greater resistance to illness. These include several variations of the vegetarian diet, such as those consumed by Seventh-Day Adventists and proponents of the macrobiotic diet. Studies have found a significant lowering of risk factors for heart disease and certain forms of cancer in these two groups. Recent studies have also reported that certain cultural eating styles, such as the Asian and Mediterranean diets, appear to lower risk factors for heart disease and certain forms of cancer as well. Eskimo diet is another one which has fascinated researchers. In spite of the high fat food they eat, they are found to be very healthy. The latest theory is that it is because of the marine fat rich in Omega-3 three that they eat which offer them such protection.

Throughout history, people have looked at as a source of healing. Some of the myths were found to have no scientific merit. But some other ones have proved their mettle over the period of time. Buttermilk and yogurt were used to treat thrush (oral candidiasis), a fungus infection of the mouth, before the invention of fungicides. Fresh limes were used to treat scurvy in sailors, cod liver oil was used to treat rickets in children, before the "invention" of vitamins. Many generations of people sipped warm milk before bed time to aid in the sleep. Now we know that milk contains an amino acid that causes the brain to release a mildly tranquilizing substance that encourages drowsiness.

Food can be therapeutic in several ways. It provides nutrient that is needed by a sick person in a form he or she can use. It also provides nutrients for persons who are deficient in them. Sometimes food also supplies an agent or chemical that aids in the metabolism of other nutrients. Food such as buttermilk can help stabilize the fungus / bacteria balance in the mouth. Such foods act by changing the ecology within the human body.

Many of the old time remedies stress food avoidance as well as specifying what to eat. For example, the ancient Indian practice of Ayurveda, is mainly based on diet control. As you can learn by referring to the section on Ayurveda in HolisticOnLine, foods are classified as either helping or hurting the three doshas, the governing principles under which all living being are classified in Ayurveda. Food is used to stabilize the "doshas" along with other things such as meditation, yoga etc.

Many people are allergic to some foods such as chocolate, lactose etc. Similarly some people get constipation from excessive high intake of fibre. Diabetes patients, especially Type 2 diabetes, need to watch out what they eat especially food containing sugar. People with heart disease need to control the intake of foods containing high amount of fat and cholesterol. These are all common sense diet therapies.

Diet and Cancer

A study conducted by the National Cancer Institute has concluded that as much as 90% of all cancer in humans have been attributed to environmental factors, including diet. Dietary modification would have the greatest effect on the incidence of the cancers of the stomach and large bowel and, to a lesser extent, on the cancers of the breast and lung. It may not be possible to specify a diet that will guarantee that cancer can be completely eliminated, as there are other factors involved, certain diet modifications would generally help. Some of these guidelines are:

- 1. Reduce the consumption of both saturated and unsaturated fats to 30% of total calories. Fat has been linked to a number of cancers. Fat may especially be a causal factor for breast and colon cancer.
- 2. Include fruits, vegetables, and whole grain cereal products in the daily diet. Foods rich in Vitamin C and beta carotene are especially recommended. Use Hollistic-Online.com extensive diet data base to look up the nutritional content of foods. Foods such as apricots, peaches, cantaloupe, watermelon, strawberries, citrus fruits, and broccoli, spinach, kale, escarole, Romaine lettuce, parsley, peppers, cabbage, white and sweet potatoes, acorn and butternut squash, Brussels sprouts, and carrots fit that bill. Consumption of such vegetables of the mustard family as cabbage, broccoli, cauliflower, kale, and Brussels sprouts has been linked to a reduced incidence of gastric and colon and rectal cancer.
- 3. Keep the consumption of food preserved by salt curing, salt pickling, and smoking to a minimum. It has been found that in countries such as China, Japan, and Iceland where such foods are consumed, there is a higher incidence of the cancer of the esophagus and the stomach. Cut back on sausages, smoked fish and ham, bacon and hot dogs.
- 4. Alcoholic beverages should be consumed only on moderation. Heavy drinking, especially in combination with cigarette smoking, has been associated with an increased risk of cancer of the upper gastrointestinal and respiratory tracts, as well as other adverse health effects.

Many people also believe that dietary protein is also linked to cancer. Many experts believe that American consume too much protein. There is not a consensus on this matter. Some research indicates that a low cholesterol (especially below 150) may be linked to colon cancer. So, the advise is to use moderate amount of any food and as far as practical, consume a balanced diet rather than eating just one kind of food (for example red meat.)

Refer to the section on Nutrition for appropriate scientific basis for diet therapy. Individual recommendations appropriate for specific illnesses are given under the appropriate title.



Glandular Therapy

One of the basic concepts of glandular therapy is that the oral ingestion of glandular material of a certain animal gland will strengthen the corresponding human gland. The result is a broad general effect indicative of improved glandular function. Thus, glandular therapy increases the tone, function, and/or activity of the corresponding gland. This principle is a mainstay of oriental therapy.

In case of infection of immune system deficiencies, thymus extracts and spleen extracts have been found to be quite useful. Glandular therapy is used extensively in the treatment of cancer, and AIDS.

History

Prior to the 1940s, glandular extracts were in wide use all over the world including the western world, and a considerable amount of research was in progress to support their use. With the development of antibiotics, and the advent of "modern" technological medicine, the research was concentrated on developing more and more antibiotics and other pharmaceutical drugs that was more profitable to the drug companies. The research in glandular therapy came to a halt as a result. Just because the glandular approach was not being pursued in clinical research does not invalidate the usefulness of the approach or diminish the validity of its therapeutic value. It is still one of the cornerstones to Traditional Chinese Medicine and India's Ayurvedic Medicine. Glandular therapy is also receiving renewed interest as a treatment for cancer.

What is Glandular Therapy?

In glandular therapy, purified extracts from the endocrine glands of animals are used to help restore a patient's overall metabolism. Key glandulars frequently used are thyroid, thymus, and adrenal.

Glandular and organ extracts are usually taken from animals. These are known clinically as protomorphogens. Protomorphogens can be an important component of a complete nutritional program. They provide short term (immediate) as well as long term benefits. Typical extracts drawn from animal sources include extracts from the:

Pituitary
Thyroid
Adrenals
Pancreas
Heart
Liver
Kidney
Thymus
Other glands and organs.

Glandular and organ extracts are indicated when a patient's endocrine system is underproducing or undersecreting a specific hormone or when an organ is weakened or diseased, such as is often the case with cancer patients. The treatment is generally recognized as effective.

Benefits of Glandular Therapy

There are three principal nutritional benefits to glandular and organ extracts:

1. Active components

It is believed that glands and organs in animals and humans contain similar biochemical substances as their functions are very similar. This is especially true with the sheep from which most of these extracts are prepared. For example, sheep digestive system produces enzymes very similar to humans. Sheep tissue contains 2 enzymes found in only one other living organism-the human body. These enzymes are

- (1) Aldose reductase, an enzyme for sugar breakdown
- (2) Steroid 17 -20 lyase, an enzyme for both producing steroidal hormones and for the subsequent detoxification of those hormones from the body.

Thus, the effect of using the biochemical compounds extracted from animals is often one of "substituting" an exogenous (externally generated) source to make up for the endogenous (internally generated) deficiency.

Examples:

- Thymosin from the thymus
- Thyroid hormone from the thyroid gland.

2. Associated nutritional factors

Glandular tissues are rich in nutrients, including vitamins, minerals, amino acids, fatty acids, polypeptides, enzymes, and many other substances. Glandular therapy can supply essential nutritional needs in a highly efficient manner.

3. Adaptogenic effect

For a tissue cell to repair or replace itself, it must have the raw materials necessary. Glandular therapy provides the raw materials to the failing organs, glands, and tissues so that they can start the process of regeneration.

Biochemist Jeffrey Bland, Ph.D, suggested a rational explanation for how glandular therapy products work. According to him, glandular-based food supplements may contain small polypeptide, protein-like substances which have specific messenger activity and which act on target tissues. Dr. Bland suggested that many of the hormones found in the glandular tissues, even at low concentrations, still have potent tissue-specific activities. For example, a small polypeptide material present in one tissue can have selective effects in encouraging another tissue at a different site in the body to produce hormonal materials, which then may affect a final target tissue and change its physiological function.

One of the key organ for metabolism is the thyroid gland. It regulates metabolism by releasing hormones that control energy production in all the body's cells. Administration of thyroid extract helps cells eliminate cellular waste and speeds up their restorative functions. A healthy thyroid is an important prerequisite to a healthy immune system.

See Also:

Glandular Extracts Useful for Immune Support/Improvement

References:

- 1. J. Bland, "Glandular-Based Food supplements: Helping to Separate Fact from Fiction," Bellevue-Redmond Medical Laboratory, Department of Chemistry, University of Puget Sound, Tacoma, WA, 1980, pp. 20-21.
- 2. Michael Murray, N.D., et. al, "Encyclopedia of Natural Medicine," Prima Publishing, 2nd edition, 1998.



Guided Imagery or Visualization

Introduction

Advocates of imagery contend that the imagination is a potent healer that has long been overlooked by practitioners of Western medicine. Imagery can relieve pain, speed healing and help the body subdue hundreds of ailments, including depression, impotence, allergies and asthma.

The power of the mind to influence the body is quite remarkable. Although it isn't always curative, imagery can be helpful in 90% of the problems that people bring to the attention of their primary care physicians.

Images and Other Senses Are the Means Used by the Brain to Communicate with Our Other Organs

Imagery is the most fundamental language we have. Everything you do the mind processes through images. When we recall events from our past or childhood, we think of pictures, images, sounds, pain, etc. It is hardly ever be words.

Images aren't necessarily limited to visual but can be sounds, tastes, smells or a combination of sensations. A certain smell, for example, may invoke either pleasant or bad memories in you. Similarly, going to a place where you had a bad accident may instantly invoke visions of the accident and initiate flight or fight response.

Think, for example, of holding a fresh, juicy lemon in your hand. Perhaps you can feel its texture or see the vividness of its yellow skin. As you slice it open, you see the juice squirt out of it. The lemon's tart aroma is overwhelming. Finally, you stick it in your mouth, suck on it and taste the sour flavour as the juices roll over your tongue.

More than likely, your body reacted in some way to that image. For example, you may have begun to salivate.

Imagery is the language that the mind uses to communicate with the body. You can't really talk to a wart and say 'Hey, go away,' because that's not the language that the brain uses to communicate with the body. You need to imagine that wart and see it shrinking. Imagery is the biological connection between the mind and body. As we will see, this is extremely useful in mind body healing.

Imagery Can Involve Negative Visualizations Too

Unfortunately, many of the images popping into our heads do more harms than good. In fact, the most common type of imagery is worry. Because when we worry, what we worry about exists only in our imaginations.

It is estimated that an average person has 10,000 thoughts or images flashing through his mind each day. At least half of those thoughts are negative, such as anxiety of meeting a quota, a coming speech, job related anxiety, etc. Unharnessed, a steady dose of worry and other negative images can alter your physiology and make you more susceptible to a variety of ailments, ranging from acne to arthritis, headaches to heart disease, ulcers to urinary tract infections.

Your thoughts have a direct influence on the way you feel and behave. If you tend to dwell on sad or negative thoughts, you most likely are not a very happy person. Likewise, if you think that your job is enough to give you a headache, you probably will come home with throbbing temples each day. This is just another clear example of the power the mind exerts over the body.

But if you can learn to direct and control the images in your head, you can help your body heal itself. Our imagination is like a spirited, powerful horse. If it's untamed, it can be dangerous and run you over. But if you learn to use your imagination in a way that is purposeful and directed, it can be a tremendously powerful vehicle to get you where you want to go, including to better health.

Your imagination can be a powerful tool to help you combat stress, tension, and anxiety. You can use visualization to harness the energy of your imagination, and it does not take long-probably just a few weeks-to master the technique. Try to visualize two or three times a day. Most people find it easiest to do in bed in the morning and at night before falling asleep, though with practice you'll be able to visualize whenever and wherever the need arises.

Imagery Had Been In Use in Ancient Civilizations

Imagery has been considered a healing tool in virtually all of the world's cultures and is an integral part of many religions. Navajo Indians, for example, practice an elaborate form of imagery that encourages a person to "see" himself as healthy. Ancient Egyptians and Greeks, including Aristotle and Hippocrates believed that images release spirits in the brain that arouse the heart and other parts of the body. They also thought that a strong image of a disease is enough to cause its symptoms.

Visualization and Imagery Has Applications in Sports, Leadership Training, Possibility Thinking and Others

Affirmations and visualizations are used by athletes everyday. It has been suggested by experts such as Dale Carnegie, Robert Schuller and Steven Covey to elicit peak performance in individuals. Athletes use visualization to enhance their performance, sometimes without realizing it. A golfer may form a mental map of the fairway, imagining precisely where he will place the ball on each shot; a high jumper may visualize every split second of his approach to and leap over the bar; a baseball pitcher may run a mental film of the ball from the time it leaves his hand until it lands in the catcher's glove.

Steven Covey, in his runaway best seller, "Seven Habits of the Most Effective People, suggested that we can use our right brain power of visualization to write an affirmation that will help us become more congruent with our deeper values in our daily life.

According to Covey, a good affirmation has five basic ingredients:

It's personal,
It's positive,

It's present tense,It's visual, andIt's emotional.

Using these principles an affirmation may look like the following: "It is deeply satisfying (emotional) that I (personal) respond (present tense) with wisdom, love, firmness, and self-control (positive) when my children misbehave."

Covey then suggest that you visualize with this affirmation for a few minutes each day.

"I can spend a few minutes each day and totally relax my mind and body. I can think about situations in which my children might misbehave. I can visualize them in rich detail. I can feel the texture of the chair I might be sitting on, the floor under my feet, the sweater I'm wearing. I can see the dress my daughter has on, the expression on her face. The more clearly and vividly I can imagine the detail, the more deeply I will experience it, the less I will see it as a spectator.

Then I can see her do something very specific which normally makes my heart pound and my temper start to flare. But instead of seeing my normal response, I can see myself handle the situation with all the love, the power, the self-control I have captured in my affirmation. I can write the program, write the script, in harmony with my values, with my personal mission statement.

And if I do this, day after day my behaviour will change. Instead of living out of the scripts given to me by my own parents or by society or by genetics or my environment, I will be living out of the script I have written from my own self-selected value system."

Imagery is very powerful and crosses many disciplines. For example, good leaders are visionaries. They can "visualize" potentials and possibilities. They will plan every detail meticulously in their mind before executing. When they do, usually, it will be done flawlessly, because, most of the glitches would have been worked out during the visualization phase.

Dr. Charles Garfield has done extensive research on peak performers, both in athletics and in business. He became fascinated with peak performance in his work with the NASA program, watching the astronauts rehearse everything on earth, again and again in a simulated environment before they went to space. He decided to study the characteristics of peak performers.

One of the main things his research showed was that almost all of the world-class athletes and other peak performers are visualizers. They see it; they feel it; they experience it before they actually do it. They begin with the end in mind.

You can do it in every area of your life. Before a performance, a sales presentation, a difficult confrontation, or the daily challenge of meeting a goal, see it clearly, vividly, relentlessly, over and over again. Create an internal "comfort zone." Then, when you get into the situation, it isn't foreign. It doesn't scare you.

How Effective Is Imagery? Clinical Studies on the Effectiveness of Imagery

Imagery had been found to be very effective for the treatment of stress. Imagery is at the centre of relaxation techniques designed to release brain chemicals that act as your body's natural brain

tranquilizers, lowering blood pressure, heart rate, and anxiety levels. By and large, researchers find that these techniques work. Because imagery relaxes the body, doctors specializing in imagery often recommend it for stress-related conditions such as headaches, chronic pain in the neck and back, high blood pressure, spastic colon, and cramping from premenstrual syndrome.

Researchers at Ohio State University in Columbus, Ohio found that people with cancer who used imagery while receiving chemotherapy felt more relaxed, better prepared for their treatment and more positive about care than those who didn't use the technique.

Several studies suggest that imagery can also boost your immunity. Danish researchers found increased natural killer cell activity among ten college students who imagined that their immune systems were becoming very effective. Natural killer cells are an important part of the immune system because they can recognize and destroy virus-infected cells, tumour cells and other invaders.

In another small study, researchers at Pennsylvania State University in University Park, Pa and Case Western Reserve University School of Medicine in Cleveland, Ohio found that seven people who suffered from recurrent canker sores in their mouths significantly reduced the frequency of their outbreaks after they began visualizing that the sores were bathed in a soothing coating of white blood cells.

Imagery can also help alter menstrual cycles and relieve symptoms of premenstrual syndrome. In a preliminary study, researchers at Massachusetts General Hospital in Boston found that 12 of 15 women, ages 21 to 40, who used imagery for three months lengthened their monthly menstrual cycles by an average of nearly four days and slashed their perceived levels of premenstrual distress in half. They also reported fewer mood swings.

At the University of South Florida in Tampa, researchers asked 19 men and women, ages 56 to 75, who had chronic bronchitis and emphysema to rate their levels of anxiety, depression, fatigue and discomfort before and after they began using imagery. The researchers concluded that imagery significantly improved the overall quality of these people's lives.

A study at Yale demonstrated that patients suffering from severe depression were helped by imagining scenes in which they were praised by people they admired- a clear boost to their self-esteem.

Visualization and other relaxation methods may produce significant benefits, often by helping to ease pain and lift depression. Research is continuing to determine whether even more spectacular results can be achieved.

A controlled study of fifty-five women examined the effects of imagery and relaxation on breast milk production in mothers of infants in a neonatal intensive care unit. They received a twenty-minute audiotape of progressive relaxation followed by guided imagery of pleasant surroundings, milk flowing in the breasts, and the baby's warm skin against theirs. They produced more than twice as much milk as compared to those receiving only routine care.

In another study, a group of metastatic cancer patients using daily imagery for a year achieved significant improvements in NK cell activity and several other measures of immune functioning.

At Michigan State University, researchers found that students could use guided imagery to improve the functioning of certain white cells called neutrophils, important immune cells in defense against bacterial and fungal infection. They could also decrease, but not increase, white cell counts. At one point in the study, a form of imagery intended to increase neutrophil count unexpectedly caused a drop instead. Subsequently, students were taught imagery explicitly intended to keep the neutrophil count steady, while increasing their effectiveness. Both of these goals were achieved.

Other studies have shown that imagery can lower blood pressure, slow heart rate and help treat insomnia, obesity and phobias.

Two cases are quoted below from literature on the effectiveness of imagery.

A Walk on the Beach

Heidi, thirty-five, was scheduled for a round of chemotherapy for breast cancer. The treatment was to take place on Friday and she and her husband had tickets to fly to Hawaii on Saturday for a week's vacation.

As is routine, she was called into the treatment centre for a blood check on the Monday before to make sure her white cell count had recovered enough from the previous treatment to allow her to qualify for the next one. To her shock, she was told that her white count was only about half what it should be and she would probably have to forego her vacation.

For four days she practiced imagery intensively several times a day, concentrating on raising her white count. She used images of the bone marrow releasing a steady, strong flow of white cells into her bloodstream and spreading throughout her body. She also imagined directing her breath into the bone marrow and thereby nourishing the stem cells (that produce the white cells) so that they could grow and release more white cells.

On that Friday, she went in for another blood test. Her white count had more than doubled. She was able to have the treatment and the next day was able to walk on the beach with her husband.

The Vital Fluid

Carol Anne was scheduled to undergo a complicated abdominal surgery to remove a cancerous tumour. Her surgeon told her that patients undergoing this procedure typically lose ten to eleven units of blood.

For several days prior to the surgery, Carol Anne practiced a form of imagery in which she pictured her body going through the surgery without losing any blood, the tissues knitting back together smoothly, no complications, and a speedy recovery. She also imagined the look on the surgeon's face when he realized that no blood had been lost.

The day after the surgery, the surgeon came into her room and congratulated her on how well she had come through the ordeal. To his amazement, she had required only one unit of blood. When she told him of her preparations, he smiled and walked out shaking his head.

