

Stress Management

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STRESS

The stress faced by professional workers is substantial. For many professionals, it is intrinsic to the job itself, where competing demands and pressures cannot be escaped. The sheer volume of work can also be overwhelming at times, whether one is a social worker, teacher, doctor or manager. Anyone in this kind of job knows, either from their own direct experience or from observing colleagues, that stress can have very serious consequences. It can develop into a living nightmare of running faster and faster to stay in the same place, feeling undervalued, feeling unable to say 'no' to any demand but not working productively on anything. The signs of stress can include sleeplessness, aches and pains and sometimes physical symptoms of anxiety about going to work. What is more, people who are chronically stressed are no fun to work with. They may be irritable, miserable, lacking in energy and commitment, self-absorbed. They may find it hard to concentrate on any one task and cannot be relied on to do their share.

And yet, some people seem to have the ability to stay in control of their workload and to handle job frustrations without becoming worn out, irritable or depressed. These people are able to handle stress, having ways of taking the rough with the smooth, keeping a sense of humor and renewing their energy and resources so that working life continues to bring pleasure and reward.

Here's a little story. This story concerns a man (it could just as well be a woman) who is chased by a tiger and falls over a cliff. To break his fall he is lucky enough to catch hold of a small shrub growing on the cliff face, and there he hangs, poised precariously between life and death. Above him the tiger prowls, and looking down he sees another tiger at the bottom of the cliff. Even were he to survive the fall, there would soon be nothing much left to him to be found by his rescuers. As he hangs there, he sees two small mice busily gnawing away at the stem of the shrub on which his life depends. Simultaneously he sees some wild strawberries growing just within reach, plucks them and pops them into his mouth and thinks to himself, 'Ah how sweet these strawberries taste!'

It isn't easy to find a generally acceptable definition of 'stress.' Doctors, engineers, psychologists, management consultants, linguists and lay-person all use the work in their own distinctive ways with their own definition. A useful definition for this handout is that *stress is a demand made upon the adaptive capacities of the mind and body*. If these capacities can handle the demand and enjoy the stimulation involved, then stress is welcome and helpful. If they can't and find the demand debilitating, then stress is unwelcome and unhelpful. This definition is useful in three ways; (1) stress can be both good and bad, (2) it isn't so much events that determine whether we're stressed or not, it is our reactions to them, and (3) the definition tells us that stress is a *demand* made upon the body's *capacities*. If our capacities are good enough, we respond well. If they aren't, we give way.

GENERAL CAUSES OF STRESS AT WORK

organizational problems

- insufficient back-up
- long or unsociable hours
- poor status, pay and promotion prospects
- unnecessary rituals and procedures
- uncertainty and insecurity

SPECIFIC CAUSES OF STRESS AT WORK

unclear role specifications

role conflict

unrealistically high self-expectations (perfectionism)

inability to influence decision making (powerlessness)

frequent clashes with superiors

isolation from colleagues' support

lack of variety

poor communication

inadequate leadership

conflicts with colleagues

inability to finish a job

fighting unnecessary battles

TASK-RELATED CAUSES OF STRESS AT WORK

difficult clients or subordinates

insufficient training

emotional involvement with clients or subordinates

the responsibilities of the job

inability to help or act effectively

STRESS AT HOME

stress caused by a partner

stress caused by children

stress caused by domestic arrangements

stress caused by environmental pressures upon the home

EFFECTS OF TOO MUCH STRESS

concentration and attention span decrease

distractability increases

short- and long-term memory deteriorate

response speed becomes unpredictable

error rate increases

powers of organization and long-term planning deteriorate

delusions and thought disorders increase

physical and psychological tensions increase

hypochondria increases

changes take place in personality traits

existing personality problems increase

moral and emotional constraints weaken
 depression and helplessness appear
 self-esteem falls sharply
 speech problems increase
 interests and enthusiasms diminish
 absenteeism increases
 drug abuse increases
 energy levels are low
 sleep patterns are disrupted
 cynicism about clients and colleagues increases
 new information is ignored
 responsibilities are shifted onto others
 problems are 'solved' at an increasingly superficial level
 bizarre behavior patterns appear
 suicide threats may be made

MANAGING STRESS

learn and utilize relaxation breathing
 meditation
 water - inside and out
 learn relaxation programs
 change diet - less fat, more fresh fruits, vegetables and fiber
 give your self permission to experience your emotions, cry if you want
 began an exercise program
 build healthy personal relationships, have someone to talk to
 learn to control your displaced aggressions; desire to yell at the kids and kick
 the dog at home because of stress at work
 reappraise your life and priorities
 realize that most stress is caused from within, not without; take time to smell
 the flowers and taste the strawberries

The Holmes-Rahe Social Adjustment Scale

Any change in the routine of our lives -- even welcome ones -- can be stressful, both in terms of the way in which we perceive them and in terms of the increased incidence of physical illness and death that occur during the following 12 months. The Holmes-Rahe Scale assigns values (based upon the sample being told that marriage represents 50 points) attributed by a sample of 394 individuals to the life events concerned.

Events	Scale of Impact
Death of spouse	100
Divorce	75
Marital separation	65
Jail term	63
Death of a close family member	63

Personal injury or illness	53
Marriage	50
Dismissal from work	47
Marital reconciliation	45
Retirement	45
Change in health of family member	44
Pregnancy	40
Sex difficulties	39
Gain of new family member	39
Business readjustment	39
Change in financial state	38
Death of close friend	37
Change to different line of work	36
Change in no. of arguments with spouse	36
Major mortgage	31
Foreclosure of mortgage or loan	30
Change in responsibilities at work	29
Son or daughter leaving home	29
Trouble with in-laws	28
Outstanding personal achievement	26
Partner begins or stops work	26
Begin or end school	25
Change in living conditions	24
Revision of personal habits	23
Trouble with boss	20
Change in work hours or conditions	19
Change in residence/schools/recreation	18
Change in social activities	17
Small mortgage or loan	16
Change in sleeping/eating habits	15
Change in no. of family get-togethers	13
Vacation	12
Christmas	11
Minor violations of the law	

Stress management

A cluttered environment with too many tasks can lead to stress.

Stress management encompasses techniques intended to equip a person with effective coping mechanisms for dealing with psychological stress.

Definition of stress: Stress management defines *stress* precisely as a person's physiological response to an internal or external stimulus that triggers the "fight-or-flight" reaction.

Causes of stress



A stress ball.

Is when you have too much stuff in your mind

a bad judgement or understanding of the demand the environment is applying on an organism, stress is a good thing until there is too high a level of stress and becomes uncontrolled.

Techniques of stress management include

- self-understanding (e.g. self-identification as a Type A or as a Type B personality)
- cognitive therapy
- self-management (e.g. becoming better-organized)
- conflict resolution
- positive attitude
- self-talk
- autogenic training
- breathing
- progressive relaxation
- meditation
- exercise
- diet
- rest
- stress balls

- therapeutic massage
- nervous laughter

Some techniques of time management may help a person to control stress. For example:

- becoming more organized and reducing the generation of clutter
- setting priorities can help reduce anxiety
- using a “to do” list of tasks that a person needs to complete can give a person a sense of control and accomplishment

Effective stress management involves learning to set limits and to say "No" to some demands that others make.

Digital Thermometers

Since stress activates the body's defense mechanism, blood is frequently drawn away from the extremities and to the torso when a stress attack occurs. Digital thermometers (digital because they measure finger temperature) can be used to detect a person's level of stress. Note that the actual temperature is not the most important characteristic, but rather the change in temperature. Using this knowledge has proven useful in designing treatment for prevention and control of stress attacks. This technique was pioneered hi by Dr. Claudio Zapata

Stress (medicine)

Detailed definitions

Stress can be defined as the sum of physical and mental responses to an unacceptable disparity between real or imagined personal experience and personal expectations. By this definition, stress is a response which includes both physical and mental components.

Mental responses to stress include adaptive (good) stress, anxiety, and depression. Where stress enhances function (physical or mental) it may be considered good stress. However, if stress persists and is of excessive degree, it eventually leads to a need for resolution, which may lead either to anxious (escape) or depressive (withdrawal) behavior.

One may further appreciate from that definition that stress may derive from imagined experiences such as frightening movies. Further, the fulcrum of stress response is the presence of disparity between experience (real or imagined) and personal expectations. A person living in a fashion consistent with personally-accepted expectations has no stress even if the conditions might be interpreted as adverse from some outside perspective — rural people may live in comparative poverty, and yet be unstressed if there is sufficiency according to their expectations. Finally, when there is chronic disparity between experience and expectations, stress may be relieved by acceptance. However, since acceptance is rarely complete except in children, stress resolution by this approach is also rarely complete. It has been said that stress is often a reaction to a crisis of predictability, that the mind is solely an instrument of prediction, and that the body may be divided into a vegetative process and an integrative process.

Neuro-chemistry and Physiology

The **neurochemistry** of the general adaptation syndrome is now believed to be well understood, although much remains to be discovered about how this system interacts with others in the brain and elsewhere in the body.

The body reacts to stress first by releasing the catecholamine hormones, epinephrine and norepinephrine, and the glucocorticoid hormones, cortisol and cortisone.

The hypothalamic-pituitary-adrenal (HPA) axis is a major part of the neuroendocrine system, involving the interactions of the hypothalamus, the pituitary gland, and the adrenal glands. The HPA axis is believed to play a primary role in the body's reactions to stress by balancing hormone releases from the adrenaline-producing adrenal medulla, and from the corticosteroid-producing adrenal cortex.

Folklore of stress

About the time of Selye's work, it was gradually realized that such concepts as anxiety, antagonism, exhaustion, frustration, distress, despair, overwork, pre-menstrual tension, over-focusing, confusion, mourning, and fear could all come together in a general broadening of the meaning of the term *stress*. The popular use of the term in modern folklore expanded rapidly and created an industry of popular psychology, self-help, personal counseling, and sometimes quackery. There were a series of films in the 30s, 40s, & 50s that dealt with mad scientists playing with hormones that seem related to this folklore.

The use of the term *stress* in serious and recognized cases, such as those of post-traumatic stress disorder and psychosomatic illness, has scarcely helped clear analysis of the generalized "stress" phenomenon. Nonetheless, some varieties of stress from negative life events (*distress*) and from positive life events, (*eustress*) can clearly have a serious physical impact distinct from the troubles of what psychotherapists call the "worried well". Stress activates the sympathetic leg of the autonomous nervous system and the release of stress hormones including adrenaline/epinephrine, and cortisol.

Sympathetic nervous output tends to divert bloodflow to the large muscles—the body 'thinks' it has to run away from something or fight something: the so-called 'fight or flight' response of ancient evolutionary heritage—and blood flows correspondingly less to the digestive system and other organs that are not immediately needed for a response to the stimulus. We all recognise the effects: dry mouth, motor agitation, sweating, pallor, enlarged pupils, and insomnia. Our modern lifestyle tends to cause continual sympathetic nervous system activation with very little opportunity for the parasympathetic (also called 'vegetative') nervous system to activate. Capitalism, as an example, has been said to induce chronic anxiety as part of its systematic mechanism. When this sympathetic system is active, the bowel and other non-muscle organs receive good blood-flow, the pupils constrict, and the glands all function well and secrete their various compounds. Absence of the autonomic parasympathetic activation leads to poor digestion and probably also to poor healing and organ function. It is vital to take time out from our modern lifestyles to allow for rest and proper parasympathetic action in our bodies.

Countering stress

The following activities may reduce daily life stress:

- Coping
- Massage
- Meditation
- Physical exercise
- Sleep
- Spending time in nature
- Tai Chi
- Yoga
- Smoking

Common factors of stress

Below is a non-exhaustive list of common stressors in people's lives:

- Bright light
- Elevated sound levels
- Events: births, deaths, reunions, weddings, divorce, moving.
- Responsibilities: Unpaid bills, lack of money
- Work/study: exams, rush hour traffic, project deadlines
- Personal relationships: conflict, deception
- Lifestyle
- Exposure to stress early on in life can permanently enhance the stress response (ie: abused children)
- Age
- Nutrition

Coping (psychology)

In psychology, **coping** is the process of managing taxing circumstances, expending effort to solve personal and interpersonal problems, and seeking to master, minimize, reduce or tolerate stress or conflict.

In coping with disease, people tend to use one of the two main coping strategies: either *problem focused* or *emotion focused* coping.

People using problem focused strategies try to deal with the cause of their problem. They do this by finding out information on the disease, learning new skills to manage their disease and rearranging their lives around the disease.

Emotion focused strategies occur when the person modifies the way they think, for example: employing denial, or distancing oneself from the problem. People may alter the way they think about a problem by altering their goals and values, such as by seeing the humour in a situation.

People may use a mixture of these different types of coping, and coping mechanisms will usually change over time. All these methods can prove useful, but some claim that those using problem focused coping strategies will adjust better to life.

Massage

Massage is the practice of applying structured or unstructured pressure, tension, motion, or vibration — manually or with mechanical aids — to the soft tissues of the body, including muscles, connective tissue, tendons, ligaments, joints and lymphatic vessels, to

achieve a beneficial response. A form of therapy, massage can be applied to parts of the body or successively to the whole body, to aid the process of injury healing, relieve psychological stress, manage pain, and improve circulation. Where massage is used for its physical and psychological benefits, it may be termed "therapeutic massage" or manipulative therapy.

Massage can also be a part of lovemaking (see erotic massage, tantramassage), and often takes place in the context of sex work.

In commercial settings, massage techniques involve the client being treated lying down on a massage table or in a massage chair, or on a mattress on the floor. Except for modalities such as Thai Massage or Barefoot Deep Tissue, the massage subject is generally unclothed, and the body may be "draped" with towels or sheets. This also helps keep the client warm. In some jurisdictions it is required that certain areas such as the genitals on both genders and the breast/nipple area on women be draped at all times. In many forms of massage, the treatment may start with the client face up or down for the first part of the session: the client then rolls over for the second half of the session. Relaxation is necessary for benefits to be achieved.

Massage Basics

Communication

Good communication is essential to effective massage. In a commercial setting, the client is encouraged to communicate the type of treatment expected, for example relaxation or pain relief, full body massage, avoidance of, or focus on a specific area, the amount of pressure that is comfortable, preferred techniques, & past medical history & current physical condition....

Types of massage

There are well over 150 types of massage therapy. Various styles of massage have developed from a number of sources.

Barefoot Deep Tissue

Barefoot Deep Tissue is a blend of Eastern barefoot techniques with Western manual medicine. Clients are typically loosely clothed and lain on floor mat in supine, prone and side-lying positions with pillows or bolsters. No oil is used. Sessions may last 2 minutes or well over an hour. Because the therapist can apply a broad range of pressure with ease and does not have to strain, more effort and concentration can be used to sense and manipulate tissue, release fascia, as well as search for and attack trigger points and other problems, regardless of client's size or build. John Harris, the proceleusmatic mentor who worked in the 1984 Olympics and developed this modality, states that the combination offers a potent new tool for powerfully satisfying, effective deep tissue massage and

Trigger Point work regardless of client's size or build. Mr. Harris and Fred Kenyon wrote *Fix Pain* in 2002, and have been hired by Human Kinetics to write a trade publication with DVD for elite athletes.

Bowen therapy

Bowen Technique involves a rolling type movement over fascia, muscles, ligaments, tendons and joints.

Breema

Breema bodywork is performed on the floor with the recipient fully clothed. It consists of rhythmical and gentle leans and stretches which leads to deep relaxation, increased vitality, and stimulation of the self-healing processes of the body. Sessions can be any length of time, although 50 minutes is common. There are also self-Breema exercises. The essence of Breema is expressed in the Nine Principles of Harmony. The Breema Center is located in Oakland, California, and there are Breema practitioners and instructors in many locations around the world.

Chair massage



A woman sitting in a massage chair.

Chair massage, also known as corporate massage, is by far the most convenient method of massage therapy. A chair massage session typically lasts 12-24 minutes, and is performed while fully clothed. Chair massage promotes better circulation, muscle stimulation and stress relief. This form of massage reduces tension in the back, neck, shoulders, head, arms, hands, legs or feet, providing a deep relaxation effect.

Chair massages are also advantageous because chair massage practitioners will frequently make work- or housecalls. Chair massage can also be done in hotels, airports and convention centers. Certain chairs, invented for this specific purpose, massage the seated person robotically by means of motors which have been inserted within the body of the chair.

Chinese Tui Na massage ()

Tui Na is a form of Chinese massage () that is similar to Zhi Ya, but focusing more on pushing, stretching and kneading the muscle.

Chinese Zhi Ya massage ()

Zhi Ya is a form of Chinese massage based on acupressure. It is similar to Tui Na massage except it focuses more on pinching and pressing at acupressure points.

Deep muscle therapy

Deep muscle therapy (created by [Therese Pfrimmer](#)), is a massage technique that focuses on using a very specific set of movements applied to all muscles and concentrating on all layers of the muscle that have become depleted of their regular blood and lymphatic flow. This technique aims to restore the circulation with its healing properties to the cellular level. Deep muscle therapy is widely used to treat the following ailments: carpal tunnel syndrome, neck and back pain, headaches, poor circulation, whiplash, and more.

Deep tissue massage

Deep tissue techniques are generally designed for more focused massage work. Working a specific joint, muscle or muscle group, the practitioner can access deeper layers of the soft tissue. Starting superficially and easing into the depth of the muscle slowly often allows more movement. This is the recommended approach in this modality since each person experiences pressure differently. If the pressure is applied too deeply or too quickly, the muscle may tighten to protect that area, and unnecessary damage or inflammation can be induced. Very little lubricant is used as the pressure doesn't travel much over the skin.

The most commonly used 'tools' during deep tissue massage may include, 3 and 6 fingers, reinforced fingers, a flat elbow, opposing thumbs, the heel of the hand or foot, and the forearm.

Effleurage

Effleurage (from the French *effleurer*, 'to skim over') consists of long, flowing or gliding strokes, performed with open hands. In many massage sessions, effleurage is used as the initial type of stroking, as it has a calming effect when performed slowly. Effleurage is usually performed in the direction of the heart to promote circulation and lymphatic drainage.

Erotic massage

Erotic massage is a form of massage that includes the genitals and leads to sexual arousal and (sometimes) orgasm. Widely practiced by couples as part of lovemaking. Also

sometimes practiced commercially, which may be illegal in some jurisdictions. See also Tantramassage.

Esalen Massage

The basis of Esalen Massage is traditional massage, which works in a very precise manner on the muscle and circulation systems. This is combined with the bodywork approach developed by Charlotte Selver, which emphasizes the deeply relaxing and emotional responses of the body when a conscious, structured and pleasant touch is applied. In addition, gentle rocking of the body, passive joint exercises and deep structural work on the muscles and joints, together with an energetic balancing of the body, are all part of this Esalen Massage “experience”. See also Esalen Massage.

Foot or sole massage

Foot massage, as practiced by the Chinese is performed in the context of chi, in that each spot on the sole of the foot corresponds to an internal organ, and the applied therapy is healing to one's overall well being. The theory supposes that an ailment of an internal organ will be associated with the nerve ending on the sole of the foot.

Before the massage, the patient's feet are bared and then soaked for about ten minutes in a foot bath, typically a dark colored solution of hot water and Chinese herbs. The massage therapist uses liberal amounts of medicated cream, to moisturize the foot and to provide lubrication. The knuckles on the therapist's hand are usually used to provide a hard and smooth implement for the massage. As pressure is applied to the sole, theory holds that a healthy patient should not feel any strong pain. Painful spots, reflexologists believe, reflect illnesses of other parts of the body. The practitioner rubs and massages the painful spots to break down rough spots and accumulated *crystals* and increase circulation.

The ailments are healed when the sore spots of the sole are treated and removed by massage. Based on this theory, some shoe liners are made with pressure points to stimulate the soles of the feet to promote better health of the overall body. The nature of these "crystals" has yet to be elucidated or demonstrated scientifically. Regardless of the actual correlation of reflexology to internal organs, many enjoy it for the mix of stimulation and relaxation.

Lomilomi — Traditional Hawaiian Massage

Lomilomi massage is an ancient art from the Hawaiian healing specialists. They were taught their art over 20 years and received their last instructions from their master on his death bed. There are hundreds of styles of Lomilomi, the main ones being the style of Big Island which was passed on by Aunty Margaret Machado, and Maui style from Uncle Kalua Kaiahua. On the island of Kaua'i, Kahu Abraham passed on what is today called Kahuna Bodywork. It is not clear if other current practices - temple style, lomi lomi nui and others - are from Native Hawaiian practitioners or are modern adaptations.

MA-URI massage

MA-URI is a new form of massage introduced by Hemi Hoani Fox in 1990, who cites as its roots Hawaiian Lomi-Lomi Nui dance, claiming increased so-called energy flow within the body and mind. Focus is internal, upon breathing, intent, and concentration. Claimed benefits include mental and physical health. Study and advocacy is primarily carried out at the MA-URI Institute, headed by Hemi and Katja Fox. It is currently difficult to find practitioners, though this may change as it grows more popular.

Muscle Energy Technique (MET)

Reciprocal Inhibition (RI) is when the therapist uses a client's muscle to stretch the opposing muscle. The therapist takes the muscle that they are wishing to stretch to its point of bind. The therapist then gets the client to use the opposing muscle by moving away from the therapist. When the client relaxes the therapist then moves the muscle to realign the muscle fibres therefore stretching the muscle.

As an example, Muscle Energy Technique (MET) Reciprocal Inhibition (RI) can be applied to the calf when the client is lying supine on the treatment couch. The masseur can place one hand on the tibia just below the knee to isolate the knee preventing it from moving. The other hand is placed around the heel so that the masseurs forearm can be used to dorsiflex the foot. This is one of the techniques used by sports massage therapists.

Myofascial Release

Myofascial Release refers to the manual massage technique for stretching the fascia and releasing bonds between fascia and integument, muscles, and bones, with the goal of eliminating pain, increasing range of motion and balancing the body. Injuries, stress, trauma, overuse and poor posture can cause restriction to fascia. Myofascial release frees fascial restrictions, and allow the muscles to move efficiently. This is usually done by applying shear, compression or tension in various directions, or by skin rolling. This is one of the techniques used by sports massage therapists and physical therapists. Myofascial release originators come from Physical Therapy and from Structural Integration (Rolfing); its current developers include John Barnes PT from a Physical Therapy background, and from a Rolfing or Structural Integration background, Art Riggs, Michael Stanborough, Tom Myers, Til Luchau, and others.

Myoskeletal alignment technique

Myoskeletal Alignment Technique (MAT) identifies postural distortions to improve and prevent pain conditions. Proprioceptive Neuromuscular Facilitation (PNF) and myofascial techniques are used to lengthen tight/facilitated muscles while fiber activation techniques tone weak/inhibited muscles. MAT was developed by Erik Dalton.

Neuromuscular therapy

Neuromuscular Therapy (NMT) is used for pain relief and specific problems. Structural and postural imbalances are identified through an initial postural assessment. These are then addressed through systematic and site specific massage. NMT reduces pain, tension, postural imbalance, and lengthens and strengthens tissues. NMT was developed by Paul St. John.

Petrissage

Petrissage (from the French *petrir*, 'to knead') is one of the five basic strokes of a Swedish massage. It is performed with kneading movement with the whole palm or finger tips, wringing, skin rolling, compress and lifting. Petrissage is usually applied vertically to the muscle tissue.

The benefits include the warming of tissue for deeper work, increase circulation, increase the supply of nutrients and oxygen to muscle, softens superficial fascia, decreases muscle tension, and restoring mobility by decreasing adhesion.

Rolfing

Rolfing, a method of Structural Integration, is a codified series of soft tissue manipulation, which purports to organize soft tissue relationships, with the objectives of realigning the body structurally and harmonizing its fundamental movement patterns. This is said to enhance vitality and well-being.

Scalp massage

In some barber shops in Hong Kong, scalp massage often lasts 30 minutes to 45 minutes during shampooing of the hair. It is also very common in India, after applying oil on the hair.

Shantala massage

Shantala massage is an ancient Indian massage technique with a rhythmic character, given to massage babies and children. It was introduced into Western society by Dr. Frederique Leboyer, the renowned French obstetrician, in a book "Loving Hands: The Traditional Art of Baby Massage".

