

## YOGA: A NOVEL INTEGRATIVE THERAPY

Modern medical advancements provide the rationale for the integration of various traditional healing techniques including Yoga to promote healing, health, and longevity. It is imperative that advances in medicine include the wholistic approach of Yoga to face the current challenges in health care. The antiquity of Yoga must be united with the innovations of modern medicine to improve quality of life throughout the world. No wonder that Dr. Dean Ornish, the eminent American doctor who has shown that Yogic lifestyle can reverse heart disease says, "*Yoga is a system of perfect tools for achieving union as well as healing*".

According to Dr B Ramamurthy, eminent neurosurgeon, Yoga practice re-orientates the functional hierarchy of the entire nervous system. He has noted that Yoga not only benefits the nervous system but also the cardiovascular, respiratory, digestive, endocrine systems in addition to bringing about general biochemistry changes in the yoga practitioners.

We are today faced with numerous debilitating chronic illnesses related to aging, environment, and hedonistic lifestyle, such as cancer, diabetes, osteoporosis, and cardiovascular diseases as well as many incurable diseases such as AIDS. Modern medical advancements provide the rationale for the integration of various traditional healing techniques including Yoga to promote healing, health, and longevity. It is imperative that advances in medicine include the wholistic approach of Yoga to face the current challenges in health care. The antiquity of Yoga must be united with the innovations of modern medicine to improve quality of life throughout the world. While modern medicine has a lot to offer humankind in its treatment and management of acute illness, accidents and communicable diseases, Yoga has a lot to offer in terms of preventive, promotive and rehabilitative methods in addition to many management methods to tackle modern illnesses. While modern science looks outward for the cause of all ills, the Yogi searches the depth of his own self. This two way search can lead us to many answers for the troubles that plague modern man.

The Centre for Yoga Therapy, Education and Research (CYTER) in MGMC & RI is conducting a scientifically sound Yoga therapy programme through its Yoga Therapy OPD. This is functioning from 9.30 am to 12 noon daily (Monday-Friday). Consultations are offered by Dr. Ananda Balayogi Bhavanani, Deputy Director (Yoga) and Mrs Meena Ramanathan, Coordinator and Yoga Therapist and qualified Yoga instructors are imparting the schedules. Individualised and group Yoga therapy sessions are being conducted for various medical conditions such as diabetes, hypertension, musculoskeletal and psychiatric disorders with excellent feedback from participants. Numerous pilot studies have been completed and major research studies are being planned under guidance of Dr. Madanmohan, Professor and Head, Department of Physiology, MGMC & RI.

## SCIENTIFIC BASIS OF APPLYING YOGA AS A THERAPY

Numerous studies have been done in the past few decades on psycho-physiological and biochemical changes occurring following practice of Yoga. A few clinical trials have also been done that have shown promise despite Yoga not being ideally suited for the scientific gold standard of 'double-blind' clinical trials. Some of the researched benefits that are quite well proven are given below to facilitate an understanding of how Yoga works at least at the physical level though we are yet to research and understand subtler effects of Yoga.

### SOME PHYSIOLOGICAL BENEFITS OF YOGA:

[www.iayt.org/site\\_Vx2/publications/articles/hlthbenefits.aspx](http://www.iayt.org/site_Vx2/publications/articles/hlthbenefits.aspx)

- Yoga induces autonomic nervous system equilibrium with a tendency toward parasympathetic dominance rather than stress-induced sympathetic dominance. This is of great potential in psychosomatic stress related illness.
- Heart rate and blood pressure decrease implying better relaxation, reducing load on the heart.
- Respiratory rate decreases and respiratory efficiency improves. The amplitude and smoothness of respiration increases along with all the pulmonary parameters like tidal volume, vital capacity and breath-holding time.
- EEG - alpha waves increase. Theta, delta, and beta waves also increase during various stages of meditation
- Cardiovascular efficiency increases.
- Gastrointestinal function and endocrine function normalizes.
- Excretory functions improve
- Musculoskeletal flexibility and joint range of motion increase
- Posture improves while strength, resiliency endurance and energy level increase
- Weight normalizes, sleep improves, immunity increases and pain decreases

### SOME PSYCHOLOGICAL BENEFITS OF YOGA

- Somatic and kinesthetic awareness increase
- Mood improves and subjective well-being increases
- Self-acceptance and self-actualization increase
- Social adjustment increases

- Anxiety, depression and hostility decreases
- Psychomotor functions such as grip strength, balance, dexterity and fine motor skills, eye hand coordination and reaction time, steadiness and depth perception, and the integrated functioning of body parts improve
- Cognitive functions such as attention, concentration, memory, and learning efficiency improve

## SOME BIOCHEMICAL EFFECTS OF YOGA

The biochemical profile improves, indicating an anti-stress and antioxidant effect which is important in the prevention of degenerative diseases.