Studies On The Effectiveness of Imagery Is Continuing

Office of Alternative Medicine, National Institutes of Health, are funding the following investigations involving imagery:

- James Halper of Lenox Hill Hospital in New York City is conducting a controlled study of the benefits of guided imagery for patients with asthma.
- Mary Jasnoski of George Washington University, Washington, D.C., is examining the effects of imagery on the immune system, with potential implications for use in cancer and AIDS.
- Blair Justice of the University of Texas Health Sciences Center in Houston was funded to conduct a controlled study examining the effects of a group imagery / relaxation process on immune function and quality of life in breast cancer patients.

Learning the Basics of Imagery

Virtually everyone can successfully use imagery. It's a question of patience and persistence. It's just like learning to play a music instrument or learning to fly an airplane. You put in the time, you put in the discipline, you will be able to do it. It is the same with imagery. Practice, practice and practice. You will be able to do it.

How much time it will take before you begin to see results depends on the severity of your ailment, the vividness of your imagery and your own determination. A person who has a sprained ankle, for example, may get pain relief in just one five-minute imagery session, while it may take weeks for a person who has severe burns to notice any significant pain reduction. For almost any chronic ailment, it's going to take a lot more time for imagery to work.

Most proponents suggest practicing your imagery for 15 to 20 minutes a day initially to ensure that you're learning to do it properly. But as you become more skilled and comfortable with the technique, you'll be able to do it for just a few minutes at a time as needed throughout the day.

The most effective images are the ones that have some meaning to you. When battling tumours, people might imagine that their healthy cells are plump, juicy berries, while their cancerous cells are dried, shrivelled pieces of fruit. They might picture their immune system as birds that fly in and pick up and carry away the raisin-like cancer cells, while the rest of the cells flourish. Another common image is that the immune system cells are like silver bullets coming in and annihilating the tumour cells.

Other experts recommend actually personifying your condition and "reasoning" with it. This way you also have a chance to learn from your condition. If you're plagued by headaches, for example, you might imagine your headache as a gremlin tightening a vice across your temples. Ask the gremlin why he's there and what you can do to make him loosen his grip. He might "tell" you that you have had too little sleep, too much junk food, or not enough rest and time away from work. Take his advice, and there is a good chance your headaches will subside, experts say.

Step By Step Imagery

Studies indicate that imagery works best when it is used in conjunction with a relaxation technique. When your physical body is relaxed, you don't need to be in such conscious control of your mind, and you can give it the freedom to daydream. Meditation, progressive relaxation or yoga is the most common relaxation techniques used with imagery.

Loosen your clothing, take off your shoes, and sit comfortably in a chair. You can also use one of the yoga or meditation postures. Dim the lights, if you prefer. Close your eyes. Take in a few deep breaths. Picture yourself descending an imaginary staircase. With each step, notice that you feel more and more relaxed

When you feel relaxed, imagine a favourite scene. It could be a beach, a mountain slope or a particularly enjoyable moment with friends or family. Try to go into this scene each time you practice your imagery. If you can create a special, safe place where nothing can hurt you and you feel secure, it will make you more receptive to other images.

Once you feel comfortable in your favourite scene, gradually direct your mind toward the ailment you're concerned about. Use one of the images

Suggested by experts or allow your mind to create one of its own. Let the image become more vivid and in focus. Don't worry if it seems to fade in and out.

If several images come to mind, choose one and stick with it for that session.

On the other hand, if no images come to mind, try focusing on a different sensation. For instance, imagine hearing fish frying in a skillet or smelling wildflowers in a meadow. If all else fails, think about how you feel at the moment. Angry? Frustrated? What colour is that anger? What image is evoked? Use these feelings to forge images.

Each time you do this, imagine that your ailment is completely cured at the end of the session.

At the end of your session, take a few more deep breaths and picture yourself re-climbing the imaginary staircase and gradually becoming aware of your surroundings. Open your eyes, stretch, smile and go on with your day.

Imagery Techniques

Several different types of imagery are used depending on the application.

Most visualization techniques begin with relaxation, followed by summoning up a mental image. In one simple exercise known as painting, you close your eyes, cover them with your palms, and concentrate on the colour black. Try to make the colour fill your whole visual field, screening out any distracting images. To reduce stress, try concentrating first on a colour you associate with tension, and then mentally replace it with one that you find soothing; for example the colour red changing to blue. Or you may find it more relaxing to picture a peaceful natural scene, such as the unruffled surface of a pond, gently rolling hills, a serene waterfall, evening in a beach watching the sun set, etc.

In a technique called guided imagery, participants visualize a goal they want to achieve, then imagine themselves going through the process of achieving it. Severely ill patients, for example, are urged to picture their internal organs and imagine them free of disease, or to picture tumours shrinking, or invading microorganisms succumbing to aggressive immune cells.

We will look at the important ones here.

Guided Waking Imagery.

In this technique, devised by the psychoanalyst Leuner, the patient is taught to visualize a standard series of scenes such as a meadow, a mountain, a house, and a swamp. Later, the patient's imaginings are examined for sources of conflict, irrational beliefs, and interpersonal problems.

Autogenic Abreactions.

Here the patient is asked to assume an attitude of passive acceptance toward his mental experiences. In this condition, the patient is to verbalize, without restriction, all the thoughts, feelings, and sensations that occur to him. Strong affect, often with marked emotional and facial involvement is likely to emerge. The session continues until the effective discharge has run its course.

Covert Sensitization.

This technique is based on the reinforcement paradigm. It postulates that imagery processes can be modified according to the same principles that govern the modification of overt, visible behaviour. In covert sensitization, the patient first imagines engaging in some behaviour he wishes to change, say, an addiction. This is quickly followed by the imagining of a highly unpleasant event. Thus, the addictive behaviour becomes paired with a highly aversive event and therefore is less likely to occur in the future.

Covert Behaviour Rehearsal.

In this method, the individual systematically visualizes the desired correct coping behavior. This technique has seen much use in sports.



Herbal Knowledgebase

Listing of 2000+ herbs from around the world.

Introduction to Herbal Medicine

Herbal medicine is the oldest form of healthcare known to mankind. A concise introduction to this fascinating field.

Interaction Between Herbs, Foods and Drugs

Use this in addition to the safety issues listed under individual herbs

Standardized vs. Whole Herb

More and more manufacturers are supplying standardized herb extracts. What are they? How are they different from whole herbs?

Forms of Herbs

Herbs can be prepared in a variety of forms depending on their purpose. Learn about such techniques.

Herbal Medicine for Healing Diseases/Conditions

Detailed coverage of herbs for treating various diseases/conditions.

Glossary of Properties of Herbs

What does terms like abortifacient, alterative, anthelmintic, etc. mean? Look it in our glossary of terms.

Drug Regulation

In the United States, herbal products can be marketed only as food supplements. An herb manufacturer or distributor can make no specific health claims without FDA approval. The situation is different another parts of the world...

European Phytomedicines

European phytomedicines are among the world's best studied medicines. Learn more about it..

Searching Herbal Knowledgebase

A large number of herbs are in use for their medicinal properties around the world. HolisticOnLine is cataloging these herbs and their known medicinal properties. We will be adding more herbs in the future.

In order to make the information most exhaustive and current, we have created a knowledgebase of herbs. You can search the knowledgebase from here.

Search for a Herb from a List of Scientific or Common Names



Introduction

Homeopathy is based on the principle that substances that are poisonous in large doses can be very beneficial in small doses. Homeopathy is a form of medicine that treats the body as a whole and helps it to heal itself. It can be used for the short term (acute) illnesses and long term (chronic) illnesses. The objective is to prevent the patient from getting the illnesses again (prevention). The name homeopathy comes from the Greek word "homios" which means "like" and the word "pathos" meaning "suffering". Thus homeopathy simply means treating like with like.

In the fourth century B.C., Hippocrates, the father of modern medicine, observed that large amount of certain natural substances can produce symptoms in healthy people resembling those caused by the disease, while smaller doses of these same substances can relieve those symptoms. In 1790's Samuel Hahnemann, a German doctor, amplified this concept and proposed the practice called homeopathy. He proposed that "Let like be cured by like". Homeopathy uses animal, vegetable and mineral preparations to cure a person's illness. Millions of people in Britain, Europe and America uses Homeopathy.

Homeopathy looks at each patient and develops a remedy or treatment plan strictly for him or her. It invokes the powers of healing inherent in individuals (our immune system) to develop a successful therapy. The more one knows about the patient, the symptoms, likes and dislikes, what makes them better or worse, it helps in developing a "symptom picture" of the patient that can lead to a successful treatment.

If we think about the principle of homeopathy, it has a lot in common with our present understanding of immunizations. To prevent us from catching small pox, a vaccine is prepared which is a mild form of the virus that causes the disease. The principle is that introduction of this small amount of the virus in our body system will set out our body's defenses so that when the actual virus shows up, our body will have enough barriers or fighting power to prevent the virus from entering our body. Homeopathy practitioners believe that when we introduce a very very small amount of the deadly material into the body, our body will unleash enough defenses to prevent the disease from recurring again. However, there are significant differences between the concepts used in Western medicine and those of Vaccines are not rendered more potent when they are diluted like homeopathic homeopathy. preparations. In conventional treatment, there is a minimum dosage that need to be given before the medication becomes effective in treating the underlying problem. For example, when taking antibiotics, we have to take the whole course at regular intervals to maintain a potency level in the bloodstream to kill the bacteria.

Homeopathic remedies, which are made from naturally occurring plant, animal, or mineral substances, are recognized and regulated by the Food and Drug Administration (FDA) and are manufactured by established pharmaceutical companies under strict guidelines. There are over 2,000 homeopathic remedies that are usually referred to by their abbreviated name. (For example Arg nit. stands for Argentum nitricum). These are derived from such exotic sources as bee stings, snake venoms, arsenic, gold and silica, and even compounds from diseases tissue. Homeopaths also prescribes tissue salts. Tissue salts are prepared from mineral sources. Homeopathic remedies are diluted to such an extent that there can be no possible side effects from even the most toxic substances. The dilution process is known as 'potentation'. Taken in this ultra diluted form, Homeopathic remedies have no side effects and are perfectly safe, non-toxic and non-addictive.

Abbreviations Used By Homeopaths and How Homeopathic Medicines are Prepared

Two abbreviations are used to describe a medicine's strength or potency. In the United States, the decimal, or x, system is more popular. In Europe, homeopaths use the centisimal, or c, system.

In both systems, potency is expressed as a number followed by an x or c, such as 3x or 6c. A potency of 1 x means a 1: 10 dilution of the original substance, or one- tenth strength (mix 1 drop of the substance with 9 drops of the dilutant, commonly water or alcohol); 2x means 1: 100, 3x is 1: 1000 and so on. In other words, the number before the x in the decimal system equals the number of zeros in the dilution, so 6x indicates a dilution of 1 part in 1,000,000. A potency of 1c means a 1: 100 dilution. The number before the c means that there are 2 times the number of zeroes in the dilution. For example, 3c means a dilution of 1 part in 1,000,000. (whereas 3x means 1 part in 1,000).

A third scale called millesimal (M) scale is also used by homeopaths. This is denoted by a number followed by the letter M, such as 1M, 2M, etc. A potency of 1M means a dilution of 1 part in 1000. The number before M means that the dilution is 3 times this number. A potency of 2M means a dilution of 1 part in 1,000,000.

Homeopathic medicines are not simply diluted. They are also shaken vigorously, or "potentized". To make a 12x dilution, one drop of the mother tincture is added to 99 drops of the alcohol or water mix and the mixture is shaken vigorously. Then one drop from this mixture is mixed with 99 drops of the dilutant and the mixture is shaken vigorously. The resultant mixture has a dilution of 1 in 10,000 (or 4x). The process is repeated a total of 6 times to get a potency of 12x. Finally, these drops are added to tiny lactose (milk sugar tablets, pillules, granules, or powder and stored in dark coloured bottle).

Homeopaths believe that shaking transfers the medicine's essence to the water used to dilute it. This concept is important because solutions diluted beyond 24x (or 12c) may not contain even a single molecule of the original solution. Homeopaths believe that medicines become stronger as they become more dilute and that even when enormously diluted, the medicine's "essence" or "energy" remains.

Names of Homeopathic Medicines

Most of the Homeopathic medicines are referred to by their Latin names. The table below shows some of the common Homeopathic medicines and their Latin names. (Source: Natures Cures, by Michael Castleman)

Table: Latin Name and Common Names of Homeopathic Medicines

Latin Name	Common Name
Allium cepa	Onion

Apis	Crushed bee
Arnica	Mountain daisy
Belladonna	Deadly nightshade
Bellis perennis	Daisy
Berberis	Barberry
Bryonia	Wild hops
Calcarea carbonica	Calcium carbonate
Calendula	Marigold
Cantharis	Spanish fly
Caulophylium	Blue cohosh
Chamomilla	Chamomile
Cimicifuga	Black snakeroot
Colocynthis	Bitter cucumber
Cuprum metallicum	Copper
Eupbrasia	Eyebright
Ferrum phos	Iron phosphate
Gelsemium	Yellow jasmine
Hepar sulph	Hahnemann's calcium sulphide
Lachesis	Venom of the bushmaster snake
Ledum	Marsh tea
Magnesia phosphorica (Mag phos)	Magnesium phosphate

Mercurius	Mercury
Natrum mur	Salt
Nux vomica	Poison nut
Oscillococcinum	Duck heart and liver
Pulsatilla	Windflower
Rhus tox	Poison ivy
Sarsaparilla	Wild licorice
Sepia	Cuttlefish
Sulphur	Sulphur
Urtica urens	Stinging nettle
Zincum	Zinc

Principles of Homeopathy

In conventional medicine, the symptoms are considered to be a manifestation of the disease. The drugs are given to kill the bacteria causing it or to dampen the symptom of the condition. Homeopaths, on the other hand, see the symptoms as the body's attempt to heal itself. They see the symptom as a positive sign that the body's defense mechanism is trying to fight the underlying cause and by this reasoning, they insist that the symptoms should not be suppressed as we are working against the body's attempt to cure it.

Homeopathic Medicine vs. Conventional Medicine

Homeopathic Medicine

Conventional Medicine

Illness

has important meaning.

Is an individual expression of imbalance and Occurs in well-defined groups based on pathology, and meaning of illness is irrelevant.

Symptoms

Are evidence of disharmony and the person's

attempt to restore order.

Are bad.

Are analyzed to follow progress of treatment. Successful treatment makes them go away.

Diagnosis

The understanding of the phenomenon of the The search for the structural cause. illness

The whole person is taken into account.

Treatment

Individualized and based on the entire Based on the pathologic diagnosis. expression of symptoms.

Self-care (what the client does) is emphasized. What the doctor does is emphasized.

microdoses of medicines.

Based on like cures like and potentized Based on opposing and suppressing symptoms, and high doses of medicine.

The laws of homeopathy are the law of similars, the principle of minimum dose and prescription for the individual.

The Law of Similars

The principle that like shall be cured by like, or Similia similibus curantur. This principle, recognized by physicians and philosophers since ancient times, became the basis of Hahnemann's formulation of the homeopathic doctrine: the proper remedy for a patient's disease is that substance that is capable of producing, in a healthy person, symptoms similar to those from which the patient suffers.

In other words, a substance produces symptoms of illness in a well person when administered in large doses; if we administer the same substance in minute quantities, it will cure the disease in a sick person. Hahnemann suggested that this is because nature will not allow two similar diseases to exist in the body at the same time. Thus homeopaths will introduce a similar artificial disease into the body which will push the original one out. The dose is small so that there is no danger of any long term side effects.

The Principle of Minimum Dose

This principle states that extreme dilution enhances the curative properties of a substance, while eliminating any possible side effects. This is just the reverse of conventional drug philosophy where a minimum dose is required for effect. Starting from the conventional dose, as we decrease the concentration (or increase the dilution), the medicine become less and less efficient. But below a threshold, the medicine start getting potent again. Homeopaths uses this region of potency.

Whole Person Prescribing

A homeopath studies the whole person. Characteristics such as their temperament, personality, emotional and physical responses when prescribing a remedy, etc. are studied. So, a homeopath may treat different persons exhibiting the same symptom differently. (For example, two persons exhibiting flu like symptoms may get two different medication from the homeopath based on the appraisal of the mind body constitution.)

Laws of Cure

There are three laws of cure, They are:

- A remedy starts at the top of the body and works downward.
- A remedy works from within the body outward, and from major to minor organs.
- Symptoms clear in reverse order of appearance.

Application of the three principles of cure means that you will feel better emotionally before you will feel better physically.

How Do Homeopathic Remedies Work?

Many of the homeopathic remedies are so diluted that according to the known laws of physics and chemistry, they couldn't possibly have any effect. Once you get beyond a certain point-24x or 12c -there is probably not even one single molecule of the original active substance remaining. This fact is often pointed to by critics of homeopathy as they dismiss the effect of homeopathy as merely due to placebo effect.

And yet, according to homeopathic doctrine and experience, the more diluted the solution, the more potent it is. Homeopaths contend that the remedies work and they see no reason to stop using them simply because we do not understand how they work. They often argue that pharmacologists cannot explain exactly how most conventional drugs work. For example, even aspirin is not fully understood in terms of how it works, but physicians have no difficulty in recommending its use. Over the years several theories have been proposed to explain the action on homeopathic potentization.

Hormesis

The effects of microdoses have been known for a long time, and there are a number of examples that support the idea that very diluted concentrations of a substance will have a measurable and sometimes profound effect. Scientists call this phenomenon: hormesis.

Scientists from Michigan State University have shown how hormesis work in nature. They used microdoses of a fertilizer to stimulate crop production. In a dose equivalent to a 9x dilution, the fertilizer increased tomato yield by 30%, carrots were 21% bigger, and corn yield increased by 25%.

Our own bodies secrete minute amounts of hormones that have powerful effects. Thyroid hormone is present in our blood at only 1 part per 10 billion-yet this is enough to regulate the rate of our entire metabolism. Many animal studies show that low doses of some substances elicit a beneficial response while high doses are harmful. This phenomenon has been documented to occur with radiation, antibiotics, and heavy metals.

Pheromones

Pheromones are powerful aromatic hormone-like substances that creatures secrete to attract one another. One molecule of moth pheromone is so potent, it will attract another moth from miles away and trigger a cascade of physical reactions. Though well documented, the exact mechanism for pheromones remains unknown.

Homeopathic Remedies Work in Spiritual/Energy Plane and Not in Physical Plane

Homeopathic remedies are believed to work in the spiritual plane as opposed to the physical plane as we are used to think and measure. Hahnemann believed that dilution and succussion released a spirit-like power that worked on the spiritual level of the vital force in humans. We are familiar with the formerly invisible, immeasurable, unknowable energy forms, such as electromagnetic radiation and subatomic particles. Magnets exerted their force long before science could explain the mechanism. Physicists are still trying to explain gravity and the nature of matter, still discovering phenomena such as the "strong force" and the "weak force."

Homeopathy is an energy medicine, as are acupuncture and therapeutic touch. Homeopaths believe that although the physical molecules of the original substance may be gone, dilution and succussion leaves something behind-an imprint of its essence, or its energy pattern-that gives it a kind of healing charge. Potentization does not occur if you simply dilute the substance, even if you dilute it repeatedly. Nor does it occur if you only shake the substance vigorously. There is something about each process that builds sequentially upon the other, causing the power to be retained and progressively intensified.

But how does the information in such a minute amount of substance get transferred to the body? Some theorists suggest the repeated succussion creates an electrochemical pattern that is stored in the water carrier and then spreads like liquid crystallization through the body's own water; others say the dilution process triggers an electromagnetic imprinting that directly affects the electro- magnetic field of the body. This concept is used in other therapies also. For example, Ayurveda suggests taking water that has been potentizated by precious metals such as gold. The water is believed to possess curative power as a result of coming in contact with gold and other gemstones although no molecular transfer takes place. The healing power of crystals and magnets are believed to come from their effect on the energy pattern or vibration frequency. So, the suggestion of the homeopathic remedies as working on the energy plane may not be as far fetched as we may think at the first glance.

