

# Yoga for Achieving Perfect Health

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Yoga as envisaged in Indian scriptures is an ancient method for spiritual experience. However, yoga is usually practiced for relaxation of body and mind and for achieving good health. In the last few years, with acceptance of 21<sup>st</sup> June as the International Yoga Day, the practice of yoga has become universal. Yoga has become part of many health fitness centers, where yoga is incorporated into the group instruction curriculum. Although some people still view yoga as a practice reserved for spiritual seekers looking for inner peace, yoga is rapidly being embraced by many in the modern societies as an alternative to increase the strength and endurance. But more importantly, yoga is slowly becoming part of the therapy for keeping good health, prevent decay and degeneration and as a supplement for the management of many lifestyle disorders.

Many fitness experts recognize yoga as valuable part of functional training. Functional training is used in programmes for competitive athletes as well as recreational exercisers. Functional training focuses on endurance, strength and coordination to allow individuals to maximize performance of everyday tasks. In a weight-training routine, incorporating exercises to strengthen the back and thigh muscles decreases the likelihood of injury and strain in a simple movement like routine bending of the body. Yoga physiologically develops the body by improving the body's ability to integrate the signals between the musculoskeletal system and the brain. The increased connectedness of mind, nerves, and muscles results in more plastic body motions and quicker adjustments to change in postures.

Though there are several systems of yoga, the four have been widely accepted: Hatha yoga, Raja yoga, Tantra yoga, Integral yoga. Hatha yoga includes practice of asanas, pranayamas, surya namaskar and kriyas. It mostly aims at perfection of the body.<sup>[1]</sup> A true practitioner (hatha-yogi) not only achieves a healthy body and a greater longevity but also gains mastery over functions of the body. However, in general, it less emphasizes the perfection of the mind. Therefore, hatha yoga by and large attains improvement of physical health with refinement of the mind to some extent. Though recent medical research on yoga therapy has revealed the usefulness of asanas, pranayamas and surya namaskar in the treatment of many life-style disorders, research in larger cohorts, follow-up studies with larger sample size, and clinical trials are needed to establish therapeutic benefits of these yoga practices.<sup>[2]</sup>

Yoga practice in general is commonly restricted to different body postures (asanas) and breathing exercises (pranayamas) and surya namaskar.

Practice of asana keeps the individual physically fit by improving endurance and functions of the body.<sup>[1]</sup> It improves flexibility of joints, maintains power and suppleness of muscles, provides strength to bones. Different yogasana postures modulate blood flow to visceral organs and improve their functions, controls secretion from endocrine glands and therefore profoundly influences body metabolisms.<sup>[3]</sup> Asanas such as ardhachandrasana, padahasthasana, tribhujasana, matsyasana, nauasana, paschimottanasana, dhanurasana, chakrasana, yoga mudra and abdominal breathing that greatly affect abdominal pressure and movement, improve insulin secretion and sensitivity. Thus, these asanas are proposed to be beneficial in diabetes.

Asanas such as matsyasana, sarvangasana, halasana, dhanurasana, that affect neck movement and stretchability improve thyroid secretion and therefore greatly affect metabolisms. Many asanas by controlling thoraco-abdominal movements and blood to visceral organs, improve exocrine secretions, liver functions, GI motility and secretions. Thus, yogasana improves appetite and balances digestion and metabolism.<sup>[1]</sup>

Asanas that affect movement of trunk and rotation of body along the main axis improve the flexibility of vertebral joints and reduce stiffness of the back muscles. Asanas that cause forward and backward bending of the body torso, reduce fat in the abdomen and pelvic regions. Asanas that influence thoracoabdominal movement, control ventilation and respiratory functions. These asanas balance sensitivity of airways and are useful in the treatment of asthma.<sup>[1]</sup>

Asanas such as sarvangasana and sirshasana that increase blood flow to brain improves memory, learning, general intelligence and cognition. Also, these asanas improve functions of the nervous system. Yogasana has profound influence on hemodynamics, circulation and cardiovascular functions. Regular practice of asanas maintains heart functions and blood pressure.<sup>[1]</sup>

Asanas like sarvangasana, paschimottanasana, abdominal breathing and shavasana ensures relaxation of body and mind and promote sleep. They decrease stress and anxiety, improve autonomic balance and reduce heart rate and blood pressure.<sup>[1]</sup>

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Pranayama (yogic breathing) is directly linked to autonomic activity, regulation of heart rate, blood pressure and metabolism.<sup>[4]</sup> Although resting heart rate varies widely in general population between 60 to 100 beats/min, persistent tachycardia has been reported to decrease heart rate variability, which is an established CV risk. It has been recently reported that heart rate more than 75/min increases CV risk. As slow pranayamas (slow breathing exercises) are very effective in reducing heart rate, improving heart rate variability and blood pressure, they profoundly decrease CV risks.<sup>[5]</sup> Pranayamas improve higher brain functions. Pranayama increases neuronal functions, in the brain and peripheral nervous system. It increases learning, memory, cognition and higher intellectual functions. Slow breathing increase longevity.<sup>[1]</sup>

Surya namaskar or the sun salutation consists of 12 steps and each step of it is an asana. With each step, breathing (inspiration and expiration) alternates, and each step is performed slowly with deeper breathing. Thus, surya namaskar is a combination of asana and pranayama. Surya namaskar improves flexibility of joints, suppleness of musculoskeletal system, especially of the vertebral joints and reduces neck and back stiffness.<sup>[6]</sup> It controls secretion from endocrine glands (including insulin and thyroxine) and therefore profoundly influences body metabolisms. It Improves exocrine secretions, liver functions, GI motility and secretions, reduces fat in the abdomen and reduces obesity, increases blood flow to brain and improves memory, learning, and general intelligence. Surya namaskar improves cardiovascular and respiratory functions and improves autonomic balance and functions of internal organs.<sup>[1]</sup>

Thus, practice of yoga consisting of few rounds of surya namaskar, basic asanas and pranayamas can be a great vehicle for positive physical, mental and psychological health. Practice of yoga aims at perfection of the body and mind. A regular practitioner of yoga (hatha-yoga) not only achieves a healthy body and mind, but also gains the mastery over functions of the body. Yoga is for improving health and preventing degeneration, disease and decay.

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