Shiatsu ()

Shiatsu is a form of Japanese massage that uses thumb pressure and works along the energy meridians in the body also with a lot of stretches the same meridians as acupressure. You are worked on fully clothed on a mat on the floor. It is uncertain whether it originated from Chinese Zhi Ya.

Soft Tissue Therapy

The Assessment, Treatment and Management of Soft Tissue Injury, Pain and Dysfunction. Treatment techniques include:

- Trigger point therapy for the alleviation of trigger points.
- Myofascial (muscle and fascia) therapy for flexibility/mobility of the connective tissues of our body, or for alleviating fibrous adhesions and decreasing the severity of scars.
- Broad handed techniques for reducing swelling or inflammation
- Frictions for the ridding of adhesions between fascial layers, muscles, compartments and the like. Frictions also promote healing in tendon pathologies as well as decreasing pain perception.
- Sustained pressure (digital pressures) to alleviate hypertonic (tight) areas within muscle and fascia
- Other techniques such as Active Release Therapies, Myofascial Release and deep tissue massage are all derivatives of the techniques above. They are NOT unique techniques with unique results.
- Stretching - static, dynamic, and/or PNF stretches (proprioceptive neuromuscular facilitation)
- Muscle Energy Technique (MET)
- Exercise Prescription
- Advice

This is one of the techniques used by sports massage therapists.

Stone massage

Massage in which hot or cold stones, usually basalt or marble, are used to massage the body. Often the stones are placed on key energy points, such as Chakras or meridians, in order to improve energy flow and healing.

Structural muscular balancing

A gentle and effective technique that releases chronic contraction in the muscles. The nervous system is triggered to release contractions through compression applied to muscles placed in a shortened position.

Swedish massage

This style utilizes long, flowing strokes, often but not necessarily in the direction of the heart. Swedish massage is designed to increase circulation and blood flow. There are six basic strokes: effleurage, petrissage, friction, tapotement, compression and vibration. Oil, cream, or lotion is applied on the skin to reduce friction and allow smooth strokes. This style of massage is generally attributed to the Swedish fencing master and gymnastics

teacher Pehr Henrik Ling (1776-1839). However, it was in fact the Dutch practitioner Johan Georg Mezger (1838-1909) who adopted the French names to denote the basic strokes under which he systemized massage as we know it today, as Swedish or classic massage. Somehow, the term Swedish Movement System was transposed to Swedish Massage System sometime during the second half of the 19th century. Ling's system was the Swedish Movement System or Swedish Gymnastic Movement System. This may be how he has become incorrectly associated for so long with Swedish massage (see). In Sweden, the term "Swedish massage" is not used.

Tai Ji Massage (Tai Chi Massage)

Tai Ji Massage

Tai Ji / Tai Chi Massage is massage using the natural principles of Tai Ji, Yin and Yang to achieve balance in the energies of the body, leading to a healthy mind body and spirit.

Tai Ji / Tai Chi The traditional Chinese term refers to the Dao, which is the inexpressible oneness and connectedness of all things. This is inexpressibility of Tao is referred to by Lao Tzu:

Chapter 32

"The Tao is constantly nameless....

As soon as we start to establish a system we have names.

And as soon as there set names,

Then you must also know that it's time to stop"

Te Tao Ching

Translation by Robert G. Hendricks. Ballantine books 1989

Qi/ Chi: This is the linking element material and spiritual (Jing and Shen), or in health terms mind and body.

Chinese medicine is often able to treat sicknesses and problems which are difficult to treat by western medicine by virtue of the fact that they consider the state of the Chi to be an important factor in diagnosis.

Qi Field theory: Qi appears as a field. In order for a sickness to become chronic an integral Qi field establishes itself in the body of the host. The shape and size of this field is variable and can stretch from head to toes in some cases.

Tai Ji Massage Qi Diagnosis: Tai Ji Massage is a Qi treatment and it makes a treatment in terms of Qi. The master practitioner can sense the Qi blockages inside the body and the relationship which they have to each other.

Qi blockages can be a way of getting insight into causes of chronic sicknesses, recurring sicknesses, psychosomatic sicknesses, future sicknesses.

The main use of this techniques is, relaxation and self-exploration, and in a therapeutic way, funtional organ problems, chronic sicknesses and psychosomatic sicknesses.

Tai Ji Massage was developed by Richard Wickes, Li Cun De.

Tantramassage (Tantric massage)

Original Tantramassage is a new form of massage developed in the early 1980s by Andro, Andreas Rothe an experienced Tantra and Bodywork Teacher in Berlin / Germany. The method includes various massage techniques, elements from Bioenergetic, Yoga and Sexualtherapy. The word "Tantra" emphasizes the connection with the old Indian cultural background where the body is seen as the temple of the soul. Clients are in a passive role, supported by breathing techniques they experience a very deep and intense journey through their own body. Every Massage session lasts 90 Minutes or longer. The Tantramassage movement is very popular in Germany and Switzerland, some practitioners are organized in the Association of Tantramassage in Germany.

Thai massage

Known in Thailand as นวดแผนโบราณ (Nuat phaen boran, IPA [nuɑt pʰɛn bora n]), which correctly translates only as ancient massage or traditional massage, this form of massage is also known as Thai ancient massage, traditional Thai massage, Thai yoga massage, yoga massage, Thai classical massage, Thai bodywork, passive yoga or assisted yoga. It is usually soothing because of its emphasis on stretching and loosening the body. Its roots go back far into history, originating in India based on the Ayurveda, and then becoming popular in ancient Siam, now known as Thailand.

Originating in India and drawing from Ayurveda, it has inevitably incorporated modalities like yoga. The receiver is put into many yoga like positions during the course of the massage. In the northeren style there are a lot of stretching movements unlike the southern style where pressure is emphasised. It was believed that the massage art was brought over to Thailand by Shivago Komarpaj (Jivaka Kumarabhacca), a contemporary of Lord Buddha over 2500 years ago.

The massage recipient changes into loose, comfortable clothes and lies on a mat or firm mattress on the floor. (It can be done solo or in a group of a dozen or so patients in the same large room). The massage practitioner leans on the recipient's body using hands and forearms to apply firm rhythmic pressure to almost every part of the recipient's body. The massage generally follows the Sen lines on the body-somewhat analogous to Chinese Meridians and Indian nadis. In some gestures, legs and feet of the giver are used to fixate the body or limbs of the recipient. In other gestures, hands fixate the body, while the feet do the massaging action. Oil is not used in traditional Thai Massage. A full Thai massage session typically lasts two hours or more, and includes rythmic pressing and stretching of the entire body; this may incluce pulling fingers, toes, ears etc., cracking the knuckles, walking on the recipient's back, arching the recipient's back in a rolling action etc. There is a standard procedure and rhythm to the massage.

Note: The traditional therapeutic practice of Thai massage should not be confused with the sexual service of the same name that is available in some hotels and brothels. Sometimes the traditional therapeutic Thai Massage, or ancient massage, is referred to as "old lady massage," while the sexual practice, which has nothing to do with therapeutic traditional massage is called "young lady massage."

Trigger point therapy

A trigger point is an area of a muscle (about 50 cells) that may refer pain sensations to other parts of the body. Trigger Point Therapy applies manual pressure, or CO₂ injections, to these points. With the proper pressure, duration and location, immediate release of tension and improved muscular functioning may occur. This therapy has been known to diminish migraine pain, mock sciatica, mock carpal tunnel syndrome and other pain syndromes, and other symptoms that may have been misdiagnosed. This work is based upon the trigger point research and manuals of Dr. Janet Travell, President Kennedy's physician.

Sometimes this work is incorporated into other styles of massage therapy such as neuromuscular therapy (NMT) or even Swedish.

Fight-or-flight response

The **fight-or-flight** response, also called the acute stress response, was first described by Walter Cannon in 1929. His theory states that animals react to threats with a general discharge of the sympathetic nervous system, priming the animal for fighting or fleeing. This response was later recognized as the first stage of a general adaptation syndrome that regulates stress responses among vertebrates and other organisms.

Biology of the stress response

Normally, when a person is in a serene, unstimulated state, the "firing" of neurons in the locus ceruleus is minimal. A novel stimulus (which could include a perception of danger or an environmental stressor signal such as elevated sound levels or over-illumination), once perceived, is relayed from the sensory cortex of the brain through the thalamus to the brain stem. That route of signaling increases the rate of noradrenergic activity in the locus ceruleus, and the person becomes alert and attentive to the environment. Similarly, an abundance of catecholamines at neuroreceptor sites facilitates reliance on spontaneous or intuitive behaviors often related to combat or escape.

If a stimulus is perceived as a threat, a more intense and prolonged discharge of the locus ceruleus activates the sympathetic division of the autonomic nervous system (Thase & Howland, 1995). This activation is associated with specific physiological actions in the system, both directly and indirectly through the release of epinephrine (adrenaline) and to a lesser extent norepinephrine from the medulla of the adrenal glands. The release is

triggered by acetylcholine released from preganglionic sympathetic nerves. The other major player in the acute stress response is the hypothalamic-pituitary-adrenal axis.

Physiology of the stress response

These catecholamine hormones facilitate immediate physical reactions associated with a preparation for violent muscular action. (Gleitman, et al, 2004). These include the following:

- Acceleration of heart and lung action
- Inhibition of stomach and intestinal action
- Constriction of blood vessels in many parts of the body
- Liberation of nutrients for muscular action
- Dilation of blood vessels for muscles
- Inhibition of tear glands and salivation
- Dilation of pupil
- Relaxation of bladder
- Inhibition of erection
- Premature ejaculation

Psychology of the stress response

A typical example of the stress response is a grazing zebra, calmly maintaining homeostasis. If the zebra sees a lion closing in for the kill, the stress response is activated. The escape requires intense muscular effort, supported by all of the body's systems. The sympathetic nervous system's activation provides for these needs. A similar example involving fight is of a cat about to be attacked by a dog. The cat shows accelerated heartbeat, piloerection (hair standing on end, normally for conservation of heat), and pupil dilation, all signs of sympathetic arousal.

Though Cannon, who first proposed the idea of fight-or-flight, provided considerable evidence of these responses in various animals, it subsequently became apparent that his theory of response was too simplistic. Animals respond to threats in many ways, not only by fighting and fleeing. Rats, for instance, try to escape when threatened, but will fight when cornered. Some animals stand perfectly still so that predators will not see them. Others have more exotic self-protection methods. Some species of fish change color swiftly, to camouflage themselves. Although these responses are triggered by the sympathetic nervous system, they do not fit the simple model of fight or flight. The only thing that would generate the fight method in these animals would be the law of self-preservation. This means that if the animal was attacked while camouflaged, it would instinctively counter-attack its assailant.

Furthermore, it is relatively rare that a threat from another animal results immediately in fight or flight. Usually there is a period of heightened awareness, during which each animal interprets behavioral signals from the other. Signs such as paling, piloerection,

immobility, sounds, and body language communicate the status and intentions of each animal. There may be a sort of negotiation, after which fight or flight may ensue, but which might also result in playing, mating, or nothing at all. An example of this is kittens playing: each kitten shows the signs of sympathetic arousal, but they are aware of each other's intent not to inflict real damage.

Negative effects of the stress response in humans

Although the emergency measure of the stress response is undoubtedly both vital and valuable, it can also be disruptive and damaging. Most humans rarely encounter emergencies that require physical effort, yet our biology still provides for them. Thus we may find our stress response activated in situations where physical action is inappropriate or even illegal. This activation takes a toll on both our bodies and our minds.

Disruption of the sexual response and the digestive system are common negative results. Diarrhea, constipation, and difficulty maintaining sexual arousal are typical examples. These are functions which are controlled by the parasympathetic nervous system and therefore suppressed by sympathetic arousal. Prolonged stress responses may result in chronic suppression of the immune system, leaving the sufferer vulnerable to infection by bacteria and viruses. Repeated stress responses can be caused not only by real threats, but also by mental disorders such as post-traumatic stress disorder, in which the individual shows a stress response when remembering a past trauma, and panic disorder, in which the stress response is activated apparently by nothing.

Meditation



A large statue in Bangalore depicting Shiva meditating

The term **Meditation** describes a variety of practices with a variety of goals. It usually involves turning our attention inward to the mind itself. Meditation is often recognized as a component of Eastern religions, having originated Vedic Hinduism. It has also become mainstream in Western culture. It encompasses any of a wide variety of spiritual practices which emphasize mental activity or quiescence. Meditation can also be used for personal development, such as the exercises of Hatha yoga. Many practice meditation in order to achieve eternal peace, while others do it in order to become healthier.

Overview



Meditation in Chinatown, Manhattan

The English word **meditation** comes from the Latin *meditatio*, which originally indicated every type of physical or intellectual exercise, then later evolved into the more specific meaning "contemplation." This usage is found in Christian spirituality, for example,

"meditations on the sufferings of Christ"; as well as Western philosophy, as in Descartes' *Meditations on First Philosophy*, a set of six mental exercises which systematically analyze the nature of reality.

However, "meditation" in its modern sense also refers to a separate practice unrelated to Christian meditations. In the late nineteenth century, Theosophists adopted the word "meditation" to refer to various spiritual practices drawn from Hinduism, Buddhism, and other Eastern religions. Thus the English word "meditation" does not exclusively translate any single term or concept, and can be used to translate words such as the Sanskrit *dhyana*, *samadhi*, or *pranayama*.

Meditation is usually defined as one of the following:

- a state that is experienced when the mind dissolves and is free of all thoughts
- focusing the mind on a single object (such as a religious statue, or one's breath, or a mantra)
- a mental "opening up" to the divine, invoking the guidance of a higher power
- reasoned analysis of religious teachings (such as impermanence, for Buddhists).

Its ritual and contemplative qualities are similar to prayer in Western religions, but prayer emphasizes communication with a higher being, whereas meditation focuses on developing oneself.

Meditation may be for a religious purpose, but even before being brought to the West it was used in secular contexts, such as the martial arts. Beginning with the Theosophists, though, meditation has been employed by a number of religious and spiritual movements, such as Yoga and the New Age movement, as well as limited use in Christianity. It has been suggested that the recent popularity of "meditation" as a religious practice in the West signals some discomfort with more traditional Christian and Jewish practices such as prayer. Others see meditation and prayer as harmonious: Edgar Cayce taught that "Through prayer we speak to God. In meditation, God speaks to us."

From the point of view of psychology, meditation can induce an altered state of consciousness. However, many religious people would challenge the assumption that such mental states (or any other visible result) are the "goal" of meditation. The goals of meditation are varied, and range from spiritual enlightenment, to the transformation of attitudes, to better cardiovascular health.

Types of meditation



"Gathering the Light", Taoist meditation from *The Secret of the Golden Flower*, by C. G. Jung and Richard Wilhelm

According to Perez-De-Albeniz & Holmes (2000), the different techniques of meditation can be classified according to their focus. Some focus on the field or background perception and experience, also called mindfulness; others focus on a preselected specific object, and are called "'concentrative' meditation." There are also techniques that shift between the field and the object.

Categorizing the varieties of meditation is difficult. One common way is according to religion or lineage. But some meditative traditions, such as yoga or tantra, are common to several religions or occur outside religious contexts. Therefore, to avoid controversy, this article will not attempt to classify all meditations into a religious class or lineage.

Bahá'í Faith

The Bahá'í Faith teaches that meditation is necessary for spiritual growth, alongside obligatory prayer and fasting. 'Abdu'l-Bahá wrote:

"Meditation is the key for opening the doors of mysteries. In that state man abstracts himself: in that state man withdraws himself from all outside objects; in that subjective mood he is immersed in the ocean of spiritual life and can unfold the secrets of things-in-themselves."

Although the Founder of the Faith, Bahá'u'lláh, never specified a particular form of meditation, some Bahá'í practices bring about a meditative state. One of these practices is the daily obligatory chanting of the Arabic phrase Alláhu Abhá (Arabic: الله أكبر) (God is Most Glorious) 95 times, which is preceded by ablutions. This is similar to the Sufi practice of chanting the names of God. The word Abhá comes from the same root as Bahá' (Arabic: عاب "splendor" or "glory"), which Bahá'ís consider to be the "Greatest Name of God".

Also, many of the prayers and Tablets of the Báb and Bahá'u'lláh are intended to bring about a meditative or ecstatic state on the part of the participant. These writings often

contain a phrase extolling God or listing several of His names and attributes, which are repeated over and over again throughout the text. For example, in the Long Healing Prayer, almost every verse is followed by "Thou the Sufficing, Thou the Healing, Thou the Abiding, O Thou Abiding One". In the Tablet of the Holy Mariner, every phrase is followed by "Glorified be my Lord, the All-Glorious!"

Buddhism



Buddha in meditation

Buddhist meditation

Meditation has always enjoyed a central place within Buddhism. The Buddha himself was said to have achieved enlightenment while meditating under a Bodhi tree. Most forms of Buddhism distinguish between shamatha and vipassana meditation, both of which are necessary for enlightenment. The former consists of learning to focus the attention single-pointedly; the latter involves seeing the true nature of reality.

Theravada Buddhism emphasizes vipassana meditation directed towards anapana, mettā bhāvanā, or 38 other traditional topics (see: Kammatthana).

In Japanese Mahayana schools, Tendai (Tien-tai), concentration is cultivated through highly structured ritual. Especially in the Chinese Chan Buddhism school (which branched out into the Japanese Zen, and Korean Seon schools), ts'o ch'an meditation and koan meditation practices are extremely important, allowing a practitioner to directly experience the true nature of reality (each of the names of these schools derives from the sanskrit dhyana, and translates into "meditation" in their respective languages). The esoteric Shingon sect shares many features with Tibetan Buddhism.

Tibetan Buddhism emphasizes tantra for its senior practitioners; hence its alternate name of Vajrayana Buddhism. However, visitors to Tibetan monasteries are often surprised to discover that many monks go through their day without "meditating" in a recognizable form, but are more likely to chant or participate in group liturgy.

Christianity

Christian meditation

Christian traditions have various practices which might be identified as forms of "meditation." Many of these are monastic practices. Some types of prayer, such as the rosary and Adoration (focusing on the eucharist) in Catholicism or the hesychasm in

Eastern Orthodoxy, may be compared to the form of Eastern meditation that focuses on an individual object.

Christian meditation is considered a form of prayer. Some Christian prayer is made primarily by using the intellect, through the contemplation of the divine mysteries. However, Christian prayer or meditation through the heart, as described in the Philokalia is a practice towards Theosis, which involves acquiring an inner stillness and ignoring the physical senses.

According to the Old Testament book of Joshua, a form of meditation is to meditate on scriptures. This is one of the reasons why bible verse memory is a practice among many evangelical Christians. "Do not let this Book of the Law depart from your mouth; meditate on it day and night, so that you may be careful to do everything written in it, then you will be prosperous and successful." (Joshua 1:8)

Gnostic (Modern)

The modern Gnostic movement counts millions of students in non-English speaking countries and is only now becoming known in English. Gnosis is Greek for "knowledge," but indicates personal, experiential knowledge rather than mere belief or theory. As such, meditation techniques are of primary importance, because it is through meditation that any person can acquire their own personal, experiential knowledge of the mysteries of life and death. There is an enormous range of techniques taught within the Gnostic tradition, ranging from basic concentration practices to very abstract and skillful techniques similar to the highest forms of Zen and Vajrayana Buddhism. Each has its place in the progressive development of the individual.

Jainism



Jain sadhvis meditating

The Jains called the practice of meditation Samayika, a word in Prakrit language. The aim of Samayika is to transcend our daily experiences as the "constantly changing" human beings, called Jiva, and allow identification with the "changeless" reality in us, called the Atma. One begins in Samayika by achieving a balance in time. If the present fine moment of time could be defined as the moving line between the past and the future, Samayika happens by being fully aware, alert and conscious in that moving timeline when one experiences one's true nature, Atma, which is considered common to all living beings. The Samayika is derived from the word samay - meaning time - in the Prakrit

language. The Samayika takes on special significance during special 8-day period practiced by the Jains called Paryushana.

Hinduism

There are several types of meditation in Hinduism These include (but are not limited to):

- Vedanta is a form of Jnana Yoga.
- Raja Yoga, as outlined by Patanjali, describes eight “limbs” of spiritual practices, half of which might be classified as meditation. Underlying them is the assumption that a yogi should still the fluctuations of his or her mind: *Yoga cittavrtti nirodha*.
- Surat shabd yoga “sound and light meditation”

Islam

Muraqaba

Within Islam, the term "meditation" refers to the Salat performed 5 times a day. This is a spiritual process of focusing the mind and heart on Allah.

There is also the act of deep detailed contemplation (tafakkur) commanded in the Qur'an.

Judaism

Jewish meditation

The concept of Jewish meditation, in Hebrew called *hitbodeidut* or *hisbodeidus* is explained in Kabbalah and Hassidic philosophy. The word *hisbodedut*, which derives from the Hebrew word "boded", בודד (a state of being alone) and claimed to be related to the *sfirah* of Binah (lit. understanding), means the process of making oneself understand a concept well through analytical study.

Kabbalah is inherently a meditative field of study. Kabbalistic meditative practices construct a supernal realm which the soul navigates through in order to achieve certain ends. One of the most well known types of meditation is /Merchava/, from the root /R-Ch B/ meaning "chariot"(of God).

Sikhism

In Sikhism, the practices of simran and Nām Japō encourage quiet meditation.

Taoism

Taoism includes a number of meditative and contemplative traditions. Originally said to have their principles described in the I Ching, Tao Te Ching, Chuang Tzu and Tao Tsang among other texts; the multitude of schools relating to Qigong, Neigong, Daoyin and

Zhan zhuang are a large, diverse array of breath training practises in aid of meditation with much influence from later Chinese Buddhism and with much influence on traditional Chinese medicine and the Chinese as well as some Japanese martial arts. The Chinese martial art T'ai Chi Ch'uan is named after the well-known focus for Taoist and Neo-Confucian meditation, the T'ai Chi T'u, and is often referred to as “meditation in motion”.

New Age

New Age meditations are influenced by Eastern philosophy and mysticism such as yoga, Hinduism and Buddhism, yet may contain some degree of Western influence. Examples of such meditations include:

- Sahaja Yoga Meditation started by Shri Mataj Nirmala Srivastava.
- Transcendental Meditation is a form of meditation invented by Maharishi Mahesh Yogi.
- Natural Stress Relief is a meditation technique invented by the Scientia Institute.
- 5Rhythms is a movement meditation technique invented by Gabrielle Roth.
- Transmission Meditation is a potent form of group meditation combining world service and personal development; introduced by British author and esotericist, Benjamin Creme.
- Theta Healing is a healing technology that utilizes theta brainwaves to heal, and transform beliefs. It was created by Vianna Stibal when she instantly cured herself of cancer.

Active/Dynamic Meditation

Osho, earlier named Rajneesh, invented radically new meditation techniques, which he termed Active Meditations, which begin with a stage of activity — sometimes intense and physical — followed by a period of silence. He emphasized that meditation is *not* concentration. Dynamic meditation involves a conscious catharsis where one can throw out all the repressions, express what is not easily expressible in society, and then easily go into silence. Some of his techniques also have spontaneous dance as a step into.

Also the Thai monk Luang Por Teean taught a (more conservative) form of dynamic meditation, involving the use of the hands and arms during sitting meditation. He also used walking meditation as a complementary method. His teaching was aimed at developing awareness of the movements of the arms, which are moved continuously in a certain pattern throughout the meditation. The awareness is, however, not limited to the arms but inclusive of the whole life-experience. This type of dynamic meditation is a type of vipassana meditation, which is popular in Thailand, and is becoming more well known in the western countries, too.

Acoustic and photic

Newer forms of meditation are based on the results of EEG work in long term meditators. Studies have demonstrated the presence of a frequency-following response to auditory and visual stimuli. This EEG activity was termed "frequency-following response" because its period (cycles per second) corresponds to the fundamental frequency of the stimulus. Stated plainly, if the stimulus is 5 Hz the resulting measured EEG will show a 5 Hz frequency-following response using appropriate time-domain averaging protocols.

Meditation in context

Most traditions address the integration of mind, body, and spirit (this is a major theme of the Bhagavad-Gita); or that of spiritual practice with family life, work, and so on. Often, meditation is said to be incomplete if it doesn't lead to positive changes in one's daily life and attitudes. In that spirit some Zen practitioners have promoted "Zen driving," aimed at reducing road rage.