Homeopathic Remedies Activate the Vital Force

Homeopaths believe that it is the energy or "vibrational pattern" of the remedy, rather than the chemical content, that stimulates the healing by activating what Hahnemann called the Vital force. Vital force is the healing power or energy that exists within us all. It is called by the name Chi by Chinese and Prana by Indian Ayurveda. The vital force fuels the mind, body, emotions and mind. It keeps us healthy and balanced. When the balance of the vital force is disturbed by factors such as stress, pollution, improper diet and lack of exercise, it becomes weakened resulting in the person getting sick.

Scientists who accept the potential benefits of homeopathic theory suggest several theories to explain how highly diluted homeopathic medicines may act. Using recent developments in quantum physics, they have proposed that electromagnetic energy in the medicines may interact with the body on some level. Researchers in physical chemistry have proposed the "memory of water" theory, whereby the

structure of the water-alcohol solution is altered by the medicine during the process of dilution and retains this structure even after none of the actual substance remains.

Which Problems Respond Well to Homeopathic Treatment?

Ailments such as colds, constipation, vomiting, and diarrhea respond well to homeopathic treatment. It can help in the treatment of rheumatoid arthritis, fibrositis and psoriasis. Homeopathy also helps in the emotional, mental or physical complaints. For example, there is a remedy available to help people to stop smoking.

The following are a list of conditions for which Homeopathy has a known remedy:

Abdominal Pain and Indigestion

Acne

Allergies: Contact Dermatitis (Skin Rash), Eczema, Hives, Upper-Respiratory- Tract Allergy (Hay

Fever)

Anxiety and Fear

Asthma: Allergic, Reactive, Psychogenic

Back and Neck Problems: Stiff Neck, Lower Back Pain, Sacroiliac Sprain, Coccyx Injury, Sciatica

Bedwetting (Enuresis)

Bladder Infections (Cystitis) Boils

Canker Sores and Cold Sores

Chicken Pox

Colds

Conjunctivitis {Eye Inflammation or Pinkeye)

Constipation

Coughs

Diaper Rash

Diarrhea

Earaches: Otitis Media, Otitis Externa

Fever Flu

Food Poisoning

German Measles

Grief and Sadness

Headaches: Muscle Contraction (Tension) Headache, Vascular (Migraine) Headache, Other Headaches

He morrhoids

Hepatitis

Herpes Simplex

Herpes Zoster (Shingles)

Impetigo

Insomnia

Irritability and Anger

Laryngitis

Measles

Menstrual Cramps and Premenstrual Syndrome (PMS)

Mononucleosis

Motion Sickness

Mumps

Nausea

Neck Pain

Poison Oak or Ivy

Prostatitis

Ringworm and Other Related Fungal Infections

Sciatica

Sexually Transmitted Diseases

Sinus Problems (Sinusitis)

Sore Throats: Noninfectious, Viral, and Strep

Styes

Teething

Thrush

Urethritis

Vaginitis: Yeast Infections, Bacterial Infections, Trichomonas Infections, and Noninfectious Vaginitis

Vomiting Warts

Clinical Studies:

Homeopaths point to the nearly two hundred years of clinical experience of convinced doctors and satisfied patients. Homeopathic remedies are believed to be effective in treating a wide variety of illnesses: infectious diseases such as flu and colds; chronic conditions such as allergies, asthma, migraines, and PMS. Conventional medicine has not had much of success in treating many of these conditions.

Several clinical studies exist that show the effectiveness of homeopathic remedies. Many of these studies employed double blind studies, accepted by scientists. Recent clinical trials suggest that homeopathic medicines have a positive effect on allergic rhinitis, asthma, treatment of dermatological complaints, fibrositis, influenza, and for the treatment of migraine.

In 1994, the first study that involved homeopathy was published in a peer-reviewed American scientific journal. Jennifer Jacobs, M.D., led the study, which was conducted in Nicaragua and included eighty-one children with acute diarrhoea. All the children received standard antidehydration treatment for diarrhoea, consisting of water containing salt and sugar. In addition, half the children received homeopathic treatment and half received a placebo. The study confirmed homeopathy's effectiveness: the recovery time for children receiving homeopathic treatment was 20% faster than those receiving the placebo, reducing the bout of diarrhoea by one day. These results are heartening because diarrhoea is the leading cause of death in developing countries such as Nicaragua.

In 1991, the British Medical Journal published an analysis of 107 clinical studies published between 1966 and 1990. The authors found that in 81 of the experiments, the homeopathic treatments were successful. Even when they included only the 23 studies that they considered to be of the highest quality, the vast majority of these (15) showed positive results. Here's how the results broke down: 13 out of the 19 trials of respiratory infection treatment were effective, 6 out of 7 were positive for other infections, 5 out of 7 were positive for digestive system treatment, 5 out of 5 were successful for hay fever, 5 out of 7 showed accelerated recovery after surgery, 4 out of 6 helped in rheumatological disease,

18 of 20 were beneficial for pain or traumatic injury; and 8 out of 10 worked for mental or psychological problems.

In one study published in Lancet by Dr. David Taylor Reilly and his colleagues compared the effects of a homeopathic hay-fever remedy with a placebo. In this double-blind controlled study, Dr. Reilly found that those who received the homeopathic remedy had six times fewer symptoms and were able to cut their use of antihistamines in half

Another study published in 1989 in the British Medical Journal dealt with fibromyalgia. The double-blind, controlled trial was also "crossed over," meaning the treatment lots were switched after one month so the subjects could be compared, not only with each other, but also with themselves. The results were evaluated by a rheumatology professional who was not a homeopath. The study found that the homeopathic remedy provided highly statistically significant improvement in both subjective and objective symptoms.

In a double-blind controlled study conducted in Britain in 1980, 82% of those receiving the homeopathic remedy enjoyed improvements in rheumatoid arthritis versus 21% of the control group on placebo. The subjects in this study received remedies that were individually prescribed.

Other significant positive studies show homeopathy helps in pain following tooth extraction (76% versus 40% for a placebo); reduces vertigo and nausea; reduces labour time in pregnant women (5.1 hours versus 8.5 hours); and reduces risk of abnormal labour (11.3% versus 40%).

Two double-blind studies compared Quietude, a combination of homeopathically prepared plant extracts that has been very popular in France, with diazepam (Valium). The subjects were adults and children who were nervous and suffered from sleeplessness. The results showed that the homeopathic product increased sleep time, reduced interruptions during sleep, and reduced nervousness. Both products relieved insomnia and minor nervous tension 63% of the time. However, the homeopathic remedy produced no side effects: there was no daytime dizziness, as opposed to 13% of the diazepam group. Homeopathic remedy group suffered no daytime drowsiness, but 53% of the diazepam group felt drowsy. In addition, Quietude was better at reducing children's nightmares, and 74% of the Quietude patients said the product was better than other treatments, as opposed to 48% of the diazepam group who felt this way.

A study, conducted in 1985, found that patients who took the homeopathic product Oscillococcinum, derived from duck heart and liver, experienced reduction in their fever much rapidly (in two days) than those who took placebo. Shivering disappeared by day four. In another controlled study, published in 1989 in the British Journal of Clinical Pharmacology, 66% more of the Oscillococcinum group recovered within forty-eight hours as compared to the placebo group. Clinical studies show the effectiveness of homeopathic remedies in treating infectious diseases. In a French study published in 1987, silica, prepared homeopathically to the 10c potency, stimulated macrophage activity by nearly 70%. Macrophages are white cells belonging to the immune defense system that destroy harmful cells and microorganisms. Homeopathic remedies were also shown to be effective in correcting immunological disorders in mice. In other studies, eight out of ten homeopathic remedies tested were able to inhibit the growth of viruses (in chicken embryos) by 50% to 100%.

Other studies show the usefulness of homeopathic remedies in treating diabetes. A 1992 study examined sixty people with retinal problems due to diabetes. In approximately half of the patients

taking the homeopathic remedy (Arnica), the eye condition improved; only 1% of the subjects receiving placebo improved a like amount. The subjects were evaluated using objective measuring instruments, indicating that homeopathy may prove valuable in helping this group of diabetics preserve their sight.

Conventional physicians often belittle homeopathic remedies and their effectiveness to placebo effect. However, several studies on animals and infants show that homeopathic remedies do work. Obviously, animals and infants are less likely to be influenced by placebo. In Germany, poultry farmers are treating their hens with homeopathic remedies instead of antibiotics for coughs, colds, and digestive problems. Farmers also treat their cats, dogs, horses, cattle, and birds homeopathically.

Other animal studies add to the evidence. A 3x potency of Chelidonium lowered cholesterol in rabbits by 25%. Microdoses of Arsenicum (10x up to 30x; and 5c up to 15c) helped rats eliminate toxic doses of arsenic from their systems, a study that has important implications for humans who are increasingly exposed to many heavy metals in the environment. And pigs given Caulophyllum had half as many stillbirths as those who received a placebo.

Homeopaths have been reporting good results when treating infants for common health problems such as teething, colic, eczema, and fever.



Welcome to Humour Therapy Section on Holistic-online.com

Patients, doctors and health-care professionals are all finding that laughter may indeed be the best medicine.

Laughing is found to lower blood pressure, reduce stress hormones, increase muscle flexion, and boost immune function by raising levels of infection-fighting T-cells, disease-fighting proteins called Gamma-interferon and B-cells, which produce disease-destroying antibodies. Laughter also triggers the release of endorphins, the body's natural painkillers, and produces a general sense of well-being.

Laughter is infectious. Hospitals around the country are incorporating formal and informal laughter therapy programs into their therapeutic regimens. In countries such as India, laughing clubs -- in which participants gather in the early morning for the sole purpose of laughing -- are becoming as popular as Rotary Clubs in the United States.

Humor is a universal language. It's a contagious emotion and a natural diversion. It brings other people in and breaks down barriers. Best of all it is free and has no known side reactions.

The Spiritual Side of Humour: How positive humour can promote lifetime connections. If there's one thing people are lacking in today's fast-paced, hi-tech world, it's meaningful connections with others. Although our world population has grown in recent decades, we've become more isolated from our neighbours than ever before.

Introduction

Patients, doctors and health-care professionals are all finding that laughter may indeed be the best medicine. Finding humour in a situation and laughing freely with others can be a powerful antidote to stress. It is also a very good coping mechanism when you are suffering from deadly diseases such as cancer. Many people find that maintaining a sense of humour at such occasions are useful for good quality of life. Our sense of humour gives us the ability to find delight, experience joy, and to release tension. This can be an effective self-care tool. Scientific evidence on the effectiveness of humour as a therapy is now overwhelming.

For many years medical professionals have recognized that those patients who maintained a positive mental attitude and shared laughter responded better to treatment. Physiological responses to laughter include increased respiration, circulation, hormonal and digestive enzyme secretion, and a levelling of the blood pressure. Many report a general sense of euphoria after vigorous laughter. But until the New England Journal of Medicine in 1979 published the Norman Cousins case study, few considered the therapeutic uses of humour.

The first documented case of humour positively affecting disease was in 1964 when Norman Cousins, published "Anatomy of an Illness". Medical professionals were for the first shown that humour

biologically reversed Cousins' ankylosing spondylitis, a painful disease causing the disintegration of the spinal connective tissue. Given a one in five hundred chance of recovery, Cousins decided to infuse himself with humour treatments. With Cousins' self-designed humour treatments, he found that 15 minutes of hardy laughter could produce two hours of pain free sleep. Blood samples also showed that his inflammation level was lowered after the humour treatments. Eventually Cousins was able to completely reverse the illness. Cousins later documented his story in a book he called "Anatomy Of an Illness"

Today, interest in humour's effects has grown so much that the field has a name --psychoneuroimmunology, the study of how psychological factors, the brain and the immune system interact to influence health.

"If you took what we now know about the capability of laughter to manipulate the immune system, and bottled it, it would need FDA approval," Dr. Lee Berk, a preventive care clinician, medical research scientist, psychoneuroimmunologist, and professor at LLU's Schools of Medicine and Public Health.

Therapeutic Benefits of Laughter

Dr. Lee Berk and fellow researcher Dr. Stanley Tan of Loma Linda University in California have been studying the effects of laughter on the immune system. To date their published studies have shown that laughing lowers blood pressure, reduces stress hormones, increases muscle flexion, and boosts immune function by raising levels of infection-fighting T-cells, disease-fighting proteins called Gamma-interferon and B-cells, which produce disease-destroying antibodies. Laughter also triggers the release of endorphins, the body's natural painkillers, and produces a general sense of well-being.

Following is a summary of his research, taken from an interview published in the September / October 1996 issue of the Humour and Health Journal.

Laughter Activates the Immune System

In Berk's study, the physiological response produced by belly laughter was opposite of what is seen in classical stress, supporting the conclusion that mirthful laughter is a eustress state -- a state that produces healthy or positive emotions.

Research results indicate that, after exposure to humour, there is a general increase in activity within the immune system, including:

- An increase in the number and activity level of natural killer cells that attack viral infected cells and some types of cancer and tumour cells.
- An increase in activated T cells (T lymphocytes). There are many T cells that await activation. Laughter appears to tell the immune system to "turn it up a notch."
- An increase in the antibody IgA (immunoglobulin A), which fights upper respiratory tract insults and infections.
- An increase in gamma interferon, which tells various components of the immune system to "turn on."
- An increase in IgB, the immunoglobulin produced in the greatest quantity in body, as well as an increase in Complement 3, which helps antibodies to pierce dysfunctional or infected cells. The increase in both substances was not only present while subjects watched a humour video; there also was a lingering effect that continued to show increased levels the next day.

Laughter Decreases "Stress" Hormones

The results of the study also supported research indicating a general decrease in stress hormones that constrict blood vessels and suppress immune activity. These were shown to decrease in the study group exposed to humour.

For example, levels of epinephrine were lower in the group both in anticipation of humour and after exposure to humour. Epinephrine levels remained down throughout the experiment.

In addition, dopamine levels (as measured by dopac) were also decreased. Dopamine is involved in the "fight or flight response" and is associated with elevated blood pressure.

Laughing is aerobic, providing a workout for the diaphragm and increasing the body's ability to use oxygen.

Laughter brings in positive emotions that can enhance – not replace -- conventional treatments. Hence it is another tool available to help fight the disease.

Experts believe that, when used as an adjunct to conventional care, laughter can reduce pain and aid the healing process. For one thing, laughter offers a powerful distraction from pain.

In a study published in the Journal of Holistic Nursing, patients were told one-liners after surgery and before painful medication was administered. Those exposed to humour perceived less pain when compared to patients who didn't get a dose of humour as part of their therapy.

Perhaps, the biggest benefit of laughter is that it is free and has no known negative side effects.

So, here is a summary of how humour contributes to physical health. More details can be found in the article, Humour and Health contributed by Paul McGhee

Muscle Relaxation – Belly laugh results in muscle relaxation. While you laugh, the muscles that do not participate in the belly laugh, relaxes. After you finish laughing those muscles involved in the laughter start to relax. So, the action takes place in two stages.

Reduction of Stress Hormones – Laughter reduces at least four of neuroendocrine hormones associated with stress response. These are epinephrine, cortisol, dopac, and growth hormone.

Immune System Enhancement – Clinical studies have shown that humour strengthens the immune system.

Pain Reduction – Humour allows a person to "forget" about pains such as aches, arthritis, etc.

Cardiac Exercise – A belly laugh is equivalent to "an internal jogging." Laughter can provide good cardiac conditioning especially for those who are unable to perform physical exercises.

Blood Pressure – Women seem to benefit more than men in preventing hypertension.

Respiration – Frequent belly laughter empties your lungs of more air than it takes in resulting in a cleansing effect – similar to deep breathing. Especially beneficial for patient's who are suffering from emphysema and other respiratory ailments.

Humour and Cancer

Many of us feel awkward in joking in front of terminally ill patients. Many may even consider it inappropriate or insensitive. However, it has been known scientifically that the best thing you can do to your friends is to provide a humourous environment and let them "forget" about their condition. Sitting and feeling sorry for their condition will not help them much.

Dr. Michael B. Van Scoy-Morsher, an oncologist in California says that "one characteristic of the cancer patient who does well is the ability to often put cancer in the background for periods of time."

TV journalist Linda Ellerbee wrote about some of her cancer experiences and of being bald in the January 1993 edition of McCall's :

That summer I bought some breast prostheses to use while swimming. Instead of fastening them to my skin with Velcro as the directions instructed, I simply inserted the prostheses into my bathing suit. When I came out of the water, one had migrated around to my back! Now, how can you not laugh at such a thing? Either you laugh or you cry your eyes out. . . . It's something I've tried to teach my kids as well. When my 23-year-old daughter saw me with my bald head and no breast, she said, "You look just like a Buddha without the wisdom," and we both howled. I think we are never braver than when we stand tall and look into the sun and laugh. Laughter may be a form of courage.

In his book "Intoxicated by My Illness," Anatole Broyard wrote about the final months of his life after he was diagnosed with prostate cancer. He stated that "Illness is primarily a drama, and it should be possible to enjoy it as well as to suffer it. Illness," after all, "is not all tragedy. Much of it is funny."

Humour: How Does It Work?

In her book, "Pulmonary Rehabilitation: Guidelines to Success," Patty Wooten noted:

The ability to laugh at a situation or problem gives us a feeling of superiority and power. Humour and laughter can foster a positive and hopeful attitude. We are less likely to succumb to feelings of depression and helplessness if we are able to laugh at what is troubling us. Humour gives us a sense of perspective on our problems. Laughter provides an opportunity for the release of those uncomfortable emotions which, if held inside, may create biochemical changes that are harmful to the body.

Herbert Lefcourt, a noted psychologist from the University of Waterloo in Canada has explored the possibility that a sense of humour and its use can change our emotional response to stress. In this study, subjects were asked to review the frequency and severity of stressful life changes occurring to them over the previous six months, and their recent negative mood disturbances were evaluated. Lefcourt then administered tests to evaluate use of humour, perception of humour, appreciation of laughter, and efforts to include opportunities for humour and laughter into each subjects lifestyle. Results of this study have shown that the ability to sense and appreciate humour can buffer the mood disturbances which occur in response to negative life events.

Humour perception involves the whole brain and serves to integrate and balance activity in both hemispheres. Derks, at the College of William and Mary in Williamsburg, has shown that there is a unique pattern of brain wave activity during the perception of humour. EEG's were recorded on subjects while they were presented with humourous material.

During the setup to the joke, the cortex's left hemisphere began its analytical function of processing words. Shortly afterward, most of the brain activity moved to the frontal lobe which is the centre of emotionality. Moments later the right hemisphere's synthesis capabilities joined with the left's processing to find the pattern -- to 'get the joke'. A few milliseconds later, before the subject had enough time to laugh, the increased brain wave activity spread to the sensory processing areas of the brain, the occipital lobe. The increased fluctuations in delta waves reached a crescendo of activity and crested as the brain 'got' the joke and the external expression of laughter began. Derks' findings shows that humour pulls the various parts of the brain together rather than activating a component in only one area.

The emotions and moods we experience directly effect our immune system. A sense of humour allows us to perceive and appreciate the incongruities of life and provides moments of joy and delight. These positive emotions can create neurochemical changes that will buffer the immunosuppressive effects of diseases and stress.

"The simple truth is that happy people generally don't get sick."

Bernie Siegel, M.D.



What Is It?

Hydrotherapy is the use of water in the treatment of disease. Hydrothermal therapy additionally uses its temperature effects, as in hot baths, saunas, wraps, etc.

Historical Perspective

Hydro- and hydrothermal therapy are traditional methods of treatment that have been used for the treatment of disease and injury by many cultures, including those of ancient Rome, China, and Japan. Water therapy has been around for centuries. The ancient Greeks took therapeutic baths. Water is an important ingredient in the traditional Chinese and Native American healing systems.

A Bavarian monk, Father Sebastian Kneipp helped re-popularize the therapeutic use of water in the 19th century. There are now many dozens of methods of applying hydrotherapy, including baths, saunas, douches, wraps, and packs.

How it works

The recuperative and healing properties of hydrotherapy are based on its mechanical and/or thermal effects. It exploits the body's reaction to hot and cold stimuli, to the protracted application of heat, to pressure exerted by the water and to the sensation it gives. The nerves carry impulses felt at the skin deeper into the body, where they are instrumental in stimulating the immune system, influencing the production of stress hormones, invigorating the circulation and digestion, encouraging blood flow, and lessening pain sensitivity.

