Yoga for refining body systems & improving physical stamina for positive health promotion

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Abstract
As far as Yoga and health are concerned those are closely linked in the modern society. Yoga is looked upon as a therapy, though it has got certain limitations. Its original purpose was to keep the Yoga Sadhaka healthy - from preventive view point. But the experience has been quite encouraging about its utility not only for prevention but for cure also. So it is in more demand. Yoga is mind-body technique which involves relaxation, meditation and a set of physical exercises performed in sync with breathing. Being holistic, it is the best means for achieving physical, mental, social and spiritual well-being of the practitioners. The physical stamina and the strength should not be used for extricating others, cutting others, beating others, terrorizing others. But it should be used for the good of the society. It should be used for building ideal social orders for bringing peace on earth. It should be used for developing our health, for developing positive health, promotion of positive health leading into perfect health. This is how the physical personality has to be developed. How can this happen? It can happen based on the principles of Yoga.

Keywords: Yoga, Body Systems, Physical Stamina, Stabilizing Metabolism, Stimulation

1 Introduction
Long before weight machines, stationary bikes and step aerobics became tools in any weight-management plan, people practiced yoga for spiritual and physical health. The origin of yoga predates written history: archaeologists have uncovered stone carvings depicting figures in yoga positions in the Indus Valley dating back 6,000 years or more! While it might not produce the rapid results that fast-paced aerobic exercises or high-tech weight machines do, yoga still has plenty to contribute to your weight loss program in the 21st century. Although some people may think of yoga as a nonphysical, sedentary activity, “there is a physical aspect to yoga,” said Michael Lee, M.A., founder of Phoenix Rising, a West Stockbridge, Massachusetts-based school of yoga and movement therapy.
“You become more flexible; increase your circulation and tone up your body.” Yoga exercises put pressure on the body’s glandular systems, increasing its efficiency and total health, according to the American Yoga Association (AYA). These exercises improve your shape by stabilizing metabolism, improving posture and circulation, and toning muscles in the back, stomach and legs. Still, as AYA pointed out, the exercises of yoga will not take off inches as fast as more vigorous aerobic exercises such as running, swimming or kickboxing. Yoga is about balance in all aspects of your life. It is very much long term, not a quick fix. You see gradual improvement in your health and self-image. Even though it’s not a big calorie-burning activity, yoga produces a lot of muscle toning.”

The physical exercises are just one step to truly realizing the benefits of yoga. The extra contribution of yogic understanding of this building up of power or building up of stamina or building up of stability or building up of dexterity is that apart from what we have understood in our sports training or fitness training or stamina training where we increase the stimulation, tomorrow a little more, tomorrow a little more and go on increasing the target. The additional component of yoga is we not only increase the stimulus, we not only increase the range of movement, we not only increase the speed of contraction, the speed of stimulation, but we also go on giving deeper and deeper rest to the muscles. So stimulus, strong contraction followed by rest is the principle by which our body learns to improve the muscle power, dexterity and stamina in a healthy way. But in the present day fitness training, we give only importance to more performance. But we have forgotten that this can tire out the muscles. This leads to lot of strain on the muscles, leading to accumulation of the toxins in the muscles which lead to Post Exercise pain. Therefore if you can use this component of deep rest, deep relaxation following stimulation, then you are not going to burn out, you are not going to cause trauma, and you are not going to have any after effects of any exercise. We see large number of Athletes who end up with a burn out after intense training, end up with joint problem. So combining yogic training in this power building, in this stamina building program is very useful for even athletes, fitness trainers, aerobic trainers so that not only muscles will improve their power but they get very deep rest and relaxation.

2 Yoga is a perfect practical system of self-culture

The word yoga is Sanskrit for Yoke, or union. In the practice of yoga we seek to create union between the mind and body. It aims at the harmonious development of the body, the mind and the soul. Yoga is the turning away of the senses from the objective universe and the concentration of the mind within. Yoga is eternal life in the soul or spirit. Yoga aims at controlling the mind and its modifications. The path of Yoga is an inner path whose gateway is your heart. Yoga is the discipline of the mind, senses and physical body. Yoga helps in the co-ordination and control of the subtle forces within the body. Yoga brings in perfection, peace and everlasting happiness. Yoga can help you in your business and in your daily life. You can have calmness of mind at all times by the practice of Yoga. You can have restful sleep. You can have increased energy, vigour, vitality, longevity and a high standard of health. Yoga transmutes animal nature into divine nature and raises you to the pinnacle of divine glory and splendour. The practice of Yoga will help you to control the emotions and passions and will give you power to resist temptations and to remove the disturbing elements form mind. It will enable you to keep a balanced mind always and remove fatigue. It will confer on you serenity, calmness and wonderful concentration. It will enable you to hold communion with the Lord and thus attain the summum bonum of existence. If you want to attain success in Yoga, you will have to abandon all worldly enjoyments and practise Tapas and Brahmacharya. You will have to control the mind.
skilfully and tactfully. You will have to use judicious and intelligent methods to curb it. If you use force, it will become more turbulent and mischievous. It cannot be controlled by force. It will jump and drift away more and more. Those who attempt to control the mind by force are like those who endeavour to bind a furious elephant with a thin silken thread.

