

# PHYSICAL AND MENTAL FITNESS IN SPORTS PERSON-ROLE OF YOGA-FITNESS PRESCRIBE IN ANCIENT BOOKS

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## Abstract

Although yoga has been practiced as Indian culture and science for thousands of years as part of life philosophy, classes in the United States only recently have been offered to patients and sports persons for curing the disease and rehabilitation and to improve the performance in sport (Clin J Oncol Nurs. 2008 Feb;1) The word yoga is derived from the Sanskrit root yuj, meaning to bind, join, and yoke. This reflection of the union of the body, mind, and spirit is what differentiates yoga from general exercise programs but Age, Sex, Religion, Race, Caste or Creed is no bar with yoga. You will only gain from it and not lose anything in life. *physical and mental fitness* is the fundamental part of life. As a healthy body boasts the healthy mind so to express one's full potential in every walk of life and specially in sports every person must be physically and mentally fit. Yoga, being the ancient Indian science, has been endorsed time to time, even by most of the religions of the world to achieve this goal. In contemporary competitive world its importance becomes even more. (J Bodyw Mov Ther. 2010 Jan;14(1):50-4).

**Research** on mind-body exercise programs such as yoga and tai chi reveal they have significant mental and physical value. There also are numerous primary and secondary preventive indications for cardiovascular disease in which yoga can play a primary or complementary role. Mind-body exercise programs will be a welcome and necessary addition to evolving disease management models and improving sport performances that focus on self-care and decreased health care use. (La Forge R., J Cardiovasc Nurs. 1997 Apr;11)

**Key words:** Yoga Fitness Ancient books

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## Introduction

**Yoga** practice is as Indian culture and science for thousands of years as part of life philosophy. Only recently offered to patients and sports persons for curing the disease and rehabilitation and to improve the performance in sports (Clin J Oncol Nurs. 2008 Feb;1) **Yoga is derived from the Sanskrit root yuj**, to bind, join, and yoke. The union of the **body, mind, and spirit** is what differentiates yoga from general exercise programs but Age, Sex, Religion, Race, Caste or Creed is no bar with yoga. **You will only gain from it and not lose anything in life.** New US study has shown that yoga and motivational exercises can both boost sport performance through sports psychology, (Br J Sports Med 2006) **YOGA**, being the ancient Indian science, has been endorsed, time to time, even by most of the religions of the world. Yoga is the most acceptable, Cheapest, best antidote for stress and is the best Antioxidant, for contemporary sports in today competitive world, its importance becomes even more. (J Bodyw Mov Ther. 2010 Jan;14(1):50-4) **Research on mind-body exercise programs** such as yoga and tai chi reveal they have significant mental and physical value. There also are numerous primary and secondary preventive indications for cardiovascular disease in which yoga can play a primary or complementary role. Mind-body exercise programs will be a welcome and necessary addition to evolving disease management models and improving sport performances that focus on self-care and decreased health care use. **Yoga is most suitable for sport persons and has been prescribed in most of the ancient literatures**

## Introduction

Yoga is right living this may appear to be simple but is very significant for the meaning of right living is very wide. **Yoga** (Sanskrit, Pāli: *yōga*) refers to traditional physical and mental disciplines

originating in India. The word is associated with ancient practices in Hinduism, Buddhism and Jainism and some other religions of the world.

Earliest archaeological evidence of Yoga's existence could be found in stone seals which place Yoga's existence around 3000 B.C. Most anthropologists agree that an oral tradition existed long before a literary tradition which gradually set in from about the 2nd century BC

Its history can be divided into four periods: **the Vedic Period, Pre-Classical Period, Classical Period, and Post-Classical Period. Vedic period**

The Vedas contain the oldest known Yogic teachings and as such, teachings found in the Vedas are called Vedic Yoga. (A. Shri, 1970)

### Pre-classical period

The creation of Upanishad marks the pre-classical yoga. Yoga shares some characteristics not only with Hinduism but also with Buddhism that we can trace in its history. During the sixth century B.C., Buddha started teaching Buddhism, which stresses the importance of yoga and the practice of physical postures.

