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## STRESS MANAGEMENT THROUGH YOGA AND YOGIC DIET

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Today, mental and physical disabilities are on the increase. We find more and more diseased bodies, debilitated minds, vicious habits, and fast ways of life. Stress and strain plague life today. Throughout the World people succumb to life's trials and tribulations. Worry and Anxiety infests people's thoughts. Sorrow and suffering disturb their Mind .Stress related disease is reaching epidemic proportions, exacting a heavy toll on the quality of human life. Stress of modern civilized life is a big problem even in rich countries. In the U.S.A. one out of every eight persons, goes to a psychiatrist, due to depression, sometime during his life.1,25,000 Americans are hospitalized, due to mental illness and at least 70,000 commit suicide, on this account every year.

In India the philosophical and religious texts provide considerable information. They contain references to the very many causes of stress-like States. Even more important is the in formations on how these conditions can be managed. There are at least two approaches to the teaching of stress management. In the first approach one begins with the nature of human Existence and moves systematically to its dysfunction, i.e., sees how Stress is generated under certain circumstances (the Ramayana is a classic example of this approach). The second approach is a exemplified by the Bhagawad Gita: a problem is identified and the principles of dealing with it are woven around the problem and its resolution (e.g., the dilemma faced by Arjuna and Krishnan 's discourse on how to resolve it.

The word '*stress*' in common English usage means conditions causing hardship or time of trouble, danger and tension. The term "*stress*" was first used by the endocrinologist Hnasselye in the 1930s to identify physiological responses in laboratory animals.

### **Definition of stress**

'Stress' (a word derived from Latin) was used popularly in the seventeenth century to means 'hardship, adversity or affliction' Stress is characterized as set of internal responses to the environment that leads to a state of imbalance.

### **Historical back ground of the stress:**

Stress has origin right from the time of cave man whose life is threatened by various natural forces like wind, water, fire, earth and space. The cave man who



comes out into the open space or forest area with mountain in which a cave is part and parcel. In trying to get food, he may indulge in various practices like climbing, hunting, and running after the animal or running back to the cave. When threat ended via a powerful animals like lion, tiger, bear etc., he gets emotionally disturbed. If he does not get food for consequent days in some cases it may leads to stress situation with the relevant physiological and psychological changes so also a threat situation may rise with presence of another cave man or women so the origin of stress is trace full to the early cave man. As civilization extended and taken deep roots like pastoral man, forming man and later industrial man. Stress is often known as a twentieth century syndrome, a product of man's. Advance to reach and adapt to modern condition of life, a product of industrialization, urbanization and other technological advances. He has to constantly face situation leading to stress. The released of stress hormones varies according to the severity of stress felt. Man's brain cannot differentiate between real and imagined stress. In Physics the word Stress is used to refer to the distribution internal force exerted on a material body, resulting in strain. In the early part of twentieth century the term Stress was used in Psychological forces referring to a mental strain or adverse situations. The advocates of holistic medicine to refer to a harmful environmental agent that could cause illness. In 1934 Walter Cannon refer to external environmental factor which disturbed the "homeostasis". In 1930s Hans Style's study of his laboratory experiments use the term to refer to the state of the organism how he /she responded and adapted to the environment. His theories of a universal non-specific stress response was carried with great interest by the academic physiology professors who have taken up wide ranging research programmes and publications. It was also got support from voters of psychosomatic medicine, in which experimental physiology.

### ***Physiology of Stress***

When a person is active his muscles work hard need more oxygen from your blood. Automatic mechanism (reflexes) come into play so that the heart pumps harder and quicker and more of the blood is derivate to the muscles .If more blood goes to the muscles less has to go elsewhere, and so the intestine and other organs receive less.

This is the main reason why your mouth feels dry. Glands which keep the mouth with saliva are part of the digestive organs. When they receive less blood mouth is no longer well lubricated also your muscles work away and burn up most of oxygen from once blood and replace it with carbon dioxide. When the level of carbon dioxide and also make efforts get more oxygen into the blood .1Which is turn is pumped to the muscles. Thus you can see the demands set in motions by your energies followed by body but only at the cost of less activity elsewhere, you



temporally through your body off balance by dramatic changes, You must have noticed that it does not catch up completely as when you stop your exercise it takes few minutes for the shorter.

You compare the feeling noticed above with those when you felt emotionally disturbed-angry, anxious, excited or frightened- you will recognize many similarities. You breathe more deeply and quickly, your heart pumps faster, your sweat on your face, palms, soles and muscles gets tense. The difference is that one is not usually physically energetic at this time. All these changes can go on without you moving from an armchair. They are all part of preparation for action. Your body receives impulses from your mind saying: I realize you are a bit slow on the uptake so I'm liable to swing into emergency action in the very near future so the body primes emergency systems and anticipates action even if it never arrives. Physical and emotional Stress are essentially the same, except that emotional Stress are rarely. Same intensity in its demands on the body. It is also worth remembering that the body does not take any notice of marker no difference whether you are red in the face from anger or hot and bothered with embarrassment, the body reacts in the same way.