3 Role of Yoga in total health

Yoga is the perfect example of holistic health because of this combination of mind and body. After all the body cannot exist without the mind and vice versa. By repairing the body, we are more able to repair the mind. If you feel tense in the neck, shoulders, or hips, you’ll find it more difficult to relax and be happy. In order to do this Yoga is comprised of the asana (physical postures) and a philosophy that offers tools to finding true, lasting happiness. Yoga is the science of life and the art of living. It is the common sense answer to overall physical and mental fitness. Basically Yoga is a system of physical and mental self-improvement and final liberation that people have been using for thousands of years. Yoga arose in the age of the Vedas and Upanishads. It is India's oldest scientific, perfect spiritual discipline. Yoga is a method of training the mind and developing its power of subtle perceptions so that man may discover for himself the spiritual truths on which religion, beliefs and moral values finally rest. It is realization of our hidden powers. Swami Shivananda said, "He who radiates good, divine thoughts does immense good unto himself and to the world also". Yoga is science of life, it offers us simple, easy remedies and techniques and methods of health and hygiene to assure physical and mental fitness with a minimum of time, effort and expense. Yoga leads to balance and also provides both a philosophy and a religion. The real joy of life appears when we can unify nature and culture, wealth and poverty, movement and stillness, attachment and detachment. Yoga can serve both the individual and society. Yoga is neither a sect nor an ideology but a practical training of mind and body. Broadly speaking, it has three main outcomes: it makes us more aware of our natural wisdom; it strengthens the body's ability to recover from illness or injury; it teaches us how to co-operate with others. Yoga teaches us truth through mind and body rather than theory; it brings about deep change of attitude. The entire thrust of our life is to devote total attention to every action and, at the same time, to trust in the power of sacred. As per prominent Jainacharya Mahaprajna inventor of Preksha Dhyan Yoga total health consists of physical, mental, emotional and spiritual health. For maintenance of physical health one should always walk in morning fresh air and should observe Asans and Pranayama. For maintenance of mental health one should get rid of worries and should deep dive in meditation and Kayotsarga. For achieving emotional health one should think positive and should always live in present and not in past or future. Sound health and peaceful mind are a must for man to enjoy the material world and develop the consciousness to its perfection. In order to achieve this purpose of birth one has to maintain harmony between body and life force, life force and mind, between individuals and society and between natures and will. Practicing appropriate exercises of body and mind and a virtuous way of living to maintain the harmonies described above constitute Yoga. Thus Karma Yoga is a system of life utilizing the full potential of the body and mind with understanding and awareness for a happy, prosperous and peaceful life. All experiences in life are enjoyed only by the mind. Mind is the peripheral stage of consciousness. In the infinite state, the consciousness itself is the truth. As a man is endowed with the sixth sense which inherits the purpose of the realization of self, in time he should realize the self, which is consciousness. By realizing consciousness man can live with satisfaction, harmony and peace. Realization of consciousness is the
only one perfect and higher knowledge by which one can know everything in the universe. The mind is nothing but the extended and perception activity of the consciousness.

4 Reasons to practice Yoga

* **Stress relief:** Yoga reduces the physical effects of stress on the body. By encouraging relaxation, yoga helps to lower the levels of the stress hormone cortisol. Related benefits include lowering blood pressure and heart rate, improving digestion and boosting the immune system as well as easing symptoms of conditions such as anxiety, depression, fatigue, asthma and insomnia.

* **Pain relief:** Yoga can ease pain. Studies have demonstrated that practicing yoga asanas (postures), meditation or a combination of the two, reduced pain for people with conditions such as cancer, multiple sclerosis, auto-immune diseases and hypertension as well as arthritis, back and neck pain, and other chronic conditions. Some practitioners report that even emotional pain can be eased through the practice of yoga.

* **Better breathing:** Yoga teaches people to take slower, deeper breaths. This helps to improve lung function, trigger the body’s relaxation response and increase the amount of oxygen available to the body.