### Classical period

The Classical Period is marked by another creation - the Yoga **Sutra**. Written by Patanjali around the second century, it was an attempt to define and standardize Classical Yoga. Patanjali's Eightfold path of Yoga (also called Eight Limbs of Classical Yoga) is the essence of yoga

### Post classical period

Post-classical Yoga differs from the first three since its focus is more on the present. . Yoga was introduced in the West during the early 19th century. It was first studied as part of Eastern Philosophy and began as a movement for health and vegetarianism around the 1930's. By the 1960's, there was an influx of Indian teachers who expounded on Yoga (New straits

times 2009, Cairo). The most ancient sustained expression of yogic ideas is found in the early sermons of the Buddha. One key innovative teaching of the Buddha was that meditative absorption should be combined with the practice of mindfulness.

According to *Tattvarthasutra*, 2nd century CE Jain text, *Yoga*, is the sum total of all the activities of mind, speech and body

The development of Sufism was considerably influenced by Indian yogic practises, where they adapted both physical postures (asanas) and breath control (pranayama) The ancient Indian yogic text, Amritakunda, ("Pool of Nectar") was translated into Arabic and Persian as early as the 11th century.

In 1989, the Vatican declared that Eastern meditation practices such as Zen and yoga can "degenerate into a cult of the body". In spite of the Vatican statement, many Roman Catholics bring elements of Yoga, Buddhism, and Hinduism into their spiritual practices.

The 20th century has produced an immense scientific literature on fitness, in terms of understanding in anatomy, physiology and medicinal health and its integration. In 21st century, The expansion of physiology is markedly noticed in the field of engineering, molecular physiology, sports and many allied fields. Physiology may not contribute in the development of new things. Needless to say, physiology is essential in all the allied branches. In the 21st century, the basic science physiology, has expanded and shall witness, much more expansion of physiology and allied sciences as coined by R Gulati, 2009, As "Interdisciplinary physiology research century" (R. Gulati in S. Tan, 2003) Crucial observations made by the ancient literature about our predecessor, Hippocrates (463-370 BC), Father of Medicine, Andreas Vesalius (1540-1564), the father of modern anatomy. Also by the Abu Al Husain Ibn Abdulla Abn Sina (Avicenna) (Tansy Yeow Me, and Loukas M, et al, 2009). The contribution of Hippocrates and Galen are well known contributions to medicine by numerous religious texts, including the Hindu Vedas, the Judeo-Christian Bible and Talmud and the Islamic Qur'an and Hadeeth (Prophetic sayings of Mohammad) (Who, 2009). There is a considerable amount of information with Qur'an and Hadeeth, Focusing on the Cardiovascular physiology and mentioned in the Hadeeth (sayings, rulings, advises, actions, habits of the Prophet Mohammad), which are distinct from the direct words of the God. Good physical fitness has scientific basis as followed today in WHO Definitions of health "Health is defined as Physical, Mental, social and spiritual well being of a person, not merely absence of Disease or infirmity" (A. Zindani, E. Johnson, G. Goeringer, et al.). In the middle ages, the authority and power exerted by the Christian church and scientific basis of inquiries into natural phenomenon, were not in harmonious relationship, compelling scientists to work in secret out of fear. Islamic teaching in this ages strongly encouraged and supported scientific research, which lead to many discoveries. (K. Cottondw, 1973)

#### **Yoga asana, Fitness, Health**

Yoga postures breathe work and inner focus can help rebalance, strengthen and restore overtaxed muscles, joints and ligaments. Through this restoration process, athletes can increase their career longevity and develop an inner balance that will last a lifetime. Balancing the mind, body and spirit is a primary philosophical principle of yoga.

Yoga arose from the matrix of the Hindu world, although according to Mircea Eliade it is of pre-Hindu origin and can be traced back to prehistoric shamanism. Yoga is not tied to the Hindu religion but has a universal applicability. "**TATO DWANWANABHIGHATAH**"— **Sadhana Pada, Sutra 48 Translation:** By perfecting Asana, one is no longer affected by the pairs of opposites (duality). The objective of *Asana*, according to Patanjali, is to gain resistance to the "pairs of opposites" (*Dwandwas*). "Pairs of opposites" refers to the conditions both within the mind and the physical body, between which we continually oscillate – those things with which we are persistently preoccupied — conditions such as hot and cold, happiness and sorrow, pain and pleasure, etc, etc.