Meditation is often presented not as a "free-standing" activity, but as one part of a wider spiritual tradition. Nevertheless, many meditators today do not follow an organized religion, or do not consider themselves to do so faithfully. Religious authorities typically insist that spiritual practices such as meditation belong in the context of a well-rounded religious life that may include ritual or liturgy, scriptural study, and the observance of religious laws or regulations.

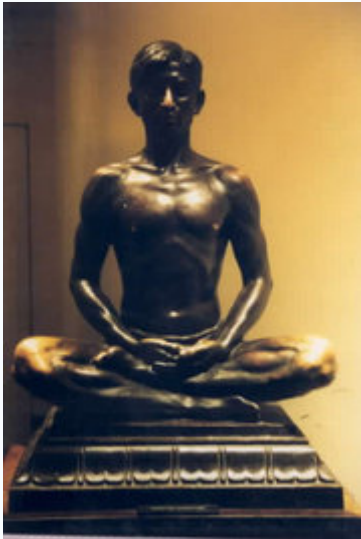
Perhaps the most widely-cited spiritual prerequisite for meditation is an ethical lifestyle. Many martial arts teachers urge their students to respect parents and teachers, and inculcate other positive values. Some traditions incorporate "crazy wisdom" or intentionally transgressive acts, in their sacred lore if not in actual practice: Sufi poets (e.g. Rumi, Hafiz) celebrate the virtues of wine, which is forbidden in Islam.

Most meditative traditions discourage drug use. Exceptions include some forms of Hinduism, which have a long tradition of hashish or marijuana-using renunciates; and certain Native American traditions, which use peyote, ayahuasca, or other restricted substances in a religious setting.

A number of meditative traditions requires permission from a teacher or elder, who in turn has received permission from another teacher, and so on, in a lineage. Most Chinese traditions rely on the Confucian concept of a Sifu. Hinduism and Buddhism stress the importance of a spiritual teacher (Sanskrit guru, Tibetan lama). Orthodox Christianity has "spiritual elders" (Greek *gerontas*, Russian *starets*); Catholic religious have spiritual directors.

The immediate meditative environment is often held to be important. Several traditions incorporate cleansing rituals for the place where one meditates, and others offer instructions for an altar or other accessories.

Physical postures



Half-lotus position.

Different spiritual traditions, and different teachers within those traditions, prescribe or suggest different physical postures for meditation. Most famous are the several cross-legged postures, including the Lotus Position. For example, the Dalai Lama recommends the Seven Points of Vairocana in which:

- the legs are crossed in either the Lotus Position (here called the vajra position) or the other way, “Indian” or “tailor” fashion (here called the bodhisattva position)
- the eyes are kept open (thus affirming the world)
- the back is kept straight (like “an arrow” or “a stack of coins”)
- the shoulders are kept even and relaxed
- the gaze is kept at a medium level—too low and one becomes drowsy; too high and one becomes restless
- the mouth is kept slightly open
- the tongue touches the roof of the mouth

Many meditative traditions teach that the spine should be kept "straight" (i.e. that the meditator should not slouch). Often this is explained as a way of encouraging the circulation of what some call "spiritual energy," the "vital breath", the "life force" (Sanskrit *prana*, Chinese *qi*, Latin *spiritus*) or the Kundalini. In some traditions the meditator may sit on a chair, flat-footed (as in New Thought); sit on a stool (as in Orthodox Christianity); or walk in mindfulness (as in Theravada Buddhism).



Bas-relief in Sukhothai, Thailand depicting monks during walking meditation.

Various hand-gestures or mudras may be prescribed. These can carry theological meaning or according to Yogic philosophy can actually affect consciousness. For example, a common Buddhist hand-position is with the right hand resting atop the left (like the Buddha's begging bowl), with the thumbs touching.

Quiet is often held to be desirable, and some people use repetitive activities such as deep breathing, humming or chanting to help induce a meditative state. The Tibetan tradition described above is probably in the minority for recommending that the eyes remain open. Practitioners of the Soto Zen tradition also meditate with their eyes open, facing a wall, but most schools of meditation assume that the eyes will be closed or only half-open.

Often such details are shared by more than one religion, even in cases where mutual influence seems unlikely. One example would be "navel-gazing," which is apparently attested within Eastern Orthodoxy as well as Chinese qigong practice. Another would be the practice of focusing on the breath, which is found in Orthodox Christianity, Sufism, and numerous Indic traditions.

Sitting cross-legged (or upon one's knees) for extended periods when one is not sufficiently limber, can result in a range of ergonomic complaints called "meditator's knee".

Common Postures

Seated posture

Person can use any chair, stool, bench, anything that has a horizontal top, so that he or she may sit on it. The person sits up, with their back straight, and holds their head and spine in alignment. They rest their hands comfortably on their knees or arms of chair. Their thighs should be parallel to the floor while the person's back does not lean against the back of the chair.

Cross legged posture

Person crosses legs while seated on the floor (and on a cushion, if it is more comfortable) and unless skilled at yoga, does not attempt to rest feet on their

thighs (like Indian yogis do). The person sits upright, back straight, and with their head and spine in alignment. Hands may rest in any position.

Kneeling posture

Person kneels on the floor with their knees together, buttocks resting on their heels and toes almost touching. They keep their back straight, head and spine in alignment, and rest their hands on their thighs.

Lying down posture

This is the *savasna*, or the corpse posture in yoga. Person lies down on a carpet, and makes sure legs are straight but relaxed. Normally, it is seldom used because it mimics natural sleeping postures, making it very easy to fall asleep while trying to meditate. It is often regarded as more effective as a stress reducer rather than in the meditation process.

Frequency and duration

These vary so greatly that it is difficult to venture any general comments. On one extreme there exist monks and nuns whose whole lives are ordered around meditation; on the other hand, one-minute meditations are not out of the question.

Twenty or thirty minutes is broadly accepted as being a typical duration. Experienced meditators often find their sessions growing in length of their own accord. Observing the advice and instructions of one's spiritual teacher is generally held to be most beneficial.

Many traditions stress regular practice. Accordingly, many meditators experience guilt or frustration upon failing to do so. Possible responses range from perseverance to acceptance. Also, many meditators stress the importance of continual practice in order to strengthen concentration for prolonged meditation sessions as well as increased focus during their daily lives.

Purposes and effects of meditation

The purposes for which people meditate vary almost as widely as practices. Meditation may serve simply as a means of relaxation from a busy daily routine; as a technique for cultivating mental discipline; or as a means of gaining insight into the nature of reality, or of communing with one's God. Many report improved concentration, awareness, self-discipline and equanimity through meditation.

Many authorities avoid emphasizing the effects of meditation — sometimes out of modesty, sometimes for fear that the expectation of results might interfere with one's meditation. For theists, the effects of meditation are considered a gift of God or from the Holy Spirit/Ghost, and not something that is "achieved" by the meditator alone, just as some say that a person will not convert to Christianity without the influence of the Holy Spirit/Ghost's presence.

At the same time, many effects (or perhaps side-effects) have been experienced during, or claimed for, various types of meditation. These include:

- Greater faith in, or understanding of, one's religion or beliefs
- An increase in patience, compassion, and other virtues and morals or the understanding of them
- Feelings of calm or peace, and/or moments of great joy
- Consciousness of sin, temptation, and remorse, and a spirit of contrition.
- Sensitivity to certain forms of lighting, such as fluorescent lights or computer screens, and sometimes heightened sense-perception.
- Surfacing of buried memories.
- Experience of spiritual phenomena such as kundalini, extra-sensory perception, or visions of deities, saints, demons, etc.
- "Miraculous" abilities such as levitation (cf. yogic flying)
- Psychotic episodes (see medical section below)

Some traditions acknowledge that many types of experiences and effects are possible, but instruct the meditator to keep in mind the spiritual purpose of the meditation, and not be distracted by lesser concerns. For example, Mahayana Buddhists are urged to meditate for the sake of "full and perfect enlightenment for all sentient beings" (the bodhisattva vow). Some, as in certain sects of Christianity, say that these things are possible, but are only to be supported if they are to the glory of God.

Health applications and clinical studies of meditation



Scenes of Inner Taksang, temple hall, built just above the cave where Padmasambhava meditated

In the recent years there has been a growing interest within the medical community to study the physiological effects of meditation (Venkatesh et al., 1997; Peng et al., 1999; Lazar et al., 2000; Carlson et.al, 2001). Many concepts of meditation have been applied to clinical settings in order to measure its effect on somatic motor function as well as cardiovascular and respiratory function. Also the hermeneutic and phenomenological aspects of meditation are areas of growing interest. Meditation has entered the mainstream of health care as a method of stress and pain reduction. For example, in an

early study in 1972, transcendental meditation was shown to affect the human metabolism by lowering the biochemical byproducts of stress, such as lactate, decreasing heart rate and blood pressure and inducing favorable brain waves. (Scientific American 226: 84-90 (1972)). In 1976, the Australian psychiatrist Ainslie Meares, reported in the *Medical Journal of Australia*, the regression of cancer following intensive meditation. Meares would go on to write a number of books, including his best-seller *Relief without Drugs*.

As a method of stress reduction, meditation is often used in hospitals in cases of chronic or terminal illness to reduce complications associated with increased stress including a depressed immune system. There is a growing consensus in the medical community that mental factors such as stress significantly contribute to a lack of physical health, and there is a growing movement in mainstream science to fund research in this area (e.g. the establishment by the NIH in the U.S. of 5 research centers to research the mind-body aspects of disease.) Dr. James Austin, a neurophysiologist at the University of Colorado, reported that Zen meditation rewires the circuitry of the brain in his landmark book *Zen and the Brain* (Austin, 1999). This has been confirmed using functional MRI imaging which examine the electrical activity of the brain.

Dr. Herbert Benson of the Mind-Body Medical Institute, which is affiliated with Harvard and several Boston hospitals, reports that meditation induces a host of biochemical and physical changes in the body collectively referred to as the "relaxation response" (Lazar et.al, 2003). The relaxation response includes changes in metabolism, heart rate, respiration, blood pressure and brain chemistry. Benson and his team have also done clinical studies at Buddhist monasteries in the Himalayan Mountains.

Other studies within this field include the research of Jon Kabat-Zinn and his colleagues at the University of Massachusetts who have studied the effects of mindfulness meditation on stress (Kabat-Zinn et.al, 1985; Davidson et.al, 2003).

Meditation and the brain

Mindfulness meditation and related techniques are intended to train attention for the sake of provoking insight. Think of it as the opposite of attention deficit disorder. A wider, more flexible attention span makes it easier to be aware of a situation, easier to be objective in emotionally or morally difficult situations, and easier to achieve a state of responsive, creative awareness or "flow".

One theory, presented by Daniel Goleman & Tara Bennett-Goleman (2001), suggests that meditation works because of the relationship between the amygdala and the prefrontal cortex. In very simple terms, the amygdala is the part of the brain that decides if we should get angry or anxious (among other things), and the pre-frontal cortex is the part that makes us stop and think about things (it is also known as the inhibitory centre).

So, the prefrontal cortex is very good at analyzing and planning, but it takes a long time to make decisions. The amygdala, on the other hand, is simpler (and older in evolutionary

terms). It makes rapid judgments about a situation and has a powerful effect on our emotions and behaviour, linked to survival needs. For example, if a human sees a lion leaping out at them, the amygdala will trigger a fight or flight response long before the prefrontal cortex responds.

But in making snap judgments, our amygdalas are prone to error, such as seeing danger where there is none. This is particularly true in contemporary society where social conflicts are far more common than encounters with predators, and a basically harmless but emotionally charged situation can trigger uncontrollable fear or anger — leading to conflict, anxiety, and stress.

Because there is roughly a quarter of a second gap between the time an event occurs and the time it takes the amygdala to react, a skilled meditator may be able to intervene before a fight or flight response takes over, and perhaps even redirect it into more constructive or positive feelings.

The different roles of the amygdala and prefrontal cortex can be easily observed under the influence of various drugs. Alcohol depresses the brain generally, but the sophisticated prefrontal cortex is more affected than less complex areas, resulting in lowered inhibitions, decreased attention span, and increased influence of emotions over behaviour. Likewise, the controversial drug Ritalin has the opposite effect, because it stimulates activity in the prefrontal cortex.

Some studies of meditation have linked the practice to increased activity in the left prefrontal cortex, which is associated with concentration, planning, meta-cognition (thinking about thinking), and *positive affect* (good feelings). There are similar studies linking depression and anxiety with decreased activity in the same region, and/or with dominant activity in the right prefrontal cortex. Meditation increases activity in the left prefrontal cortex, and the changes are stable over time — even if you stop meditating for a while, the effect lingers.

Meditation and EEG

Electroencephalograph (EEG) recordings of skilled meditators showed a significant rise in gamma wave activity in the 80 to 120 Hz range during meditation. There was also a rise in the range of 25 to 42 Hz. These meditators had 10 to 40 years of training in Buddhist-based mental training. EEG done on meditators who had received recent training demonstrated considerably less rise.

The experienced meditators also showed increased gamma activity while at rest and not meditating.

During meditation there is a modest increase in slow alpha or theta wave EEG activity.

Chang and Lo found different results. First they classify five patterns in meditation based on the normal four frequency ranges (delta < 4Hz, theta 4 to <8Hz, alpha 8 to 13Hz, and beta >13Hz). The five patterns they found were:

- 1) delta
- 2) delta + theta
- 3) theta + slow alpha
- 4) high-amplitude alpha
- 5) amplitude suppressed ("silent and almost flat")

They found pattern #5 unique and characterized by:

- 1) extremely low power (significant suppression of EEG amplitude)
- 2) corresponding temporal patterns with no particular EEG rhythm
- 3) no dominating peak in the spectral distribution

They had collected EEG patterns from more than 50 meditators over the prior five years. Five meditation EEG scenarios are then described. They further state that most meditation is dominated by alpha waves. They found delta and theta waves occurred occasionally, sometimes while people fell asleep and sometimes not. In particular they found the amplitude suppressed pattern correlated with "the feeling of blessings."

Adverse effects

Predominantly, studies of meditation report positive effects. However, some studies report that meditation may have adverse effects in certain circumstances (Lukoff, Lu & Turner, 1998; Perez-De-Albeniz & Holmes, 2000). If practiced improperly or too intensely, meditation can lead to considerable psychological and physiological problems. Serious and credible teachers of meditation usually warn their students about the possible pitfalls of a contemplative path (Trungpa, 1973).

Another issue concerns the adaptation of eastern meditative concepts to a western culture, an adaptation that is often unfamiliar with the cultural matrix in which the meditative concept originated. Eastern concepts of meditation are often imported to a western setting within the popular context of new religious movements, or within the context of popular approaches to body and health. It is common for this popular context to be unfamiliar with the broad range of adverse effects that might occur during meditation, and to have limited tools for dealing with them when they do arise. Since the practice of meditation may include a powerful confrontation with existential questions, it is not considered wise to engage in intense meditation techniques without an extended period of psychological preparation, preferably in contact with a credible teacher or clinician. In the case of Asian contemplative traditions (Hindu, Buddhist), which has often originated within a monastic or reclusive context, there often exist major challenges connected to the way the particular meditation techniques are to be applied to a Western mindset without causing harm to the practitioner, for example passivity.

A growing body of clinical literature is now starting to address the phenomenon of meditation-related problems (Lukoff, Lu & Turner, 1998; Perez-De-Albeniz & Holmes, 2000). Several side-effects have been reported, including uncomfortable kinesthetic sensations, mild dissociation and psychosis-like symptoms (Craven, 1989). From a clinical study of twenty-seven long term meditators, Shapiro (1992) reported such adverse effects as depression, relaxation-induced anxiety and panic, paradoxical increases in tension, impaired reality testing, confusion, disorientation and feeling 'spaced out'. The possibility that meditation might trigger strong emotional reactions is also reported by Kutz, Borysenko & Benson (1985). Therefore, meditation might cause serious side effects, even among long-term practitioners, and might even, in some instances, be contraindicated. The tendency of meditation to release unconscious material (Perez-De-Albeniz & Holmes, 2000) implies that the beginning meditator should approach the practice with moderation.

Particularly in the Chinese Qigong tradition, stories of unguided practitioners or inexpertly guided students developing chronic mental and physical health problems as a result of their attempts at meditation training are not uncommon. English speaking practitioners and teachers of Qigong and related disciplines note that the practice of this contemplative exercise is sometimes accompanied by physical and psychological distress. The identification of this syndrome has led to the inclusion of a culture-sensitive category in the DSM-IV called Qi-Gong Psychotic Reaction (American Psychiatric Association, 1994: Appendix 1).

Meditative traditions which include the use of drugs are generally considered to be harmful to the practitioner. Additionally, as with any practice, meditation may also be used to avoid facing ongoing problems or emerging crises in the meditator's life. In such situations, it may be helpful to apply mindful attitudes acquired in meditation while actively engaging with current problems (see Hayes et al, 1999, chap. 3; Metzner, 2005).

Meditation and drugs

Some modern methods of meditation do not include the use of drugs due to the known health problems associated with the use of some drugs. However, the use of either stimulants has been proposed by some as a means to provide insight, and in some shamanistic traditions they are used as agents of ritual. Some Native American traditions for instance emphasized the smoking of a pipe containing tobacco, salvia divinorum or other plants. Some Hindu traditions use bhang, East Asian traditions use tea and Middle Eastern (and many Western) religions use coffee as an aid to meditation.

During the 1960s, eastern meditation traditions and psychedelics such LSD became popular among many people, and many people suggested that LSD use and meditation were both means to the same spiritual/existential end. Many practitioners of eastern traditions rejected this idea, including many who had tried LSD themselves. In *The Master Game*, de Ropp said that the door to full consciousness could be glimpsed through with the aid of substances -- which is doubted by many others -- yet to pass beyond the door required yoga and meditation. Other authors, such as Rick Strassman,

continue to believe that the relationship between religious experiences reached by way of meditation and through the use of psychedelic drugs deserves further exploration.

Physical exercise

U.S. Marine emerges from the water upon completing the swimming portion of a triathlon.

Physical exercise is the performance of some activity in order to develop or maintain physical fitness and overall health. It is often directed toward also honing athletic ability or skill. Frequent and regular physical exercise is an important component in the prevention of some of the diseases of affluence such as heart disease, cardiovascular disease, Type 2 diabetes and obesity.

Exercises are generally grouped into three types depending on the overall effect they have on the human body:

- Flexibility exercises such as stretching improve the range of motion of muscles and joints.
- Aerobic exercises such as walking and running focus on increasing cardiovascular endurance.
- Anaerobic exercises such as weight training, functional training or sprinting increase short-term muscle strength.

Physical exercise is considered important for maintaining physical fitness including healthy weight; building and maintaining healthy bones, muscles, and joints; promoting physiological well-being; reducing surgical risks; and strengthening the immune system.

Proper nutrition is at least as important to health as exercise. When exercising it becomes even more important to have good diet to ensure the body has the correct ratio of macronutrients whilst providing ample micronutrients, this is to aid the body with the recovery process following strenuous exercise.

Proper rest and recovery is also as important to health as exercise, otherwise the body exists in a permanently injured state and will not improve or adapt adequately to the exercise. Hence, it is important to remember not to do the same type of exercise two-days-in-a-row.

The above two factors can be compromised by psychological compulsions (eating disorders such as exercise bulimia, anorexia, and other bulimias), misinformation, a lack of organization, or a lack of motivation. These all lead to a decreased state of health.

Delayed Onset Muscle Soreness can occur after any kind of exercise, particularly if the body is in an unconditioned state relative to that exercise.

Exercise benefits

Frequent and regular exercise has been shown to help prevent or to cure major illnesses such as high blood pressure, obesity, heart disease, Type 2 diabetes, insomnia, and depression. Researchers have shown that three 10 minute walks burn as many calories and exercise the heart as well as one 30 minute walk. (Strength training, on the other hand, appears to have continuous energy-burning effects that persist for about 24 hours after the training.) Exercise can also increase energy and raise one's threshold for pain.

There is conflicting evidence as to whether vigorous exercise (more than 70% of VO_2 Max) is more or less beneficial than moderate exercise (40 to 70% of VO_2 Max). However studies have shown that vigorous exercise executed by healthy individuals can effectively increase opioid peptides (aka endorphins, a naturally occurring opiate that in conjunction with other neurotransmitters is responsible for exercise induced euphoria and has been shown to be addictive), positively influence hormone production (i.e., increase testosterone and growth hormone), and help prevent neuromuscular diseases. These benefits are not as fully realized with more moderate exercise.

Both aerobic and anaerobic exercise also work to increase the mechanical efficiency of the heart by increasing cardiac volume, or myocardial thickness (see Organ hypertrophy).

Common myths

Many myths have arisen surrounding exercise, some of which have a basis in reality, and some which are completely false. Myths include:

- That excessive exercise can cause immediate death. Death by exercise has some small basis in fact. Water intoxication can result from prolific sweating (producing electrolyte losses) combined with consumption of large amounts of water (e.g. when running a marathon).
- Weightlifting makes you short or stops growth. One caveat is that heavy weight training in adolescents can damage the epiphyseal plate of long bones.

Targeted fat reduction

It is a common belief that training a particular body part will preferentially shed the fat on that part; for example, that doing sit-ups is the most direct way to reduce subcutaneous belly fat. This is false: one cannot reduce fat from one area of the body to the exclusion of others. Most of the energy derived from fat gets to the muscle through the bloodstream and reduces stored fat in the entire body. Sit-ups may improve the size and shape of abdominal muscles but will not specifically target belly fat for loss. Instead, such exercise may help reduce overall body fat, affecting all parts of the body as determined by genetics. In fact, belly fat will often be the last fat removed from the body.

Muscle and fat tissue

Some people incorrectly believe that muscle tissue will turn into fat once a person stops exercising. In reality, fat tissue and muscle tissue are fundamentally different. However, the more common expression of this myth “muscle will turn to fat” has a grain of truth. Although a muscle cell will not become a fat cell, the material that makes up muscle can in fact turn to fat. The catabolism of muscle fibers releases protein, which can be converted to glucose that can be burned as fuel, and excesses of which can be stored as fat. Moreover, the composition of a body part can change toward less muscle and more fat, so that a cross-section of the upper-arm for example, will have a greater area corresponding to fat and a smaller area corresponding to muscle. This is not muscle “turning to fat” however, it is simply a combination of muscle atrophy and increased fat storage in different tissues of the same body part. Another element of increased fatty deposits is that of diet, as most trainees will not significantly reduce their diet in order to compensate for the lack of exercise/activity.

Abdominal muscles

Abdominal muscles are like any other muscle tissue; they don't necessarily respond to hundreds of repetitions. If an individual can easily do 15 reps of any abdominal exercise, they should consider switching exercises or adding resistance. Abdominal muscles can be over-trained like any other muscle. It is important that abdominal muscles have enough rest to recover from a bout of exercise. Over-training will result in diminished gains. Many conventional abdominal exercises solely tone the superficial muscles of the abdomen whereas core-stability exercises, such as the plank, target internal muscles in the abdomen which may be more conducive to obtaining a flatter stomach. Furthermore, men and women all have the same anatomy that responds the same way to exercise. Men and women must follow the same rules regarding diet, exercise and life-style to achieve aesthetic and health related goals.

Too much exercise

Too much exercise can be harmful. The body part needs at least a day of rest, which is why most health experts say one should exercise every other day or 3 times a week. Without proper rest, the chance of stroke or other circulation problems increases, and muscle tissue may develop slowly.

Appropriate exercise does more good than harm, with the definition of “appropriate” varying according to the individual. For many activities, especially running, there are significant injuries that occur with poorly regimented exercise schedules. In extreme instances, over-exercising induces serious performance loss. Unaccustomed overexertion of muscles leads to rhabdomyolysis (damage to muscle) most often seen in new army recruits. Another danger is overtraining in which the intensity or volume of training exceeds the body’s capacity to recover between bouts.

Stopping excessive exercise suddenly can also create a change in mood. Feelings of depression and agitation can occur when withdrawal from the natural endorphins produced by exercise occurs.

Physical exercise releases opioid peptides or endorphins, opiates that exhibit synergetic effects with other neurotransmitters, causing exercise euphoria, also known as “runners high”, and causing addiction to physical exercise and possibly decreased sex drive. This usually leads to over-exercising; a person suffering exercise addiction is often described as a “gym rat”, “body nazi”, “exercise freak”, etc.