When a person responds to stressful stimuli through nervous system and the release of hormones into the blood stream. The initial step is taken by the Hypothalamus of the brain which secretes adrenocorticotrophic releasing hormone (ARH). ARH stimulates the adjacent pituitary gland to secrete Adrenocorticotrophic hormone (ACTH). This in turn stimulates the adrenal glands which are situated on the superior part of the kidneys to secrete Adrenaline and cortisol Hormones. In the brain the sympathetic and parasympathetic nerves both play an important role in a situation of stress. The parasympathetic nerves which regulate and center the functioning of our internal organs. But when we are under stress, it is the sympathetic nerves that take over. The sympathetic nerves release a chemical substance called adrenaline at their nerve ends in different organs. The effect of adrenaline is to prepare the body to fight stress.

Adrenaline will play a major part in the case of Pete Sampras before the Wimbledon 2000 finals. He was given dope tests in the Olympics- what is the drug being taken? Nothing but steroids, which enhance ANS arousal and increase adrenaline levels. So, even sports persons are becoming aware of the 'fight or flight' syndrome. Dr. Shawan Talbott, director of the nutrition clinic at the University of Utah, in Salt Lake City. As a result, he says, "we eat when we're not really hungry and we get fat. Stress may also trigger a disorder known as the night-eating syndrome, in which people eat one-third or more of their daily calories after their evening meal, sometimes getting up once or twice during the night to snack. Before menopause, when production of



estrogen and progesterone is high due to chronic stress women tend to put weight at, hips, men put on pound around the abdomen, the apple shape associated with heart disease.

These effects include immunosuppression, immune stimulation, and a biphasic response to stress. Although often neglected in conceptual models, there is also a response to stress. Although often neglected in conceptual models, there is also a reported relationship between stress and susceptibility to arthritis. Our nervous system (along with parts of the endocrine, or glandular, system) which holds the major responsibility for organizing bodily changes. Our nervous system is composed of two major divisions, the central nervous system (CNS), which involves the brain and the spinal cord, and the peripheral nervous system (PNS), comprising all of the nerve tissue in the rest of the body that leads to and from the central nervous system. Ultimate control of the nervous system rests in the CNS, particularly in the brain; the role of the peripheral nervous system is to relay messages to and from the brain and different parts of the body so that it can act in a coordinated, efficient manner and carry out our mental goals.

The peripheral nervous system has two major divisions. The sensory-motor component, called the voluntary nervous system, is responsible for carrying sensory data or impulses from our sensory organs (via motor nerves) which thus receive information about the outside world as well as about the state of the muscles and joints; it also transmits impulses back to the musculo-skeletal system (via motor nerve) which control muscular contraction and body motion. It has major connections in the most advanced part of our brain, the cerebral cortex, which is associated with conscious (or voluntary) behavior, free will, or choice.

The second major division of the peripheral nervous system is called the autonomic nervous system because it has the capacity to function autonomously (or on its own without conscious control)

The autonomic nervous system is in turn divided into two functional systems. (1) The sympathetic system controls inner body functions. (2) The parasympathetic system focus is on the inward activities of nourishment and excretion, repairing tissues and building up energy and fuel supplies for the next period of outward action. The fight or flight defense system of the body is the sympathetic nervous system and the adrenal glands. The activities of the sympathetic nervous system and adrenal glands have been known for quite some time; these two systems complement each other. During time of stress: danger or fear, the adrenal glands secrete a hormone called adrenaline, which prepares the body for fight or flight. It makes the body more efficient. It increases the heart rate, increases the



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respiration rate, improves eye sight, hearing, etc.

### ***Causes of Stress;***

Stress may be caused by variety of factors both outside the body and within. External factors including noise, binding light, extreme heat or cold, x-rays and other various toxic substances. The external factors such as the society, family, economic and financial condition, race, class, community, technology, etc. what cause stress in one individual need not necessary cause stress to another person. It depends up on genetic factors (that which he/she derive from parents). Also one should aware of temperament, dislikes, capabilities and weakness positive and negative traits.<sup>2</sup>

There are varieties of Stress which are caused by external factors include the one set of Panchmahabhootas (five great elements of nature), also due fast technological changes and job situation. The types of Stress according to Dr. T.V.V.S.Rao can be classified in three categories Social Stress, Digestive Stress, Environmental Stress.<sup>3</sup>

***Social Stress*** is emotional or mental Stress being generated by our personality as it interact with environment every day and digestive Stress taken food due to poor eating habits one may be struck by improper release of digestive juices, it may not be day today cause. But over period of time may leads to digestive Stress.