Generally, heat quiets and soothes the body, slowing down the activity of internal organs. Cold, in contrast, stimulates and invigorates, increasing internal activity. If you are experiencing tense muscles and anxiety from your stress, a hot shower or bath is in order. If you are feeling tired and stressed out, you might want to try taking a warm shower or bath followed by a short, invigorating cold shower to help stimulate your body and mind.

When you submerge yourself in a bath, a pool, or a whirlpool, you experience a kind of weightlessness. Your body is relieved from the constant pull of gravity. Water also has a hydrostatic effect. It has a massage-like feeling as the water gently kneads your body. Water, in motion, stimulates touch receptors on the skin, boosting blood circulation and releasing tight muscles.

Indications

Hydrotherapy and hydrothermal therapy are chiefly used to tone up the body, to stimulate digestion, the circulation, and the immune system, and to bring relief from pain. Description of indications are given under individual method used.

Water seems to have special powers in getting rid of stress and rejuvenating our body. It affects the skin and muscles. It calms the lungs, heart, stomach, and endocrine system by stimulating nerve reflexes on the spinal cord.

Proof it works

Various case reports, observational studies, and a number of controlled studies provide some evidence of success in the use of hydrotherapy.

In a study of 40 persons at University of Minnesota, 85% of the participants preferred a whirlpool bath to a still bath. Only whirlpool was effective in reducing the participants' reactivity to stress although both still and whirlpool baths were effective in reducing anxiety.

Risks, Cautions, and Contraindications

Please see under individual techniques for warnings and caution for the use and follow them.

Persons with impaired temperature sensation run the risk of scalding or frostbite at temperature extremes.

When a condition is recurrent or persistent, please consult your physician to determine whether a physical therapy of this type is suitable in your case.

- If you have diabetes, avoid hot application to the feet or legs. Also avoid full body heating treatments, such as body wraps.
- Avoid cold application if you are diagnosed with Raynaud's disease.
- Hot immersion baths and long, hot saunas are not recommended for those with diabetes or multiple sclerosis, women who are pregnant or anyone with abnormally high or low blood pressure.
- Don't take cold foot baths if you are prone to bladder or rectal irritation. People suffering from sciatica, pelvic inflammation or rheumatism in the toes or ankles should avoid cold foot baths.
- Elderly people and young children may be exhausted by too much heat and should avoid long full-body hot treatments such as immersion baths and saunas.
- If you are pregnant or have heart disease, consult a doctor before taking a sauna.

Common techniques

A number of techniques are available under the general heading of hydrotherapy. These include: baths and showers, neutral baths, sitz baths, contrast sitz baths, foot baths, cold mitten friction rub, steam inhalation, hot compresses, cold compresses, alternating hot and cold compresses, heating compresses, body wrap, wet sheet pack, and salt glow.

Cold rubbings

Soak a linen cloth in cold water, wring out and briskly rub the upper and lower trunk, or the entire body. Go to bed until warm and dry. *Indications*: For invigoration, to tone up the body, to promote blood flow, for use in problems of circulation, or infections of the respiratory system.

Douches

Gentle douches can be carried out with a watering can or hose. The water should not splash, but gently envelop the skin. The water stream should always be directed from the periphery toward the heart. After douching, stroke off excess water, dress, and exercise. There are various types of douche:

- **Knee douche.** The water stream is directed from the right small toe, along the outside of the lower leg to the hollow of the knee, then back along the inside and over the sole of the foot. The process is then repeated for the left leg. Useful for headaches and migraines, low blood pressure, sleeplessness, contusions, and varicose veins. This treatment influences the digestive and reproductive organs and can help ward off vascular damage. Do not use for urinary tract infections, irritable bladder, sciatica, or during menstruation.
- **Thigh douche.** The procedure is as for a knee douche, but includes the upper thigh. It can stimulate blood flow and help improve poor circulation. Useful for the treatment of varicose veins, muscular rheumatism, crural paralysis, coxarthritis. Do not use for urinary tract infection, irritable bladder, sciatica, or during menstruation.
- Lower trunk douche. The procedure is as for the thigh douche, but including the lower trunk. Useful for diabetes mellitus, meteorism, enlargement of the liver, enlargement of the gallbladder, stone formation. Do not use for urinary tract infections, irritable bladder, sciatica, or during menstruation.
- Arm douche. Direct the water stream from the outside of the right hand to the shoulder, then back on the inside of the arm. Repeat the process for the left arm. Useful for cold hands, nervous disorders, neuralgia and paralysis, rheumatism of the arms, heart problems, vertigo, headaches, catarrh in the nose and throat.
- **Chest douche.** Douche the arms first. Useful for chronic bronchitis and bronchial asthma, angina pectoris. **Caution:** Moderate the temperature if there is risk of angiospasm.
- Upper trunk douche. This involves the upper torso and arms. It can be used to improve blood flow to the lungs, heart, and pleura. Useful for the treatment of bronchitis, bronchial asthma, disease of the larynx and vocal cords, headaches, nervous excitability, varicose veins of the legs, for toning-up, and for stimulating cardiac and respiratory activity. Caution: Do not use if there is blood stasis in the pulmonary circulation.
- ■Back douche. Useful for the treatment of weakened back muscles, back pain, spinal disease, multiple sclerosis, bronchial asthma, nearly all diseases of the lung. Warning: Do not use in debilitated patients or those with neurasthenia.
- Neck douche. Useful for headaches, migraines, tenseness in the shoulder and neck, hypersensitivity to changes in the weather, mild depression, tinnitus, vertigo, arthrosis of the hand and finger joints. Warning: Not to be used in persons with high blood pressure, enlargement of the thyroid, or raised intraocular pressure.
- Face douche. Proceed from the right temple downward to the chin, upward to the left temple, from right to left over the forehead, and repeatedly from the forehead to the chin, then in circles over the face. This is useful for relieving headaches and migraines, trigeminal neuralgia, toothaches, for relaxing tired eyes. Caution: Keep the eyes closed.

Sauna and Steam Baths

Saunas and steam baths are similar in effect; the decision to take one rather than the other will be guided by personal preference. In a sauna the heat acts more quickly to eliminate toxins through the skin, though some consider the moist air of a steam bath to have a more satisfying effect on the respiratory system. Saunas are deeply relaxing and are a great way to melt away stress.

A sauna is an eliminative procedure; it stimulates blood flow, increases the heart rate, has an immune-modulating effect, promotes hormone production, encourages mucosal secretions in the respiratory system, opens the airways, reduces resistance to respiration, regulates the vegetative system, relaxes, and can improve mental outlook. Children can start to take saunas at two or three years of age.

Indications: For "toning-up," for health promotion, as a way of treating pain caused by pulled back muscles, chronic rheumatoid arthritis, bronchial asthma, unstable hypertension (stages I and 11), severely disturbed peripheral blood circulation.

Warnings: Saunas should not be taken by persons with acute rheumatoid arthritis, acute infection, active tuberculosis, sexually transmitted diseases, acute mental disorder, inflammation of an inner organ or blood vessels, significant vascular changes in the brain or heart, circulatory problems or acute cancer.

Do not spend more than 15 to 20 minutes at a time in a sauna. Wipe your face frequently with a cold cloth to avoid overheating.

Full and partial immersion baths

Various substances can be added to warm and rising temperature baths. See herbal baths below. The following are the different kinds of bath used:

Rising temperature hip bath. This is taken in a tub filled with a hand's breadth of tepid water. Hot water is then gradually added until the level reaches the navel. The final temperature should be 103-104'F (40°C). Following this procedure, the patient is wrapped warm and proceeds to bed. It should last 15-30 minutes, not more than three times per week.

Indications: incipient and abating common colds, back pain (sciatica).

Warning: to be used with caution by persons with heart or circulation problems, haemorrhoids, or varicose veins.

Cold foot bath. The feet are placed into a foot bath filled to calf depth with cold water. Stop when a cold stimulus is felt or when the water is no longer perceived as being particularly cold. Stroke off excess water, dress, and walk or run until dry. A special form of this treatment is "walking in water," which involves walking stork-like on a non-slip mat placed under the water.

Indications: Varicose veins, susceptibility to oedemas, headaches, low blood pressure, circulatory problems, sleeplessness, proneness to the common cold, sweaty feet, or a contused ankle.

Warning: This type of treatment is best avoided by people who suffer from cold feet, very high blood pressure, an irritable bladder, urinary tract infection, diabetes, or vascular occlusion.

Rising temperature foot bath, warm foot bath. The feet are immersed in a foot bath filled with water at body temperature. Hot water is gradually added to give a final temperature of 103-104'F (40°C). In warm foot baths water of this temperature is added straight away. Keep warm afterwards. The procedure should last 10-15 minutes and can be done *daily*.

Indications: Cold feet, start of a common cold, for relaxation.

Warning: Best avoided by people with varicose veins, lymphostasis, or oedema.

Cold arm bath. A basin is filled with cold water until it reaches a depth several inches above the immersed elbow. If the treatment becomes intolerable, stop and repeat as *desired*.

Indications: Headaches, sleeplessness.

Warning: Best avoided by people with heart or circulatory problems.

Rising temperature arm bath. In principle, this is the same as the rising temperature foot bath. It should be followed by a cold arm douche, then by half an hour's rest.

Indications: Bronchitis, asthma, incipient respiratory infection, circulatory problems, angina pectoris.

Sitz bath. This is generally taken in a hip bath as a cold, rising temperature, or warm sitz bath. Prior to a sitz bath, warm the feet, e.g. through a warm foot bath. Parts of the body not immersed in water should be covered.

Indications: Cold sitz bath for haemorrhoids or inflammation of the anus; warm or rising temperature sitz bath for difficulty in voiding the bladder, an irritable bladder, inflammation or infection of the prostate, preparation for pregnancy.

Warning: Do not use warm or rising temperature sitz baths for haemorrhoids.

Wraps

A wrap is primarily used as a supportive measure for treating fever and local inflammation. The person receiving treatment should first adopt a relaxed position. Then a linen cloth is moistened with cold water (warm water for respiratory diseases), well wrung out, and then wrapped tightly around the appropriate part of the body, but not so tightly as to cause constriction. The moist linen cloth is in turn wrapped with a dry cotton or linen cloth. The patient is then usually wrapped in a blanket or another cloth, and should rest for 45-60 minutes or, if the intention is to induce sweating, for up to three hours.

If the wrap is not felt to be warm after a quarter of an hour, heat should be applied in the form of a hot water bottle or by giving warm tea. The wrap should be removed immediately if the person complains of feeling unwell.

Indications:

- Neck wrap: sore throat.
- Chest wrap: bronchitis, lung disease, neuralgia.
- Body wrap (between costal arch and pubic bone): inflammatory disease of the upper abdomen, gastric and duodenal ulcers, cramps, sleeplessness, fever.
- Trunk wrap (between pubic bone and armpits): high fever.
- Hip wrap (with gap between the legs): prostatitis, vaginitis, hemorrhoids, anal eczema, inflammation in the pelvic cavity.
- Calf wrap (between foot and knee): lymphostasis, edema, for withdrawing heat in fever and phlebitis; in varicose veins the effect can sometimes be amplified through the use of healing earth or loam

poultices.

Joint wraps: rheumatoid arthritis, arthrosis.

Packs

Warm packs. A wrapping cloth is soaked in a hot infusion or decoction of herbs, then wrung out and applied to the patient's body. Alternatively, the wrap may receive a coating of hot mud mustard flour, or fango. As a further alternative, hayseed may be placed in a sack and steamed.

Indications: Painful chronic diseases such as arthrosis, renal disease, or cystitis, and for stimulating blood flow.

Warning: Always check that the temperature is tolerable before applying a wrap.

Cold packs. Cooled cataplasm is spread onto the wrapping cloth and placed on the part of the body. Crushed ice in a plastic bag may also be repeatedly applied for one minute, then removed for four.

Indications: Various inflammatory arthropathies, sprains and strains, pleurisy. Ice packs can also be used for headaches.

Warning: When using ice packs, place a thin cloth between the pack and the skin to prevent frostbite.

Herbal baths can be particularly soothing when you are experiencing a period of stress. There are several ways to prepare an herbal bath:

- 1. Simmer 1/2 cup of herbs in 1 quart of water in a covered pot for fifteen minutes. While the herbs are simmering, take a short shower to cleanse your body, then fill the tub with hot or warm water. Strain the liquid from the decoction into the bath water, and wrap the herbs in a washcloth. Soak in the tub for at least twenty minutes, using the "herbal washcloth" to rub over your body. -
- 2. Add 1/2 cup of herbs to running bath water, preferably hot. You might want to cover the drain with a thin mesh screen to prevent the herbs from clogging the pipes. Soak in the tub for twenty to thirty minutes.
- 3. Fill a thin cloth bag with 1/2 cup of herbs, either placing it in the bath water or tying it to the spigot so that the hot water runs through it as it fills the tub. Again, soak for twenty to thirty minutes.

Certain herbs are quite effective for creating soothing baths. Combine a handful each of valerian, lavender, linden, chamomile, hops, and burdock root, and add it to your bath according to one of the preceding methods. Soak for thirty minutes in the tub. Another soothing herbal bath calls for a handful each of hops, linden, valerian, chamomile, yarrow, and passionflower. Prepare this bath according to one of the preceding methods, or simmer the herbs in a quart of water, then drink 1/2cup of the liquid (with lemon and honey added, if you wish) and pour the rest in the tub. While soaking in an herbal bath, you can read, meditate, listen to peaceful music, or just sit quietly, concentrating on relaxing yourself.

Importance of Drinking Sufficient Water

It is very important that we drink sufficient amount of water in a day to make up for the water lost. The benefits of drinking water is widely recognized. Drinking pure, fresh water is essential to our health and well-being.

Our need for water increases as we grow older. As we age, our skin and mucus membranes become thinner and lose more water, and our kidneys function less efficiently. So our need for water increases. You may not feel thirsty. But you should get into the habit of drinking water, nevertheless.

Follow these steps for an Effective Hydrotherapy:

- For overall tension reduction, use a neutral bath (temperature between 92 to 94 degree F (34°C) that is close to the skin temperature.
- Use water temperature between 102 to 106 degree F (40°C) for loosening tight, tense muscles and reducing the pain of stress-related conditions such as backache. (Using temperatures higher than 106 degrees is not recommended as it can raise your body temperature very fast, inducing an artificial fever.)
- Take a cold shower after you step out of the bath. This brings and immediate rush of blood through your system, as well as a rush of energy. (Try alternating cold and hot shower to get a similar effect. 3 minutes of hot water followed by 30 seconds of cold water and the 3 minutes of hot water, etc.)
- Stay in the bath no more than 15 to 20 minutes. If you have high blood pressure or cardiovascular problems, don't stay long enough to raise your body temperature.
- Evening is the best time to soak in water. A study conducted in England found that people who took a soaking bath before going to bed slept more readily and deeply.

<u>Hydrotherapy for Healing Diseases/Conditions</u>

Chronic Fatigue Syndrome

Hydrotherapy

Hyperthermia

Several doctors have reported success using artificial hyperthermia as the central element in a treatment program for CFS. The treatment involves artificially inducing fever in order to augment the body's ability to fight viral infections. Patients must commit to a three-week course of treatment during which they stay home, get total bed rest, and undergo the fever treatment three times daily.

To induce hyperthermia, the patient soaks in a bath (as hot as is tolerable) for a full five minutes, while drinking a twelve-ounce glass of tepid water mixed with two thousand milligrams of vitamin C.

Preparing the bath

Fill a bathtub halfway with comfortably warm water. Sit in the tub and immediately finish filling it with water that's as hot as you can tolerate. Keep a basin of cold water within easy reach, so you can sponge off your face periodically. After soaking for about 10 minutes, begin taking your temperature at regular intervals. Once your body temperature reaches 102°F; usually within 20 to 25 minutes, stay in the tub for as long as you're comfortable--up to another 45 minutes-adding hot water as necessary to keep your temperature at 102°F (40°C).

Proponents of this therapy suggest that by elevating the body temperature to 102°F for at least five minutes every day, the baths increase the number and activity of white blood cells, jump-starting the depressed immune system of the CFS patient.

Emerging from the bath, the patient quickly dries off and gets into a bed prepared with flannel sheets and wool blankets, placing a hot water bottle under the breast (women) or over the liver (men), and remaining under the blankets for twenty minutes. This procedure stimulates a natural fever response and the body will sweat profusely in its attempt to return to normal body temperature.

In addition to the baths, eat a vegetarian diet made up of whole grains, nuts, seeds and fresh fruits and vegetables. No meats, eggs or dairy products are allowed. Take a daily walk at a comfortable pace, increasing the speed and distance as you become stronger.

Naturopathic physicians consider that fever is one of the immune system's natural adaptive mechanisms. By artificially raising the body temperature, we enhance the immune response. They report a 70% to 75% success rate with his patients who follow this protocol for the full three weeks. Most failures in fever therapy occur in individuals unwilling or unable to address simultaneous disorders such as yeast infections, dental amalgam reaction (to mercury), and hypothyroidism.

Caution: This treatment is intended for extreme cases of CFS in which the patient is virtually incapacitated. This protocol may also be contraindicated for certain conditions, such as high blood pressure, diabetes, or endocrinological problems. The program must be carried out under the guidance of a qualified physician.

Hydrotherapy: A Warm, Hot Bath

Hot baths can do more than keep you clean. It has been found that warm baths (water temperature between 100 to 102 degree F) not only relax the muscles but help provide some quiet time as well. So when you need to escape, fill the tub, lie back, and relax.

Soak in a hot bath with Epsom salt. It is a great stress buster.

There is nothing that calms me more than a tub of hot water filled with bath oil and scented bubble bath. Turn on the radio and add soothing background music.

Internet Discussion Forum

Generally, heat quiets and soothes the body, slowing down the activity of internal organs. Cold, in contrast, stimulates and invigorates, increasing internal activity. If you are experiencing tense muscles and anxiety from your stress, a hot shower or bath is in order. If you are feeling tired and stressed out, you might want to try taking a warm shower or bath followed by a short, invigorating cold shower to help stimulate your body and mind. Experiment with different water temperatures and durations in the bath or shower to determine what water method works best for you. Remember, the goal is to use hydrotherapy to achieve a state of comfort, relaxation, and refreshment.

Water seems to have special powers in getting rid of stress and rejuvenating our body. It affects the skin and muscles. It calms the lungs, heart, stomach, and endocrine system by stimulating nerve reflexes on the spinal cord.

When you submerge yourself in a bath, a pool, or a whirlpool, you experience a kind of weightlessness. Your body is relieved from the constant pull of gravity. Water also has a hydrostatic effect. It has a massage-like feeling as the water gently kneads your body. Water, in motion, stimulates touch receptors on the skin, boosting blood circulation and releasing tight muscles.

The more the water is in motion, higher is its stress-relieving benefits. In a study of 40 persons at University of Minnesota, 85% of the participants preferred a whirlpool bath to a still bath. Only whirlpool was effective in reducing the participants' reactivity to stress although both still and whirlpool baths were effective in reducing anxiety.



Imagery

Imagine that you're carrying a 100-pound bag on your back. Drop the bag, open it and examine the contents. There may be a lot of stuff in that bag-anger, frustration, depression, painful memories-that you can throw away to lighten your load. Do this exercise once a day for several minutes every time you have a bout of back pain.

Chronic Fatigue Syndrome

Imagery

The use of imagery with CFS involves inventing symbols in your mind's eye which will help you play out in a visualization how you want things to occur in your body. This may involve, for instance, visualizing your immune system working harmoniously and in balance; seeing your immune system eliminating viruses or other pathogens; or a general symbol to represent the syndrome, and another symbol to represent all your healing forces, etc. Visualization is a process in which you see the desired outcome develop.

Two theories have been proposed to explain how imagery works. One theory is called specificity hypothesis and the other one is called general effect hypothesis. Specificity hypothesis suggests that the effects of imagery are very specific and depend on the details of the message we want to send. The messages we are sending through the pathways connecting mind and body, the neuroimmune network, are heard at the cellular level, and the body respectfully responds to our commands.