- Decreased levels of: blood glucose, total white blood cell count, total cholesterol, triglycerides, LDL and VLDL.
- Increased levels of: HDL cholesterol, ATPase, hematocrit, hemoglobin, thyroxin, lymphocytes, vitamin C and total serum protein.

## PRINCIPLES OF YOGA CHIKITSA

When we set out to practice Yoga Chikitsa (Yoga as therapy) it is vital that we are conversant with important principles of this unique system of healthy living. One of the outcomes of Yoga practice is attainment of health. This implies as healthy a state that may be attained in spite of our genetic predispositions and environment. Yoga also helps maintain and sustain this dynamic state of health after it has been attained through self effort.

1. **BECOME AWARE OF YOUR BODY, EMOTIONS AND MIND:** Without awareness there cannot be health or healing. Awareness of body implies conscious body work that needs to be synchronized with breath to qualify as a psychosomatic technique of health and healing. Psychosomatic disorders that are the bane of the modern world cannot be tackled without awareness.
2. **IMPROVE YOUR DIETARY HABITS:** Most disorders are directly or indirectly linked to improper dietary patterns that need to be addressed in order to find a permanent solution to the health challenge. One of the most important lifestyle changes that needs be implemented in management of any lifestyle disorder is diet.
3. **RELAX YOUR WHOLE BODY:** Relaxation is most often all that most patients need in order to improve their physical condition. Stress is the major culprit and may be the causative, aggravating, or precipitating factor in so many psychosomatic disorders. The relaxation part of every Yoga session is most important for it is during it that benefits of practices done in the session seep

into each and every cell producing rest, rejuvenation, reinvigoration and reintegration.

4. SLOW DOWN YOUR BREATH MAKING IT QUIET AND DEEP: Rapid, uncontrolled, irregular breathing is a sign of ill health whereas slow, deep and regular controlled breathing is a sign of health. Breath is the link between body and mind and is the agent of physical, physiological and mental unification. When the breath is slowed down the metabolic processes also are slowed and anabolic activities begin the process of healing and rebuilding. If breath is calm, mind is calm and life is long!
5. CALM DOWN YOUR MIND AND FOCUS IT INWARDLY: The mind is as disturbed as a drunken monkey bitten by a scorpion say our scriptures. To bring that wayward agitated mind under control, and take it on a journey into our inner being is fundamental in finding a way out of the 'disease maze' in which we are entangled like a fly in the spider's web. Breath work is the base on which this mind training can occur and hence much importance needs to be given to Pranayama and Pratyahara in Yoga Chikitsa. It is only after this that concentration practices leading to meditation can have any use. Just sitting and thinking about something is not meditation!
6. IMPROVE THE FLOW OF HEALING 'PRANIC LIFE ENERGY': Improve the flow of Healing 'Pranic Life Energy' to all parts of your body, especially to those diseased parts, thus relaxing, regenerating and reinvigorating yourself. Prana is life and without it there cannot be healing. The various Prana Vayus that are energies driving different physiological functions of the body need to be understood and applied as per needs of the patient. In patients of digestive disorders, focus must be on the Samana Vayu whereas in pelvic conditions it needs to be on Apana Vayu.
7. FORTIFY YOURSELF AGAINST OMNIPRESENT STRESSORS: Decrease your stress level by fortifying yourself against the various omnipresent stressors in your life: when face to face with the innumerable thorns in a forest, you may either choose to spend all your time picking them up one by one while others continue falling or choose to wear a pair of shoes and walk through the forest. The difference is in attitude. Choosing the right attitude can change everything and bring about a resolution of the problem by healing the core. Stress is more about how you react to the stressor than about the stressor itself!
8. INCREASE YOUR SELF RELIANCE AND SELF CONFIDENCE: Life is full of challenges that are there only to make us stronger and better. The challenges should be understood as opportunities for change and faced with confidence. We must understand we have the inner power to overcome each and every challenge that is thrown at us by life. The Divine is not a sadist to give us challenges that are beyond our capacity!