***Environmental factors*** are well known that all stressful situations produce feeling of anxiety, depression, anger, frustration etc. More and more studies are being carried to know various form of environmental Stress it is due many factors such as smog, noise, pollution and the external pressures beings force on an individual.

And these feelings are usually associated with physical systems of palpation and sweating, headache etc. In addition, these emotional states also produce autonomic, motor and endocrine changes which, if prolonged, may lead to the interaction of genetic and personality factors and even to structural changes in various organs. These psychosomatic disorders include conditions like chronic duodenal ulcer, hypertension and bronchial asthma etc. Various environmental factors contribute to the development of stressful disorders. This natural law leads to mental stress and strain.<sup>1</sup>

***Geopathic stress:*** Geopathic stress is the name given to the natural and artificial electromagnetic forces that around us. This energy includes ground stream, near geological faults in the earth's crust. Electromagnetic energy is also generated by electricity pylons, radios, television, and computers.<sup>3</sup>

### ***Naturopathy point of view causes Stress:***

According to the Naturopathy point of view men and women are an integral

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part of nature and the universe. Health depends on, the means of, achieving this are clean air, light, clean water, balanced nutrition and exercise. If violation of this natural law leads to mental stress and strain. Not proper use of sun's light and air leads imbalance of vital factors in the body leads to stress and strain. Water which contain excess iron if you person drink more mineral contain water may cause liver trouble, dyspepsia finally give more pressure on mind and body leads to stress. Certain nutrients deficiencies may cause stress and strain such as Potassium deficiencies in the diet leads breathlessness, fatigue, insomnia and low blood sugar leads to nervousness and tension.

**Patanjali Maharshi**, the founder of Yoga Philosophy described causes of Stress:

The concept of stress in his Yoga Sutra in a most comprehensive way from the subtlest level(ignorance) to its grossest manifestation. According to him the following five affliction (named by him as (*panchkleshas*) are causes of Stress and miseries in men.

These five affliction (*panch kleshas*) create imbalance between body, mind and spirit and finally leads to stress and pin. According to Patanjali our original state is Stress free and is blissful. He calls it Swaroop or Self . When this state is agitated or disturbed then the imbalance occurs. Avidya leads to further thinking and we start limiting ourselves, constriction, pressurization or stress is built up. Avidya leads to Asmita, the "I"ness, ego, and associated attachments like 'my mind', 'my thoughts', 'my feelings', 'my body' etc., Imbalance at this level leads to disintegration and the differentiation take shape. Attachment and 'I'ness leads to strong likes(*raga*) and dislikes(*dvesha*).

It is then that the emotional expansion starts. Throwing up and down in these emotional imbalance leads to deterioration in the quality of life and loosing all discrimination power and acts from instinctive level. This Patanjali called as *Abhinivisha*, a state of helpless, constriction, slavery or bondage. That is grossest manifestation of stress. He proposes the techniques of Yoga meditation for reducing Stress, for thinking of the *Klesha* as under resorting to Yoga for thinking for thinking the *Kleshas* and achieving higher states of consciousness featured by lesser stresses and emergence of greater capacities.

### **Reactions to Stress:**

- More blood sugar and fats flow to the muscle and brain.
- Heart rate increases.
- Breathing becomes faster



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- Many muscles tense and tighten
  - Blood pressure rises
  - Stomach and intestines temporarily last digestion. Perspiration increases.

### **Symptoms:**

- Dull thinking
- Irritability
- Decreased Motivation
- Lethargic performance

### **Some yoga techniques to control stress**

Yama ,Niyama, Asana, Pranayama, Pratyahar, Dharna, Dhyana and Samadhi called Astanga yoga or eight limbs of yoga .Among the above eight steps the third one is Asana, therefore some selected yoga postures or Asanas are recommended for the control of the stress which are as under : Relaxation asanas such has advasana , jyestikasana, makrasana, tadasana, trikonasana, yoganidra, nadisodhan pranayama, bhramari pranayama and meditation(dhyana).Mastery of a scientific technique of relaxation like yoga nidra is the most important steps in recovery from stress.

### **Diet management**

Diet should be light avoiding meat, excessive protein, milk and dairy products, oils and excessive spices. These should be replaced by whole grains, fruits and fresh vegetables.

### **Conclusion**

Yoga is a way of life and living which demands conscious effort on the part of practitioner. This conscious effort brings changes in the whole personality, attitude, lifestyle is in fact a way of transformation of life, mind and body. Studies conducted around the globe suggest positive changes at physiological, biochemical, psychological levels that are bound to bring an effective management of stress induced disorders.

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