In a study at the University of Arkansas, an experienced meditator using imagery techniques was able to manipulate her immune system's reaction to an injection of harmless virus particles just below the skin. The material injected, called a "varicella zoster test reagent," ordinarily gives rise to a type of inflammation called a delayed hypersensitivity reaction. This reaction is created by white cells releasing chemicals, such as histamine, which have the effect of causing inflammation. It was found that on demand, the woman being studied could alternately (1) suppress her inflammatory reaction and white-cell responsiveness, and (2) allow her inflammatory reaction to respond normally. In other words, she was able to communicate with and influence the behaviour of her white cells.

This and other studies suggest that it might be possible for people with CFS to deal with the problem of chronic immune activation through such methods. For example, by imagining the white cells becoming more relaxed and practicing the relaxation response, the patients will be able to reduce their hyperactivity.

The general effect hypothesis suggests benefits arise from the general overall feeling of greater control that we feel when we believe we can influence our health through these methods. It gets better as our confidence grows. Studies have shown that a sense of control over the source of stress leads to better immunity.

A study of cancer patients found improvement in immunity associated with imagery practice. Ten metastatic cancer patients attended monthly group sessions for a year in which they were supervised in imagery practice. Between sessions they performed the exercises twice a day. After each monthly meeting, blood samples were drawn to monitor immunologic changes. Significant improvements were found in several immune functions, including natural killer cell activity.

If the general effect hypothesis is true, then it does not matter what we imagine or visualize so long as it provides us heightened sense of well being and control. The feelings of confidence or competence are the key. Carl Simonton, M. D., once suggested that if you feel hopeful, powerful, and optimistic after doing your imagery, then that is the criterion of success, much more than the details of the images used. It follows that if you are confident in your ability to influence your health, this confidence will reduce the degree of stress you feel as a result of CFS. Then your healing can progress more readily.

Learning from Drawing

One tool you can use to harness the power of imagery is by drawing. Drawings and images can help you clarify issues in your life. They reveal the person's inner attitudes and beliefs about what is happening. This can lead to useful insights about needed changes.

William Collinge, in "Recovering from Chronic Fatigue Syndrome," described how one patient, during a group imagery session, drew a picture of herself being subdued by CFS. CFS was represented by a monster. Seeing this drawing, she realized how victimized she felt, and she immediately became in touch with her anger at this situation. Her anger fuelled a renewed determination to break her old habit of volunteering to do all the legwork for her support group, which had been draining her of energy she needed to combat her illness.

This was the beginning of a much needed change in her life – to stop doing favours for others that she really did not want to do. That shift has endured beyond her illness.

Imagery and Belief in Recovery

Imagery can help you strengthen your belief in recovery. Belief in recovery is a prerequisite in healing from CFS. Very often, people cannot actually imagine themselves recovered. This need to be addressed. A major source of the difficulty is the powerful images of debilitation portrayed by the media. Very often we see the negative images of suffering; we do not see the positive images of people having recovered from this illness. We need to balance the two.

The ability to imagine yourself well affects you in many ways. On the physical level, the biochemistry of hope is very different from that of despair, and your immune responsiveness is affected by both. On the psychological level, a great deal of change in behaviour is necessary to promote healing. Without belief in recovery, there is no incentive to sincerely follow through with such changes. And also, in those moments when you are in despair, feeling your absolute worst, imagery can be a resource to get you through.

One of the best ways to strengthen your belief in recovery is to create images of yourself well, and view them each day. Now that you understand the nature of CFS and the major principles in promoting recovery, you can create images which should be both realistic and inspiring to you.

Excerpted from Recovering From Chronic Fatigue Syndrome by William Collinge, Ph. D.

There are three stages to any visualization program

Stage 1: Calming Relaxation. Imagery should begin with a period of calming relaxation. Close your eyes and take several breaths to clear your mind of the clutter of the day so you can be fully present for the process at hand. (Refer to our section on meditation for recommendations on how to do this.) Relax so that all your attention is available to the imagery.

Stage 2: Healing Imagery This is the central part of the imagery process. Feel free to let your images change. As your healing work progresses, and as you get to know yourself better, your images will naturally evolve and change. Be open to this and whatever messages you can glean from these changes.

Stage 3: Future Glance End with imagery of yourself healed, doing something you love to do. This reinforces the sense of momentum and direction for your healing process. This is where you are headed, and this is the incentive for the earlier healing imagery. This should be part of all your imagery process.

As in any exercises, it will take you some time to get the steps mastered the first time. Think through the imagery details. Very soon you will have a number of such images in your mind that you can recall as needed depending on the circumstance.

Example of Imagery

Close your eyes, breathe out three times and go inside your body. Imagine yourself playing a flute while riding a polo pony and carrying a polo mallet in your saddle. Coax the viruses out of your organs by playing music, then kill them with the mallet. Visualize living without the virus and CFS. Make it as detailed and specific as you can. Create an inner movie of how you imagine your life will look after you have recovered from CFS. Include the following details:

How do you look?

How is your body different?

How are your eating habits different?

How do you moderate your energy now? How is your pattern of exercise?

How is your pattern of working hours? What kind of work are you doing? With whom do you relate?

How is your communication with them?

How is the quality of your relationships different?

What kinds of people do you spend more time with? Less time? How is your honesty and self-expression? What are your goals?

How do you maintain your environment? What do you appreciate about your life?

Now open your eyes.

Practice this imagery three times daily, three minutes a session, for nine cycles of 21 days on and 7 days off.

We suggest that you draw a picture of yourself that can represent your living this life of balance. This can be a picture you can hang on your refrigerator or a wall in your home. It will be a constant reminder of the new you and can invoke the beneficial effects of the imagery whenever you look at it.

Imagery: Looking Back On CFS

Close your eyes, and take several long, slow, deep, calming breaths. Now picture yourself in the future, five years after recovery from CFS. During those five years since you recovered, you have been able to contemplate what you learned and how you grew from that adversity.

Now imagine you are sitting on the ground in a meadow, with a circle of people. It is a beautiful day, and the nature that surrounds you seems most approving of your presence. The circle of people includes your closest friends, family members, teachers, and all the significant people of your lifetime. Be sure to include everyone with whom you have ever had an important relationship. The circle may even be two or three persons deep, so everyone can be included. Take a few minutes to fill out this circle.

Now give an informal talk entitled "My Healing Journey". It is about your past experience with CFS. Begin the talk with the following: "I'd like to tell you a story. I'd like to share with you what I learned and how I grew from having CFS." After finishing the talk, imagine that the circle of people offers you a gift. This gift symbolizes their appreciation for your being in their lives and sharing your story with them. Express your gratitude. Accept the gift graciously, and hold it close to your heart.

Now draw a picture of this gathering in the meadow. Attach names to the figures who represent all the important people of your life. Place this drawing on your refrigerator or a wall in your home.

(Source: William Collinge: Recovering from Chronic Fatigue Syndrome)

Imagery (Visualization)

If you're mildly depressed imagery or visualization is very useful. Doing an imagery exercise called the trapeze of hope may help brighten your outlook.

This is how: Imagine that you are a trapeze artist standing high in the air on a platform. Now see yourself swinging from the left on a trapeze bar. From the right, you see another trapeze bar swinging toward you. Keep swinging and building up your momentum. When you're ready, let go of the old bar, and reach out and catch the new one. See yourself landing safely on the other platform. Grab a golden rope and lower yourself to the ground. Tie the golden rope around yourself and someone you love. Now see both of you standing in a golden light.

Do this exercise

http://www.pascashealth.com/index.php/library.html

Library Downloads - Pascas Papers

All papers may be freely shared. The fortnightly mailouts are free to all, to be added into the mailout list, kindly provide your email address. info@pascashealth.com



Colour Therapy Infocenter on Holisticonline.com is now open Learn more about light therapy in the colour therapy infocenter.

Introduction

Ancient medical books are filled with explanations of the importance of getting enough light. For example, the ancient Ayurvedic physician Charaka who lived in the sixth century B.C., recommended sunlight to treat a variety of diseases. For thousands of years people the world over have revered the sun as a great healer; some ancient cultures even worshiped the sun.

In 1980, A.J. Lewy and coworkers published an article in Science that ushered in the modern era of phototherapy. Lewy suggested that secretion of the hormone melatonin could be suppressed by exposing subjects to bright artificial light but not to light of ordinary indoor intensity. As we shall see later, melatonin is nicknamed "the chemical expression of darkness" as it is secreted at night and is believed to tell the body that it is time to sleep. It has been shown that melatonin in animals is secreted at night by the pineal gland under the influence of a circadian rhythm. Light rays impinging on the retina are converted into nerve impulses, which influence the secretion of melatonin by connections between the retina and the hypothalamus. This demonstration that one physiologic effect of light in humans, transmitted presumably via the hypothalamus, has a threshold intensity far higher than that required for vision, suggested that there might be other effects of light on the brain that require high-intensity light.

There is no doubt that the sun plays a very important role in our daily lives. During winter, the well-to-do vacations in Caribbean. The summer months are synonymous with spending time in the beach, in spite of all the warning of the potential to get skin cancer. We feel better after spending time in the sun. Today, most of the doctors and medical researchers view the sun more as a healer than a hazard.

We know that lack of sunlight can result in nutritional deficiencies. Without sunlight vitamin D cannot be metabolized in the human body, which can result in rickets. Most enzymes, hormones and vitamins need light for proper functioning. Studies have shown that different lights affect different enzymatic reactions for healing purposes. For example, one of the first test a paediatrician do to a new-born baby is to check for jaundice. If found positive, they are placed under a blue light to cure the disease. So, most of us are given light therapy, without us being aware of it.

Professor Mester of Budapest University conducted experiments to determine the function of light in the cells of animals and humans. He found that the monochromatic light promotes the DNA to use the lipoprotein in the area enabling the cell to function better as well as to produce collagen and elastin.

In a study reported in the *American Geriatrics Society*, researchers wanted to find out "the effects of low-power light therapy on pain and disability in elderly patients with degenerative osteoarthritis of the knee." They have divided the patients into three groups. One group was treated with red light, one was treated with infrared light and the third group got no light therapy. Prior to the light therapy, the pain and disability was statistically similar among the three control groups. They found that pain reduction in the red and infrared groups after the treatment was more than 50%. Significant functional improvement was observed in the red and infrared-treated groups, but not in the placebo group. The experiment showed that low-power light therapy is effective in relieving pain and disability in degenerative osteoarthritis of the knee.

Research conducted in Soviet Union and biological research done in the United States suggest that all living things may conduct light. Light has a great impact on synchronizing our circadian rhythms.

In fact, researchers have determined several benefits from regular, moderate exposure to sunlight-or to sun-like artificial lights. Such exposure can help relieve winter blues and treat other forms of depression; minimize jet lag; shorten abnormally long menstrual cycles and treat psoriasis, eating disorders and some forms of insomnia. It can possibly even help relieve some symptoms of lupus-a serious disease involving the immune system.

How Does Light Affect The Human Functions?

Human beings are the product of habits and heritage. Before the advent of alarm clocks, many farmers woke up hearing the rooster crowing, announcing the arrival of morning. They milked their cows, worked in the farm and went into bed at night. There was no electricity. So, daylight announced the initiation and termination of many activities.

Modern life style differs significantly from these early days. Most of us wake up in the morning, not by hearing a rooster crow or by feeling the golden rays of sunlight slowly drifting into our rooms; we wake up by the alarm clock or by the clock radio. Many of us have tough time getting up at the first time; so we set the "snooze" button to give us a little more of precious time to sleep. The windows have heavy drapes, so most of us do not see the sunlight except when we peek outside. In the evening, many of us stay awake to watch the late night shows. (Now we have light night shows and late late night shows to keep us company till the wee hours of the night.)

The problem is that our system needs time to sleep. Studies on animals have shown that they have definite patterns they follow every day depending on the season. In autumn, most of the plants and animals get ready to go into "hibernation" for the winter period. Many birds migrate to south for the winter. During this period, they do not eat much (There is not much food to be found.) But, come spring, nature become very lively. The birds return from the south. The trees starts the new growth.

Many animals are found to time the events in their lives depending on the season, so that the functions can be accomplished at the most effective way. For example, lambs are born only in the spring when there is plentiful of food for the mother to nurse the newborn. Most of the animal species coordinate the mating time so that the birth occurs in the season when there is plenty of food available. In the tropical rainforests, birds wait till the dry season to breed. In Arctic, the breeding is timed to coincide with the melting of snow and ice.

The question is how do animals know how to predict the seasons in advance? Is it the temperature fluctuations? It cannot be, because, sometimes we have the "so called Indian Summer" in fall; but the birds do fine. It turns out that the most important factor is the day light; or more specifically the day/night cycle. Animals and plants sense the shortening of the days in the fall and perceive the arrival of winter. In spring, the lengthening of the day signifies the arrival of spring and summer. Most of the expert horticulturists know about this. They manipulate the "day light hours" (or photoperiod) to coax the poinsettia to bloom in time for the Christmas season, daylilies to bloom for the Easter (although Easter can be in March or April), etc.

It turns out that human beings are also influenced by the light. Light determines our sleep/wake cycle. In most animals and humans, the desire to sleep is brought on by secretion of a hormone called melatonin. Melatonin is produced in a tiny gland known as the pineal gland. In the evening the pineal gland reacts to the diminishing levels of daylight and starts to produce melatonin, which is then released into the blood and flows through the body making us drowsy. Its secretion peaks in the middle of the night during our heaviest hours of sleep. In the morning, bright light shining through the eye reaches the pineal gland which reacts by switching off the production of melatonin, thus removing the desire to sleep.

The pineal gland is linked up to the rest of the hormonal system. Consequently melatonin production also influences the functioning of other parts of the body. During darkness and sleep, melatonin modifies the secretion of hormones from organs such as the pituitary, the master gland of the hormonal system. The pituitary in turn regulates the secretion of hormones controlling growth, milk production, egg and sperm production. It also regulates the action of the thyroid gland, which is concerned with metabolism, and the adrenal glands, which control excretion of the body's waste. It is obvious then that fluctuations in light and darkness according to the seasons of the year will influence rhythms of growth, reproduction and activity in animals and indeed humans.

Statistics show that despite living and working in "closed structures", our bodies still respond to the external environment and to its seasonal variability in duration and intensity. Scientist have found that growth rates in children are affected by the seasons. For example, surveys carried out in Germany, Sweden and Scotland show that height and weight increase is more predominant in the spring and early summer. In many countries the rate of conception peaks in the summer when the hours of daylight are longest. In numerous trials the seasons have been seen to influence the timing and duration of sleep, pain threshold, alertness, eating habits, mood, the onset of menstruation in women and sexual activity.

Biological Clocks and The Relationship to Health

We have shown that light levels influences the life in animals and humans immensely. Scientists have performed experiments to determine how animals will react if they are deprived of light. Of particular interest was to determine, whether they can perceive the seasons in the absence of light. These studies have shown that, the animals perceived the arrival of seasons without the aid of the light. This result led them to the conclusions that the animals, and humans too, possess a biological clock in their body that can keep the approximate time in the absence of the external stimuli such as sunlight.

The interesting thing they noticed was that, this biological clock was, at best, approximate. It was not meant to keep time over a longer period of time. (This can be illustrated with the example of our spare tire in cars. Most of new cars come with a spare tire which is smaller in size. It is meant to be used, in case their tire has to puncture, to go to the nearest service station to get the main one fixed. Because the

spare tire is smaller, it cannot be used to drive for extended period of time.) For example, the body clock sensed the day more than 24 hours. (The cycle was anywhere from 24 to 48 hours in the absence of light.) What we do is to use the natural daylight to "fine-tune" our body clock (or to apply a correction), so that the body clock is in synch with the external environment. The result of going for an extended period of time without having our body clocks "reset" with natural light is that we get sick with problems such as hormonal imbalances, sleep disorders, and mood disturbances.

Just as animals rely on signals from the sun to keep their body clocks exact and to synchronize their activities, so humans need sufficient daylight to synchronize their circadian and circannual rhythms (See Rhythms and Body Clock_ for an explanation). It has been suggested that a number of illnesses which result from hormonal imbalances – sleep, appetite, mood and reproductive disorders – could be linked to a disruption of circadian rhythms and ultimately to a lack of sufficient sunlight. SAD is an example of disturbed sleep patterns, appetite and weight disorders and depression, all of which manifest in a yearly and daily cycle: the symptoms peak at the height of winter and are at their worst in the evening. Giving SAD patients artificial daylight (light therapy) has proved successful in correcting these disorders, which suggests that SAD is directly associated with a lack of sufficient light.

There are other diseases that are influenced by the circadian rhythm disturbances. Classical depression has a daily rhythm. It worsens in the morning and improves in the evening. The result of this swing is the appearance of mood swings, along with insomnia or disturbed sleep patterns. Today, classical depression is often treated with drugs which exert an influence on circadian rhythms. Research is being carried out to determine the effectiveness of treating it with light therapy. Menstrual disturbances in women, such as irregular menstrual cycles or premenstrual syndrome are further examples of disturbances in the body's biological clocks. Again research is looking at the possibility of treatment with light therapy.

Brain, Hormones, Biological Cycles and Clocks

In order to understand the mechanism of Seasonal Affective disorder and the effect of light on our mind, it is necessary to get an understanding of how our body and brain work. We will introduce some important terms in this section to augment our understanding.

Our brain manages a number of complicated body processes, breathing, digestion, circulation, growth, reproduction, and repair. These brain utilizes two separated systems to control these processes, the nervous system and the endocrine system.

The **nervous system** is the fastest out of the two. Two send a message fast, the brain uses the nervous system. The messages are generally brief (such as a few thousandths of a second). The nervous system employs electrical impulses that travel through nerve cells as fast as 650 feet (200 metres) per second.

The **endocrine system** sends most messages slowly. It uses hormones to produce more long lasting effects. Hormonal messages travel through the blood stream. It may take several hours or days to reach the destination or to effect a change. Endocrine system is a collection of ductless glands throughout the body that secrete hormones directly into the blood stream. These glands include the pituitary, thyroid, thymus, adrenals, pancreas, ovaries or testes, and many others. The function of these glands are to control the internal environment of the entire body.

The difference between nervous system and endocrine system can be illustrated as follows. Let us say we need to send an article from the United States to Asia. The fastest way to send it is by air mail or express mail. It will take a few days. Since it is expensive, we will only utilize the medium for small things such as a letter. The other way to send is by surface mail (by ship). This takes a few months to get there; but is relatively cheap compared to air mail. Normally, big, bulky items are transported by this means. In this analogy, air mail is like the nervous system and the surface mail is like the endocrine system. Depending on the amount of material to send and the urgency of the message, the brain chooses either one of these systems.

Hypothalamus

Hypothalamus is known as the brain behind the endocrine system. The main vehicle used by hypothalamus is the **pituitary** (a pea sized gland that sits under the hypothalamus) to control other glands. The hypothalamus weighs a fraction of an ounce. It is about the size of the tip of our thumb.

For example, when hypothalamus determines that the level of thyroid hormone in the blood need to be increased, it releases a hormone to the pituitary gland instructing it to convey the message to the thyroid gland. The pituitary immediately sends a thyroid stimulating hormone to the thyroid instructing it to release more thyroid. When thyroid receives this message, it will start releasing the thyroid hormone called thyroxin. When this happens, the metabolic rates are speeded up. In the same fashion, hypothalamus controls the other endocrine systems, thus controlling such things as the sugar level in the blood, the body temperature, etc.

Pineal Gland

Pineal Gland is a tiny pine-cone shaped (the name is from the resemblance of the shape of the organ to the pine cone) organ located at the back of the brain, just above the brain stem.

Many scientists believe that pineal gland is the "aging clock" for the body. It appears to act as the body's timekeeper by keeping the body in sync with the most constant environmental cue we have: the light-dark cycle.

It is the pineal's job to announce to the rest of the body that it is dawn or dusk, time for the body to be awake and alert, or time to prepare for bed and a rejuvenating sleep. This crucial signal sets complex processes into motion, a cycle that is designed to remain relatively regular and balanced. The circadian rhythm (see below for an explanation) lies at the heart of the state of internal balance and harmony we know of as health. When it becomes disrupted over a long period of time, there may be serious physical and psychological consequences.