Excess is unhealthy. Exercise should be controlled by each body’s inherent limitations. While one set of joints and muscles may have the tolerance to withstand multiple marathons, another body may be damaged by 20 minutes of light jogging. This must be determined by each individual.

Exercise helps brain function

In the long term, exercise helps the brain by:

- increasing the blood and oxygen flow to the brain
- increasing growth factors that help create new nerve cells
- increasing chemicals in the brain that help cognition

Activities used as physical exercises

- Aerobics
- Baseball
- Bossaball
- Calisthenics
- Bicycling
- Curling
- Cycling
- Dancing
- Exercise machines
- Functional training
- Games
- Football
- Parkour
- Pilates
- Rowing
- Running
- Skipping
- Sport
- Squatting
- Stretching
- Swimming
- Walking
- Warming up
- Weight training

- Housework
- Jogging
- Jump rope
- Martial arts
- Yoga

Categories of physical exercise

- Abdominal exercises
- Aerobic exercise
- Anaerobic exercise
- Functional training
- Gymnastics
- High-density exercise
- High-intensity interval training (HIIT)
- High Intensity Training
- Isometric exercise
- Resistance training
- Agility training
- Swimming

Some activities can fall into more than one category of exercise. For instance: cycling can be used for endurance or high-intensity interval training; weightlifting is resistance training or functional training and can be high-density exercise with certain workout designs.

Sometimes the terms 'dynamic' and 'static' are used. 'Dynamic' exercises such as steady running, tend to produce a lowering of the diastolic blood pressure during exercise, due to the improved blood flow. Conversely, static exercise (such as weight-lifting) can cause the systolic pressure to rise significantly.

Breathing

Active exhalation during physical exercise helps the body to increase its maximum lung capacity, and oxygen uptake. This results in greater cardiac efficiency, since the heart has to do less work to oxygenate the muscles, and there is also increased muscular efficiency through greater blood flow. Consciously breathing deeply during aerobic exercise helps this development of the heart lung efficiency

Cognitive therapy

Cognitive therapy or **cognitive behavior therapy** is a kind of psychotherapy used to treat depression, anxiety disorders, phobias, delusional disorder and other forms of mental disorder.

It involves recognizing unhelpful or destructive patterns of thinking and reacting, then modifying or replacing these with more realistic or helpful ones. Its practitioners hold that clinical depression is typically associated with negatively biased thinking and irrational thoughts. Cognitive therapy is often used in conjunction with mood stabilizing medications to treat bipolar disorder. Its application in treating schizophrenia along with medication and family therapy is recognized by the NICE guidelines (see below) within the British NHS. According to the U.S.-based National Association of Cognitive-Behavioral Therapists:

“There are several approaches to cognitive-behavioral therapy, including Rational Emotive Behavior Therapy, Rational Living Therapy, Cognitive Therapy, and Dialectic Behavior Therapy.”

The basics

Cognitive Behavior Therapy (CBT) is based on the idea that how we think (cognition), how we feel (emotion) and how we act (behavior) all interact together. Specifically, our *thoughts* determine our feelings and our behavior. Therefore, negative thoughts can cause us distress and result in problems.

One example could be someone who, after making a mistake, thinks “I’m useless and can’t do anything right.” This impacts negatively on mood, making the person feel depressed; the problem may be worsened if the individual reacts by avoiding activities. As a result, a successful experience becomes more unlikely, which reinforces the original thought of being “useless.” In therapy, the latter example could be identified as a self-fulfilling prophecy or “problem cycle,” and the efforts of the therapist and client would be directed at working together to change this. This is done by addressing the way the client thinks in response to similar situations and by developing more flexible thought patterns, along with reducing the avoidance of activities. If, as a result, the client escapes the negative thought pattern, the feelings of depression may be relieved. The client may then become more active, succeed more often, and further reduce feelings of depression.

Thoughts as the cause of emotions

With thoughts stipulated as being the cause of emotions rather than the outcome or by-product, cognitive therapists reverse the causal order more generally used by psychotherapists. Therefore, the therapy is to identify those irrational or maladaptive thoughts that lead to negative emotion and identify what it is about them that is irrational

or just not helpful; this is done in an effort to reject the distorted thoughts and replace them with more realistic alternative thoughts.

Cognitive therapy is not an overnight process. Even after patients have learned to recognize when and where their thought processes go awry, it can take months of concerted effort to replace an irrational thought process or habit with a more reasonable, salutary one. With patience and a good therapist, however, cognitive therapy can be a valuable tool in recovery.

Cognitive behavioral therapy

While similar views of emotion have existed for millennia, cognitive therapy was developed in its present form by Albert Ellis, who developed his Rational Emotive Behavioral Therapy, or REBT, in the early 1950s, as a reaction against popular psychoanalytic and increasingly humanistic methods at the time, and Aaron T. Beck, who followed up Ellis' approach in the 1960s. It rapidly became a favorite intervention to study in psychotherapy research in academic settings. In initial studies, it was often contrasted with behavioral treatments to see which was most effective. However, in recent years, cognitive and behavioral techniques have often been combined into cognitive behavioral treatment. This is arguably the primary type of psychological treatment being studied in research today.

Cognitive behavioral group therapy (CBGT) is a similar approach in treating mental illnesses, based on the protocol by Richard Heimberg. In this case, clients participate in a group and recognize they are not alone in suffering from their problems.

A sub-field of cognitive behavior therapy used to treat Obsessive Compulsive Disorder makes use of classical conditioning through extinction (a type of conditioning) and habituation. (The specific technique, Exposure with Response Prevention (ERP) has been demonstrated to be more effective than the use of medication—typically SSRIs—alone.) CBT has also been successfully applied to the treatment of Generalized Anxiety Disorder, health anxiety, Social phobia and Panic Disorder. In recent years, CBT has been used to treat symptoms of schizophrenia, such as delusions and hallucinations, has been developed in the UK by Douglas Turkington and David Kingdon.

CBT has a good evidence base in terms of its effectiveness in reducing symptoms and preventing relapse and has been recommended in the UK by the National Institute for Health and Clinical Excellence as a treatment of choice for a number of mental health difficulties, including post-traumatic stress disorder, OCD, bulimia nervosa and clinical depression.

Cognitive Therapy and/or Cognitive Behavioral Therapy most closely ally with the Scientist-Practitioner Model of Clinical Psychology, in which clinical practice and research is informed by a scientific perspective; clear operationalization of the “problem” or “issue;” an emphasis on measurement (and measurable changes in cognition and behavior); and measurable goal-attainment.

Depression

Negative thinking in depression can result from biological sources (i.e., endogenous depression), modelling from parents, peers or other sources. The depressed person experiences negative thoughts as being beyond their control: the negative thought pattern can become automatic and self-perpetuating.

Negative thinking can be categorized into a number of common patterns called “cognitive distortions.” The cognitive therapist provides techniques to give the client a greater degree of control over negative thinking by correcting these distortions or correcting thinking errors that abet the distortions, in a process called cognitive restructuring.

Negative thoughts in depression are generally about one or more of three areas: negative view of self, negative view of the world and negative view of the future. These constitute what Beck called the “cognitive triad.”

Attributional style

An approach to depression based upon attribution theory in social psychology is related to the concept of attributional style. First put forth by Lyn Abramson and her colleagues in 1978, this approach argues that depressives have a typical attributional style —they tend to attribute negative events in their lives to stable and global characteristics of themselves . There is considerable evidence that depressives do exhibit such an attributional style; but it is important to remember that Abramson et al. do not claim that an attributional style of this nature is necessarily going to cause depression — only that it will lead to clinical depression if combined with a negative event. This theory is sometimes known as a revised version of learned helplessness theory.

In 1989, this theory was challenged by Hopelessness Theory . This theory emphasised attributions to global and stable factors, rather than, as in the original model, internal attributions. Hopelessness Theory also emphasises that beliefs about the consequences of events and rated importance of events may be at least as important in understanding why some people react to negative events with clinical depression as are causal attributions.

The ABCs of Irrational Beliefs

A major aid in cognitive therapy is what Albert Ellis called the ABC Technique of Irrational Beliefs. The first three steps *analyse* the process by which a person has developed irrational beliefs and may be recorded in a three-column table.

- **A - Activating Event** or objective situation. The first column records the objective situation, that is, an event that ultimately leads to some type of high emotional response or negative dysfunctional thinking.
- **B - Beliefs.** In the second column, the client writes down the negative thoughts that occurred to them.
- **C - Consequence.** The third column is for the negative feelings and dysfunctional behaviors that ensued. The negative thoughts of the second column are seen as a connecting bridge between the situation and the distressing feelings. The third column C is next explained by describing emotions or negative thoughts that the client thinks are caused by A. This could be anger, sorrow, anxiety, etc.

For example, Gina is upset because she got a low mark on a math test. The Activating event, A, is that she failed her test. The Belief, B, is that she *must* have good grades or she is worthless. The Consequence, C, is that Gina feels depressed.

- **Reframing.** After irrational beliefs have been identified, the therapist will often work with the client in challenging the negative thoughts on the basis of evidence from the client's experience by reframing it, meaning to re-interpret it in a more realistic light. This helps the client to develop more rational beliefs and healthy coping strategies.

From the example above, a therapist would help Gina realize that there is no evidence that she *must* have good grades to be worthwhile, or that getting bad grades is *awful*. She desires good grades, and it would be good to have them, but it hardly makes *her* worthless. If she realizes that getting bad grades is disappointing, but not awful, and that it means she is currently bad at math or at studying, but not as a person, she will feel sad or frustrated, but not depressed. The sadness and frustration are likely healthy negative emotions and may lead her to study harder from then on.

Another way of viewing the ABC's of Cognitive Behavioral Therapy

- **A - Activating Stimulus** This is the stimulus that activates the irrational fear or anxiety in the person.
- **B - Blank** This is the blank process that lies in between the stimulus and the irrational thinking. The person would have to identify this gap and create a bridge in their thought process in order to be able to be treated.
- **C - Conditioned Response** This is the irrational fear or anxiety with which the person has conditioned themselves to respond with to the stimulus.

The way the treatment works is that by going back and thinking over what the stimulus was and the irrational reaction to it and then try to follow the chain of events that led from one to another, thereby filling in the blank in between, the person can identify what causes their thinking to become irrational.

For example;

A person walks out of his home and hears an ambulance siren. The person gets anxious from this and runs back into his home. The Activating Stimulus was the ambulance siren. The Conditioned Response was severe anxiety and running into his home. The person now has to fill in the Blank and try to understand what was the exact thought process that went through his mind that caused the irrational response to take place. By bridging this gap in his thought, he is identifying the faulty thought process that caused the extreme response. The person can now work on replacing these faulty thoughts with realistic ones, thereby correcting the undesired chain of thoughts and activating a functional one.

Effectiveness of CBT with or without drugs for depression

A large-scale study in 2000 showed substantially higher results of response and remission when a form of cognitive behavior therapy and an anti-depressant drug were combined than when either method was used alone.

The effectiveness of combination therapy is endorsed by the Australian depressionNet group:

Currently the most effective treatment for major (clinical) depression is considered to be a combination of antidepressant medication and Cognitive Behavioral Therapy.

For more general results confirming that CBT alone can provide lower but nonetheless valuable levels of relief from depression, and result in increased ability for the patient to stay in employment, see *The Depression Report*, which states:

The typical short-term success rate for CBT is about 50%. In other words, if 100 people attend up to sixteen weekly sessions one-on-one lasting one hour each, some will drop out but within four months 50 people will have lost their psychiatric symptoms over and above those who would have done so anyway. After recovery, people who suffered from anxiety are unlikely to relapse. . . . So how much depression can a course of CBT relieve, and how much more work will result? One course of CBT is likely to produce 12 extra months free of depression. This means nearly two months more of work.

The American Psychiatric Association Practice Guidelines (April 2000) indicated that among psychotherapeutic approaches, cognitive behavioral therapy and interpersonal

therapy had the best-documented efficacy for treatment of major depressive disorder, although they noted that rigorous evaluative studies had not been published .

CBT with children and adolescents

The use of CBT has been extended to children and adolescents with good results. It is often used to treat depression, anxiety disorders, and symptoms related to trauma and Post Traumatic Stress Disorder. Significant work has been done in this area by Mark Reinecke and his colleagues at Northwestern University in the Clinical Psychology program in Chicago.

CBT has been used with children and adolescents to treat a variety of conditions with good success.

CBT is also used as a treatment modality for children who have experienced Complex Post Traumatic Stress Disorder, chronic maltreatment, and Post Traumatic Stress Disorder. It would be one component of treatment for children with C-PTSD, along with a variety of other components, which are discussed in the Complex Post Traumatic Stress Disorder article. In addition, many approaches to treating such children, such as Dyadic Developmental Psychotherapy incorporate Cognitive therapy methods and principles into treatment

Stress ball



A stress ball



Stress balls are often utilized after using a computer for extended periods of time

A **stress ball** is a malleable toy, usually not more than 7cm in diameter. It is squeezed in the hand and manipulated by the fingers, ostensibly to either help relieve stress and muscle tension or to exercise the muscles of the hand.

There are many types of stress balls. Many are a closed-cell foam rubber. Others contain gel of different densities, especially those used in physical therapy. Another type uses a thin rubber membrane surrounding a fine powder. The latter type can be made at home by filling a balloon with baking soda. Some balls, similar to a footbag are marketed and used as stress balls.

Despite the name, many stress balls are not spherical. Many stress toys are molded in amusing shapes and printed with corporate logos. They are presented to employees and clients as gifts and marketing pieces. Stress toys are a staple of cubicles where repetitive stress injuries such as carpal tunnel syndrome are common.

Nervous laughter

Nervous laughter is used to describe laughter evoked from an audience's expression of embarrassment, alarm, or confusion, rather than amusement. Nervous laughter is usually less robust in expression than "a good belly laugh", and may be combined with confused glances or awkward silence on the part of others in the audience. Nervous laughter is considered analogous to a **courtesy laugh**, which may be rendered by more of a conscious effort in an attempt to move a situation along more quickly, especially when the comedian is pausing for laughter.

Autogenic training

Autogenic training is a term for a relaxation technique developed by the German psychiatrist Johannes Schultz first published in 1932. It usually involves a series of sessions in which the patients learn to relax their limbs, heart, and breathing. The goal is to induce a pleasant, warm feeling throughout most of the body and induce a feeling of coolness in the forehead. The technique is used against stress-induced psychosomatic disorders.

Schultz emphasized parallels to techniques in yoga and meditation. However, unlike some forms of yoga and meditation, autogenic training is devoid of any mysticism. It is a method for influencing one's autonomic nervous system. Abbe Faria and Emile Coue are the forerunners of Schultz. There are many parallels to Progressive relaxation.

Anger management

The term **anger management** commonly refers to a system of psychological therapeutic techniques and exercises by which one with excessive or uncontrollable anger can control or reduce the triggers, degrees, and effects of an angered emotional state.

Healthy adults need to be able to hint, to use or to pretend "anger": either management or mismanagement (or both), as is appropriate. Competent teachers, law-enforcement and other authority figures are especially skilled in anger management. Teams of such practitioners may decide beforehand or in real-time, to play "Good-Bad Cop" roles.

Courses in anger management are sometimes mandated by a legal system. Courts typically require 8 to 12 hours of classes for most offenders. There are currently no national or state standards. Therefore, some people may not receive the help that is required of them.

Typical anger management "techniques" are the use of deep breathing and meditation as a means to relaxation. As the issue of anger varies from person to person, the treatments are designed to be personal to the individual.

Anger in modern society

In modern society, anger is viewed as an immature or uncivilized response to frustration, threat, violation, or loss. Conversely, keeping calm, coolheaded, or turning the other cheek is considered more socially acceptable. This conditioning can cause inappropriate expressions of anger, such as uncontrolled, violent outbursts or misdirected anger, or, at the other extreme, repressing feelings of anger (or lacking them altogether) when those feelings would be an appropriate response to the situation. Also, anger that is constantly “bottled up” can lead to persistent violent thoughts or nightmares, or even physical symptoms like headaches, ulcers, or hypertension.

Unhealthy anger

It is important to manage anger effectively because mismanaged anger can aggravate mental health problems. Anger can fuel depression, which makes a person feel as if they are enveloped in a dark cloud for a very long time. People who are depressed generally don't take care of themselves and they may not bother to eat properly, dress smartly or work efficiently. They indulge in self-destructive activities, such as too much drinking, smoking, eating, taking risks, and not watching their finances. Depressed people have less energy, reduced appetite, and need more sleep. Their work performance will drop and relationships will deteriorate. Many people believe that depression is in fact anger turned inward. The reason for this assumption is because many depressives react to stress by turning their anger inward as a response to physical or emotional abuse, or neglect from parents or parent figures. After a while the coping mechanisms become habits that they use inappropriately and indiscriminately whenever they perceive loss or frustration. Depressives tend to grow up believing that if they are hurt or abused, there are merely two options available, which are self-blame and denial of blame. One secondary effect of the depressive's denial of anger is that their interpersonal relationships are often unhappy and they do not get the 'breaks' that other people seem to get. They may not get promotions, social invitations or love because the reality is that most people do not want to be around depressed people for any length of time, both at home and at work. Another side-effect of anger is that it can fuel obsessions, phobias and addictions. Obsessions and phobias arise from situations when, for some reason or another, we feel we are either losing control of ourselves or the world around us. Anger can also fuel manic tendencies. Many people who are not able to express their anger let it out in furious activity. Sometimes this activity reaches a breaking point and results in clinical depression or even bipolar disorder. Anger can also fan the flames of paranoia and prejudice, even in normal, everyday situations. People tend to express their anger either passively or aggressively with the basic 'flight' response, which is repression and denial of anger. Aggressive behaviour is associated with the 'fight' response and the use of the verbal and physical power of anger to abuse and hurt others.

Passive anger

Passive anger can be expressed in the following ways:-

- Secretive behaviour, such as stockpiling resentments that are expressed behind people's backs or through sly digs, giving the silent treatment or under the breath

- mutterings, avoiding eye contact, putting people down, gossip, anonymous complaints, poison pen letters, stealing, conning.
- Manipulation, such as provoking people to aggression and then patronizing forgiveness, provoking aggression but staying on the sidelines, emotional blackmail, ingenuine tearfulness, feigning illness, sabotaging relationships, using sexual provocation, using a third party to convey negative feelings, withholding money or resources.
 - Self-blame, such as apologizing too often, being overly critical, inviting criticism you should be sorry.
 - Self-sacrifice, such as being overly helpful, pointedly making do with second best, quietly making long suffering signs but refusing help, or lapping up gratefulness and making friendly digs where it is not forthcoming.
 - Ineffectual, such as setting yourself and others up for failure, choosing unreliable people to depend on, being accident prone, underachieving, sexual impotence, expressing frustration at insignificant things but ignoring serious ones.
 - Dispassionate, such as giving the cold shoulder or phony smiles, looking cool, sitting on the fence while others sort things out, dampening feelings with substance abuse (to include overeating), oversleeping, not responding to other's anger, frigidity, indulging in sexual practices that depress spontaneity and make objects of participants, giving inordinate amounts of time to machines, objects or intellectual pursuits, talking of frustrations but showing no feeling.
 - Obsessional behaviour, such as needing to be clean and tidy, making a habit of constantly checking, over-dieting or overeating, demanding that all jobs are done perfectly.
 - Evasiveness, such as turning your back in a crisis, avoiding conflict, not arguing back, becoming phobic.

Aggressive anger

Aggressive anger can be displayed as:-

- Threatening, such as frightening people by saying how you could harm them, their property or their prospects, finger pointing, fist shaking, wearing clothes associated with violent behaviour, driving on someone's tail, setting on a car horn, slamming doors.
- Hurtful, such as physical violence, verbal abuse, unfair jokes, breaking a confidence, playing loud music, using foul language, ignoring people's feelings, wilfully discriminating, blaming or punishing people for deeds they are known not to have committed, labelling others.
- Destructive, such as harming objects, deliberately wasting resources, wantonly polluting the environment, knowingly destroying a relationship between two people, driving recklessly, drinking too much.
- Bullying, such as threatening people, persecuting, pushing or shoving, using power to oppress, shouting, using a powerful car to force someone off the road, purposely glaring at people with full beam headlights, playing on people's weaknesses.

- Unjustly blaming, such as accusing other people for your own mistakes, blaming people for your own feelings, making general accusations.
- Manic, such as speaking too fast, walking too fast, working too much and expecting others to fit in, driving too fast, reckless spending.
- Grandiose, such as showing off, expressing mistrust, not delegating, being a poor loser, wanting center stage all the time, not listening, talking over people's heads, expecting kiss and make-up sessions to solve problems.
- Selfish, such as ignoring other's needs, not responding to requests for help, queue jumping, 'cutting in' when driving.
- Revengeful, such as being over-punitive, refusing to forgive and forget, bringing up hurtful memories from the past.
- Unpredictable, such as blowing hot and cold, explosive rages over minor frustrations, attacking indiscriminately, dispensing punishment out of the blue, inflicting harm on other just for the sake of it, using drink and drugs that are known to destabilize mood, using illogical arguments.

Handling anger assertively

Psychologists recommend a balanced approach to anger, which both controls the emotion and allows the emotion to express itself in a healthy way. Examples of which are:

- Direct, such as not beating around the bush, making behaviour visible and conspicuous, using body language to indicate feelings clearly and honestly, anger directly at persons concerned.
- Honourable, such as making it apparent that there is some clear moral basis for the anger, being prepared to argue your case, never using manipulation or emotional blackmail, never abusing another person's basic human rights, never unfairly depowering the weak or defenceless, taking responsibility for actions.
- Focuses, such as sticking to the issue of concern, not bringing up irrelevant material.
- Persistent, such as repeating the expression of feeling in the argument over and over again, standing your ground.
- Courageous, such as taking calculated risks, enduring short term discomfort for long term gain, risking displeasure of some people some of the time, taking the lead, not showing fear of other's anger, standing outside the crowd and owning up to differences, using self-protective skills.
- Passionate, such as using full power of the body to show intensity of feeling, being excited and motivated, acting dynamically and energetically, initiating change, showing fervent caring, being fiercely protective, enthusing others.
- Creative, such as thinking quickly, using more wit, spontaneously coming up with new ideas and new views on subjects.
- Forgiving, such as demonstrating a willingness to hear other people's anger and grievances, showing an ability to wipe the slate clean once anger has been expressed.

Biofeedback



Biofeedback mechanism.

Biofeedback is a form of complementary and alternative medicine (CAM) which involves measuring a subject's bodily processes such as blood pressure, heart rate, skin temperature, galvanic skin response (sweating), and muscle tension and conveying such information to him or her in real-time in order to raise his or her awareness and conscious control of the related physiological activities.

By providing access to physiological information about which the user is generally unaware, biofeedback allows users to gain control over physical processes previously considered automatic.

Interest in biofeedback has waxed and waned since its inception in the 1960s; at the beginning of the 21st century it is undergoing something of a renaissance, which some ascribe to the general upswing of interest in complementary and alternative medicine modalities. Neurofeedback has become a popular treatment for ADHD, electromyogram (muscle tension) biofeedback has been widely studied and accepted as a treatment for incontinence disorders, and small home biofeedback machines are becoming available for a variety of uses. Its role in controlling hypertension is becoming recognised

Types of Biofeedback Instrumentation

Electromyogram (EMG)

This is the most common form of biofeedback measurement. An EMG uses electrodes or other types of sensors to measure muscle tension. By the EMG alerting you to muscle tension, you can learn to recognize the feeling early on and try to control the tension right away. EMG is mainly used as a relaxation technique to help ease tension in those muscles involved in backaches, headaches, neck pain and grinding your teeth (bruxism). An EMG may be used to treat some illnesses in which the symptoms tend to worsen under stress, such as asthma and ulcers.

Peripheral Skin Temperature

Sensors attached to your fingers or feet measure your skin temperature. Because body temperature often drops when a person experiences stress, a low reading can prompt you to begin relaxation techniques. Temperature biofeedback can help treat certain circulatory disorders, such as Raynaud's disease, or reduce the frequency of migraines. The

physiological process behind the temperature drop associated with the stress response is quite simply vasoconstriction (blood vessels narrowed by the smooth musculature in their walls)

Galvanic skin response training

Sensors measure the activity of your sweat glands and the amount of perspiration on your skin, alerting you to anxiety. This information can be useful in treating emotional disorders such as phobias, anxiety and stuttering. This is the method most commonly used by lie detector machines. It is the most popular form of biofeedback, with over 500,000 hand-held GSR2 units having been purchased by consumers since the early 70's; it is also one of the biofeedback methods used by the video game series Journey to Wild Divine.