As I.K. Taimni says in his book, *The Science of Yoga*; "Those who have studied Yoga will attest that this Science of sciences is too comprehensive in its nature and too profound in its scope of teachings to be fitted into the framework of any particular philosophy, religion or belief, ancient or modern. It stands in its own right as a science based on the eternal laws of the higher life. Its truths are based on the experiences and experiments of an unbroken line of mystics, occultists, saints and sages who have realized and borne witness to them throughout the ages." (P. Pioreschi, 2006).

The physical exercises, which have come to be considered the "mainstay" of *Yoga* in our time, did not figure predominantly in Patanjali's *Ashtanga Yoga* system. But by the time of Patanjali, whose *Yoga Sutras* you have already been briefly introduced to, the word *Asana*, though it maintained this classical notion (a place), also became a "physical" state that one adopted. His first direct reference to *Asana* in the *Yoga Sutras* comes in chapter 2 (*Sadhana Pada*), **verse 46: "STHIRA SUKHAM ASANAM"** **Translation:** A seated posture that is steady and comfortable is called asana. The attainment of a perfect *self-mastery*, which is itself the first step toward magical mastery of the world. The most daring magical desires, are realized through yogic technique, or, more precisely, that Yoga can equally well adapt itself to either path." — Mircea Eliade, *Yoga: Immortality and Freedom*.

#### **Muslim Prayer posture, Fitness, Health**

The study investigates the physiological interactions and effects of the Muslim prayer postures on the human body," Prime Minister Abdullah Badawi told the Third Kuala Lumpur International Conference on Biomedical Engineering. The study, conducted by the University of Malaya's Biomedical Engineering Department, concluded that postures during the prayers are beneficial to the heart, spine and the capacity of memory and attention in psychological performance. Muslims pray five times a day, which each prayer made of a series of postures and movements, each set of which is called a *rak'ah*. The faithful starts in a standing posture then bows down with his/her hands

placed on his/her knees keeping the back straight. The worshipper then returns to the standing position before prostrating with forehead, nose, hands, knees, and bottoms of the toes touching the ground. The forearms and elbows should be raised off the floor. (Asana in Ancient Times, 2006) The Qur'an and the Hadeeth discuss the importance of the heart, blood and its circulation and how they are vital to the maintenance of life. Descriptions of the human anatomy derived from religious texts are often omitted from the medical literature. The present review aims to discuss the comments and commentaries made regarding the heart and cardiovascular system as found in the Qur'an and Hadeeth. It is clear that these early sources both had a good comprehension of parts of the body Fitness. © 2009 Published by Elsevier Ireland Ltd.

European scientists during the Middle Ages and beyond failed to benefit from the discoveries of the neighboring Islamic empire for multiple reasons, including poor translations and the unreadiness of the medical establishment to give prominence to observation and study over the word of ancient authority (ML Gharote, Ganguly, 1979) As new advances in technology and medicine continue to grow at an exponential rate today, there is time to reflect and appreciate the Islamic contribution to medicine. It is for this reason that the discoveries and medical revelations in Qur'an should not be ignored or forgotten. QUR'AN, prophetic traditions and sayings of Mohammad were religious, scientific and spiritual and influenced the medical texts Its importance has also been described for the benefit in CVS Heart has been described as the organ of emotion ,psyche. and intelligence and that can be harmed easily In depth analysis of contribution of Islamic medicine in physiology ,anatomy and health is severely lacking in the west ,and if conducted ,would uncover discoveries made centuries years before in Europe, were actually were part of Islamic traditions (Who, 2009) Islam is a complete, integral spiritual path, so yoga is nosubstitute for any Islamic requirement.

#### **Arabia & the World in around AD 600**

Did these ancient teachings travel from India to Arabia? No—there is no need to assume such a horizontal transfer; the sacred truths are revealed vertically from Heaven to all peoples. There are close similarities between Islam and yoganot because of borrowing or cultural diffusion, but because of both originating in the Primordial Tradition, *sanātana dharma, al-dīn al-hanīf*, which all the prophets of Allah have brought and reaffirmed throughout the ages, among all nations, revealed directly from the Creator. Goldsmith's art refined in Frankish-Merovingian era. Byzantine Architecture and Mosaic. Architecture and sculpture in India. Classic **Buddha figures** in yoga postures Psychological development in sportsperson is importantly controls all psycho-physiological functions.