9. FACILITATE NATURAL EMANATION OF WASTES: Facilitate the natural emanation of waste from your body by the practice of Yoga Shuddhi Kriyas such as Dhauti, Basti and Neti. Accumulation and stagnation of waste materials either in inner or outer environment always causes problems. Yogic cleaning practices help to wash out the impurities (Mala Shodhana) helping the process of regeneration and facilitating healing.
10. TAKE RESPONSIBILITY FOR YOUR OWN HEALTH: Remember that ultimately it is "YOU" who are responsible for your own health and well being and must take the initiative to develop positive health to tide you over challenging times of ill health. Yoga fixes responsibility for our health squarely upon our own shoulders. If we do healthy things we are healthy and if we do unhealthy things we become sick. No use complaining that we are not well when we have been the cause of our problem. As Swamiji Gitananda Giri would say, "You don't have problems-you are the problem!"
11. HEALTH AND HAPPINESS ARE YOUR BIRTHRIGHT: Health and happiness are your birthright, claim them and develop them to your maximum potential. This message of Swamiji is a firm reminder that the goal of human existence is not health and happiness but is Moksha (liberation). Most people today are so busy trying to find health and happiness that they forget why they are here in the first place. Yoga helps us regain our birthrights and attain the goal of human life.

## MODALITIES OF YOGA AS A THERAPY

There are numerous therapeutic modalities used in the application of Yoga as a therapy. Given below are some of the commonly used modalities :

- PHYSICAL THERAPIES: Asanas (static postures), Kriyas (systematic and rationale movements), Mudras (seals of neuromuscular energy) and Bandhas (locks for neuromuscular energy) gently stretch and strengthen the musculoskeletal system in a healthy manner. They improve mobility and flexibility of the different joints and groups of muscles. There is also concomitant improvement in the systemic function such as respiration, circulation, digestion and elimination. A general sense of health and well being is also promoted by these aspects of Yoga that help release feel good hormones like endorphins and encephalins.
- EMOTIONAL THERAPIES: Swadhyaya (introspectional self analysis), Pranayama (techniques of vital energy control), Pratyahara (sensory withdrawal), Dharana (intense concentration), Dhyana (meditational oneness) and Bhajana (devotional music) stabilize emotional turmoil and relieve stress and mental fatigue. They bring about an excellent sense of emotional balance that is vital for good health. Group work such as this is important to achieve proper emotional balance that is essential to good health.

- DEVELOPMENT OF PROPER PSYCHOLOGICAL ATTITUDES: Yoga encourages us to step back and take an objective view of our habitual patterns of behaviour and thoughts. This enables us to cope better with situations that normally put our bodies and minds under strain. Patanjali emphasized the need to develop following qualities in order to become mentally balanced humane beings: Vairagya (detached, dispassionate attitude), Chitta Prasadann (acceptance of the Divine Will), Maitri (friendliness towards those who are at peace with themselves), Karuna (compassion for the suffering), Mudita (cheerfulness towards the virtuous) and Upakshanam (indifference and avoidance of the evil) etc.
- MENTAL THERAPIES: There are a great many Jnana and Raja Yoga techniques of relaxation and visualization that are useful. Other practices such as Trataka (concentrated gaze), Pranayama, Pratyahara, Dharana as well as Dhyana may also be utilized. Relaxation is a central element in Yoga as it is the body's own way of recharging its cells and helps to ease physical, emotional and mental tensions.
- SPIRITUAL THERAPIES: Swadhyaya, Satsangha (spiritual gathering seeking knowledge of the reality), Bhajana sessions and Yogic counseling are important aspects of Yogic therapy that are often neglected in favor of physical therapies alone. Helping patients understand their inner spiritual nature and realize that "Oneness" is health whereas "Duality" is disease, is most important. We cannot remain lonely, depressed and diseased if we realize that we are part of this wonderful, happy and healthy Universe (Multiverse).
- PREVENTIVE AND REHABILITATIVE THERAPIES: Yoga has numerous preventive benefits especially when it is started early in childhood. It helps in prevention of accidents by increasing awareness as well as agility. Improved immunity helps in preventing infectious and contagious diseases. The added benefit of starting early is that the person knows the technique so that they can do it if needed at a later stage in life. Psychosomatic, stress related and lifestyle disorders may be effectively prevented by adoption of a Yogic way of life. Yoga also offers rehabilitative therapies for most musculoskeletal conditions as well as in recovery for debilitating illnesses. The practice of Yoga also goes a long way towards prevention of disability and improving quality of life in numerous chronic conditions.
- PAIN RELIEF THERAPIES: Yoga is a useful addition to the pain relief therapies as it improves pain tolerance and provides an improved quality of life. It can be safely said that Yoga helps us endure conditions that it may not be able to cure. This is vital in end life situations where it is important that the patient has a sense of improved quality of life during their end days. Yoga can also benefit caretakers of such terminal patients who are under great stress themselves.