Electroencephalography (EEG)

An EEG monitors the activity of brain waves linked to different mental states, such as wakefulness, relaxation, calmness, light sleep and deep sleep. This is the least common of the methods, mostly due to the cost and availability of an EEG machine.

Origins of biofeedback

Neal Miller, a psychology Ph.D and neuroscientist who worked and studied at Yale University, is generally considered to be the father of modern-day biofeedback. He came across the basic principles of biofeedback while doing animal experimentation conditioning the behavior of rats. His team found that, by stimulating the pleasure center of a rat's brain with electricity, it was possible to train them to control phenomena ranging from their heart rates to their brainwaves. What they did was they had two groups of rats. Both of the groups were put in a maze. One group was given a reward for getting out of the box and the other wasn't reinforced with anything. The group that got the rewards found the end fastest and the other group didn't seem to pick up the maze. Once the other group started to get reinforced they picked up the maze very quickly. This type of learning was called latent learning. Until that point, it was believed that bodily processes such as heart rate were under the control of the autonomic nervous system and not responsive to conscious effort.

The Miller group was one of three major approaches to understanding the limits of self-regulation of the body. Voluntary control of the autonomic nervous system had been considered impossible, only controlled by conditioning. Other threads of inquiry leading to "biofeedback" emerged from clinical attempts to use mind/body self-regulation techniques in healthcare. Elmer Green, PhD of the Menninger Foundation produced some of the original research on the limits of human self-regulation of normally unconscious processes and applied these techniques successfully to migraine headache and hypertension. Barbara Brown, PhD actually coined the word "biofeedback" during the early days of the field, as the Biofeedback Research Society was being formed. Other early pioneers were interested in "consciousness" and looked at EEG self-regulation as a

way to approach mind vs. brain distinctions - see the work of Joe Kamyia, PhD. Other early efforts were directed toward examining the claims of yogi's and other meditators for demonstrated mind/body control and markers of states of consciousness. See Elmer Green et al "Beyond Biofeedback" and Barbara Brown "Stress & The Art of Biofeedback" for some early writings. The Biofeedback Research Society evolved into the Biofeedback Society of America and more recently the Association for Applied Psychophysiology and Biofeedback, a scientific and professional society for the field.

Yoga



A woman practising hatha yoga

Yoga, meaning ‘yoke’ in Sanskrit, is a family of ancient spiritual practices originating in India. It is one of the six schools of Hindu Philosophy, in which it is often paired with Samkhya, and they are referred together as the Samkhya-Yoga school.

Today in India and across the World, Yoga remains a vibrant living tradition and is seen as a means to enlightenment. Karma Yoga (yoga of Action), Jnana Yoga (yoga of Knowledge), Bhakti Yoga (yoga of Devotion), and Raja Yoga (yoga of Meditation) are considered the four different paths of Yoga.

Outside India, Yoga has become primarily associated with the asanas (postures) of Hatha Yoga (a development within Raja Yoga placing more emphasis on physical practice than meditation).

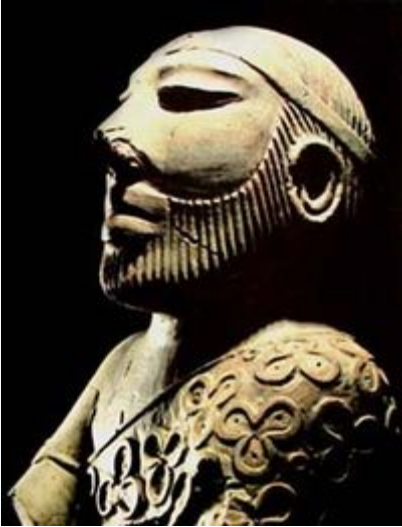
Yoga as a means to enlightenment is central to Vedanta, Hinduism, Buddhism, and Jainism, and has influenced other religious and spiritual practices throughout the world. Nevertheless, Yoga was created by the Hindus and it is defined as a Hindu practice which branches of Hinduism such as Buddhism and Jainism adopted. Ancient Hindu texts establishing the basis for yoga include the Upanishads, the Bhagavad Gita, the Yoga Sutras of Patanjali, the Hatha Yoga Pradipika and many others, which specify the criteria of having successfully mastered a particular yoga technique.



Eka-Pada-Rajakapotasana (Single-Legged Pigeon) demonstrated at a Hindu temple.

Roots of Yoga

Origins



The earliest written accounts of yoga appear in the Rig Veda, which began to be codified between 1500 and 1200 BC. Some historians believe that this 5000-year-old sculpture is of a yogi.

History of Yoga

The word “yoga” derives from the Sanskrit root *yuj* (“to yoke”); which is cognate to modern English “yoke”, “jugal” and “jugum” in Latin. All derive from the Proto-Indo-European root *yeug- meaning “to join” or “unite”. It is generally translated as “union of the individual *atma* (loosely translated to mean soul) with *Paramatma*, the universal soul.” This may be understood as union with the Divine by integration of body, mind, and spirit. One who attempts yoga may loosely be referred to as a *yogi* or in Sanskrit, a *yogin* (masculine) or *yogini* (feminine), although these designations are actually intended for advanced practitioners, who have already made considerable progress along the path towards yoga.

Images of a meditating yogi from the Indus Valley Civilization are thought to be 6 to 7 thousand years old. The earliest written accounts of yoga appear in the Rig Veda, which began to be codified between 1500 and 1200 BC but had been orally transmitted for at least a millennium prior to this. The first quasi-rational, full description of the principles and goals of yoga is to be found in the *Upanisads*, thought to have been composed between 700 and 300 BC. The Upanisads are also called Vedanta since they constitute the end or conclusion of the Vedas (the traditional body of spiritual wisdom). In the Upanisads, the older practice of offering sacrifices and ceremonies to appease external gods gives way instead to a new understanding that man can, by means of an inner sacrifice, become one with the Supreme Being (referred to as Brāhman or Māhātman) -- through moral culture, restraint and training of the mind.

Bhagavad Gita

The Bhagavad Gita ('Song of the Lord') is thought to have been written some time between 400 and 100 BC. Technically it is not an individual work - it is a section of the epic Mahabharata - but it is frequently published and discussed as if it were. To this day, it remains the single most influential and popular work of Hindu philosophy ever written, and it is also the first work devoted explicitly and wholly to yoga. Its narrative concerns a moral dilemma faced by Prince Arjuna, who is advised by Lord Krishna as to the best course of action regarding how he should regain his lost kingdom.

The first and foremost lesson of the Bhagavad Gita is regarding the importance of action - that we have a moral imperative to act, and that by implication non-action is an immoral choice when faced with a dilemma. But this action should always be conducted without selfish motivation. Thus the principle of Karma Yoga, of selfless action. It distinguishes several types of yoga according to what is most appropriate for the different nature of people, such that a devoted person will be most suited to the duty of Bhakti yoga, an intellectual person to Jnana yoga and so on.

The Bhagavad Gita talks of four branches of yoga:

(1) *Karma yoga* (sometimes called *Kriya yoga*), the yoga of action in the world

“ With the body, with the mind, with the intellect, even merely with the senses, the yogins perform action toward self-purification, having abandoned attachment. He who is disciplined in yoga, having abandoned the fruit of action, attains steady peace...”

(2) *Jnana yoga*, the yoga of knowledge and intellectual endeavor

“ When he perceives the various states of being as resting in the One, and from That alone spreading out, then he attains Brahman. They who know, through the eye of knowledge, the distinction between the field and the knower of the field, as well as the liberation of beings from material nature, go to the Supreme.”

(3) Bhakti yoga, the yoga of devotion to a deity

“... those who, renouncing all actions in Me, and regarding Me as the Supreme, worship me... of those whose thoughts have entered into Me, I am soon the deliverer from the ocean of death and transmigration, Arjuna. Keep your mind on Me alone, your intellect on Me. Thus you shall dwell in me hereafter.” “ And he who serves me with the yoga of unswerving devotion, transcending these qualities [binary opposites, like good and evil, pain and pleasure] is ready for absorption in Brahman.”

(4) Raja yoga, the yoga of meditation

“ Establishing a firm seat for himself in a clean place... having directed his mind to a single object, with his thought and the activity of the senses controlled, he should practice yoga for the purpose of self-realization. Holding the body, head and neck erect, motionless and steady, gazing at the tip of his own nose and not looking in any direction, with quieted mind, banishing fear, established in the brahmacharin vow of celibacy, controlling the mind, with thoughts fixed on Me, he should sit, concentrated, devoted to Me. Thus, continually disciplining himself, the yogin whose mind is subdued goes to nirvana, to supreme peace, to union with Me.”

Yoga Sutras of Patanjali

Patanjali and Yoga Sutras of Patanjali

The Yoga Sutras of Patanjali are a book of 196 aphorisms compiled by the sage Patanjali sometime between 100 BC and 200 AD. Patanjali in the Yoga Sutras presents the goal of yoga as ‘the cessation of mental fluctuations’ (cittavrtti nirodha).

In reference to the Bhagavad Gita classifications, Patanjali’s yoga is a form of Raja yoga, as it seeks meditation as the path towards the ultimate goal. Patanjali himself referred to it as “Ashtanga Yoga” (“Eight-Limbed Yoga”), from the eight steps he set out as the practical path towards attainment of enlightenment. This eight-limbed concept became an authoritative feature of Raja yoga from that point forward, and is a core characteristic of practically every Raja yoga variation (including Hatha yoga) taught today.

Patanjali’s Eight Limbs of yoga practice are:

- (1) *Yama* (The five “abstentions”): violence, lying, theft, (illicit) sex, and possessions
- (2) *Niyama* (The five “observances”): purity, contentment, austerities, study, and surrender to god
- (3) *Asana*: Literally means “seat”, and in Patanjali’s Sutras refers to seated positions used for meditation. Later, with the rise of Hatha yoga, asana came to refer to all the “postures”
 - (4) *Pranayama* (“Breath Control”): Control of *prāna* or vital breath
 - (5) *Pratyahara* (“Abstraction”): Reversal of the sense organs
 - (6) *Dharana* (“Concentration”): Fixing the attention on a single object
 - (7) *Dhyana* (“Meditation”): Intense contemplation of the true nature of reality
 - (8) *Samadhi* (“Liberation”): Super-conscious state of enlightenment

Hatha Yoga Pradipika

Hatha yoga

Hatha Yoga is a particular system of Yoga introduced by Yogi Swatmarama, a yogic sage of the 15th century in India, and compiler of the Hatha Yoga Pradipika. Hatha Yoga is a development of - but also differs substantially from - the Raja Yoga of Patanjali, in that it

focuses on *shatkarma*, the purification of the physical as leading to the purification of the mind (*ha*) and *prana*, or vital energy (*tha*). In contrast, the Raja Yoga posited by Patanjali begins with a purification of the mind (*yamas*) and spirit (*niyamas*), then comes to the body via *asana* (body postures) and *pranayama* (breath). Hatha yoga contains substantial tantric influence, and marks the first point at which chakras and kundalini were introduced into the yogic canon. Compared to the seated asanas of Patanjali's Raja yoga which were seen largely as a means of preparing for meditation, it also marks the development of asanas as full body 'postures' in the modern sense.

Hatha Yoga in its many modern variations is the style that most people actually associate with the word "Yoga" today. Because its emphasis is on the body through asana and pranayama practice, many western students are satisfied with the physical health and vitality it develops and are not interested in the other six limbs of the complete Hatha yoga teaching, or with the even older Raja Yoga tradition it is based on.

Other Works

The sage Sri Nathamuni supposedly composed the *Yoga-Rahasya* in the 9th or 10th century CE, although no copies of this work are known to exist. Sri Tirumalai Krishnamacharya claimed to have received knowledge of this text in a vision. Krishnamacharya is also responsible for the only known translation of the *Yogayajnavalkya Samhita*, a dialogue between the great sage Yajnavalkya and his learned wife Gargi. Like the *Gheranda Samhita* and the *Hatha Yoga Pradipika*, the *Yogayajnavalkya Samhita* is generally considered a tantric yoga work.

Yoga Philosophy



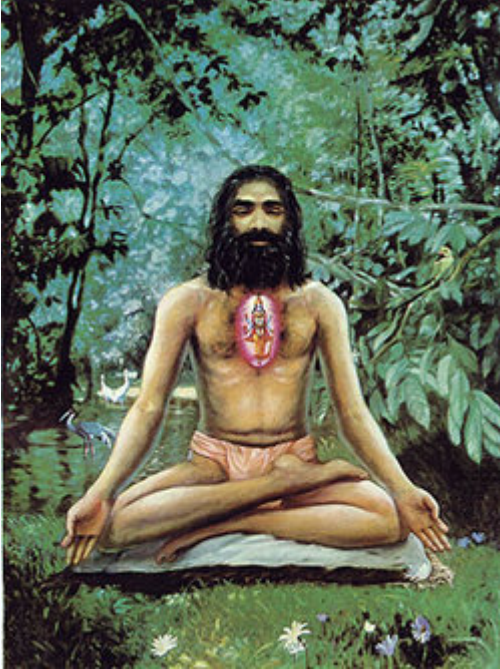
A large statue in Bangalore depicting Lord Shiva meditating.

Yoga has been called a science or technology of liberation. This is because, unlike purely theoretical philosophies, yoga seeks to provide the student with a **practical path** (or indeed many possible paths) towards the common goal of liberation. As explained above, Yoga is a diverse tradition, which makes it quite difficult to provide a concise summary of the philosophy. One approach is to consider common elements that are found in all (or nearly all) branches of the tradition.

Within orthodox Hindu philosophy there are six schools (astika) that recognise Vedic authority, of which Yoga is one. These schools are traditionally placed into three complimentary pairs - Yoga being paired with **Samkhya**, which is the oldest of the orthodox philosophical systems in Hinduism. The Samkhya school has deeply influenced the Hindu Yoga school of philosophy. Samkhya philosophy regards the universe as consisting of two eternal realities: Purusha and Prakriti; it is therefore a strongly dualist and enumerationist philosophy. The Purusha is the centre of consciousness, whereas the Prakriti is the source of all material existence. Sage Kapila is traditionally considered to be the founder of the Samkhya school, although no historical verification is possible. The definitive text of classical Samkhya is the extant Samkhya Karika, written by Ishvara Krishna, circa 200 CE.

Returning to the practical side, the first step for any potential student (*shishya* or *chela*) of yoga is to find a suitable teacher. Traditionally, this relationship would be with a **guru** - who is seen as an embodiment of the Divine - and would involve a relatively full-time commitment to study, often involving manual service to the guru as a form of payment for instruction. A guru may also found an ashram or order of monks. Many gurus write modern translations and elucidations of classical texts, explaining how their particular teachings should be followed. In practice, the modern western student is much more likely to attend a local yoga course and receive instruction from a teacher who are themselves practicing the style of a particular school founded by a guru. It is often a mark of accomplishment and authenticity if a yoga teacher can demonstrate their close link to a guru with a strong lineage.

In all branches of yoga, the ultimate goal is the attainment of **liberation** from worldly suffering and the cycle of birth and death (*Samsara*). Yoga entails mastery over the body, mind, and emotional self, and transcendence of desire. It is said to lead gradually to knowledge of the true nature of reality. The Yogi reaches the enlightened state (*Moksha*) where there is a cessation of thought and an experience of blissful union. This union may be of the individual soul (*Atman*) with the supreme Reality (*Brahman*), as in Vedanta philosophy; or with a specific god or goddess, as in theistic forms of Hinduism and some forms of Buddhism. Enlightenment may also be described as cessation of mental fluctuations (*citta-nirodha*) accompanied by extinction of the limited ego, and direct and lasting perception of the non-dual nature of the universe.



In Hinduism, Yoga is described as the ultimate way to attain God.

Common to most forms of yoga is the practice of concentration (*dharana*) and meditation (*dhyana*). *Dharana*, according to Patanjali's definition, is the "binding of consciousness to a single point." The awareness is concentrated on a fine point of sensation (such as that of the breath entering and leaving the nostrils). Sustained single-pointed concentration gradually leads to meditation (*dhyana*), in which the inner faculties are able to expand and merge with something vast. Meditators sometimes report feelings of peace, joy, and oneness.

The focus of **meditation** may differ from school to school, e.g. meditation on one of the *chakras*, such as the heart center (*anahata*) or the 'third eye' (*ajna*); or meditation on a particular deity, such as Krishna; or on a quality like peace. Non-dualist schools such as *Advaita Vedanta* may stress meditation on the Supreme with no form or qualities (*Nirguna Brahman*). This resembles Buddhist meditation on the Void.

Yoga and Other Traditions

The goals of yoga are expressed differently in different traditions. In theistic Hinduism, yoga may be seen as a set of practices intended to bring people closer to God - to help them achieve union with God. In Buddhism, which does not postulate a creator-type god, yoga may help people deepen their wisdom, compassion, and insight. In Western nations, where there is a strong emphasis on individualism, yoga practice may be an extension of the search for meaning in self, and integration of the different aspects of being. The terms Self-Realization and god-Realization are used interchangeably in Hindu yoga, with the underlying belief that the true nature of self, revealed through the practice of yoga, is of the same nature as God.

For the average person still far from enlightenment, yoga can be a way of increasing one's spiritual awareness, or cultivating compassion and insight. While the history of yoga strongly connects it with Hinduism, proponents claim that yoga is not a religion itself, but contains practical steps which can be found in the esoteric spiritual practices of all religions, as well as those who do not consider themselves religious.

Yoga and Buddhism

It is quite likely that Buddha (Siddhartha Guatama), who is estimated to have lived 563 to 483 BC, actually studied what was known of yoga at that time as part of his extensive education on Hindu philosophy. It is also very likely, given the rapid growth of Buddhism after his death and before the Bhagavad Gita and Patanjali's Yoga Sutras were composed, that Buddhism had some influence on those works.

In either case, there is a considerable overlap between Yoga and Buddhism. Of particular interest is a comparison of the Buddhist eight-fold path and the eight limbs of Patanjali's Yoga. Their moral precepts (the *sila* of Buddhism, the *yama* and *niyama* of yoga) share the Hindu principle of non-violence (*ahimsa*); their final steps point towards a common goal - 6. Buddhist *Samma Vayama* (Effort) vs Yogic *Dharana* (Concentration), 7. Buddhist *Samma Sati* (Mindfulness) vs Yogic *Dhyana* (Meditation) and 8. Buddhist *Samma Samadhi* vs Yogic *Samadhi*. An in relation to views of the Self, yoga's *asmita-samapatti* is designed to eradicate the wrong views on the Self much in the same way Buddha did it in *Anatta-lakkhana-sutta*.

The correlation between Yoga and Buddhism seems to be particularly strong in Tibetan Buddhism, due to various historical events including the influence of Tantra on Tibetan traditions. For example, a system of 108 bodily postures practiced with breath and heart rhythm timing in movement exercises is known as Trul khor or union of moon and sun (channel) prajna energies, and the body postures of Tibetan ancient yogis are depicted on the walls of the Dalai Lama's summer temple of Lukhang.

Yoga and Tantra

Yoga is often mentioned in company with Tantra, and it is true that these traditions have influenced one another over time. They are both families of spiritual texts, practices, and lineages with origins in the Indian subcontinent and both have been popularized in the West.

Tantra has roots in the first millennium, and incorporates Shiva and Shakti worship. It focuses on the kundalini, a three and a half-coiled 'snake' of spiritual energy at the base of the spine that rises through chakras until union ('samadhi') between Shiva and Shakti is ultimately achieved. These concepts were formally introduced into yoga with the Hatha Yoga Pradipika, and because of the subsequent popularity of Hatha Yoga, many Hindu and western yoga teachers now accept these essentially tantric concepts within the yogic philosophy, and this is the most obvious major intersection between tantra and yoga today. The acceptance of tantric kundalini teachings into modern yoga was reinforced by

the New Age movement which accompanied (and fed into) the rise of popularity of yoga in the West.

However, Tantra and Yoga have notable points of difference. Where body consciousness is seen as the root cause of bondage in Yoga, Tantra views the body as a means to understanding, rather than as an obstruction. As a result, in India particularly, Tantra often carries quite negative connotations involving sexual misbehavior and black magic, although it must be said most forms actually follow quite mainstream social mores and this is simply an expression of prejudice.

The actual method of Tantra is quite different to traditional Raja Yoga. It emphasises mantra (Sanskrit prayers, often to gods, that are repeated), yantra (complex symbols representing gods in various forms through intricate geometric figures), and rituals that range from simple murti (statue representations of deities) or image worship to meditation on a corpse.

Yoga Therapy

It has been proposed by T.K.V. Desikachar, through his organisation the KYM , that Yoga be integrated with other medical practices for the purpose of therapeutic healing. The KYM is currently running training courses for Yoga teachers to become Yoga therapists.

It is not clear at this stage to what extent Yoga Therapy can be considered a unique practice, or where it is merely a mixture of traditional Ashtanga yoga with Ayurvedic medicine.

Notable Yogis



Sri Ramakrishna Paramahansa (1836-1886)

Centuries ago, such individuals included **Mirabai** from the Bhakti tradition, **Shankaracharya** from the Jnana Yoga tradition, and **Patanjali**, who formalized the system of Raja Yoga.

Ramakrishna Paramahansa (1836-1886), a Bhakti Yogi, brought about a rebirth of yoga in India. A devotee of Mother Kali and a teacher of Advaita Vedanta, he preached that “all religions lead to the same goal.”

Swami Vivekananda (1863-1902), Ramakrishna’s disciple, is well known for introducing Yoga philosophy to many in the west, as well as reinvigorating Hinduism in a modern setting during India’s freedom struggle.

Sri Aurobindo (1872-1950) translated and interpreted Yogic scriptures, such as the Upanishads and Bhagavad-Gita. His epic poem *Savitri* is a treasure of Hindu Yogic literature, among the longest poems ever written in English. He also founded an Ashram in Pondicherry, which continues to propagate the practice of Integral Yoga, which is Aurobindo’s synthesis of the four main Yogas (Karma, Jnana, Bhakti and Raja).

Swami Sivananda (1887-1963), founder of the Divine Life Society lived most of his life in Rishikesh, India. He wrote an impressive 300 books on various aspects of Yoga, religions, philosophy, spirituality, Hinduism, moral ethics, hygiene and health. He was a pioneering Yogi in bringing Yoga to the west and throughout the world. He was clear, simple and precise in all his teachings. His motto being: “Serve. Love. Give. Meditate. Purify. Realise.”

Sri Tirumalai Krishnamacharya (1888-1989), taught at Mysore Palace from 1924 until his death in 1989. He can be considered the father of modern yoga, inasmuch as he catalysed its popularity. As much for his many accomplishments, he is known as the teacher of four of the most influential yogi gurus who have subsequently spread yoga knowledge throughout the world: **Sri K. Pattabhi Jois** (1915-present), **B.K.S. Iyengar** (1918-present), **Indra Devi** (1899-2002) and his own son **T.K.V. Desikachar**. See Krishnamacharya’s yoga.

Yogiraj Swami Bua (1888?-Present), founded the Indo-American Yoga Vedanta Society in 1969. He received the titles of “Yogiraj” and “Maharaja of Hatha Yoga” from Swami Sivananda. He is maybe the only Yogi who can still perform Khechari Mudra (Tongue Lock). His actual age is unverified: although he is almost certainly over 100 years of age, it is unclear if he is 116 as his devotees claim.

Paramahansa Yogananda (1893-1952), a practitioner of Kriya Yoga, taught Yoga as the binding force that reconciled Hinduism and Christianity. Yogananda founded the Self-Realization Fellowship in Los Angeles, in 1925. His book *Autobiography of a Yogi* continues to be one of the best-selling books on yoga.

A.C. Bhaktivedanta Swami Prabhupada (1896-1977) popularised Bhakti Yoga in many countries through his movement, the International Society for Krishna Consciousness, (popularly known as the Hare Krishna movement) which he founded in 1966. His followers, known for enthusiastic chanting in public places, brought Bhakti Yoga to the attention of many westerners.

Gopi Krishna (1903-1984) was a Kashmiri office worker and spiritual seeker who wrote best-selling autobiographical accounts of his spiritual experiences. He wrote frequently about the nature of kundalini and was important in introducing this concept to a wider western audience.