At the same time, the pineal gland also appears to act as the body's pacemaker, a kind of "activities director" for the human life cycle. Scientists believe that the pineal gland, through its major product, melatonin, triggers the start of puberty and regulates reproductive life. When the pineal gland stops giving out its melatonin-directed signals, we grow old because our bodies are no longer able to operate with efficiency or with internal synchronicity.

Melatonin

Melatonin is produced by the pineal gland. Scientists believe that the pineal gland and melatonin are the body's primary timekeepers-its clock and calendar-imparting information about the time of day, season of the year, and phase of life to the brain and throughout the body. Melatonin is believed to influence the internal processes so that all of the body's systems work together, in coordination. Should this internal structure become disorganized in any way, the body becomes more susceptible to disease.

Melatonin is produced almost exclusively at night or in a light-free environment. (In fact, it is nicknamed "the chemical expression of darkness" by scientists because of its nocturnal habits.) Blood levels of melatonin are up to ten times greater at night than during the day. This high concentration of nocturnal melatonin led scientists to conclude that the production of this hormone signals to the rest of the body that it is time to sleep. Indeed, melatonin supplements have been used for decades to treat sleep-related problems, such as insomnia, sleep apnea, and jet lag.

In the morning, when we perceive that it is light, melatonin secretion ceases, which stimulates the production of other hormones and hence other body activities to begin. This orderly daily rhythm is of prime importance to our physical condition, intellectual capabilities, and emotional health.

Animals change their behaviours such as reproduction, hibernation, and migration based on the season. It is believed that animals perceive the change of seasons by the patterns of light and dark. The mechanism used to implement this behaviour is by the secretion of melatonin. When daylight hours grow shorter during the autumn months, melatonin production in animals automatically increases, helping to make the almost constant sleep of hibernation possible. When daylight hours increase during the spring, the pineal gland secretes less melatonin, triggering a new pattern of physical activity.

The ways in which these seasonal patterns affect human behaviour is under intense investigation. Some researchers believe that seasonal melatonin levels may help to explain Seasonal Affective Disorder.

Chronobiology is a new science that is concerned with identifying our cycles and internal clocks and seeing how they interact. Such natural rhythms as temperature fluctuations, weather systems, patterns of light and dark are studied to explore how it affects the life cycle of men and women.

Melatonin and Serotonin

Melatonin affects the production and subsequent action of several other hormone in the body. It works in sync with serotonin, a powerful neurotransmitter from which it is derived. Serotonin is involved in several central physiological processes, including pain perception, temperature and blood-pressure regulation, and several neuropsychological functions such as appetite, memory, and mood. Like melatonin, serotonin levels influence a myriad of endocrine activities, including those performed by the hypothalamus and pituitary gland.

Generally speaking, melatonin and serotonin are not active in the body at the same time. As mentioned earlier, melatonin is active at night, serotonin is active in the daytime. Although both tend to moderate endocrine functions, serotonin may also have a negative effect on the cardiovascular system if its levels are too high in the bloodstream. It has been known to cause blood clotting and narrowing of the blood vessels, among other problems. And, unlike melatonin, serotonin levels in the body do not decrease as we age, but instead increase in relation to other hormones and neurotransmitters. Scientists who specialize in the study of elderly and the aging process believe that this age-related imbalance between serotonin and melatonin may play as important a role in the aging process as the lack of melatonin itself,

particularly in relation to heart disease. Without melatonin to act as a free-radical scavenger during the night, more damage may occur to blood vessels, thus stimulating the release of more serotonin.

Research has also shown that in very depressed people, there is a shortage of serotonin, along with dopamine and norepinephrine, three of the neurotransmitters used by the brain. So, the serotonin and melatonin link along with their dependence on the body clock may explain the depression experienced by the people suffering from SAD.

Circadian Rhythm

From the Latin circa (about) dies (a day), the circadian rhythm is the twenty-four-hour cycle of light / dark, wakefulness / sleep to which most human physiologic processes are set. At regular intervals each day, the body tends to become hungry, tired, active, listless, energized. Body temperature, heart-beat, blood pressure, hormone levels, and urine flow rise and fall in this relatively predictable, rhythmic pattern – a pattern initiated and governed by exposure to sunlight and darkness.

Experiments where humans were placed in isolation chambers, cut off from all potential environmental cues, have shown that, in the absence of natural daylight, rhythms are still maintained. But in the absence of the day light, the rhythms tend to deviate from 24 hours. For instance, the rhythms was found to expand to 24-30 hours, thus disrupting the biological processes over a long period of time.

The fact that animals and humans can continue to function according to daily and annual rhythms in the absence of external environmental stimuli means that animals and humans possess some kind of biological clock, which act as a backup mechanism in case it cannot get the proper stimuli from the natural events such as sunshine.

This behaviour can be illustrated by our clocks. Let us say, our clock is running slow. Over a period of time, the clock may lag the actual time because of this defect. Usually, we will reset the clock when it gets far out of sync by other external stimuli like a radio or phone time. Now, if we do not have access to this external synchronizing signal, the clock can get far out of line with the reality. Our body clocks functions the same way. The biological clock can keep the time; but in the absence of correction from the day / light cycle provided by the sun, the biological clock tend go out of sync affecting our physical and mental health. A similar thing happens when we travel across time zones; we tend to experience what is known as "jet lag".

However, in the absence of natural light our body clocks may lose or gain a little time. This in turn could lead to the desynchronization of different rhythms. For example, in the absence of sufficient environmental light the sleep-wake and associated rest-activity rhythms may lengthen to a cycle of between 30 and 48 hours, while the temperature rhythm may remain at a period of, say, 25 hours. Such desynchronization of the body's intricate rhythms is suspected to trigger problems: hormonal imbalances, sleep disorders and mood disturbances.

Circannual Rhythm

Circannual rhythm is the annual or yearly cycle used by all living things.

Circaseptan Rhythm

Circaseptan rhythm is a seven-day cycle in which the biological processes of life, including disease symptoms and development, resolve. Many physicians believe that transplant patients tend to have more rejection episodes seven, fourteen, twenty-one, and twenty-eight days after surgery. They further believe that medications administered to the patients at particular times may be more effective than at other times. These are all related to the circaseptan rhythm.

How does the brain know when it is light or dark?

Deep within the brain, inside the hypothalamus, lie two clusters of cells (i.e., neurons) called the suprachiasmatic nuclei (SCN). Each of these SCN is composed of more than 8,000 neurons. The SCN act as the body's circadian pacemaker. In mammals, the SCN appear to get their information from photoreceptors in the retina, which transmit signals about light and dark through the optic nerves to the hypothalamus. Once these messages enter the SCN, a series of physiological reactions takes place.

What happens after the light / dark signal reaches the SCN?

We are not sure. The pathway from the retina through the optic nerves to the SCN extends further to reach the pineal gland, which lies adjacent to the hypothalamus above the brain stem. Stimulated by the message it receives from the SCN, the pineal gland either secretes its main hormone, melatonin, or inhibits melatonin's release, which may result in the production of serotonin as was explained before.

Light Therapy for Seasonal Affective Disorders

One of the most important applications of light therapy is in the treatment of <u>Seasonal Affective</u> <u>Disorders (SAD)</u>. There is a large body of scientific evidence that points to the efficacy of light therapy for the treatment of SAD. What is not quite understood, yet, is how light treatment works.

We have shown that our daily rhythms are affected by the availability of the natural sun light. Many of us work in artificially lit buildings and does not get enough light. Most artificial lighting cannot replace the natural light. The reason for this is that the type of indoor lighting we use is not of sufficient intensity to affect the hormonal mechanisms which control our bodily rhythms. Intensity of light is measured in a unit called lux. One lumen means the light received by the receptor at an intensity of one lumen per square metre. Thus the intensity of light at any point is determined not only by the strength of the illumination source but also by how far it is from the source. The electric light used in most homes and workplaces rarely exceeds 500 lux. A sunny afternoon could be as much as 100,000 lux, and even the cloudiest day is rarely below 10,000 lux. Researchers have discovered that light of at least 2,500 lux is necessary to suppress melatonin production in humans. Most of the bright light therapy uses 5,000 lux light (10,000 lux preferred). The artificial light we use indoors is not of sufficient intensity to suppress melatonin and to correct the circadian rhythm. Night-shift workers, and people who live in Arctic climates, are usually exposed to light levels of only 50 lux. Light specialists believe this "malilumination" may be at the heart of many common disorders, including fatigue, depression, skin damage, suppressed immune function, and, of course, sleep problems.

Light therapy for Seasonal Affective Disorders and circadian-rhythm disorders involves sending visible light through the eyes so that it reaches, and triggers, the pineal gland.

There are several different forms of light therapy in use today; the oldest is sunlight itself. The sun is the ultimate source of full-spectrum light, which means it contains all possible wavelengths of light,

from infrared to ultraviolet. Generally speaking light therapy involves the use of equipment that sheds either full spectrum or bright white light.

In most cases, the purpose of light therapy is to increase the amount of light to which we would otherwise be exposed. Bright light therapy consists of looking at special broad spectrum bright lights from one-half to three hours a day, generally in the early morning hours. One should not stare directly into the lights because of possible eye damage.

A substantial amount of light is needed, which means the distance from the lights to your eyes needs to be monitored---close enough to give you the best amount of light, but distant enough so you don't hurt your eyes.

By the mid- 1980s, bright-light therapy (phototherapy) had become the treatment of choice for SAD. But many people found it difficult to allocate the four hours everyday for the light therapy. Additional studies were conducted by the researchers to determine an optimum light therapy. It was found that similar benefits can be obtained from a morning only therapy, effectively slashing the time by half. Later, by increasing the brightness or the intensity of the lights used, the therapy time was cut down further.

A few years later, it was cut further by brightening the lights. For example, with 10,000-lux light, it only required 30 minutes of exposure per day to get effective cure from SAD.

SAD symptoms typically begin to lift about a week after the start of phototherapy. But they return shortly after discontinuing the treatment. As a result, authorities urge people with SAD to sit under bright light daily from October through April.

Different Type of Illumination Sources

Common Electric Light Bulb

This is the most common type of lighting sources we use. It is also one of the least efficient. This passes electricity through a metal filament to produce heat. When the temperature reaches 500°C (943 degrees F) the filament begins to give off light as well as heat. The light generated is adequate to see with, but is quite different from the light of the sun. This is because most of the energy that an electric bulb uses is wasted in producing infrared radiation (heat), only about six per cent of the energy input is used to produce light. The resulting light is heavy on red colour and its neighbours, but contain very few violet, blue and green.

Fluorescent Strip Lighting

This is very popular in offices and factories. This is more efficient. But the light emitted differs from that generated by the sun. Within the glass tube of a fluorescent lamp, ultra violet rays are generated by a mercury vapour arc. The tube is lined with specially designed luminescent compounds which, when hit by the ultra violet rays, emit light of certain colours. Which colours are emitted depends on the type of

compounds used to line the tube. Generally these tubes are designed to give off a high level of yellow-green light, the colours to which the eye is most sensitive. Thus they offer a seemingly very bright light while using relatively little energy. However, like the incandescent bulbs, their light is significantly different from that of the sun.

Full Spectrum Lighting

A few lighting manufacturers have built indoor lights that approximates natural daylight in intensity and colour spectrum. What they have done is to replicate the spectral balance of daylight. These lights emit a certain amount of ultraviolet as well as all colours in daylight from red to violet. These lights are called full spectrum lights and are very useful for light therapy for SAD.

Full spectrum lighting is very similar to the fluorescent tubes. It uses a mercury vapour lamp to emit ultra violet light. The surface of the tube is coated with a compound which will emit the full spectrum light when hit by the ultraviolet light emission from the mercury vapour lamp. The coating is designed to emit all colours of the spectrum in approximately the same percentage as is found in natural sunlight minus the harmful ultraviolet light. Shields are generally provided to prevent the user from getting accidental exposure to the ultraviolet light.

Comparison of light intensities from different light sources (Lux is unit to measure light intensities)

Under sunny sky on the beach 100,000 lux

Typical Bright light therapy product for SAD treatment 10,000 lux

In spring, outdoor a few minutes after sunrise 10,000 lux

In a very well lit office 500 to 1,000 lux

At home (conventional lighting) 300 to 500 lux

Typical desk lamp (in a bedroom) 100 lux

Full Spectrum Lighting versus Broad Spectrum Lighting

Full spectrum light bulbs are made to try to imitate natural sunlight, and like sunlight, they also produce UV rays. Typically full spectrum bulbs have a Colour Rendering Index (C.R.I.) of 90 or above (Outdoor light has a CRI of 100) and a Kelvin temperature of 5,000 or above. Full spectrum light is described as having a purple or a bluish cast. Most light box companies using full spectrum light bulbs now block these UV rays through their diffuser screen. Make sure they do before purchasing their products.

Broad spectrum light boxes are often described as being as close to full spectrum as you can get without the UV rays. Typically they have a CRI of around 82 and a Kelvin temperature of around 4,200. Broad spectrum light bulbs are described as being a pure white light. Most light box companies use a broad spectrum light bulb so that there is no danger of UV rays.

Ultraviolet Light

One of the major safety concern of exposure to light is the possibility of being exposed to ultraviolet (UV) light. Exposure to ultra violet (UV) light can cause sunburn, eye damage and skin cancer. Recent studies have shown that UV rays are not an essential component of light therapy; units that emit almost no UV light are just as effective. Many of the light box manufacturers provide shields to filter away the UV light. Make sure that the unit you buy complies with this.

Side Effects

Very few people have reported mild side-effects from light treatment. These are not dangerous. Compared to the unpleasant side-effects of antidepressant drugs, the side effects of light therapy are minimal. Another factor which works in favour of the light therapy is that the side-effects, if there are any, are usually temporary, and can generally be remedied by reducing exposure time. It is found that various persons have their own threshold for light therapy. Find yours and stay below the limit and you will be fine.

Some of the most common initial side-effects of light therapy are headaches, eye irritation (itching or stinging), and slight nausea the beginning of treatment. Usually these effects subside a few hours after treatment is finished. They generally disappear altogether after several exposures. Unless you are in extreme discomfort, it is worth putting up with minor irritations for a few days, (make sure you consult a specialist before proceeding with the treatment) until you adapt to the light. If, after four days, the irritation persists or becomes worse, sit a little further away from the light box, reduce your exposure, and consult a professional trained to treat SAD.

The most dramatic side effect, which occurs quite infrequently, is a switch to an overactive state, during which one may have difficulty sleeping, become restless or irritable, and feel speedy or "too high". People who have experienced such states in late spring or summer are particularly vulnerable, and guidance by a skilled clinician in the use of light therapy is especially important. If eye irritation persists, it can be alleviated by sitting farther from the lights, using them for shorter periods, or by installing a humidifier.

Some people report disturbing sensations of visual glare under bright light therapy, which can be alleviated by use of a tilted light box design. A major source of visual glare is short-wavelength blue light, which is a component of the white light used for therapy. If this bothers you, use specially designed eyeglass lenses to screen out the blue light without appreciable affecting the intensity of the light entering the retina.

It is possible that you may become depressed during a cold or viral infection. Light therapy could at this time cause irritation. However, soon after the infection or virus has cleared up, the positive effects of the light will return.

Light Therapy Is not Recommended If You Are..

If you have an eye or skin condition which is affected by bright light you should consult a doctor before embarking on light therapy. If you are suffering from disorders such as glaucoma, cataracts, retinal detachment, retinopathy, do not undergo the bright light treatment. The bright light could worsen the

eye problem or cause a rash in a skin condition. If you suffer from hypertension, diabetes or have any history of eye disease in the family, seek medical advice before starting light therapy.

Other Benefits of Light Therapy

Increasingly, light therapy is being used to reset our body clocks – sometimes along with melatonin and sometimes on its own-no matter how or why they've been put off track. Scientists are discovering that light therapy may have potential for treatment of several other disorders in addition to that of SAD.

Early Morning Insomnia

Those suffering from this illness, find that they cannot sleep in the early morning. In a 1993 study conducted at South Australia, 9 persons who have suffered from early morning insomnia underwent bright-light stimulation in the evening. They were given photo therapy that involved exposure to 2,500 lux light from 10 p.m. to midnight. The result: They fell asleep at their normal times; but, stayed asleep an average of one and a half hours longer than usual.

Productivity Enhancement

A study in Wetaskiwin, Alberta, Canada, clearly showed that students in classrooms with full-spectrum light had less absenteeism and had a higher academic-achievement than students in classes conducted under ordinary fluorescent lighting.

Night-owl insomnia

One type of insomnia involves a nightly inability to fall asleep until the wee hours of the morning. This often results in the abuse of alcohol and sleeping pills. It's called delayed sleep phase syndrome (DSPS), or night-owl insomnia, and it usually develops during the teen years. Researchers blame it on having a maladjusted biological rhythm that doesn't say "good-night" until several hours past a normal bedtime.

In one study of people suffering from delayed sleep-phase syndrome, light therapy involving two hours of bright light exposure in the morning and then restriction from bright light in the evening hours, successfully altered the troubled sleepers' circadian rhythms. In addition, both sleep and morning alertness improved significantly during the treatment.

Jet Lag

Some people have been able to avoid, or at least minimize the effect of, jet lag with light therapy. Experts recommend that if you are planning a trip eastward-to Europe from USA, for example-you may want to try to get up a few hours earlier than normal on the day you intend to fly. Take a walk and soak up the sun, or stay inside with all the lights on. Stay awake and surround yourself with light. Then, once you arrive at your destination, try to stay outside in the sun for an hour or two. By doing so, you may be able to move your clock forward to more closely match the rhythm of life in the new time zone.

Late-shift drowsiness.

According to the National Commission of Sleep Disorders Research, people who work nights are two to five times more likely to fall asleep on the job and have accidents. Late-night sleepiness may impair the

judgment of police, firefighters and ambulance drivers. In addition, a disturbing number of airline disasters have occurred in the wee hours.

In an analysis of ten studies involving nightshift workers, researchers found that the circadian rhythms of the subjects could be successfully shifted after bright light exposure at night and complete darkness during the day for four days. These shifts resulted in significant improvement in both alertness and cognitive performance during work hours. In addition, the workers were able to sleep an average of two hours longer during the day.

Later studies show that circadian rhythms of young subjects can be shifted more easily compared to middle aged subjects. In one study, the subjects slept well when given melatonin; but it did not improve their performance at work. The best performance improvement at work was found when subjects were exposed to bright light and asked to wear goggles when they are going home from work. The scientists speculated that the exposure to the morning sun may be affecting their circadian rhythm shift; and it can be prevented by wearing gloves. Most of studies seem to suggest that the workers performed better when they were exposed to the bright light treatment. To get the optimum effect, exposure of 3 hours was found to be all that is needed. There was no improvement when the subjects were exposed to 6 hours of bright light of 4,000-6,000 lux.

Bulimia

This binge / purge eating disorder typically develops in women during their teenage or early adult years. If bulimia remains untreated, it can cause serious physical and emotional problems. Some researchers have noted that bulimic episodes seem to occur most frequently in winter, leading to speculation that the illness might have a seasonal component. People who underwent high intensity light therapy had shown a remarkable improvement in this condition.

Lupus.

Lupus is an autoimmune disease-meaning that the immune system mistakes the body's own tissues for germs and attacks them. It strikes many more women than men and can cause a confusing array of symptoms, including fatigue, rashes, joint pains and kidney damage.

People with lupus are usually warned to avoid sunlight because it can aggravate their symptoms. But scientist have discovered that one type of ultraviolet sunlight, UVA - 1, helps relieve lupus symptoms.

Non-seasonal depression

Some10 to 15 million Americans are seriously depressed, and the suicide claims 30,000 lives a year. The success of light therapy in treating SAD has led to studies of its effectiveness for non-seasonal depression-with promising preliminary results.

Prolonged menstrual cycles

The typical menstrual cycle lasts about a month, but some women's extend up to twice as long.