* **Flexibility:** Yoga helps to improve flexibility and mobility, increasing range of movement and reducing aches and pains. Many people can’t touch their toes during their first yoga class. Gradually they begin to use the correct muscles. Over time, the ligaments, tendons and muscles lengthen, increasing elasticity, making more poses possible. Yoga also helps to improve body alignment resulting in better posture and helping to relieve back, neck, joint and muscle problems.

* **Increased strength:** Yoga asanas (postures) use every muscle in the body, helping to increase strength literally from head to toe. And, while these postures strengthen the body, they also provide an additional benefit of helping to relieve muscular tension.

* **Weight management:** Yoga (even less vigorous styles) can aid weight control efforts by reducing the cortisol levels as well as by burning excess calories and reducing stress. Yoga also encourages healthy eating habits and provides a heightened sense of well-being and self-esteem.

* **Improved circulation:** Yoga helps to improve circulation and, as a result of various poses, more efficiently moves oxygenated blood to the body’s cells.

* **Cardiovascular conditioning:** Even gentle yoga practice can provide cardiovascular benefits by lowering resting heart rate, increasing endurance and improving oxygen uptake during exercise.
* **Focus on the present:** Yoga helps us to focus on the present, to become more aware and to help create mind body health. It opens the way to improved concentration, coordination, reaction time and memory.

* **Inner peace:** The meditative aspects of yoga help many to reach a deeper, more spiritual and more satisfying place in their lives. Many who begin to practice for other reasons have reported this to be a key reason that yoga has become an essential part of their daily lives.

### 5 Concept of yoga and physical stamina

When we lift heavy weights, entire muscles contract whereas for light weight only a few fibres contract. The ability to lift a heavy weight and maintain is stamina. The muscle contraction is associated with the information from the brain. For example, for moving the right hand up, a small electric current will be sent from the nerve cells of the motor area of the left brain and it passes down the spinal card, down the arm to these muscles to contract.

But what is the extra contribution of yogic understanding of this building up of power or building up of stamina or building up of stability or building up of dexterity is that apart from what we have understood in our sports training or fitness training or stamina training where we increase the stimulation, tomorrow a little more, tomorrow a little more and go on increasing the target. The additional component of yoga is we not only increase the stimulus, we not only increase the range of movement, we not only increase the speed of contraction, the speed of stimulation, but we also go on giving deeper and deeper rest to the muscles. So stimulus, strong contraction followed by rest is the principle by which our body learns to improve the muscle power, dexterity and stamina in a healthy way. But in the present day fitness training, we give only importance to more performance. But we have forgotten that this can tire out the muscles. This leads to lot of strain on the muscles, leading to accumulation of the toxins in the muscles which lead to Post Exercise pain. Therefore if you can use this component of deep rest, deep relaxation following stimulation, then you are not going to burn out, you are not going to cause trauma, you are not going to have any after effects of any exercise. We see large number of Athletes who end up with a burn out after intense training, end up with joint problem.

So combining yogic training in this power building, in this stamina building program is very useful for even athletes, fitness trainers, aerobic trainers so that not only muscles will improve their power but they get very deep rest and relaxation. Yoga helps by dual process of increased speed(stimulation) on one side and relaxation on one side. We first use Dynamic asanas and Loosening Exercises & then we use simple breathing Practices to harmonize the breath. Some of these are mentioned below:

#### 5.1 Sīthilakārana Vyāyāma

- Simple Jogging ---Mukha Dhouti
- Forward jogging
- Backward jogging
- Side Jogging
- Twisting
- Rotation of arms
- Forward & backward bending
- Tiger Stretch
- Pavana Muktāsana
- Back stretch
• Side Bending
• Neck Movement

5.2 Breathing Practices
• Hands in and out breathing
• Hand stretch Breathing
• Ankle stretch Breathing
• Dog breathing
• Rabbit breathing
• Tiger Stretch
• Tiger Breathing

5.3 Asanas
• Ekapadasana
• Uttihita hasta padangusthasana
• Merudandasana
• Santolanasana

5.4 Kriyas
• Agnisara
• Kapalabhati
• Both nostril
• Alternate Nostril

5.5 Pranayama
Surya Anuloma Viloma

6 Health management through Yoga positions
6.1 Through Asanas
Yoga poses have been developed over centuries of research and experience. They have been found to be extremely effective. We should adopt Yoga positions and preferably Yoga routine in our life. Yoga results in huge benefit in terms of:
(i) Correcting metabolic disorders.
(ii) Overcoming stress and mind behaviours that seem beyond our control.
(iii) Changing firmly entrenched attitudes or personality disorders. Integral Yoga ensures all rounds personality and health development by concentrating on Yoga positions, meditation, pranayama techniques and body cleansing methods.