Maharishi Mahesh Yogi (1917-present) is the founder of the Transcendental Meditation movement, which came to great public knowledge when the Beatles studied it for a short time in the mid-1960s, and still has many followers today. Although not a traditional yoga, it is clearly following that tradition and its goals.

Swami Vishnu-devananda (1927-1993) Founder of the International Sivananda Yoga Vedanta Centers, Swami Vishnu-devananda, was a world authority on Hatha Yoga and Raja Yoga. He originated the Sivananda Yoga Teacher Training Course in 1969 - a certification now common in Yoga practice in the West. Swamiji was also known as the “Flying Swami” for the different peace missions he accomplished around the world.

P.R. Sarkar also known as Baba (1921-1990), founded the socio-spiritual organization Ananda Marga (*the path of bliss*) in 1955. Based on tantric yoga, his teaching emphasizes social service in the context of a political, economic and cultural theory; or “self-realization and service to all.”

How to Deal With Stress

Life can be stressful and at times you'll have to take steps to deal with ongoing stress in a positive way. Stress can have a variety of causes such as family problems, job problems, financial difficulties, false expectations or even the death of someone close to you. It is important to recognise the causes (some stress is natural) and, if possible, take steps to deal with the root of the problem or ask for help from friends and, in severe cases, professionals.

Steps

1. Upon waking up say something positive to yourself.
2. Start the day with reflection, spiritual or otherwise, and set goals of what needs to be achieved in that day. Review these again before sleeping at the end of the day. This can be cathartic allowing you a better nights sleep.
3. Eat a healthy breakfast and snack on healthy food only. Your choice of food is very important when dealing with stress, stay away from sugary snacks and have unsalted nuts and fruit available. Water is the best drink and stay off alcohol which always adds to stress one way or another. Caffeine is also known to raise stress levels, so again it is best to drink water.
4. Listen to supportive positive music. Bach and Mozart can be effective if you like classical music, but tastes are different. Choose music that encourages you to relax and breathe slower.
5. Be aware of your choices; you *always* have a choice. This is true for emotions and work. Sometimes you need to let your emotions out but still stay in control.
6. Talk to friends. This is one of the most important things, as keeping things bottled up can only cause more stress.
7. Know your limits and do not push yourself too hard or beat yourself up when you do not achieve your goals or find that you cannot cope.
8. Try to exercise a little everyday. This releases endorphines that can lower stress levels.
9. Take a good vitamin/mineral mix tablet; some vitamins help you cope with stress.
10. Remember to get enough sleep, and, if possible, get into regular sleeping habits.
11. Learn to say no; you cannot do everything you are asked.
12. Try and visualize positive things; this does not take long but can help you regain focus.
13. Try some relaxation techniques or breathing techniques.
14. Prioritise your tasks and work to finish them starting with the highest priority work.
15. Learn how to delegate.
16. Just focus on one task at a time.
17. Do not worry about what you cannot change. Learning to accept things as they are is an important coping mechanism, but not as easy as it sounds.
18. Congratulate yourself on your achievements.

19. When you feel overwhelmed, use mental imaging to manage short term stress, first find a quiet place then:
20. i. Shift your focus to the area around your heart. You
21. could even think of the volume of space around your
22. heart.
23. ii. Hold your focus there for a count of 10 breaths at
24. least, imagining the breath coming in through your
25. chest.
26. iii. While breathing, remember a positive fun time.
27. iv. Ask your heart intelligence for a less stressful
28. way to handle this situation, and wait for its answer.
29. v. Repeat or imagine yourself on a beach.

Tips

- Try to "use" stress, find something that you want to do or have been putting off and focus on that task but make sure this is not a form of escapism.
- If you know something is going to add to your stress, take positive steps to prepare in advance.
- Identify causes of other hassles and minor stresses and eliminate them if possible.
- Keep a journal or diary where you can write down your thoughts, express yourself and analyze situations.
- Be honest about your emotions, do not deny them or repress them as this will only add to the stress. Do not be afraid to cry as this can relieve anxiety and let out bottled-up emotions which can help you cope.
- If you need to apologize to someone, and it will not make the situation worse, find a way to do so. Guilt adds pain to stress.
- Plan an event in the future to look forward to. Planning using imagination can also help reduce stress.
- Seek out positive friends.
- Make space for yourself and allow yourself to breathe.
- Do not expect perfection from yourself.
- Do not be a people pleaser always giving into others.
- Maintain perspective and be aware that things might not be as stressful as you first thought. Look at what things are important in your life as against the causes of the stress.
- Be a friend to yourself and do not feel guilty for taking time for yourself.
- Learn to forgive, particularly to forgive yourself.

Warnings

- If you cannot cope with the stress, ask for help. If friends and family cannot help, seek out medical advice.
- Avoid escapism as it will not help you cope apart from in the most extreme cases in which you should seek medical help anyway.

- TV can also be a way to avoid stress rather than deal with it.
- Avoid self-medication including alcohol and drugs, prescription or otherwise.
- Be aware that physical symptoms can be a sign of subconscious stress
- Beware of junk food, it is just junk. While sugar might be a quick source of energy, sugar lows happen pretty fast and this can often be severe raising stress levels.

Things You'll Need

- Diary
- Pen
- To Do List
- Patience with yourself

How to Be Calm in a Stressful Situation

The clock is ticking. Everyone's counting on you. Which wire do you cut? While most of us never have to deal with the life-or-death dilemmas of a bomb squad, everyday situations, such as job interviews, public speaking, and family emergencies, can be every bit as stressful if we're not accustomed to dealing with them. Learning how to remain calm in times of stress will not only make things go more smoothly immediately, it can also, over time, help you lead a healthier, happier life. Here's how to keep your cool when the pressure mounts.

Steps

1. Identify the cause of your stress. Is your heart pounding because that idiot just cut you off on the freeway, or is it because of that presentation you have to give to your boss this afternoon? Think for a moment and try to figure out what's really bothering you.
2. Choose your response. Even if you're powerless to change your stressor, you have the power to choose how you'll respond to it. The appropriate response to stress should depend on what's causing it: you can either shake off your stress (ignore it and let it go immediately) or face it head-on. In order to choose your response ask yourself some questions.
 - Does it matter? Yeah, it's all small stuff, but some stuff is smaller than others. Consider how long the stressor will impact you if properly handled. That idiot driver will be gone in a moment if you just let him keep speeding down the road, but the death of a loved one may affect you for years.
 - How much control do you have over the situation? You can't control the rain that's ruining your wedding, but you can control how well you do on your algebra exam tomorrow.

- Is the stressor in the past, present, or future? You can't change the past, but you can react to the present and prepare for the future. Shake off the past.
3. Shake it off. If a situation is beyond your control, or if it just isn't that important, stop worrying about it. Easier said than done? Just do it.
- Inhale deeply and slowly through your nose. Hold each breath for 3-4 seconds, and then exhale slowly through your mouth. Repeat this breathing pattern several times.
 - Think about something else. Get your mind off the stress by thinking about something that makes you happy, such as your kids or spouse (provided they're not the cause of the current stress), or by concentrating about the things you have planned for the day.
 - Visualize relaxing things, such as a deserted island or a country road. Close your eyes and try to picture even minor details about the imaginary place, and you can put yourself in that situation instead of the one you're in.
 - Get away from the cause of the stress. If you can physically escape the stress trigger, do so. Leave the room or pull off the road for a moment to put things in perspective.
 - Get some exercise. Whether you go for a run, do calisthenics, do yoga, or lift weights, 10-20 minutes of physical exercise can relax you even when nothing else can. Getting plenty of exercise also helps you react better to stress in the long run.
4. Face your stressor head-on. Stress about future events is mostly caused by fear, and stress over things in the present is usually caused by a feeling of powerlessness. If you can change the outcome of a situation that matters to you, the quickest way to overcome that fear or to empower yourself is to take action as quickly as possible. The steps below will help you. If you feel paralyzed, use the steps above to relax and temporarily distance yourself from the situation just long enough to be able to see it clearly.
- Realize that getting stressed is not going to resolve the situation. Sitting around worrying is a good way to procrastinate, but procrastinating will only prolong or intensify the stress.
 - Make a plan. Sometimes you can resolve a stressful situation right away with one action, but often you'll need several steps, perhaps over a long period. Write out a plan with attainable goals and a timeline for reaching those goals.
 - Take one step at a time. A complex problem can be overwhelming, even when you've got your plan mapped out, but remember: the journey of a thousand miles begins with one step. Just focus on one small goal at a time.
 - Trust yourself. If people trust you to do something important, they probably have a reason for doing so.
 - Be realistic. If you continue to experience stress because no matter how hard you try you can't take the steps quickly enough, you probably haven't set realistic goals. In a culture that values a can-do attitude, it can

be hard to accept that sometimes you can't do something, at least not within a given period of time. If that's the case, revise your timeline or lower your expectations. If you can't do that, the situation qualifies as one which you can't control. Learn from your experience, but let it go.

Tips

- Facing your stress head-on and doing something about your stressor is really just a way to shake off stress about a situation that you cannot or should not ignore. Once you've resolved the underlying problem, you can shake off the stress because it no longer matters.
- Many stressful situations are avoidable. If you prepare ahead of time for important events and make contingency plans, you may not have to cope with as much stress later. An ounce of prevention is worth a pound of cure.
- Chew gum. It has been shown that the action of chewing can reduce stress; this is why many people who are under constant stress tend to overeat. Chewing gum is a healthier alternative if this method works for you.
- Focus on someone else who is in the same situation as you and try to tune in to that person's calm. Remember that if he or she isn't nervous, you probably don't have to be.
- If physically able, hit something. Punch a pillow, kick the couch, squeeze the heck out of a stuffed toy, etc. You'd be surprised at how quickly physical venting can reduce stress.
- If you experience chronic stress—if you find yourself frequently breaking down in tears, rapidly gaining or losing weight, or experiencing a diminished sex drive—see a doctor about your symptoms. You may have an anxiety disorder or other illness.

Warnings

- Inappropriate reactions to stress or an inability to cope with stress can shave years off your life.
- Getting in the habit of hitting things while angry might make you a violent/aggressive person. It's better to defuse your anger than to try to take it out on other people or things. Never hit a person or other living thing, and make sure that whatever inanimate object you hit won't hurt you.
- Don't self-medicate. Alcohol and drugs may provide a temporary escape, but your problems will be waiting for you when you get back to reality.
- See a health professional immediately if you experience chest pain or dizziness.

How to Relax

Stress has negative consequences to both your health and your relationships. The way to stay healthy and happy is to learn how to relax.

Steps

1. Begin eating a healthy diet--start today! Sugar and caffeine are your enemies, as they both cause severe ups and downs, upsetting your body's ability to regulate energy. Instead of sugary, carbohydrate loaded snacks (like cookies or granola bars), eat fresh fruits and whole grain breads or crackers (sugar-free). Make sure you get plenty of protein, like that found in chicken, lean beef, whole grains, and lowfat dairy.
2. When you feel overwhelmed, find a quiet place. Even the stall of a bathroom will work if you have no other place to go.
3. Once in a quiet place, close your eyes and picture your own personal paradise. Put yourself there and imagine the setting. What do you see around you? Is there a breeze? What do you hear--birds? Waves? Water? Imagine yourself thoroughly enjoying every moment here in your special place.
4. Breathe. Inhale deeply, counting to five, then exhale slowly, counting to five. Do this ten times.
5. When you return to work (or school), pick one task--only one--and focus on it. When it is finished, pick the next one. Do not allow yourself to think about all the other millions of things you have to do. Think about the task at hand only, until you have to set it aside and work on something else.
6. Avoid people who walk around with their hair on fire. Stress can be contagious, so avoid transmitters.
7. If you are engaging in behaviors that make you feel guilty, stop! Seek help from a professional if necessary, but don't allow destructive behavior to sabotage your life and your health. Guilt is a potent source of stress, so get rid of the source of guilt by behaving yourself.
8. Exercise every day. You don't need to work out like a body builder or celebrity. At least twenty minutes (or more, if you like) every day of moderate activity, like walking or bike-riding, is the best known, scientifically proven way to significantly reduce stress. Walk on a treadmill every day for twenty minutes, take the stairs instead of the elevator, and park a little further away from the entrance to stores. You will be amazed at how much easier you overcome stress when you exercise regularly.
9. Learn to prioritize. Make a list, every single day, of what you must accomplish that day. Put the most important things at the top and list every task in descending order of importance. Learn to be proactive and take care of things before they become a problem, then your time will be more productive and you will feel less stress.

Tips

- Drink tea instead of coffee.

- Smile and laugh. Laughing releases endorphins, which fight stress, help you relax, and remind you that life is about more than work. Make it a point to smile more, even if it feels strange at first.
- When you first start cutting sugar from your diet you will crave it terribly. Be strong! After a couple of days the cravings will subside and you will notice (already) how much better you feel.
- Take a multi-vitamin, some vitamins help relieve stress.

Warnings

- Avoid toxic people! People who try to guilt you into doing things, or tell you you're not good enough, are people you should spend minimal time with (yes, even if they are family). Your life and health are YOUR responsibility.
- If stress is causing serious problems such as ulcers, headaches, or other symptoms, seek help from a doctor.
- If you feel the need to drink alcohol or use drugs to "escape" from your stress, please seek professional help IMMEDIATELY.

How to De Stress Yourself

Life comes at you in all directions. To remain positive, you must tap into your inner self.

Steps

1. Wake up every day with a smile on your face.
2. Whatever happened yesterday, keep it there. Today is a new day. A new day is a new challenge and deserves a new approach. Try doing things a little differently each day.
3. Get some alone time. If you spend your whole day surrounded by people, you are going to end up stressed. Spend some time in your bedroom reading a book.
4. Start and complete everything you do. Don't do things half-assed.
5. Make peace with yourself and your past. If you hurt a person's feelings yesterday, apologize to them today. If you hold onto guilt and anger, you will live a stressed and miserable life.
6. Learn to forgive, rather than forget.
7. Try going on a walk for a few minutes. The fresh air and alone time gives you time to think and cool off.
8. Put on some music you love, draw a warm bubble bath, grab a bar of chocolate, and grab a good, funny book. Stay in as long as you want. Chances are you'll come out in a great mood.
9. Listen to running water. Something you can also do is gently massage your sides from your armpits down to your hips with your fingernails.

10. Feel the air around you. Let it flow gently around you and engulf you. Feel it blow through your hands. This works best when you're outside.

Tips

- Whenever you are faced with a stressful situation always remember that there is another way to handle things.
- Being alone for 5-15 minutes can really make your stress disappear. It allows your body and mind to calm down.
- If your creative 'bug' is to paint or sew, complete the task. It will make you feel proud of yourself. That gives you new confidence.
- Learn to breathe properly. The best way is to inhale from the pit of your stomach and then slowly exhale through your nose.
- Repeat a mantra like, "I feel relaxed and wonderful." Repeat it as many times as necessary.
- Avoid being critical towards yourself. It brings your good mood down, which could also lead to you being a pessimist about everything.
- There is a lesson to be learned in everything.

Warnings

- If being stressed is making you lean towards drugs or alcohol, remember that this is just a quick fix and ultimately solves nothing.
- If stress is starting to affect your life, consider talking to a professional.

How to Manage Stress Quickly

Does your heart have intelligence? Can learning to switch your focus from the external stressor to your heart intelligence actually work? In a heart beat!

Recent research has shown that there are neurons in the heart, and that with the proper training the heart can learn to make its beat very coherent when breathing patterns and mental imagery change. When my heart beat becomes coherent soon every cell in the body is functioning at that rhythm! You can use this tool to manage your body chemistry in the moment (road rage, for example) or as a life style tool, practicing heart coherence every five minutes for two heart beats. When the heart beat is coherent, you are pulsing the hormone DHEA rather than adrenaline or cortisol.

Steps

1. Shift your focus to the area around your heart. You could even think of the volume of space around your heart.
2. Hold your focus there for a count of 10 breaths at least, imagining the breath coming in through your chest.

3. While breathing, remember a positive fun time.
4. Ask your heart intelligence for a less stressful way to handle this situation, and wait for its answer.
5. Repeat at every stop light.

Tips

- Heart intelligence is affiliative and cooperative. You can contrast heart intelligence and head intelligence before acting.

How to Dance to Relieve Stress

You know, we all get a little stressed out sometimes. This dance, if done with full motivation, will rock your socks; and your body!

Steps

1. Pick a good song. A really good one is 'Turning Japanese' (as found on the Charlie's Angels CD or in the Windows Media Player, type in under music: Turning Japanese). For this exercise, we'll do this for Turning Japanese.
2. What to wear, something that makes you feel sexy. This can be a cute top, or even a pretty pair of lingerie. I recommend a pretty bra and some dance pants; this dance needs mobility. If you want, wear a crazy hairdo you can take out during the song.
3. When you're ready, make sure you have a large space to dance in. When the guitar intro begins, start out on the floor. Just kneeling is fine, with your arms outstretched on the ground. When the lyrics start, jump up and walk around and sway your hips exaggeratedly.
4. Do a shimmy shake and bend over, still shimmying, scream "I am so frickin' awesome!"
5. Come up and jump around. Take out your hair and shake like a sexy beast.
6. Dance whatever comes to you.
7. Air-guitar for the chorus, then shake your arms in the air. Fan yourself like you're so hot you make even yourself sweat. Pretend like your taunting a cute guy, and dance like you would if you were a superstar.
8. Freestyle it. Make stuff up!
9. When the music gets slow, near the end, lie on your back and make snow angels on the ground. Hop up, point at an invisible bitch made of stress and shout 'come and get me!' Run around like it's chasing you and laugh as loud as you can, and show off some moves. The song ends, and bam, the stress is dead. If it makes you feel good, shout, "Ha! No stupid stress can get me."
10. Try a DansKinetics class. It's uses dance as a method of emotional release.

Tips

- Just let loose. That's what stress relieving is all about.
- After the dance, go ahead and grab a burger or your favorite ice cream. You earned it!

Warnings

- Drink plenty of water
- Don't shake your head too much, you may lose balance and fall on something. Ouch!
- Don't let the "bitch of stress" catch you; chances are, she won't :)

Things You'll Need

- Water
- Large space
- Comfortable clothes that make you feel sexy

How to Deal With Stressful Situations in School



Take yourself out of it

Sometimes it could be pretty hard to deal with the many stressors of school, such as taking a test and seeing the principal for something you didn't do wrong. So, here is a technique for when you feel like you're gonna blow in school.

Steps

1. Ask the teacher for permission to leave the classroom. It is best to ask to go to the bathroom, because he or she will assume you gotta go!
2. Go to the bathroom if you really have to go! If you don't have to, just walk around the school a few times, particularly near a quiet place such as the auditorium or the choir room. Take a drink if you need one.

3. Run a few laps in the gym if it's really bad. Most phys ed teachers won't care and they'll be happy if you got some exercise. Also, you might get extra credit from the gym teacher.
4. Get your CD player or iPod and listen to a few songs before you go back to class.
5. Return to class all de-stressed and ready to move on with the day. Also, if you spent more than 5 minutes outside of the classroom, tell her that you really had to go potty. Or that you felt a little nauseous (queasy, sick) and had to sit down for a time to recover.

Tips

- See the student nurse or counselor if you feel really rotten and alone. At least they can cover your absence for you with an explanation and may give you some time to talk things through.
- If things are so bad that all you want to do is go home, ask to call your parents and get someone to come and collect you. If this isn't possible, try to go and lie down in the sick bay for a short while; at least it will give you quiet rest and some time to think over things.

Warnings

- There is always someone to help you - a teacher, a counselor, a friend, a parent, a relative, a nurse, a doctor, a church person. Do not despair into thinking you're alone because you're not. If the first person you talk to about your worries dismisses you, find someone who will listen and care.

How to Tell if You Are Depressed

How do you know if you are depressed or are just having a bad day? Take an inventory. If you have several of the following symptoms you may be depressed.

Steps

1. Try to engross yourself in one of your hobbies that you have always enjoyed. Depressed people have difficulty enjoying almost anything.
2. Determine how much of the time you are tearful or have a lump in your throat or stomach.
3. Determine if your appetite has changed recently.
4. Decide whether your sleep habits have changed.
5. Determine whether you are spending more or less time with friends.
6. Monitor your television watching, gaming behavior, and alcohol intake. If they have increased significantly it could be a symptom of depression.

7. Ask someone you are close to if you are grouchier than usual.
8. Ask yourself if you have wanted yourself or someone close to you to be gone recently.

Tips

- If you have several of the above symptoms you may want to seek professional counseling. Counselors are skilled at finding what makes a person depressed and guiding the person through the recovery steps.
- If you have been depressed for a long time it may take a long time to recover from depression.

Warnings

- Determine if your feeling is due to a recent event: the loss of a friend, an argument, an anniversary. If it is due to a recent event it is not depression, it is sadness.
- If you have been sick lately your feelings may be more physical than emotional.
- If you have allergies or food sensitivities you could be having a reaction rather than being depressed.
- Depression can be caused by emotions as well as physical ailments such as thyroid deficiency. See a doctor to determine if you have a physical illness.

How to Overcome Being Burned Out

How to overcome being burned out.

Steps

1. Figure out why you are burned out. This will help you figure out how to solve the problem. There is usually one major reason but there might be more than one factor contributing to you being so tired, fatigued or unmotivated.
2. Get some sleep. Everything becomes better after you have had adequate rest. Adequate means at least 8 straight hours (12 hours if you're still a kid). No less! Make sure you are getting enough sleep (or as much as possible). Do not waste time when you should be sleeping!
3. When you wake up, stop and think about how you feel. Drink a lot of water (dehydration leads to fatigue)
4. Make sure to take it easy for a few days or weeks, however long you need. If this is not possible, maximize the portion of your free time you spend truly relaxing. Playing video games or surfing the net is *not* relaxing. It is actually more strenuous on your eyes, hands, etc.
5. Eat healthy (vegetables, fruits, not too many processed foods or meats).

6. Relax your mind. Think of things or places that make you feel calm. Put some relaxing music on. Close your eyes and just sit or lie for 15 minutes. You'll be amazed at the difference it makes.

Tips

- Drink plenty of water
- Get enough sleep
- Don't think about stressful, tiring things
- Don't think about how tired you are

Warnings

- Don't waste time watching TV, on the computer or playing video games when you should be relaxing or sleeping!

How to Host a Stress Free Small Dinner Party at Home

Yes you can enjoy your own dinner party! The 3 keys to hosting a stress-free dinner party are to keep it simple, do as many chores as you can ahead of the big day, and prepare as many dishes as you can ahead of your guests' arrival.

Steps

1. Keep it simple: Limit the guest list to eight people, six is even better. Choose a neutral table setting that lets your colorful centerpiece flowers pop. Serve no more than three courses. Feature only one "fancy" dish. Plan a mostly make ahead menu with few items that need last minute kitchen time.
2. Do ahead. Two weeks in advance, invite your guests and choose a menu with mostly make-ahead dishes. A few days ahead, shop for the non-perishables and clean house. The day ahead, shop for the perishables and set the dinner table and do a last minute clean of the bathroom and living room.
3. Prepare your make ahead recipes the day before or morning of your dinner party.

Tips

- Remember that your guests are the real stars of the evening, not your food. The food is only your pleasant excuse for getting together, so don't worry about putting on a gourmet restaurant spread.
- Never serve a dish you haven't made before. This way you avoid disasters like apologising for a recipe that doesn't taste the way you hoped it would.

- You are part of the company and your guests expect to talk with you. Keeping it simple means you get to spend time with your guests instead of in the kitchen.
- Don't get nervous about choosing wine. If you're not sure what to serve, just go to your local wine store and ask for something simple and inexpensive that most people are likely to enjoy. Remember people love to give advice, and wine store staff are no different!
- Check the ingredient list for every recipe against your pantry contents. Make sure you already have the item on hand or add it to your shopping list. This has the added bonus of preventing you from buying duplicates!
- In your last minute schedule be sure to include time for you to get dressed, set out the appetizers, put on the dinner music and - yes - sit down for a few minutes before your guests arrive. Wow! What a stress-free way to start enjoying your own dinner party.