In a study, a number of women who suffered from prolonged menstrual cycles were asked to sleep with a 100 watt light on for five nights near the middle of their extended cycles. The result were amazing.

Their cycles became shorter. Scientists speculate that the light might be affecting the regulation of female sex hormones. If so, phototherapy might one day be used to treat some cases of infertility.

Safety

Please be aware that these studies are all preliminary. Currently, light therapy is not an approved treatment for non-seasonal depression, menstrual regulation, night-owl insomnia, bulimia or lupus. But if you have an abnormally long menstrual cycle, it can't hurt to try the light therapy. If you have another of these conditions, discuss the possibility of light therapy with your physician before embarking on a treatment plan.

One of the main safety Concern of light therapy is the possibility of exposure to ultra violet (UV) light, which can ultimately cause sunburn, eye damage and skin cancer. Please make sure that the equipment you use has the proper filtering / shielding for UV before using.

Does the Human Body Conduct Light?

When we studied optics in school, we learned about conductors and reflectors. Those that conduct light are called transparent objects; those that do not conduct or transmit light are called opaque. One of the signs of an opaque object is that it creates a shadow when it is struck by light. Our body is transparent to higher energy photons such as x-rays and laser. But, it is opaque to visible light (it produces shadow); or is it?

A group of scientists under Prof. Kaznachejew conducted some unusual experiments at the Institute for clinical and Experimental Medicine, in Novosibirsk, USSR. They directed a focused beam of light into different parts of the human body. The objective was to measure the skin reaction to radiation in the visible light spectrum. They used a simple laboratory light, equipped with several light filters. During this experiment, the experimenters saw a strong light signal, a tiny speck of light, at a not illuminated area about 10 centimetres distant from the illuminated surface. To their surprise, they noticed that the spot of the light had spread under the human skin (the strength of the light signal was monitored by a photo-metric device, supported by a luminance microscope with a photo multiplier).

In order to understand this phenomena better and to better classify it, follow-up experiments were conducted with better equipment. They found that only certain parts of the body are able to conduct the light entering it. This "light sensitive regions" coincided with the well-known acupuncture points and meridians on the body surface. (Please refer to the section on Acupuncture for a description of the meridians and a schematic view of the 12 meridians in the human body.) The traditional Chinese defines 365 main acupuncture points (which actually are holes which provide access to the meridians or channels which control body's vital organs). Historically, acupuncture points were believed to be holes that allow entry into channels. These holes provide us gateways to influence, redirect, increase, or decrease body's vital substance, qi, thus correcting many of the imbalances.

The experiments at Novosibirsk did demonstrate that light will only propagate between points of the same acupuncture circuit. If the light source is moved by as little as 3-4 millimetres distant from the acupuncture point, the signal to the photomultiplier disappears at once. The light path through the human body was found to be dependent on the spectral range of the light used. The white light (a mixture of all colours) propagated the best, followed by red and blue. Green light had travelled the least.

If a living organism is exposed to visible light at the critical points, the light can travel immense distances within the body as shown in the <u>routing of the meridians</u>. We may think of the meridians as a "light distribution system," similar to a fibre optics system used in modern communication systems. In a fibre optic channel, the light can travel even around bends and corners by bouncing and reflecting. If one accept this light conducting theory, then we can explain the claim made by some individuals that they can sense colours and differentiate texture just by touching!

Two American scientists, Dina F. Mandoley and Winslow R.Briggs, found that light can travel through plants (Scientific American, August 1984). They illuminated the end of a barley stem with red light of a helium-neon laser. They found that the barley stem conducted the light for a distance of 4.5 centimetres. The light was traced visually and with the aid of a photo multiplier at the dark end of the stem.

From these observations, it has been postulated that the living beings are sensitive to the changes in intensity of incident light. In fact, the light may have a profound influence on the cycles of life. The entire internal system of light guiding channels is adapted to the electromagnetic environment provided by the sun and is an additional aid to survival. It is also possible that the organism uses the light to sense the changes to its external environment and use it to regulate the function of different body parts. For instance, plants do not have a nervous system such as that present in animal and humans. So, the plants may be using these "light channels" as a pseudo nervous system. This can explain why a plant will die if it does not get enough sunlight (of course, the plants cannot make their food in the absence of light). Within the human organism, the inner light guide system is, perhaps, a remnant of a much older regulatory system, which was inherited from an earlier state of evolution from a time where nervous systems in living organism were either undeveloped or not in existence at all.

Many scientists believe that light entering through the retina of the eye is responsible for the coordination of the circadian rhythms in human beings. Recent research has shown, however, some blind person's circadian rhythm can be influenced by light therapy. If body can conduct light, as this research has shown, it may bring up a whole new aspect to the manipulation of circadian rhythm.



Massage therapy is the systematized manipulation of soft tissues for the purpose of normalizing them. Practitioners use a variety of physical methods including applying fixed or movable pressure, holding, or causing movement to the body. Therapists primarily use their hands, but may also use their forearms, elbows, or feet.

The basic goal of massage therapy is to help the body heal itself and to increase health and well-being.

Touch is the core ingredient of massage therapy and also combines science and art. Practitioners learn specific techniques for massage and use their sense of touch to determine the right amount of pressure to apply to each person and locate areas of tension and other soft-tissue problems. Touch also conveys a sense of caring, an important component in the healing relationship.

When muscles are overworked, waste products such as lactic acid can accumulate in the muscle, causing soreness, stiffness, and even muscle spasm.

Massage improves circulation, which increases blood flow, bringing fresh oxygen to body tissues. This can assist the elimination of waste products, speed healing after injury, and enhance recovery from disease.

Therapeutic massage can be used to promote general well-being and enhance self-esteem, while boosting the circulatory and immune systems to benefit blood pressure, circulation, muscle tone, digestion, and skin tone. It has been incorporated into many health systems, and different massage techniques have been developed and integrated into various complementary therapies.

We, at holisticonline.com tried to provide a comprehensive and objective look at all the aspects of massage therapy: history, benefits, types of massage, safety and more. We hope that you will be pleased.

Definition of Massage and Massage Therapy

Therapeutic massage involves the manipulation of the soft tissue structures of the body to prevent and alleviate pain, discomfort, muscle spasm, and stress; and, to promote health and wellness. AMTA defines Massage as, "a manual soft tissue manipulation that includes holding, causing movement, and/or applying pressure to the body."

Massage therapy is "a profession in which the practitioner applies manual techniques, and may apply adjunctive therapies, with the intention of positively affecting the health and well-being of the client." (AMTA)

Massage therapy improves functioning of the circulatory, lymphatic, muscular, skeletal, and nervous systems and may improve the rate at which the body recovers from injury and illness. Massage involves holding, causing movement of soft tissue, and/or applying pressure to the body.

Massage comes in many forms, including:

- **Swedish** a gentle, relaxing massage;
- Pressure point therapy for certain conditions or injuries; and
- Sports massage which focuses on muscle groups relevant to the particular sport.

History of Massage

Massage may be the oldest and simplest form of medical care. Egyptian tomb paintings show people being massaged. In Eastern cultures, massage has been practiced continually since ancient times. A Chinese book from 2,700 B.C., *The Yellow Emperor's Classic of Internal Medicine*, recommends "breathing exercises, massage of skin and flesh, and exercises of hands and feet as the appropriate treatment for -complete paralysis, chills, and fever." It was one of the principal method of relieving pain for Greek and Roman physicians. Julius Caesar was said to have been given a daily massage to treat neuralgia. "The Physician Must Be Experienced In Many Things," wrote Hippocrates, the father of Western medicine, in the 5th century B. C., "but assuredly in rubbing.. for rubbing can bind a joint that is too loose, and loosen a joint that is too rigid."

Ayurveda, the traditional Indian system of medicine, places great emphasis on the therapeutic benefits of massage with aromatic oils and spices. It is practiced very widely in India.

Doctors such as Ambroise Pare, a 16th-century physician to the French court, praised massage as a treatment for various ailments. Swedish massage, the method most familiar to Westerners, was developed in the 19th century by a Swedish doctor, poet, and educator named Per Henrik Ling. His system was based on a study of gymnastics and physiology, and on techniques borrowed from China, Egypt, Greece, and Rome. Physiotherapy, originally based on Ling's methods, was established with the foundation in 1894 of the Society of Trained Masseurs. During World War I patients suffering from nerve injury or shell shock were treated with massage. St. Thomas's Hospital, London, had a department of massage until 1934. However, later breakthroughs in medical technology and pharmacology eclipsed massage as physiotherapists began increasingly to favour electrical instruments over manual methods of stimulating the tissues.

Massage lost some of its value and prestige with the unsavoury image created by "massage parlours." This image is fading as awareness of the value and therapeutic properties of massage grows.

Massage is now used in intensive care units, for children, elderly people, babies in incubators, and patients with cancer, AIDS, heart attacks, or strokes. Most American hospices have some kind of bodywork therapy available, and it is frequently offered in health centres, drug treatment clinics, and pain clinics.

A variety of massage techniques have also been incorporated into several other complementary therapies, such as aromatherapy, reflexology, Rolfing, Hellerwork, and osteopathy.

Types of Massage

Relaxation Massage: A smooth, flowing style that promotes general relaxation, improves circulation and range of movement, and relieves muscular tension.

Remedial Massage: Is a paramedical treatment that helps to restore function to injured "soft tissues" (muscles, tendons and ligaments). Therapy may involve the use of various types of Massage, as well as a range of other physical treatments to assist your recovery. In addition, you may be asked to perform some activities at home to assist the process of recovery.

Sports Massage: Combines different Massage techniques to enhance sports performance and recuperation. An effective component of any training program.

Aromatherapy Massage: Combining the therapeutic properties of essential oils with specific Massage techniques to promote health and well-being.

Reflexology: Using thumb and finger pressure on the reflex points of the feet (which correspond to all areas of the body) to assist in achieving balance within the body.

Oriental Therapies: Oriental-based systems of finger pressure Massage, such as Acupressure and Shiatsu, that treat points along the acupressure meridians, aiming to release discomfort and rebalance energy.

Massage Therapy Today

These days massage isn't just for feeling good anymore. It has lost the ancient stigma associated with blue light districts. It is a holistic therapy that reduces the heart rate, lowers blood pressure, increases blood circulation and lymph flow, relaxes muscles, improves range of motion, and increases endorphins, the body's natural painkillers.

Therapeutic massage enhances medical treatment and helps people feel less anxious and stressed, relaxed yet more alert. It had been said that, "Massage is to the human body what a tune-up is for a car."

Fuelled by the popularity of the alternative therapies, consumers are using more and more services of licensed massage therapists:

- Consumers spend US\$2 billion to US\$4 billion a year on visits to massage therapists, according to an American Massage Therapy Association (AMTA) analysis of a study by Beth Israel Deaconess Medical Center and Harvard Medical School published in the New England Journal of Medicine in 1993.
- Current research shows that people are getting more massages, and that therapeutic massage is becoming more mainstream, appealing to everyone from young adults to seniors. People are experiencing the therapeutic benefits of massage. They are getting massages mostly to relax, to relieve aches and pains, and to help reduce stress.
- A national survey conducted by the State University of New York at Syracuse found 54% of primary care physicians and family practitioners said they would encourage their patients to pursue massage therapy as a treatment, and a third of those said they are willing to refer patients to a massage therapist.
- The American Massage Therapy Association's membership has increased nearly four-fold in the past decade, to more than 28,000.

More and more employers are offering massage during break times to their employees. They have found that massage therapy isn't just a perk, but actually increases employee productivity and morale. For example, according to a 1996 survey of employees who regularly receive therapeutic massage onsite at Reebok International Ltd., 98% said it helped them reduce work-related stress; 92% said it increased alertness, motivation and productivity; 83% said it had in some cases sufficiently addressed a problem so medical attention was not necessary; and 66% said it had enabled them to stay at work when they would have otherwise gone home sick.

Massage and Health

Massage is a holistic therapy. It has effect on both body and mind.

Massage increases the circulation of blood and flow of lymph. The direct mechanical effect of rhythmically applied manual pressure and movement used in massage can dramatically increase the rate of blood flow. Also, the stimulation of nerve receptors causes the blood vessels (by reflex action) to dilate, which also facilitates blood flow. This has a profound effect on one's health.

The following are the key effects of massage:

- Improved blood circulation. The oxygen capacity of the blood can increase 10%-15% after massage. By indirectly or directly stimulating nerves that supply internal organs, blood vessels of these organs dilate and allow greater blood supply to them.
- **Better lymph movement.** Lymph is a milky white fluid that drains impurities and waste away from the tissue cells. A component of these wastes is toxins which are the by-products of metabolism. So, it is a vital to our health. Muscular contraction has a pumping effect that moves lymph. Massage and exercise help to move lymph.
- Increased mobility and range of motion of joints. Massage provides a gentle stretching action to both the muscles and connective tissues that surround and support the muscles and many other parts of the body, which helps keep these tissues elastic.
- Stimulated or soothed nervous system. Massage balances the nervous system by soothing or stimulating it, depending on which effect is needed by the individual at the time of the massage.
- **Enhanced skin condition.** Massage enhances the skin condition by improving the function of the sebaceous and sweat glands, which keep the skin lubricated, clean, and cool.
- **Better digestion and intestinal function.** Massage increases the body's secretions and excretions. It increases the production of gastric juices, saliva, and urine. There is also an increased excretion of nitrogen, inorganic phosphorus, and salt. As a result, the metabolic rate increases.
- Relief of acute and chronic pain. Massage can promote recovery from the fatigue and from minor aches and pains
- Beneficial effects on the internal organs and the immune system
- Reduced swelling
- Reduced stress

- General relaxation
- Overall improvement in physical health and the quality of life.

(Source: Encyclopedia of Alternative Medicine, Jennifer Jacobs, MD, MPH, Consultant Editor)

Benefits of Massage

Research in massage therapy has been ongoing for more than 120 years.

Here are some reported benefits of massage:

- Medical school students at the University of Medicine and Dentistry of New Jersey-New Jersey Medical School who were massaged before an exam showed a significant decrease in anxiety and respiratory rates, as well as a significant increase in white blood cells and natural killer cell activity, suggesting a benefit to the immune system.
- Preliminary results suggested cancer patients had less pain and anxiety after receiving therapeutic massage at the James Cancer Hospital and Research Institute in Columbus, Ohio.
- Women who had experienced the recent death of a child were less depressed after receiving therapeutic massage, according to preliminary results of a study at the University of South Carolina.

Studies funded by the National Institutes of Health (NIH) have found massage beneficial in improving weight gain in HIV-exposed infants and facilitating recovery in patients who underwent abdominal surgery. At the University of Miami School of Medicine's Touch Research Institute, researchers have found that massage is helpful in decreasing blood pressure in people with hypertension, alleviating pain in migraine sufferers and improving alertness and performance in office workers.

An increasing number of research studies show massage reduces heart rate, lowers blood pressure, increases blood circulation and lymph flow, relaxes muscles, improves range of motion, and increases endorphins (enhancing medical treatment). Although therapeutic massage does not increase muscle strength, it can stimulate weak, inactive muscles and, thus, partially compensate for the lack of exercise and inactivity resulting from illness or injury. It also can hasten and lead to a more complete recovery from exercise or injury.

Research has verified that:

- Office workers massaged regularly were more alert, performed better and were less stressed than those who weren't massaged.
- Massage therapy decreased the effects of anxiety, tension, depression, pain, and itching in burn patients.
- Abdominal surgery patients recovered more quickly after massage.
- Premature infants who were massaged gained more weight and fared better than those who weren't.
- Autistic children showed less erratic behaviour after massage therapy.

According AMTA, massage helps both physically and mentally.

"Often times people are stressed in our culture. Stress-related disorders make up

between 80-and-90 percent of the ailments that bring people to family-practice physicians. What they require is someone to listen, someone to touch them, someone to care. That does not exist in modern medicine.

One of the complaints heard frequently is that physicians don't touch their patients any more. Touch just isn't there. Years ago massage was a big part of nursing. There was so much care, so much touch, so much goodness conveyed through massage. Now nurses for the most part are as busy as physicians. They're writing charts, dealing with insurance notes, they're doing procedures and often there is no room for massage any more.

I believe massage therapy is absolutely key in the healing process not only in the hospital environment but because it relieves stress, it is obviously foundational in the healing process any time and anywhere."

Joan Borysenko - Massage Journal Interview, Fall 1999

Physical Benefits of Therapeutic Massage

- Helps relieve stress and aids relaxation.
- Helps relieve muscle tension and stiffness.
- Alleviates discomfort during pregnancy.
- Fosters faster healing of strained muscles and sprained ligaments; reduces pain and swelling; reduces formation of excessive scar tissue.
- Reduces muscle spasms.
- Provides greater joint flexibility and range of motion.
- Enhances athletic performance; Treats injuries caused during sport or work.
- Promotes deeper and easier breathing.
- Improves circulation of blood and movement of lymph fluids.
- Reduces blood pressure.
- Helps relieve tension-related headaches and effects of eye-strain.
- Enhances the health and nourishment of skin.
- Improves posture.
- Strengthens the immune system.
- Treats musculoskeletal problems.
- Rehabilitation post operative.
- Rehabilitation after injury.

(Source: AMTA)

Mental Benefits of Massage Therapy

- Fosters peace of mind.
- Promotes a relaxed state of mental alertness.
- Helps relieve mental stress.
- Improves ability to monitor stress signals and respond appropriately.
- Enhances capacity for calm thinking and creativity.

- Emotional Benefits.
- Satisfies needs for caring nurturing touch.
- Fosters a feeling of well-being.
- Reduces levels of anxiety.
- Creates body awareness.
- ■Increases awareness of mind-body connection.

(Source: AMTA)

What Types of Dysfunctions Respond To Clinical Massage?

The following dysfunctions respond to clinical massage.

Myofascial Pain and Dysfunction

Pain and/or physiological dysfunction originates from identifiable points within muscles and their fascial tissues. These locations are known as trigger points because they often trigger distant reactions.

Scientists have developed extensive maps of such referred pain. They have also identified nearly a hundred dysfunctions that can have myofascial trigger point origins. Some of these are: carpal tunnel syndrome, TMJ dysfunction, PMS, headache, diarrhoea, dizziness, cardiac arrhythmia, indigestion, tennis elbow, urinary frequency, sinusitis, deafness, and blurred vision.

Fascial Plane Dysfunction

Fascia can be compared to the body's own version of "Saran Wrap". It covers most of the body in large, continuously connected sheets. Injury, postural patterns and chemical imbalances can cause these sheets to distort and bind to themselves and nearby tissues. Since all major blood vessels and nerves follow these fascial sheathes through the body, properly aligned and released fascia is vital to good health and the proper operation of the circulatory and nervous systems.

Neuromuscular Dysfunction

The smallest muscular activity requires that countless nerve impulses be sent to the muscle to be activated and to all of the adjoining and opposing muscles. For example, let us say that you want to flex your elbow. This requires that you must tighten the biceps and other associated muscles while simultaneously relaxing the triceps and other associated muscles. The combined nervous activity and muscular response must be precisely timed and exactly proportionate.

For more complex movements like rotating the head or taking a breath, the amount of coordinating activity increases exponentially. Unfortunately, the mechanism responsible for such coordination can break down and muscle fibres or whole muscles can actually lock in opposition to their normal activity.

Tonus System Dysfunction

When overused, muscles can lose their ability to understand how to relax. This is referred to as hypertonic. As a result, the muscles become overly tight. They tend to harbour myofascial trigger points, and cause stress on the muscles that oppose them and the joints that they cross.

Dermatomic and Spondylogenic Dysfunctions

If a nerve is pinched where it leaves the spine, or anywhere along its route, the area that nerve serves will feel pain. Many people have experienced such a problem with the sciatic nerve. It originates in the low back, but when pinched can make the knee, shin, or heel hurt. This is an example of dermatomic pain – literally translated – pain in an area of skin.

Spondylogenic Dysfunction

This occurs when the joints of the spine are compressed or otherwise impaired and cause their own special trigger point-type pain or dysfunction.

Both of these are successfully treated with clinical massage by loosening the muscles and other soft tissue that surrounds the affected joint or nerve.