PHYSICAL, ENDURANCE, STRENGTH-POWER ,psychological role of REGULAR PRACTICE OF NAMAZ IS BENIFICIAL IN HEALTH AND FITNESS- EVEN APPLICABLE TO SPORT PERSONS

**The core of Yoga's philosophy, Physiological basis**

Human information processing consists of five steps-

1. detection of stimulus
2. Decision
3. memory
4. reaction time
5. motion response.

This concepts represents anatomy and physiology of sensory neuron for stimulus detection, brain stem and reticular activating system for arousal to sustain attention flow ,thalamus to relate signal and noise content ,prefrontal cortex to discriminate and extracts stimulus feature such as cues ,shape ,form etc. frontal cortex is for decision making and parietal cortex for updating the information ,short term memory. cerebellum and premotor cortex for response execution (Y. Mcilvo, 2004)

Psychological development in sportsperson is importantly controls all psycho-physiological functions, control of breath, monitors the homeostasis for optimal health. Stress causes cortical dysfunction and damage physiological homeostasis. This leads to various disorders. Specially for the sportsperson, any disturbances in family, socioeconomic, personal relations derail the prospect of winning medals in the events.

Stress triggers autoimmune disease ,hypertension, Diabetes ,rheumatoid arthritis, AIDS. (T. Desiraju, 1988, A. Newberg, J. Iversen, 2003) Yoga enhances immediate memory, (N. Jerne, 1983, R. Sahu, M. Bhole, M. Gore, R. Bhogal, M. Rajapurkar, 1990, M. Gore, 1990), Stress relieved (D. Kulkarni, 2003), Conserved resources (S. Bhattacharya, U. Pandey, 2002), Best Natural Antioxidant (H. Mahapure, S. Shete, T. Bera, 2008, D. Kulkarni, R. Bhogal 1991).

The basic of Yogic exercises, concerns with several components, of body awareness. Example, stress detection, stimulus content, and rejection of the post detection process. That results in muscle relaxation process. (J. Kiecolt-Glaser, R. Glaser, Willeger Det El. 1985)

Yoga is beneficial for geriatric population ,help disclose negative thoughts, and feelings in cognitive domain (C. Steel, J. Evans, M. Smith, 1974) Sports person need good psychosocial elements in the positive role of it's good immunity. (S. Cohen, 1988, A. Silverman, Hou-Ya, D. Kelly, 1989) Yoga modulates the psychoneuroendocrine (PNE) network, via hypothalamus (B. Carol, M. Feinberg, J. Greden, Et al. 1981)- pituitary-adrenal activity (S. Levy, R. Herberman, M. Lippman, D'Angelo, 1987) ,and effect natural killer cells activity (K. Oshikawa, 1921)

Yoga affect peripheral nervous system and also central nervous system with effect on immune system, this dual role of central nervous system is well correlated (Friederger, M. Timiti, 1924, D. Kulkarni and TK Bera, 2009). Yoga brings down stress, enhances power of relaxation, boosts physical strength, stamina, flexibility, bestows concentration, self-power, helps in rehabilitation of old and new injuries, boosts immunity, enhances posture and muscle tone, healthy glowing skin, a more positive outlook towards life, all

these are essential for Indian sport performance. (S. Baijal, N. Srinivasan, 2010)

### **The Eight Limbs of Yoga**

Yoga is composed of many layers, all of which can enhance athletic performance. These layers are referred to as the **eightfold disciplines**, or the **eight “limbs” of yoga**. These eight limbs form the main principles of yoga, as follows: **Yama** refers to universal ethics. **Niyama** refers to personal ethics. **Asana** refers to posture. **Pranayama** refers to breath. **Pratyahara** refers to withdrawal or quieting of the senses. **Dharana** refers to inner focus or concentration. **Dhyana** refers to meditation, reflection or observation. **Samadhi** refers to absorption with the whole being, or absolute enlightenment. While athletes can benefit from all these principles, and they are all equally important to enhancing athletic performance, fitness professionals teaching yoga should focus on the limbs that fall within their area of expertise—for example, *asana* (posture), *pranayama* (breath), *dharana* (inner focus) and *dhyana* (meditation). **Athletes can benefit from these limbs** just as they benefit from other tools they use to optimize their performance. For example, a tennis player intent on making contact with the ball and returning it to an exact spot on his opponent’s side of the court is exhibiting inner focus, or **dharana**.