How to Plan a Spa Adventure



Spa luxury

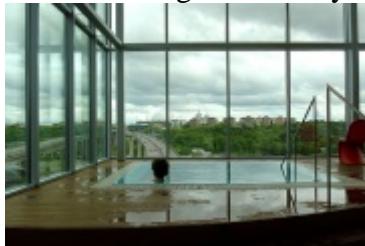
Spas are a great way to relieve stress! Stressed out people are taking advantage of spas in record numbers. More and more women, men and teens are prioritizing spa visits, making salons and spas among the trendiest hangouts to date.

Steps

1. Relax at a spa. A spa experience is a great way to relieve stress. Stress is one of the major causes of diseases like cancer and most other sicknesses. It has been proven that the benefits of a spa experience are very effective in reducing stress. Not only that, where else can one feel pampered and beautiful at affordable prices? Most of all, spas provide a fun way to just hang out with your friends and acquaintances.
2. Use a spa experience to kick off good habits. A spa gives you an all-encompassing experience. Depending on ones choice, it can be a great way to

jumpstart a diet or make a major lifestyle change in a supportive environment. The relaxing atmosphere of a spa experience has a very powerful healing effect on your body. It used to be that spas were about relaxation, beauty and pampering. Now the new demand is for healing modalities-body therapies that focus on moving energy in the body.

3. Try the basics first. Basic treatments at a spa may involve several things:
 - o The most popular service and the best place to start is therapeutic massage. Massage has a number of health benefits.
 - o The second most popular service is the European facial. This involves skin analysis, deep cleansing, massage, and extraction. Body treatments are essentially facials for the whole body. The most popular body treatment is a salt glow or body scrub.



4.

Water relaxation

Experiment with the variety of water facilities. Hydrotherapy tubs, steambaths and saunas may be included in the array of utilities offered. Saunas are deeply relaxing and a great way to melt away stress. They are valuable in stimulating circulation, improving the elimination of waste products through the skin.

5. Splurge on the nails and toes too. Many spas offer manicures and pedicures, and spa/salons offer hair cutting and styling services.
6. Tone up after pampering. Some spas offer a wide selection of exercise and outdoor activities to choose from. Even an exercise as simple as walking will make and keep our bodies fit. Our bodies can only function if the body structure is sound and our blood is pure. Spas continue to be considered a sanctuary from stress.

Tips

- Always check to see what's included. Meals? Treatments? Tax? Service fees? And some resort spas even charge extra for yoga or aerobic classes.
- Tips of 15-20% are typical at day spas. The therapist gets just 40% to 50% of the fee for the service at most, so they rely on tips.
- Destination and resort spas often charge a service fee of 15-20%, but they keep most of that-sometimes all of it-themselves. So if you really appreciated your service, tips are appreciated if not expected.

- Best Spa-Bargains is that you can save by traveling off-season. In the Northeast, rates are lower in the winter, higher in the summer. It's the reverse in the Southwest and Florida.
- Plan your stay during the week rather than on weekends. A Thursday night arrival will cost more than a Sunday night arrival.
- Look for special bring-a-friend programs. You can also make the most of your time by arriving early in the morning on your first day and leaving late your last day.

How to Erase Anxiety Naturally With Herbs

Feeling a little anxious? Maybe you will find some of these mixtures soothing.

Steps

1. Consider the following herbs to help you:
 - Melissa Officinalis. An herb native to the Mediterranean that is used throughout the world to calm the nervous system and digestive tract and to reduce blood pressure.
 - Passion Flower is an herbal sedative that can give you a sense of calm and also helps you sleep better. Also, it can help you control nausea and the "butterflies in the stomach".
 - Lavandula Angustifolia or lavender. It's known for its calming properties and is widely used in aromatherapy to induce relaxation. In a recent study it was found that the scent from lavender was enough to relax and relieve depression in many of the participants.
 - Fennel is a popular tea in India. This herb relieves gastrointestinal upsets that are related to anxiety.
 - Kava kava is an herbal remedy used to ease the symptoms of anxiety, stress and depression. It's non addictive and can be taken as an infusion. People with liver problems are recommended to stay away from kava kava.
 - Valerian is used around the world to reduce stress and promote sleep. It's safe and non addictive.
 - Chamomile is an herb used to treat mild anxiety and stress. It's also used to settle an upset stomach.
2. A study by The American Journal of Epidemiology showed coca's usefulness in treating gastrointestinal ailments, as well as motion and altitude sickness. They found it to be a fast acting antidepressant and helpful in combating hypoglycemia and diabetes. Furthermore, coca leaves deliver healthy doses of vitamins A, C, B and E, phosphorous, iron, potassium, magnesium, calcium and protein.

Tips

- you can get coca tea at amazon.com , works better than any opiate prescription and it ships within the US

How to Get Rid of Anger

There are different views on how to get rid of anger. Here are a few steps to help take off the edge.

Steps

1. Scream into a pillow.
2. Draw a picture of the person you are mad at and rip it into pieces.
3. Dance or listen to music.
4. Kick your soccer ball into a tree or shed. Pretend it's the person you are really mad at.
5. Write in your diary, or try some reading.
6. Count to ten, then take deep breaths. You can repeat this, if you have to.
7. Consider the good points about the person who makes you mad.
8. Breathe.
9. Go do some kind of physical activity.
10. Throw a fit (without anyone else around). Scream and stomp and throw yourself on the floor if you want. Bite a pillow, punch a pillow, throw it against the wall.
11. Listen to some soothing music, or a favorite song.
12. Lay down
13. Talk to them calmly and tell them how you feel.
14. Draw a funny picture about the person you're angry at!
15. Write a story that uses the emotions you are experiencing.
16. Think of something completely different.

Tips

- Make sure that when you talk to them, your body language shows that you are calm enough to talk it out.
- Make sure that when you kick the soccer ball, you are outside and not near any breakables or plants (just so you don't get into any more trouble).
- Beat something up i.e. pillow, punching bag, anything! (As long as it's not alive...)
- Consider the reason you're angry, and try focusing that rage into doing something about it. Try fixing the source of your anger.

Warnings

- Hitting or punching a tree can result in bodily injury.
- Try not to spaz out at all to avoid this mess

How to Find an Easy Way to Relax

Whether you have kids or not, you can always find easy ways to relax. Prop your feet up, let go of the stress, and clear your mind. Here are some tips for easy ways to relax.

Steps

1. Draw a warm bath, light candles around your tub, dim the lights, add bubbles, lavender, or just keep the water plain.
2. You can curl up on your couch with a blanket, and a good book, maybe even a cup of tea, cocoa, or coffee.
3. Do yoga, it relaxes your body, and helps clear your mind.
4. Go to your local spa for a great massage. You will feel so great afterwards.
5. Lay on your bed or sofa, have some soft music playing in the background (or nature Cd's) and listen to ocean waves, waterfalls, or birds.
6. Go for a walk. If you live near a park with a fountain, or near a beach or lake, the calming sound of water will soothe you. Just a regular walk will also relax you.
7. If you can, go swimming, either at your local pool, a friend or relatives home, or in a lake. Swimming is great for reducing stress.
8. Do the activities or hobbies that relax you (fishing, sewing, singing, painting, taking photographs), whatever it is that keeps your mind off the things that normally stress you out, or things that you just need a break from every now and then.

Tips

- If you need to call a sitter or the grandparents for you to be able to relax, then don't hesitate to do so.



STRESS...At Work

Stress in Today's Workplace



The longer he waited, the more David worried. For weeks he had been plagued by aching muscles, loss of appetite, restless sleep, and a complete sense of exhaustion. At first he tried to ignore these problems, but eventually he became so short-tempered and irritable that his wife insisted he get a checkup. Now, sitting in the doctor's office and wondering what the verdict would be, he didn't even notice when Theresa took the seat beside him. They had been good friends when she worked in the front office at the plant, but he hadn't seen her since she left three years ago to take a job as a customer service representative. Her gentle poke in the ribs brought him around, and within minutes they were talking and gossiping as if she had never left.

"You got out just in time," he told her. "Since the reorganization, nobody feels safe. It used to be that as long as you did your work, you had a job. That's not for sure anymore. They expect the same production rates even though two guys are now doing the work of three. We're so backed up I'm working twelve-hour shifts six days a week. I swear I hear those machines humming in my sleep. Guys are calling in sick just to get a break. Morale is so bad they're talking about bringing in some consultants to figure out a better way to get the job done."

"Well, I really miss you guys," she said. "I'm afraid I jumped from the frying pan into the fire. In my new job, the computer routes the calls and they never stop. I even have to schedule my bathroom breaks. All I hear the whole day are complaints from unhappy customers. I try to be helpful and sympathetic, but I can't promise anything without getting my boss's approval. Most of the time I'm caught between what the customer wants and company policy. I'm not sure who I'm supposed to keep happy. The other reps are so uptight and tense they don't even talk to one another. We all go to our own little cubicles and stay there until quitting time. To make matters worse, my mother's health is deteriorating. If only I could use some of my sick time to look after her. No wonder I'm in here with migraine headaches and high blood pressure. A lot of the reps are seeing the employee assistance counselor and taking stress management classes, which seems to help. But sooner or later, someone will have to make some changes in the way the place is run."

What Workers Say About Stress on the Job

Survey by Northwestern National Life



Survey by the Families and Work Institute



Survey by Yale University



Scope of Stress in the American Workplace

David's and Theresa's stories are unfortunate but not unusual. Job stress has become a common and costly problem in the American workplace, leaving few workers untouched. For example, studies report the following:

- One-fourth of employees view their jobs as the number one stressor in their lives.
- Three-fourths of employees believe the worker has more on-the-job stress than a generation ago.
- Problems at work are more strongly associated with health complaints than are any other life stressor-more so than even financial problems or family problems.

Fortunately, research on job stress has greatly expanded in recent years. But in spite of this attention, confusion remains about the causes, effects, and prevention of job stress. This booklet summarizes what is known about job stress and what can be done about it.

What Is Job Stress?

Job stress can be defined as the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. Job stress can lead to poor health and even injury.

The concept of job stress is often confused with challenge, but these concepts are not the same. Challenge energizes us psychologically and physically, and it motivates us to learn new skills and master our jobs. When a challenge is met, we feel relaxed and satisfied. Thus, challenge is an important ingredient for healthy and productive work. The importance of challenge in our work lives is probably what people are referring to when they say "a little bit of stress is good for you."

But for David and Theresa, the situation is different-the challenge has turned into job demands that cannot be met, relaxation has turned to exhaustion, and a sense of satisfaction has turned into feelings of stress. In short, the stage is set for illness, injury, and job failure.



**Job stress
results when the requirements
of the job do not match the
capabilities, resources,
or needs of the worker.**

What are the Causes of Job Stress?

Nearly everyone agrees that job stress results from the interaction of the worker and the conditions of work. Views differ, however, on the importance of *worker characteristics* versus *working conditions* as the primary cause of job stress. These differing viewpoints are important because they suggest different ways to prevent stress at work.

According to one school of thought, differences in individual characteristics such as personality and coping style are most important in predicting whether certain job conditions will result in stress-in other words, what is stressful for one person may not be a problem for someone else. This viewpoint leads to prevention strategies that focus on workers and ways to help them cope with demanding job conditions.

Although the importance of individual differences cannot be ignored, scientific evidence suggests that certain working conditions are stressful to most people. The excessive workload demands and conflicting expectations described in David's and Theresa's stories are good examples. Such evidence argues for a greater emphasis on working conditions as the key source of job stress, and for job redesign as a primary prevention strategy.

In 1960, a Michigan court upheld a compensation claim by an automotive assemblyline worker who had difficulty keeping up with the pressures of the production line. To avoid falling behind, he tried to work on several assemblies at the same time and often got parts mixed up. As a result, he was subjected to repeated criticism from the foreman. Eventually he suffered a psychological breakdown.

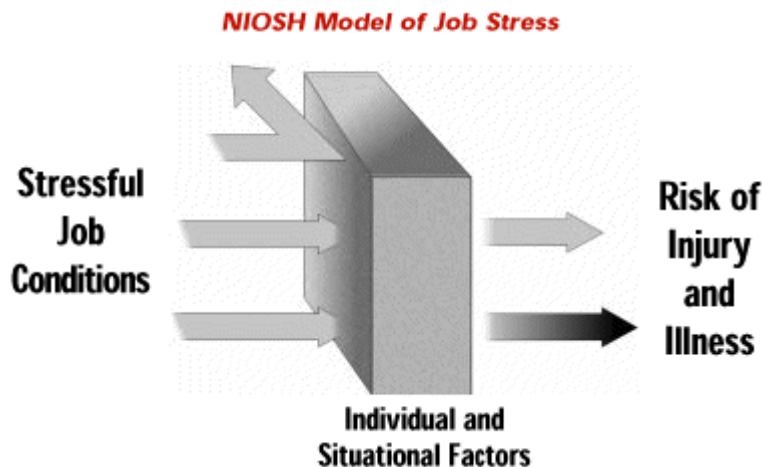
By 1995, nearly one-half of the States allowed worker compensation claims for emotional disorders and disability due to stress on the job [note, however, that courts are reluctant to uphold claims for what can be considered ordinary working conditions or just hard work].

NIOSH Approach to Job Stress

On the basis of experience and research, NIOSH favors the view that working conditions play a primary role in causing job stress. However, the role of individual factors is not ignored. According to the NIOSH view, exposure to stressful working conditions (called job stressors) can have a direct influence on worker safety and health. But as shown below, individual and other situational factors can intervene to strengthen or weaken this influence. Theresa's need to care for her ill mother is an increasingly common example of an individual or situational factor that may intensify the effects of stressful working conditions. Examples of individual and situational factors that can help to reduce the effects of stressful working conditions include the following:

- Balance between work and family or personal life
- A support network of friends and coworkers
- A relaxed and positive outlook

NIOSH Model of Job Stress



Job Conditions That May Lead to Stress

The Design of Tasks. Heavy workload, infrequent rest breaks, long work hours and shiftwork; hectic and routine tasks

that have little inherent meaning, do not utilize workers' skills, and provide little sense of control.

Example: David works to the point of exhaustion. Theresa is tied to the computer, allowing little room for flexibility, self-initiative, or rest.

Management Style. Lack of participation by workers in decision- making, poor communication in the organization, lack of family-friendly policies.

Example: Theresa needs to get the boss's approval for everything, and the company is insensitive to her family needs.

Interpersonal Relationships. Poor social environment and lack of support or help from coworkers and supervisors.

Example: Theresa's physical isolation reduces her opportunities to interact with other workers or receive help from them.

Work Roles. Conflicting or uncertain job expectations, too much responsibility, too many "hats to wear."

Example: Theresa is often caught in a difficult situation trying to satisfy both the customer's needs and the company's expectations.

Career Concerns. Job insecurity and lack of opportunity for growth, advancement, or promotion; rapid changes for which workers are unprepared.

Example: Since the reorganization at David's plant, everyone is worried about their future with the company and what will happen next.

Environmental Conditions. Unpleasant or dangerous physical conditions such as crowding, noise, air pollution, or ergonomic problems.

Example: David is exposed to constant noise at work.

Job Stress and Health

Stress sets off an alarm in the brain, which responds by preparing the body for defensive action. The nervous system is aroused and hormones are released to sharpen the senses, quicken the pulse, deepen respiration, and tense the muscles. This response (sometimes called the fight or flight response) is important because it helps us defend against threatening situations. The response is preprogrammed biologically. Everyone responds in much the same way, regardless of whether the stressful situation is at work or home.

Short-lived or infrequent episodes of stress pose little risk. But when stressful situations go unresolved, the body is kept in a constant state of activation, which increases the rate of wear and tear to biological systems. Ultimately, fatigue or damage results, and the ability of the body to repair and defend itself can become seriously compromised. As a result, the risk of injury or disease escalates.

In the past 20 years, many studies have looked at the relationship between job stress and a variety of ailments. Mood and sleep disturbances, upset stomach and headache, and disturbed relationships with family and friends are examples of stress-related problems that are quick to develop and are commonly seen in these studies. These early signs of job stress are usually easy to recognize. But the effects of job stress on chronic diseases are more difficult to see because chronic diseases take a long time to develop and can be influenced by many factors other than stress. Nonetheless, evidence is rapidly accumulating to suggest that stress plays an important role in several types of chronic health problems-especially cardiovascular disease, musculoskeletal disorders, and psychological disorders.

Health care expenditures are nearly 50% greater for workers who report high levels of stress.

Early Warning Signs of Job Stress

Headache
Sleep disturbances
Difficulty in concentrating
Short temper
Upset stomach
Job dissatisfaction
Low morale



Job Stress and Health: What the Research Tells Us

Cardiovascular Disease

Many studies suggest that psychologically demanding jobs that allow employees little control over the work process increase the risk of cardiovascular disease.

Musculoskeletal Disorders

On the basis of research by NIOSH and many other organizations, it is widely believed that job stress increases the risk for development of back and upper- extremity musculoskeletal disorders.

Psychological Disorders

Several studies suggest that differences in rates of mental health problems (such as depression and burnout) for various occupations are due partly to differences in job stress levels. (Economic and lifestyle differences between occupations may also contribute to some of these problems.)

Workplace Injury

Although more study is needed, there is a growing concern that stressful working conditions interfere with safe work practices and set the stage for injuries at work.

Suicide, Cancer, Ulcers, and Impaired Immune Function

Some studies suggest a relationship between stressful working conditions and these health problems. However, more research is needed before firm conclusions can be drawn.

Stress, Health, and Productivity

Some employers assume that stressful working conditions are a necessary evil-that companies must turn up the pressure on workers and set aside health concerns to remain productive and profitable in today's economy. But research findings challenge this belief. Studies show that stressful working conditions are actually associated with increased absenteeism, tardiness, and intentions by workers to quit their jobs-all of which have a negative effect on the bottom line.

Recent studies of so-called healthy organizations suggest that policies benefiting worker health also benefit the bottom line. A healthy organization is defined as one that has low rates of illness, injury, and disability in its workforce and is also competitive in the marketplace. NIOSH research has identified organizational characteristics associated with both healthy, low-stress work and high levels of productivity. Examples of these characteristics include the following:

- Recognition of employees for good work performance
- Opportunities for career development
- An organizational culture that values the individual worker
- Management actions that are consistent with organizational values

Stress Prevention and Job Performance

St. Paul Fire and Marine Insurance Company conducted several studies on the effects of stress prevention programs in hospital settings. Program activities included (1) employee and management education on job stress, (2) changes in hospital policies and procedures to reduce organizational sources of stress, and (3) establishment of employee assistance programs.

In one study, the frequency of medication errors declined by 50% after prevention activities were implemented in a 700-bed hospital. In a second study, there was a 70% reduction in malpractice claims in 22 hospitals that implemented stress prevention activities. In contrast, there was no reduction in claims in a matched group of 22 hospitals that did not implement stress prevention activities.



What Can Be Done About Job Stress?

The examples of Theresa and David illustrate two different approaches for dealing with stress at work.

Stress Management. Theresa's company is providing stress management training and an employee assistance program (EAP) to improve the ability of workers to cope with difficult work situations. Nearly one-half of large companies in the United States provide some type of stress management training for their workforces. Stress management programs teach workers about the nature and sources of stress, the effects of stress on health, and personal skills to reduce stress-

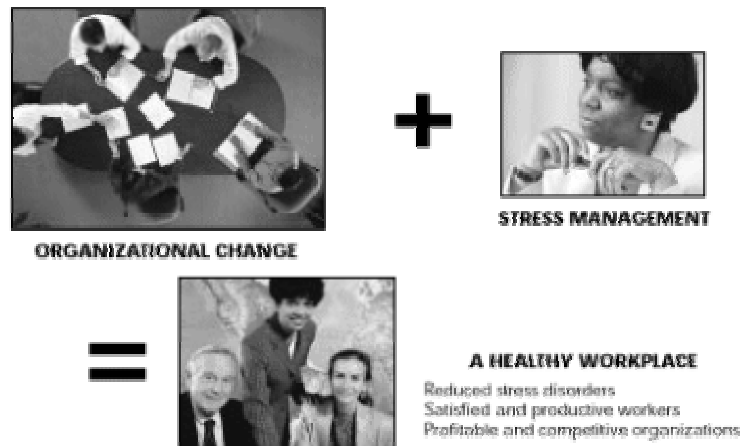
for example, time management or relaxation exercises. (EAPs provide individual counseling for employees with both work and personal problems.) Stress management training may rapidly reduce stress symptoms such as anxiety and sleep disturbances; it also has the advantage of being inexpensive and easy to implement. However, stress management programs have two major disadvantages:

- The beneficial effects on stress symptoms are often short-lived.
- They often ignore important root causes of stress because they focus on the worker and not the environment.

Organizational Change. In contrast to stress management training and EAP programs, David's company is trying to reduce job stress by bringing in a consultant to recommend ways to improve working conditions. This approach is the most direct way to reduce stress at work. It involves the identification of stressful aspects of work (e.g., excessive workload, conflicting expectations) and the design of strategies to reduce or eliminate the identified stressors. The advantage of this approach is that it deals directly with the root causes of stress at work. However, managers are sometimes uncomfortable with this approach because it can involve changes in work routines or production schedules, or changes in the organizational structure.

As a general rule, actions to reduce job stress should give top priority to organizational change to improve working conditions. But even the most conscientious efforts to improve working conditions are unlikely to eliminate stress completely for all workers. For this reason, a combination of organizational change and stress management is often the most useful approach for preventing stress at work.

Preventing Stress at Work: A Comprehensive Approach



How to Change the Organization to Prevent Job Stress

- Ensure that the workload is in line with workers' capabilities and resources.
- Design jobs to provide meaning, stimulation, and opportunities for workers to use their skills.
- Clearly define workers' roles and responsibilities.
- Give workers opportunities to participate in decisions and actions affecting their jobs.
- Improve communications—reduce uncertainty about career development and future employment prospects.
- Provide opportunities for social interaction among workers.
- Establish work schedules that are compatible with demands and responsibilities outside the job.



Preventing Job Stress - Getting Started

No standardized approaches or simple "how to" manuals exist for developing a stress prevention program. Program design and appropriate solutions will be influenced by several factors—the size and complexity of the organization, available resources, and especially the unique types of stress problems faced by the organization. In David's company, for example, the main problem is work overload. Theresa, on the other hand, is bothered by difficult interactions with the public and an inflexible work schedule.

Although it is not possible to give a universal prescription for preventing stress at work, it is possible to offer guidelines on the process of stress prevention in organizations. In all situations, the process for stress prevention programs involves three distinct steps: problem identification, intervention, and evaluation. These steps are outlined beginning on page 17. For this process to succeed, organizations need to be adequately prepared. At a minimum, preparation for a stress prevention program should include the following:

- Building general awareness about job stress (causes, costs, and control)
- Securing top management commitment and support for the program
- Incorporating employee input and involvement in all phases of the program
- Establishing the technical capacity to conduct the program (e.g., specialized training for in-house staff or use of job stress consultants)

Bringing workers or workers and managers together in a committee or problem-solving group may be an especially useful approach for developing a stress prevention program. Research has shown these participatory efforts to be effective in dealing with ergonomic problems in the workplace, partly because they capitalize on workers' firsthand knowledge of hazards encountered in their jobs. However, when forming such working groups, care must be taken to be sure that they are in compliance with current labor laws.*

*The National Labor Relations Act may limit the form and structure of employee involvement in worker-management teams or groups. Employers should seek legal assistance if they are unsure of their responsibilities or obligations under the National Labor Relations Act.

Steps Toward Prevention

Low morale, health and job complaints, and employee turnover often provide the first signs of job stress. But sometimes there are no clues, especially if employees are fearful of losing their jobs. Lack of obvious or widespread signs is not a good reason to dismiss concerns about job stress or minimize the importance of a prevention program.

Step 1 - Identify the Problem. The best method to explore the scope and source of a suspected stress problem in an organization depends partly on the size of the organization and the available resources. Group discussions among managers, labor representatives, and employees can provide rich sources of information. Such discussions may be all that is needed to track down and remedy stress problems in a small company. In a larger organization, such discussions can be used to help design formal surveys for gathering input about stressful job conditions from large numbers of employees.

Regardless of the method used to collect data, information should be obtained

about employee perceptions of their job conditions and perceived levels of

- Hold group discussions with employees.
- Design an employee survey.
- Measure employee perceptions of job conditions, stress, health, and satisfaction.
- Collect objective data.

stress, health, and satisfaction. The list of job conditions that may lead to stress (page 9) and the warning signs and effects of stress (page 11) provide good starting points for deciding what information to collect.