Yoga has simple and effective body movements that strengthen our back, firm the stomach and redistribute body weight. Yoga exercises stretch and tone the body muscles. To increase endurance and improve flexibility, Yoga asanas or positions are the best among all exercises for toning muscles, lubricating joints and massaging the body. Yoga postures bring physical as well as mental stability. These asanas were developed thousands of years ago and have evolved over centuries. They work wonders in keeping the body healthy and the mind peaceful. Asanas exercise the nerves, glands, ligaments and muscles. In other words, Yoga exercises are the most comprehensive method of self-care. Although the asanas are very powerful, the effect becomes dramatic when they are done the right way. The mind must be in harmony with the body movements, for this it is essential to equip over selves with the other tool of Integral Yoga. We must always begin with simple poses and gradually overtime move towards the complex ones. It is not as if maximum benefits cannot be
achieved with simple positions. Quite contrary, maximum benefits would be achieved by what is "acceptable" to our body. To achieve the maximum benefits of Yoga, a specific Yoga routine must be developed by first basic positions to free various rigid joints and get the mind in suitable mode. Only then we should be moving to these positions. The process of Yoga is just as important as the result.

6.2 Through Preksha Dhyana

The main purpose of the practice of Preksha Dhyana is to purify the mental states. Mind is constantly choked by contaminating urges, emotions and passions. This hampers the flow of wisdom. The hurdles of uncleanness must first be removed. When the mind is cleaned, peace of mind automatically surfaces. Balance of mind, equanimity and the state of well being are also experienced simultaneously. Similarly peacefulness is also a secondary benefit and will always be achieved, but not the aim. We have to transcend both these mental states to reach our ultimate purpose, viz. total purity of mind and goodness. Preksha Dhyana is an uncomplicated, easy to lean technique of meditation. It is comprised of the following:

- Kayotsarga (Total relaxation)
- Antaryatra (Internal trip)
- Swash preksha (Perception of breathing)
- Sharir preksha (Perception of body)
- Chaitnya kendra preksha (Perception of psychic centres)
- Lesya Dhyan (Perception of psychic colours)
- Bhavana (Auto-suggestion)
- Anupreksha (contemplation)

6.3 Through Chakras—Centres of Consciousness

Amrit Yoga chakras is to build heat by charging battery of the body, which is based in the lower three centres. As this energy is aroused and consciously directed from the lower chakras to the upper ones, our biological prana awakens to its evolutionary potential. Awakened prana, called kundalini, carries out healing and cleansing at an accelerated level resulting in the purification of the nerve channels in the body as well as cleansing kriyas—all of which prepare the body for accelerated spiritual development.

(i) Muladhara chakra (roots, alignment, earth): Muladhara is the body in physical space and time, developing grounded ness, stability and foundation. In Amrit Yoga, the attention is alignment in all poses, building awareness and strength in the legs especially all standing poses. Anything that stabilizes and roots the foundation reinforces muladhara.

(ii) Swadhisthana chakra (sensation, flow, water): In swadhisthana chakra we become aware of the senses, sensation (pleasure/pain) and emotions that accompany each pose. We allow our awareness of ecstatic energy to build in the second half of the pose. Suggested poses include pigeon, bridge and he spinal twist.

(iii) Manipura chakra (flower, fire): In manipura, our fire (spiritual heat) is stimulated. We "jump-start" the battery of the body, the physical storehouse of energy, through strong standing poses like the warrior. The wilful aspect of the practice is also associated with chakra three. Here we are building the battery in the belly and then consciously directing that energy upward. This is an essential part of conscious generation and directing of energy is necessary for prana to awaken and move upward to higher centres.
(iv) **Anahat chakra (Awakening to the spiritual path):** In Anahat, we are asked to open the heart. This requires spiritual commitment to let the ego drop away. In Amrit Yoga the heart energy is engaged with the use of the arms, with mudras, giving and receiving movements, some heart opening poses can be camel, Yoga mudra, cobra, half locust (opens arms and heart meridians) Breathe (lungs) and the forth chakra are closely connected.

(v) **Visuddha chakra (Internal/external):** Use sound vibration when in the pose and the power of our word (opening intention and om) to create the vibration field we intend. Become aware of our own inner dialogue and if it serves us or not. In Amrit Yoga the throat chakra may be stimulated through chanting, bridge, camel and shoulder stand postures.