**Injury Prevention** Athletes can learn from practicing yoga is to respect their body’s strengths and limitations. This knowledge is essential to preventing sports injuries. Yoga is a powerful biofeedback tool that can help athletes develop better body awareness. Listening to the body and responding to its messages is a way to honor the body and not push it over the edge.

**Deciding on the Right Yoga Style** *Hatha yoga* is the umbrella term for many different styles of yoga, such as Anusara, Ashtanga vinyasa (sometimes called “power yoga”) and Iyengar. These styles are all powerful, dynamic, alignment-oriented types of yoga that are well suited for fitness and sport adaptation. The postural alignment of the *asanas* described in this article are based on Anusara yoga, which focuses on specific principles of alignment. Depending on their goals and personalities, athletes may prefer one form of yoga over another. For example, some athletes may prefer a style of yoga that emphasizes holding postures for longer durations, while others may prefer a format that emphasizes optimal alignment. Finally, some will be keen to touch on all of these elements in one class.

### **Starting Sports Yoga Conditioning**

Mastering the physical and mental challenges of yoga can be a revelation for athletes accustomed to years of a different kind of training. Most athletes are used to conditioning in a particular way, usually by isolating specific muscle groups with the aim of increasing the intensity and frequency of the training regimen; this kind of conditioning focuses on isolating different parts of the body. Yoga, on the other hand, is based on the principle of *integrating* the body as a whole and shifts the emphasis to the *quality* of the movement.

### **Sport-Specific Yoga Poses**

The *asanas* described in the following sections are examples of some of the best choices for some of the most popular competitive and recreational

sports—running, swimming, cycling, skiing, tennis and golf. (Due to space constraints, not all the poses are described in detail; see “References” and “Resources” on page 39 for more information.) When introducing yoga poses into your athletes’ training programs, remember to start off slowly and then gradually add postures during the warm-up

### **More Yoga for Athletes, Yoga for Sports Performance**

**RUNNING** :One of the best yoga poses for runners is *Eka Pada Rajakapotasana Prep* (pigeon pose prep) which stretches many muscles, including the hip flexors, the gluteals and the piriformis, psoas, low-back and groin muscles. Also good for runners are , *Virabhadrasana 1* (warrior pose) and *Parsvottanasana* (extended sideways pose) and *Supta Padangusthasana Prep* (supine hand-to-big-toe pose prep).

**GOLF**:Golfers need to repeatedly twist their body in one direction to swing a golf club. To strengthen and flex the spine, try *Utthita Trikonasana* (triangle pose) and *Bhujangasana* (cobra pose)and *Ardha Matsyendrasana* (pretzel pose).

**SKIING**:Skiers often incur injuries in their low back and knees. These conditions can be improved by doing poses that strengthen the joints and muscles of the low back, knees and posterior legs. Examples to try with skiers include *Utthita Trikonasana* (triangle pose) *Modified Virabhadrasana 3* (modified warrior pose with hands on hips or bent 90 degrees at sides), *Paschimottanasana* (seated forward fold pose), *Supta Padangusthasana Prep* (supine hand-to-big-toe pose prep) and *Bhujangasana* (cobra pose).

**TENNIS**: *Prasarita Padottanasana* (legs spread wide, forward bend while standing) is excellent for opening the shoulders; it also deeply stretches the hamstrings and adductors. Other good choices for tennis players are *Utkatasana* (chair pose).

**CYCLING**:cyclists benefit most from poses that stretch the back and open the chest. Examples are *Bhujangasana* (cobra pose), *Dhanurasana Prep* (bow pose prep, with hands reaching toward the feet) and *Ustrasana Prep* (camel pose prep, with hands on the sacrum rather than reaching to the heels. (B. Baptiste, 1999).

### **Conclusion**

In ancient books fitness is prescribed and yoga is important for sport and education fitness cooling down after sport and exercise and circadian body temperature variation near the thromboregulatory area is responsible for deep body temperature for sport persons (Mitra S.) Mcilvo Y. comparison of brain temperature to core temperature .. A review of literature J. neuroscience nursing 2004 ,36-21to 31.yoga is important for psychoimmunological aspect of health and follow the hypothalamic –pituitary – adrenal –limbic axis is basis of yogic exercise modulation of immunity ,psychosomatic disorders and psychological enhancements .yogic exercise are considers the best tool to mange stress (Y TO Y).

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