- Analyze data to identify problem locations and stressful job conditions.

Regardless of the method used to collect data, information should be obtained about employee perceptions of their job conditions and perceived levels of stress, health, and satisfaction. The list of job conditions that may lead to stress (page 9) and the warning signs and effects of stress (page 11) provide good starting points for deciding what information to collect.

Objective measures such as absenteeism, illness and turnover rates, or performance problems can also be examined to gauge the presence and scope of job stress. However, these measures are only rough indicators of job stress-at best.

Data from discussions, surveys, and other sources should be summarized and analyzed to answer questions about the location of a stress problem and job conditions that may be responsible-for example, are problems present throughout the organization or confined to single departments or specific jobs?

Survey design, data analysis, and other aspects of a stress prevention program may require the help of experts from a local university or consulting firm. However, overall authority for the prevention program should remain in the organization.

Step 2 - Design and Implement Interventions. Once the sources of stress at work have been identified and the scope of the problem is understood, the stage is set for design and implementation of an intervention strategy.

In small organizations, the informal discussions that helped identify stress problems may also produce fruitful ideas for prevention. In large organizations, a more formal process may be needed. Frequently, a team is asked to develop recommendations based on analysis of data from Step 1 and consultation with

outside experts.

Certain problems, such as a hostile work environment, may be pervasive in the organization and require company-wide interventions. Other problems such as excessive workload may exist only in some departments and thus require more narrow solutions such as redesign of the way a job is performed. Still other problems may be specific to certain employees and resistant to any kind of organizational change, calling instead for stress management or employee assistance interventions. Some interventions might be implemented rapidly (e.g., improved communication, stress management training), but others may require additional time to put into place (e.g., redesign of a manufacturing process).

- Target source of stress for change.
- Propose and prioritize intervention strategies.
- Communicate planned interventions to employees.
- Implement Interventions.

Step 3 - Evaluate the Interventions. Evaluation is an essential step in the intervention process. Evaluation is necessary to determine whether the intervention is producing desired effects and whether changes in direction are needed.

Time frames for evaluating interventions should be established. Interventions

- Conduct both short- and long-term evaluations.
- Measure employee perceptions of job

involving organizational change should receive both short- and long-term scrutiny. Short-term evaluations might be done quarterly to provide an early indication of program effectiveness or possible need for redirection. Many interventions produce initial effects that do not persist. Long-term evaluations are often conducted annually and are necessary to determine whether interventions produce lasting effects.

- conditions, stress, health, and satisfaction.
- Measure employee perceptions of job conditions, stress, health, and satisfaction.
- Include objective measures.
- Refine the intervention strategy and return to Step 1.

Evaluations should focus on the same types of information collected during the problem identification phase of the intervention, including information from employees about working conditions, levels of perceived stress, health problems, and satisfaction. Employee perceptions are usually the most sensitive measure of stressful working conditions and often provide the first indication of intervention effectiveness. Adding objective measures such as absenteeism and health care costs may also be useful. However, the effects of job stress interventions on such measures tend to be less clear-cut and can take a long time to appear.

The job stress prevention process does not end with evaluation. Rather, job stress prevention should be seen as a continuous process that uses evaluation data to refine or redirect the intervention strategy.

The following pages provide examples of actions some organizations have taken to help prevent stress in their workplaces.



Stress Prevention Programs: What Some Organizations Have Done

Example 1

A Small Service Organization. A department head in a small public service organization sensed an escalating level of tension and deteriorating morale among her staff. Job dissatisfaction and health symptoms such as headaches also seemed to be on the rise. Suspecting that stress was a developing problem in the department, she decided to hold a series of all-hands meetings with employees in the different work units of the department to explore this concern further. These meetings could be best described as brainstorming sessions where individual employees freely expressed their views about the scope and sources of stress in their units and the measures that might be implemented to bring the problem under control.

Using the information collected in these meetings and in meetings with middle managers, she concluded that a serious problem probably existed and that quick action was needed. Because she was relatively unfamiliar with the job stress field, she decided to seek help from a faculty member at a local university who taught courses on job stress and organizational behavior.

After reviewing the information collected at the brainstorming sessions, they decided it would be useful for the faculty member to conduct informal classes to raise awareness about job stress—its causes, effects, and prevention—for all workers and managers in the department. It was also decided that a survey would be useful to obtain a more reliable picture of problematic job conditions and stress-related health complaints in the department. The faculty member used information from the meetings with workers and managers to design the survey. The faculty member was also involved in the distribution and collection of the anonymous survey to ensure that workers felt free to respond honestly and openly about what was bothering them. He then helped the department head analyze and interpret the data.

Analysis of the survey data suggested that three types of job conditions were linked to stress complaints among workers:

- Unrealistic deadlines



- Low levels of support from supervisors
- Lack of worker involvement in decision-making.

Having pinpointed these problems, the department head developed and prioritized a list of corrective measures for implementation. Examples of these actions included (1) greater participation of employees in work scheduling to reduce unrealistic deadlines and (2) more frequent meetings between workers and managers to keep supervisors and workers updated on developing problems.

Example 2

A Large Manufacturing Company. Although no widespread signs of stress were evident at work, the corporate medical director of a large manufacturing company thought it would be useful to establish a stress prevention program as a proactive measure. As a first step he discussed this concept with senior management and with union leaders. Together, they decided to organize a labor-management team to develop the program. The team comprised representatives from labor, the medical/employee assistance department, the human resources department, and an outside human resources consulting firm. The consulting firm provided technical advice about program design, implementation, and evaluation. Financial resources for the team and program came from senior management, who made it clear that they supported this activity. The team designed a two-part program. One part focused on management practices and working conditions that could lead to stress. The second part focused on individual health and well-being.

To begin the part of the program dealing with management practices and job conditions, the team worked with the consulting firm to add new questions about job stress to the company's existing employee opinion survey. The survey data were used by the team to identify stressful working conditions and to suggest changes at the work group and/or organizational level. The employee health and well-being part of the program consisted of 12 weekly training sessions. During these sessions, workers and managers learned about common sources and effects of stress at work, and about self-protection strategies such as relaxation methods and improved health behaviors. The training sessions were offered during both work and nonwork hours.

The team followed up with quarterly surveys of working conditions and stress symptoms to closely monitor the effectiveness of this two-part program.

Managing Traumatic Stress: After the Hurricanes

The effects of the recent hurricanes will be long-lasting and the resulting trauma can reverberate even with those not directly affected by the disaster.

It is common for people who have experienced traumatic situations to have very strong emotional reactions.

Understanding normal responses to these abnormal events can aid you in coping effectively with your feelings, thoughts, and behaviors, and help you along the path to recovery.

How should I help myself and my family?

Many people already possess the skills of resilience and will bounce back on their own, given time. There also are a number of steps you can take to help restore emotional well being and a sense of control following a natural disaster, including the following:

- Give yourself time to heal. Anticipate that this will be a difficult time in your life. Allow yourself to mourn the losses you have experienced. Try to be patient with changes in your emotional state.
- Ask for support from people who care about you and who will listen and empathize with your situation. But keep in mind that your typical support system may be weakened if those who are close to you also have experienced or witnessed the trauma.
- Communicate your experience in whatever ways feel comfortable to you - such as by talking with family or close friends, or keeping a diary.

- Find out about local support groups that often are available such as for those who have suffered from natural disasters. These can be especially helpful for people with limited personal support systems.
- Try to find groups led by appropriately trained and experienced professionals such as psychologists. Group discussion can help people realize that other individuals in the same circumstances often have similar reactions and emotions.
- Engage in healthy behaviors to enhance your ability to cope with excessive stress. Eat well-balanced meals and get plenty of rest. If you experience ongoing difficulties with sleep, you may be able to find some relief through relaxation techniques. Avoid alcohol and drugs.
- Establish or reestablish routines such as eating meals at regular times and following an exercise program. This can be especially important when the normal routines of daily life are disrupted. Even if you are in a shelter and unable to return home, establish routines that can bring comfort. Take some time off from the demands of daily life by pursuing hobbies or other enjoyable activities.
- Help those you can. Helping others, even during your own time of distress, can give you a sense of control and can make you feel better about yourself.
- Avoid major life decisions such as switching careers or jobs if possible because these activities tend to be highly stressful.

When should I seek professional help?

Many people are able to cope effectively with the emotional and physical demands brought about by a natural disaster by using their own support systems. It is not unusual, however, to find that serious problems persist and continue to interfere with daily living. For example, some may feel overwhelming nervousness or lingering sadness that adversely affects job performance and interpersonal relationships.

Individuals with prolonged reactions that disrupt their daily functioning should consult with a trained and experienced mental health professional. Psychologists and other appropriate mental health providers help educate people about common responses to extreme stress. These professionals work with individuals affected by trauma to help them find constructive ways of dealing with the emotional impact.

With children, continual and aggressive emotional outbursts, serious problems at school, preoccupation with the traumatic event, continued and extreme withdrawal, and other signs of intense anxiety or emotional difficulties all point to the need for professional assistance. A qualified mental health professional such as a psychologist can help such children and their parents understand and deal with thoughts, feelings and behaviors that result from trauma

Managing Traumatic Stress: Dealing with the Hurricanes from Afar

Even if you were not directly affected by the hurricanes, you may experience a sense of vulnerability from witnessing the results of the disaster.

This can be especially acute if a relative or friend was affected by the disasters, particularly if you have been unable to get news on their welfare.

- Take a news break. Watching endless replays of footage from the disasters can make your stress even greater. Although you'll want to keep informed - especially if you have loved ones affected by the disasters - take a break from watching the news.
- Be kind to yourself. Some feelings when witnessing a disaster may be difficult for you to accept. You may feel relief that the disaster did not touch you, or you may feel guilt that you were left untouched when so many were affected. Both feelings are common.

- Keep things in perspective. Although a disaster often is horrifying, you should focus as well on the things that are good in your life.

- Find a productive way to help if you can. Many organizations are set up to provide financial or other aid to victims of natural disasters. Contributing can be a way to gain some "control" over the event.

- Control what you can. There are routines in your life that you can continue and sometimes you need to do those and take a break from even thinking about the disasters.

- Look for opportunities for self-discovery and recognize your strengths. People often learn something about themselves and may find that they have grown in some respect as a result of persevering through hardship. Many people who have experienced tragedy and adversity have reported better relationships, greater sense of personal strength even while feeling vulnerable, increased sense of self-worth, deeper spirituality, and heightened appreciation for life.

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With children, continual and aggressive emotional outbursts, serious problems at school, preoccupation with the traumatic event, continued and extreme withdrawal, and other signs of intense anxiety or emotional difficulties all point to the need for professional assistance. A qualified mental health professional such as a psychologist can help such children and their parents understand and deal with thoughts, feelings and behaviors that result from trauma.

Managing Traumatic Stress: the Hurricanes and Children

The intense anxiety and fear that often follow a disaster can be especially troubling for surviving children, especially if children were victims of the disaster or were separated from their families. Some may regress and demonstrate younger behaviors such as thumb sucking or bed wetting. Children may be more prone to nightmares and fear of sleeping alone. Performance in school may suffer. Other changes in behavior patterns may include throwing tantrums more frequently, or withdrawing and becoming more solitary.

There are several things parents and others who care for children can do to help alleviate the emotional consequences of trauma, including the following:

- Spend more time with children and let them be more dependent on you during the months following the trauma - for example, allowing your child to cling to you more often than usual. Physical affection is very comforting to children who have experienced trauma.

- Provide play experiences to help relieve tension. Younger children in particular may find it easier to share their ideas and feelings about the event through non-verbal activities such as drawing.

- Be available and encourage older children to ask questions they may have, as well as sharing their thoughts and feelings with you and with one another. This helps reduce their confusion and anxiety related to the trauma. Respond to questions in terms they can comprehend. Reassure them repeatedly that you care about them and that you understand their fears and concerns.

- Keep regular schedules for activities such as eating, playing and going to bed to help restore a sense of security and normalcy, even if your family has been relocated to a shelter or other temporary housing.

-Provide safe opportunities for children to help others – helping others offers a sense of control and can help children feel better about themselves.

- Reduce the number of times children see the trauma on the news. Repeatedly watching broadcasts of the disaster can re-traumatize children.

When should children seek professional help?

Many children are able to cope effectively with the emotional and physical demands brought about by a natural disaster by using their own support systems. It is not unusual, however, to find that serious problems persist and continue to interfere with daily living.

With children, continual and aggressive emotional outbursts, serious problems at school, preoccupation with the traumatic event, continued and extreme withdrawal, and other signs of intense anxiety or emotional difficulties all point to the need for professional assistance. A qualified mental health professional such as a psychologist can help such children and their parents understand and deal with thoughts, feelings and behaviors that result from trauma.

Managing Traumatic Stress: Tips for Recovering From Disasters and Other Traumatic Events

The September 11th terrorist attacks were the type of events we thought could never happen. Like other types of disasters they were unexpected, sudden and overwhelming. In some cases, there are no outwardly visible signs of physical injury, but there is nonetheless a serious emotional toll. It is common for people who have experienced traumatic situations to have very strong emotional reactions. Understanding normal responses to these abnormal events can aid you in coping effectively with your feelings, thoughts, and behaviors, and help you along the path to recovery.

What happens to people after a disaster or other traumatic event?

Shock and denial are typical responses to terrorism, disasters and other kinds of trauma, especially shortly after the event. Both shock and denial are normal protective reactions.

Shock is a sudden and often intense disturbance of your emotional state that may leave you feeling stunned or dazed. Denial involves your not acknowledging that something very stressful has happened, or not experiencing fully the intensity of the event. You may temporarily feel numb or disconnected from life.

As the initial shock subsides, reactions vary from one person to another. The following, however, are normal responses to a traumatic event:

- Feelings become intense and sometimes are unpredictable. You may become more irritable than usual, and your mood may change back and forth dramatically. You might be especially anxious or nervous, or even become depressed.
- Thoughts and behavior patterns are affected by the trauma. You might have repeated and vivid memories of the event. These flashbacks may occur for no apparent reason and may lead to physical reactions such as rapid heart beat or sweating. You may find it difficult to concentrate or make decisions, or become more easily confused. Sleep and eating patterns also may be disrupted.
- Recurring emotional reactions are common. Anniversaries of the event, such as at one month or one year, as well as reminders such as aftershocks from earthquakes or the sounds of sirens, can trigger upsetting memories of the traumatic experience. These 'triggers' may be accompanied by fears that the stressful event will be repeated.
- Interpersonal relationships often become strained. Greater conflict, such as more frequent arguments with family members and coworkers, is common. On the other hand, you might become withdrawn and isolated and avoid your usual activities.

- Physical symptoms may accompany the extreme stress. For example, headaches, nausea and chest pain may result and may require medical attention. Pre-existing medical conditions may worsen due to the stress.

How do people respond differently over time?

It is important for you to realize that there is not one 'standard' pattern of reaction to the extreme stress of traumatic experiences. Some people respond immediately, while others have delayed reactions - sometimes months or even years later. Some have adverse effects for a long period of time, while others recover rather quickly.

And reactions can change over time. Some who have suffered from trauma are energized initially by the event to help them with the challenge of coping, only to later become discouraged or depressed.

A number of factors tend to affect the length of time required for recovery, including:

- The degree of intensity and loss. Events that last longer and pose a greater threat, and where loss of life or substantial loss of property is involved, often take longer to resolve.
- A person's general ability to cope with emotionally challenging situations. Individuals who have handled other difficult, stressful circumstances well may find it easier to cope with the trauma.
- Other stressful events preceding the traumatic experience. Individuals faced with other emotionally challenging situations, such as serious health problems or family-related difficulties, may have more intense reactions to the new stressful event and need more time to recover.

How should I help myself and my family?

There are a number of steps you can take to help restore emotional well being and a sense of control following a terrorist act, a disaster or other traumatic experience, including the following:

- Give yourself time to heal. Anticipate that this will be a difficult time in your life. Allow yourself to mourn the losses you have experienced. Try to be patient with changes in your emotional state.
- Ask for support from people who care about you and who will listen and empathize with your situation. But keep in mind that your typical support system may be weakened if those who are close to you also have experienced or witnessed the trauma.
- Communicate your experience in whatever ways feel comfortable to you - such as by talking with family or close friends, or keeping a diary.
- Find out about local support groups that often are available such as for those who have suffered from natural disasters, or for women who are victims of rape. These can be especially helpful for people with limited personal support systems.
- Try to find groups led by appropriately trained and experienced professionals. Group discussion can help people realize that other individuals in the same circumstances often have similar reactions and emotions.
- Engage in healthy behaviors to enhance your ability to cope with excessive stress. Eat well-balanced meals and get plenty of rest. If you experience ongoing difficulties with sleep, you may be able to find some relief through relaxation techniques. Avoid alcohol and drugs.
- Establish or reestablish routines such as eating meals at regular times and following an exercise program. Take some time off from the demands of daily life by pursuing hobbies or other enjoyable activities.
- Avoid major life decisions such as switching careers or jobs if possible because these activities tend to be highly stressful.

How do I take care of children's special needs?

The intense anxiety and fear that often follow a disaster or other traumatic event can be especially troubling for children. Some may regress and demonstrate younger behaviors such as thumb sucking or bed wetting. Children may be more prone to nightmares and fear of sleeping alone. Performance in school may suffer. Other changes in behavior patterns may include throwing tantrums more frequently, or withdrawing and becoming more solitary.

There are several things parents and others who care for children can do to help alleviate the emotional consequences of trauma, including the following:

- Spend more time with children and let them be more dependent on you during the months following the trauma - for example, allowing your child to cling to you more often than usual. Physical affection is very comforting to children who have experienced trauma.
- Provide play experiences to help relieve tension. Younger children in particular may find it easier to share their ideas and feelings about the event through non-verbal activities such as drawing.
- Encourage older children to speak with you, and with one another, about their thoughts and feelings. This helps reduce their confusion and anxiety related to the trauma. Respond to questions in terms they can comprehend. Reassure them repeatedly that you care about them and that you understand their fears and concerns.
- Keep regular schedules for activities such as eating, playing and going to bed to help restore a sense of security and normalcy.

When should I seek professional help?

Some people are able to cope effectively with the emotional and physical demands brought about by a natural disaster or other traumatic experience by using their own support systems. It is not unusual, however, to find that serious problems persist and continue to interfere with daily living. For example, some may feel overwhelming nervousness or lingering sadness that adversely affects job performance and interpersonal relationships.

Individuals with prolonged reactions that disrupt their daily functioning should consult with a trained and experienced mental health professional. Psychologists and other appropriate mental health providers help educate people about normal responses to extreme stress. These professionals work with individuals affected by trauma to help them find constructive ways of dealing with the emotional impact.

With children, continual and aggressive emotional outbursts, serious problems at school, preoccupation with the traumatic event, continued and extreme withdrawal, and other signs of intense anxiety or emotional difficulties all point to the need for professional assistance. A qualified mental health professional can help such children and their parents understand and deal with thoughts, feelings and behaviors that result from trauma.

Managing Traumatic Stress: Tips for Recovering From Natural Disasters

When a natural disaster affects a community, the resulting trauma can reverberate even with those not directly affected by the disaster.

Disasters of this type can be sudden and overwhelming. In addition to the often catastrophic toll on lives and property, a disaster like a tsunami (tidal wave), hurricane or fire can have an impact on those who have lost loved ones and even those who feel more vulnerable as a result of learning about the disaster.

It is common for people who have experienced traumatic situations to have very strong emotional reactions.

Understanding normal responses to these abnormal events can aid you in coping effectively with your feelings, thoughts, and behaviors, and help you along the path to recovery.

What happens to people after a disaster or other traumatic event?

Shock and denial are typical responses to large-scale natural disasters, especially shortly after the event. Both shock and denial are normal protective reactions.

Shock is a sudden and often intense disturbance of your emotional state that may leave you feeling stunned or dazed.

Denial involves your not acknowledging that something very stressful has happened, or not experiencing fully the intensity of the event. You may temporarily feel numb or disconnected from life.

As the initial shock subsides, reactions vary from one person to another. The following, however, are normal responses to a traumatic event:

- Feelings become intense and sometimes are unpredictable. You may become more irritable than usual, and your mood may change back and forth dramatically. You might be especially anxious or nervous, or even become depressed.
- Thoughts and behavior patterns are affected by the trauma. You might have repeated and vivid memories of the event. These flashbacks may occur for no apparent reason and may lead to physical reactions such as rapid heartbeat or sweating. You may find it difficult to concentrate or make decisions, or become more easily confused. Sleep and eating patterns also may be disrupted.
- Recurring emotional reactions are common. Anniversaries of the event, such as at one month or one year, as well as reminders such as aftershocks from earthquakes or the sounds of sirens, can trigger upsetting memories of the traumatic experience. These 'triggers' may be accompanied by fears that the stressful event will be repeated.
- Interpersonal relationships often become strained. Greater conflict, such as more frequent arguments with family members and coworkers, is common. On the other hand, you might become withdrawn and isolated and avoid your usual activities.
- Physical symptoms may accompany the extreme stress. For example, headaches, nausea and chest pain may result and may require medical attention. Pre-existing medical conditions may worsen due to the stress.

How do people respond differently over time?

It is important for you to realize that there is not one 'standard' pattern of reaction to the extreme stress of traumatic experiences. Some people respond immediately, while others have delayed reactions - sometimes months or even years later. Some have adverse effects for a long period of time, while others recover rather quickly.

And reactions can change over time. Some who have suffered from trauma are energized initially by the event to help them with the challenge of coping, only to later become discouraged or depressed.

A number of factors tend to affect the length of time required for recovery, including:

- The degree of intensity and loss. Events that last longer and pose a greater threat, and where loss of life or substantial loss of property is involved, often take longer to resolve.
- A person's general ability to cope with emotionally challenging situations. Individuals who have handled other difficult, stressful circumstances well may find it easier to cope with the trauma.
- Other stressful events preceding the traumatic experience. Individuals faced with other emotionally challenging situations, such as serious health problems or family-related difficulties, may have more intense reactions to the new stressful event and need more time to recover.

How should I help myself and my family?

There are a number of steps you can take to help restore emotional well being and a sense of control following a natural disaster, including the following:

- Give yourself time to heal. Anticipate that this will be a difficult time in your life. Allow yourself to mourn the losses you have experienced. Try to be patient with changes in your emotional state.
- Ask for support from people who care about you and who will listen and empathize with your situation. But keep in mind that your typical support system may be weakened if those who are close to you also have experienced or witnessed the trauma.
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How do I take care of children's special needs?

The intense anxiety and fear that often follow a disaster can be especially troubling for surviving children, especially if children were victims of the disaster. Some may regress and demonstrate younger behaviors such as thumb sucking or bed wetting. Children may be more prone to nightmares and fear of sleeping alone. Performance in school may suffer. Other changes in behavior patterns may include throwing tantrums more frequently, or withdrawing and becoming more solitary.

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- Encourage older children to speak with you, and with one another, about their thoughts and feelings. This helps reduce their confusion and anxiety related to the trauma. Respond to questions in terms they can comprehend. Reassure them repeatedly that you care about them and that you understand their fears and concerns.
- Keep regular schedules for activities such as eating, playing and going to bed to help restore a sense of security and normalcy.
- Reduce the number of times children see the trauma on the news. Repeatedly watching broadcasts of the disaster can re-traumatize children.

For those struggling to cope from afar

Even if you were not in the actual disaster, you may experience a sense of vulnerability from witnessing the results of the disaster.

- Take a news break. Watching endless replays of footage from the disaster can make your stress even greater. Although you'll want to keep informed - especially if you have loved ones affected by the disaster - take a break from watching the news.
- Be kind to yourself. Some feelings when witnessing a disaster may be difficult for you to accept. You may feel relief that the disaster did not touch you, or you may feel guilt that you were left untouched when so many were affected. Both feelings are normal.
- Keep things in perspective. Although a disaster often is horrifying, you should focus as well on the things that are good in your life.
- Find a productive way to help if you can. Many organizations are set up to provide financial or other aid to victims of natural disasters. Contributing can be a way to gain some "control" over the event.
- Look for opportunities for self-discovery. People often learn something about themselves and may find that they have grown in some respect as a result of persevering through hardship. Many people who have experienced tragedy and adversity have reported better relationships, greater sense of personal strength even while feeling vulnerable, increased sense of self-worth, deeper spirituality, and heightened appreciation for life.

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