(vi) **Ajna chakra:** the third eye Meditation, witness, meditative, awareness, pratyahar, deep absorption without choosing for or against what is present in Ajna chakra. In the second half of the pose and third eye integration consciously allow energies to grow with meditative attention and draw freed energies upwards toward the third eye for integration. All forward bending poses where the head is lower than the heart brings attention and energy to the third eye (child, Yoga mudra, wide angle forward bend)

(vii) **Sahasrar chakra (silence):** In the sahasrar, the elixir of Amrita comes through silencing the fluctuations of the mind. This is the entry into the bliss body which can happen in the second half of the pose, in third eye meditation integration or in any pose. All these practices of Amrit Yoga are intended to reach the final point of stilling the modifications of the mind, which is always associated with the seventh chakra.

**7 Specific effect of Yogasanas on different systems**

- **Digestive system:** Regular practice of Yogasanas activates the contractibility and physiological activity of stomach. Secretion of gastric Juices and hormones is increased. This helps to normalize the digestive processes. Through various studies it has been observed that by Yogasanas the peristaltic activity of intestines is increased. Moreover the absorbing capacity of Villi of small intestine is promoted by asanas. As a result of which adequate amount of nutrients are absorbed and desired supply of nutrition is made available to respective part of the body. Yogasanas help to regulate these body processes, which thereby control gastric disorders, such as constipation, indigestion and acidity chiefly Yogasans, which cause positive effects on digestive system include Udar Shakti Vikasak Kriya, Padmasana, Vajrasana, Ardhayamayasendrasana, Gomukhasana, Dhanurasana etc.

- **Respiratory System:** A regular practice of deep Pranayarna, Shavasana helps to regulate inspiration and expiration, which, in turn, provides adequate amount of oxygen in the body. Oxygen gets attached to blood and circulates the entire body. A regular practice of Pranayam helps to prevent the infestation of bacterial infection in the lungs, more specifically the apical region of lungs. specially the saprolactic bacteria are prevented, which subsequently cause T.B. Apart from this, the practice of finer techniques of paranayam, helps to relieve pulmonary disorders, such as bronchitis, pneumonia etc.

- **Endocrine Glands:** It has been revealed through extensive researches that various meditative asans, especially, Padmasana, helps to regulate endocrine secretion of serotonin and dopamine. In such persons in whom there is more secretion of adrenaline and cortisone, meditative asanas such as Padmasana helps to control such secretions. This helps to control serious disorders, such as high B.P., stress and anxiety. Thus, every asana regulate one or the
other endocrine gland and thus offers physical and mental health and alleviate disorders. With the result of Yogasanas the activity of both these nervures systems are well regulated and balanced, which leads to progressive growth and development of the person.

➤ **Muscular System:** A regular practice of Yogic Asanas and Yogic processes tones up muscles and offers flexibility. It normalizes the physiological activities of muscles. Moreover, at minute levels it reconstitutes any damage to muscles. Yogasana accelerates the oxygen supply to blood and thus promotes the normal catabolism of glycogen to release desired level of energy. This helps to regulate the lactic acid level in blood and energy based different metabolic processes continue in a normal manner.

➤ **Circulatory System:** Regular practice of Yogasana promotes purification and circulation of blood in different systems of the body. An accelerated blood flow during Yoga practice helps to deplete various harmful deposits, such as cholesterol in the blood vessels. Thus Yogasanas helps to prevent various disorders related to cardiovascular system.

8 **Conclusion**

Yogic asanas impart physical and mental health all over the body by controlling, regulating and balancing the effect over the sympathetic and parasympathetic nervous system. Through regular practice of Yoga normal physiological activities of nervous system, flexibility and contractibility of muscles, vital capacity of lungs, blood circulation etc such biological processes are toned-up. A regular practice of Deep Pranayarma, Shavasana helps to regulate inspiration and expiration, which in turn, provides adequate amount of oxygen in the body. Oxygen gets attached to blood and circulates the entire body. Our human body is a marvelous piece of machinery. The practice of Yoga Asanas and Pranayama is unquestionably an ideal method to preserve the health and longevity of our body. Yoga is unique in that it recuperates the entire system. In the Yogic system, the mechanism is quiet and restful. Asanas provide a soothing effect on both the outer and inner organs, The result is organ tranquility. Yogasanas, Pranayam, Bandh, Shatkarma, Dhyan etc. such yogic processes carry specific effects on heart, lungs, nervous system and on endocrine glands. Pranayama and other yogic processes control various clinical disorders. It promotes vital capacities of various endocrine and exocrine glands. Moreover, yogic exercises regulate nervous system excretory system and normalize the nerve stimuli. This helps to regulate and normalizes the physical, mental and social state of the person to lead a normal day to day life.

9 **References**