Who Can Benefit From Clinical Massage Therapy?

If you suffer from any of the following disorders, you may benefit by clinical massage:

- Any chronic muscle or joint pain.
- A known condition of referred pain, such as "when my neck gets tense I get a headache."
- Any recurring symptoms that seem to accompany or are precipitated by muscle lightness.
- Tight muscles that are limiting the mobility of a joint.
- Chronically fatigued muscles.
- Low energy level, especially when accompanied by muscle aches and pains.
- A recent muscle injury that generates pain or dysfunction in areas not seemingly involved in the injury.
- Any visceral dysfunction that tests negative for conventional causes.
- Muscle pain that recurs in an area with no apparent new cause.
- A tendency for pain to spread to other muscles whenever a simple strain or injury occurs

People find that therapeutic massage can help with a wide range of medical conditions, including:

- Allergies.
- Anxiety.
- Arthritis (both osteoarthritis and rheumatoid arthritis).
- Asthma and bronchitis.
- Carpal tunnel syndrome.
- Chronic and acute pain.
- Circulatory problems.
- Depression.
- Digestive disorders, including spastic colon, constipation and diarrhoea.
- Headache, especially when due to muscle tension.
- Gastrointestinal disorders (including spastic colon, colic and constipation).
- Headache.
- Immune function disorders.
- ■Insomnia.
- Myofascial pain (a condition of the tissue connecting the muscles).

- Premature infants.
- Reduced range of motion.
- Sinusitis.
- Sports injuries (including pulled or strained muscles and sprained ligaments).
- Stress.
- Temporomandibular joint (TMJ) dysfunction.

Massage for Pain Control

Massage is a very effective technique for controlling pain. How does it work? There are number of ways massage may help in controlling pain.

Massage confuses the body's pain signals.

Rubbing may interfere with pain signals' pathways to your brain, a process called the "gate control theory," according to experts. Pain impulses run toward the spinal cord and then up the cord and into the brain. It's only when they reach the brain that these impulses, are perceived as pain. When you rub, it sends other impulses along the same nerves. When all these impulses try to reach the brain through nerves, the nerves get clogged like a highway during morning rush hour. The result? Most of them won't reach the brain. And if the pain signals does not reach the brain, you won't feel pain. Thus massage works by 'closing the gate' that pain impulses have to pass through.

Massage also calls up the body's natural painkillers.

It stimulates the release of endorphins, the morphine-like substances that the body manufactures, into the brain and nervous system.

Massage provides deep relaxation

It relieves muscle tension, spasm, and stiffness. All of these contribute to pain. Experts suggest that tense muscles are usually deprived of oxygen, because the tightness reduces blood circulation to the area. Massage improves blood circulation, bringing with it what the muscle needs-oxygen and other forms of nourishment. The muscle then relaxes, and pain decreases.

Massage relieves mental stress and anxiety.

Massage is providing the benefit by the therapeutic value of touching that helps a person in pain. Research shows that even touch lasting for less than 1 second has the ability to make people feel better. Obviously, an hour-long touch provided by massage has to make you feel good!

What Types of Pain Can Massage Help?

Massage can help any pain originating from muscle tension: example – head, back, neck, and shoulder pain are all can benefit from massage. Releasing tightness and tension in muscles is the most obvious effect of a good massage.

Massage also is beneficial for relieving pain associated with arthritis, injuries, or even recent surgery.

Basic Techniques of Swedish Massage.

Traditional Swedish Massage uses five main strokes, and many variations, to achieve its relaxing and healing effects. Many therapists use a variety of techniques.

Effleurage consists of long, gliding strokes from the neck down to the base of the spine or from the shoulder down to the fingertips. When done on the limbs, all strokes are toward the heart to aid blood and lymphatic flow. It is done with the whole hand or the thumb pads. Effleurage is designed to acquaint the therapist with his or her subject's body and vice versa.

Petrissage involves gently lifting muscles up and away from the bones, then rolling and squeezing them, again with a gentle pressure. It generally involves kneading and compression motions – rolling, squeezing, or pressing the muscles to enhance deeper circulation. Petrissage attempts to increase circulation with clearing out toxins from muscle and nerve tissue.

Friction is the most penetrating of the strokes, and consists of deep circular or transverse movements made with the thumb pads or fingertips. The therapist applies deep, circular movement near joints and other bony areas (such as the sides of the spine). Friction breaks down adhesions, which are knots that result when muscle fibres bind together during the healing process, thus contributing to more flexible muscles and joints.

Tapotement consists of a series of briskly applied percussive movements, using the hands alternately to strike or tap the muscles for an invigorating effect. There are many variations on this stroke. It may be applied with the edge of the hand, with the tips of the fingers, or with a closed fist. Tapotement attempts to release tension and cramping from muscles in spasm.

Vibration, or Shaking, involves the therapist pressing his or her hands on the back or limbs, and rapidly shaking for a few seconds. It boosts circulation and increase the power of the muscles to contact. Vibration is particularly helpful to people suffering from low-back pain.

Self Massage

There are simple massage you can do it yourself. This is a great "pick-me-up" after a hard day of work. You can also get benefits of massage by immersing yourself in a Jacuzzi with the water doing the massaging.

Many massage and wellness centres offer workshops on massages and partner massages. It may be worthwhile going for a workshop to get some familiarity with this technique.

For the exercises given below you don't need anything other than a few tennis balls, a quiet corner and your own two hands.

Head

Pressure points in your skull can relax your whole body. There are two very significant acupressure points at the base of the skull on what's called the occipital ridge. If you apply consistent pressure there, you can achieve total relaxation.

How do you find these points and apply pressure on those spots? There is a simple solution. Put two tennis balls in a sock and tie the end. Lie on your back on the floor and place the sock behind the upper neck, so that the two balls each touch the skull ridge that's right above the hollow spot. Stay like that for 20 minutes. If you like, you can listen to soothing music. The pressure on those acupressure points send messages down the spinal column to relax all the muscles and it is very effective.

Face

Just touch your face. There's no need to knead it. With a very light touch, cup your cheeks and temples with your hands using no more pressure than the weight of a nickel. Hold your hands there for a minute. The warmth of the hands relaxes the muscles and connective tissue, bringing on an overall sense of relief.

Jaw

Pull the sides of your ears gently straight outward, then straight up, then straight down. Or, with your index finger, press the tender spot next to your earlobe where it attaches to your head. Press and release. Now do it on the other ear. Repeat, alternating ears, 10 to 15 times.

Torso

Get a quick boost by rubbing the area above your kidneys. That's at waist level where the tissue is still soft. Rub briskly with your fists in a circular motion. This energizes the whole body.

Feet

Foot massage is very soothing. After you try the following techniques on one foot, switch feet and repeat.

- 1. Sit on a chair and place one foot on the opposite thigh. Rub some massage oil or lotion onto your foot if you like. Apply pressure with your thumbs to the sole of your foot, working from the bottom of your arch to the top near your big toe. Repeat five times.
- 2. Make a fist and press your knuckles into the bottom of your foot, moving from your heel to your toes. Repeat five times.
- 3. Massage each toe by holding it firmly and moving it from side to side. Extend each toe gently out and away from the ball of your foot. Then apply pressure to the areas between your toes.
- 4. Hold your toes in one hand and bend them backward holding them there for five to ten seconds. Then bend them in the opposite direction and hold for five to ten seconds. Repeat three times.
- 5. Press and roll your thumbs between the bones of the ball of your foot.

Face Massage

Massage can help prevent new tension lines and wrinkles from appearing. Massage does this by relaxing the muscles and by stimulating the blood vessels under the skin.

Before starting the massage, cleanse your face thoroughly. Now follow the procedure described below. Use basic movements – stroking, pinching and stimulating.

- 1. Start by stroking the whole face. Use both hands and work up the neck, out across the cheeks, then glide gently inwards, work up and out over the forehead. Finish by applying gentle pressure to the temples.
- 2. Stimulate the skin by using the back of your hands and loosely rolling your fingers up the cheek. This can also be used on the neck and under the chin.
- 3. With your thumb and forefinger, gently pinch the skin along the jawbone and under the chin. This is very stimulating and helps prevent a double chin.
- 4. To release tension around the eyes, firmly squeeze the eyebrows with your thumb and forefinger. Always work from the bridge of the nose towards the temples.
- 5. For tension in the neck and shoulders make firm circular movements working up either side of the neck then out across the shoulders.

Massage – Precautions / Contra-Indications

Certain medical conditions require the exercise of caution concerning the advisability of giving or receiving massage. If you are in any doubt, or if you or your partner are under medical supervision, check with your doctor or other qualified medical practitioner before embarking on massage therapy. This advice applies particularly in the case of cardiovascular conditions and heart disease, especially in cases of thrombosis, phlebitis, and oedema.

Never apply pressure under or over varicose veins. Never massage directly over infected skin, for example where there are warts, herpes, or boils, or where there is inflammation, unexplained lumps, bruises and open cuts. While giving a massage, cover up any open cuts or scratches on your hands with a plaster or other dressing. Massage on the abdomen is best avoided during the first three months of pregnancy when the risk of miscarriage is highest.

The causes of acute back pain should first be diagnosed by a physician before receiving massage treatment. Consult a qualified medical practitioner in cases of raised temperature, infections, or contagious disease.

- Seek medical advice before having a massage if you suffer from phlebitis, thrombosis, varicose veins, severe acute back pain, or fever.
- Swellings, fractures, skin infections, or bruises should not be massaged. Lumps and swellings should be checked by your doctor.
- Massage of the abdomen, legs, and feet should not be given during the first three months of pregnancy.
- Cancer patients are best treated by specially trained practitioners who know which areas to avoid and which kind of massage is appropriate.

WE ALL ARE BEING GUIDED HOME:

We need the Spirits of Truth of the Avonal Pair to Heal ourselves; then once Healed, (and for support (overshadowing) as well through your Healing), we need the Creator Pair, Mary Magdalene and Jesus' Spirits of Truth to see us through the Celestial spheres, while at all times embracing our Heavenly Mother and Father.

Until Mary and Jesus died and liberated their Spirits of Truth, no one from any of the worlds could leave Nebadon, because no one knew the way to do so. Nebadon is our local universe containing some 3.8 million inhabited physical worlds and their associated spirit worlds.

When we embrace the truths Mary and Jesus are revealing, and start to do our Feeling Healing, or with Divine Love, Soul Healing, we are then freeing ourselves up from our parental and self control.

Thus our journey to Paradise, to the home of our Heavenly Parents, is of our choosing as to when we progress, however, there is only one way:

HUM: Humanity is to ascend. We are self contained. Our soul is always in truth and perfect at all times. By living true to ourself, true to our feelings, we are living true to God. It's that simple.

We are to recognise that being engaged and dominated by our mind is the wrong way for us to evolve and grow in truth. We are to discard the mind enslavement that has been imposed upon as by all of our parents. We are to express our feelings, both good and bad and free ourselves of the indoctrination that humanity has embraced worldwide.

Live true to your feelings, and you ARE living true, not only to your own soul, but also true to God's soul. So doing your Healing by honouring all your feelings, IS living the will of God. And being fully Healed, IS living even more truly the Will of our Mother and Father.

AVO: We are to embrace the truths and guidance of the Avonal Pair through their Spirits of Truth. It is the Avonal Pair's guidance that will lead us through our Feeling Healing, and with Divine Love, we will be able to ascend through the 7 spirit Mansion Worlds and enter the Celestial Heavens where we also interact with other world's spirits.

J&M: We are also to embrace the truths and guidance of the Paradise Pair, Mary and Jesus, who will then lead us through the 3 Celestial Heavens that are aligned with Earth, and then further on through Nebadon where we will then depart beyond on towards Paradise.

M&F: Beyond the universal zone of Nebadon, we will be guided by our Heavenly Mother and Father onwards through the universes to Paradise where we will be welcomed by them, home for us all, as we are all Children of God.



M&F



J&M



AVO



WE ALL ARE BEING GUIDED HOME - NOW, HOW TO COMMENCE THE JOURNEY:



M&F

For 200,000 years, we have been misled into embracing our mind's distortion of wisdom and truth. All such traditional understandings only lead us in the wrong direction, from which we must turn back from. Our soul based feelings are always in truth. Our minds are to follow our soul based truths and feelings, not the other way round, as we have been brought up to embrace.

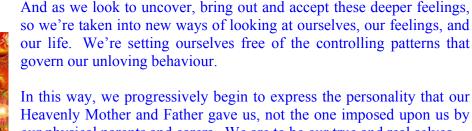
We are to connect with our deeper repressed feelings. We are to long for the truth of what we are feeling. We are to live true to our selves; by living true to our feelings.

Use your surface day-to-day feelings to connect with your deeper repressed feelings. Express your surface feelings and your deeper repressed feelings to uncover the truth of yourself.

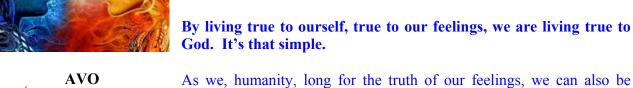


J&M

We all have feelings which we communicate and share with each other. And we all have deeper buried and hidden repressed feelings. Feelings from our early childhood we felt, yet weren't allowed to express. These feelings are still within us, waiting to have their say. These feelings, because they are repressed, cause us all our problems.



In this way, we progressively begin to express the personality that our Heavenly Mother and Father gave us, not the one imposed upon us by our physical parents and carers. We are to be our true and real selves.





As we, humanity, long for the truth of our feelings, we can also be assisted by the Spirits of Truth of the Avonal Pair who are our spiritual teachers for Earth over this coming 1,000 years, to assist us through the Great U-Turn, away from mind dominance to being soul based feeling lead. They will assist us through the seven levels of the spirit Mansion Worlds.

Then the Creator Pair, Jesus and Mary, will lead us through Nebadon and into the greater universe. Then our Heavenly Mother and Father lead us home to Paradise.

Collectively, should we embrace them all, as we are to, then our pathway home is a journey in the hands of the Spirits of Truth of the Avonal and Paradise Pairs overseen by our Heavenly Parents.

The Key

HOW TO GET TO PARADISE:

Long for the Divine Love

Long for the Truth

Long for the truth of your feelings

Don't deny any feelings: accept, express and want to know the truth of them

Know your feelings are the key; your feelings are the Way

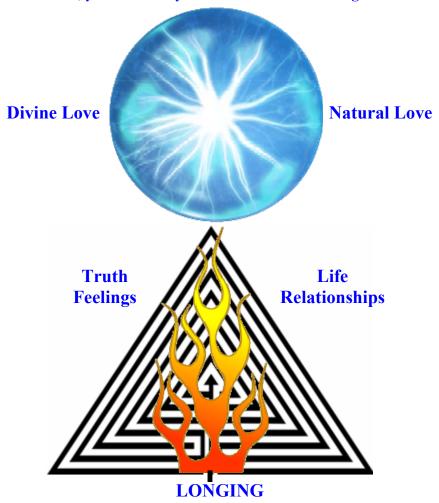
Want to end your falseness and being untrue

Want to understand the truth of your early life

Use your surface feelings to move deeper into yourself, bringing up your repressed feelings

Want and long to know the whole truth of yourself

Want to do it all with God, your Heavenly Mother and Father – long to Them for help.



Our longing drives our life. We long with feelings. We can wish for things using our mind, yet long for things with our heart. These things in the pyramid are what to long for. Longing for them, when the longing comes naturally. Longing because you feel you really want them. Long to be true with all your heart. Long to live true to your feelings. Long to understand the whole truth of yourself.

Feelings First Spirituality The New Way

Feelings First FF Feeling Free

The New Way, Feelings First Spirituality Learn to live with God through your Feelings

Accept, express and long for the truth of your feelings

Be free in your feelings
Free your feelings from your mind's control
Live true to your feelings; your feelings are your true self
Live true to yourself through your feelings



Live true to yourself by living true to your feelings. Long for the truth of your feelings.

Accept / Express / Bring out ALL of your good, and most importantly, BAD feelings.

Want to understand why you're feeling them.

Use your surface feelings to take you deeper into your repressed and hidden feelings.



The Feeling Way is the True Way. Your feelings are your spiritual guide. Your feelings will take you to God.

Your feelings will show you the truth of your relationships, including your relationship with God; and if anything is wrong, untrue and unloving, then why it is.



Our feelings are sacrosanct and we should respect them accordingly. And we should NEVER block them out, ignore, override, banish, deny or reject them, because if we do, we're only doing that to ourselves, as Our Feelings Are Our Self.

Our feelings are the gateway to our soul. Our feelings are the closest we can get to our soul. Knowing the truth of our feelings is knowing the truth of our soul, and knowing the truth of God.

Feelings First Spirituality is the True path for humanity.

It embraces all people.

It completely unifies the world.

Everyone can relate to everyone else through their feelings.

And we can all live the truth that comes from our feelings, all sharing the same truths as we express and have the same feelings.

No one need be left out; no one is more special than anyone else – we are all united in Truth through our feelings.



So with and through our truth we live our lives, therefore without the need of any man-made mind-laws, rules and restrictions that limit self-expression as inspired by our feelings.

The New Way, Feelings First Spirituality is what is to replace all man-made, mind-contrived religions that so many people have enslaved themselves to. The New Way, Feelings First Spirituality will set us free of all that control, ending the Rebellion and Default within ourselves as we do our Feeling-Healing, and ending such control and spiritual stagnation in the world.

Bring on the End Times – get it over and done with! Let's all see that Jesus is not going to come again, that Prophecy has failed all the mind-controlled platforms. Allow such false systems of belief to die their long-awaited natural death, they've overstayed their welcome, it's now time they fade away. So let us show such antiquated, erroneous systems of belief the exit and bring on the fresh liberation of discovering the truth of how we are to live for ourselves, each of us personally in our lives, and all by looking to our own feelings for it. Self-revelation through our feelings is the way to go.

The Way of the Mind is ending, and is really the End Times – the End of our mind control, and it's about time! With the Way of our Feelings replacing it.

The End Times means the end and therefore a New Beginning. And that new beginning is a whole new Spiritual Age – an age based on self-revelation of truth through one's feelings, coupled with and supported by higher revelations from the Celestial spirits, angels and nature spirits.



The Feelings First Spirituality is the True Way to God because it helps you get to know God, helping you to reach out, connect and be personal with God, and do God's Will, all through your feelings. It is the only true way of getting to know the God of Feelings – our beloved Heavenly Mother and Father, the Great Soul of Divine Love.

Love comes through our feelings and not our mind, as we've all been wrongly led to believe.

Feelings First; then comes The Truth; then comes Love.

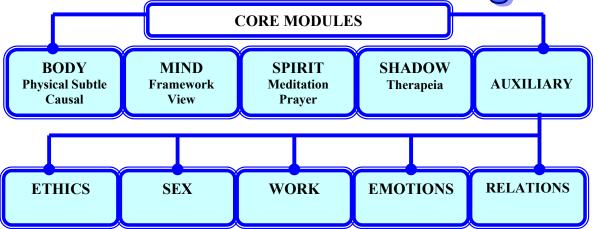
LOVE is the Religion of Feelings, being:

Feelings First Spirituality, The New Way





PASCAS CARE Life Practice Matrix - Feelings First



Mind imprisoned humanity has been subjected to the percepts imposed by the Rebellion and Default commencing some 200,000 years ago.

Humanity has universally adopted its mind as the pinnacle of one's intellect. In doing so, it has looked to its ego and arrogance to reveal the way to live one's life. Humanity has conjured up endless modalities enabling one's mind to suppress, albeit temporarily, discomforts, pains and illness through countless ineffective mind controlling systems, and has even categorised them into the boxes as outlined above.

Humankind has enslaved themselves to their mind, depowering themselves by ignoring their feelings. One's soul based feelings are always in truth and love – interconnecting with all aspects of life.

For those who have discovered and embraced their feelings, longed for the truth that one's feelings can reveal about their feelings, both good and bad, a great sense of freedom has emerged.

By living through Feelings First, and then having one's mind assist with the implementation of what one's feelings are conveying, we are then living true to one's self, and consequently true to our Heavenly Parents, our Mother and Father.



Feelings First

Feeling Free

