

Yoga as a therapy-4: 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. It is virtually impossible for subjects to be taught Yoga without their knowing it is Yoga! The difficulty of finding right methods and apparatus to study higher aspects of Yoga is still to be overcome as there doesn't seem to be much money in it and as we know, money makes the world go round!

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

- It has been found that yoga produces stable autonomic nervous system equilibrium, with a tendency toward parasympathetic nervous system dominance rather than the usual stress-induced sympathetic nervous system dominance. This is of great potential in psychosomatic stress related illness that abound in populations all over the world.
- The heart rate and blood pressure decrease implying a better state of relaxation leading to reduced load on the heart.
- The respiratory rate decreases with improved respiratory efficiency. The amplitude and smoothness of respiration increases along with all the pulmonary parameters such as tidal volume, vital capacity and breath-holding time.
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- 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
- Strength, resiliency endurance and energy level increase
- Weight normalizes and 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.