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# **Role of Yoga in Sports Injury**

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Abstract: Yoga has been around for around 5,000 years. Yoga has spawned a slew of schools and organisations throughout the years. Finding a yoga style that connects with you can be intimidating as first. If you're a competitive athlete, it's best to match your yoga practise to your training programme because some sports focus on developing specific muscle groups while neglecting others. Over time, this process produces muscle and joint imbalances, resulting in overuse problems. Yoga allows the muscles, tendons, and ligaments to move through their full range of motion, promoting balance and core strength, which is beneficial to players in their chosen sports. "I'm delighted I found yoga and added it to my weekly workout programme," Heidi Resiert, a triathlete from San Diego, said. I'm not only feeling stronger, but I'm also more confident that I won't be hurt again." Breath work is another important aspect of yoga (pranayama). One of the most essential benefits for athletes is paying attention to their breath while doing yoga. Learning to stay focused and centred in painful poses by focusing on even inhalations and exhalations prepares the athlete for a race or a difficult workout. Yoga's mind-body connection is crucial for athletes to improve their mental clarity and attention. Yoga also aids in the relaxation of not only tense muscles, but also worried and agitated minds. Yoga is beneficial not only in the sagittal plane, but also in the frontal and transverse planes, ensuring complete growth. Being more calm will also help you perform better in sports. So, why not integrate yoga to your training regimen today to improve your gaming performance and prevent injury?

Keywords: Athlete, Yoga, Injury, Muscle, Performance

# I. INTRODUCTION

Yoga as we know it now is the result of a centuries-long spiritual progression; nonetheless, the exact history of Yoga is unknown. Yoga's origins can be traced back to Stone Age Shamanism, which shares cultural connections with Yoga. The sacred art of discerning the cosmic order through inner vision was valued by the shamanistic culture, and they employed rituals to generate alterations in their perceptual field to connect with the spirit world. Yogis are the forerunners of Shamans. Yoga's origins can be traced back over 5,000 years, with evidence of yoga postures found on stone paintings dating from this time period. The Pashupati seal is a depiction of a Yogi meditating in what appears to be an Asana discovered by archaeologists from the Indus Valley Civilization. Vedic Yoga, Pre-Classical Yoga, Classical Yoga, Post-Classical Yoga, and Modern Yoga are the five major periods in the history of yoga.

Yogic techniques, which aim to cultivate one's physical and mental self-awareness, are backed by science and induce constant physiological improvements. Yogis are said to be capable of incredible feats of endurance and control over their autonomic systems. Yoga practise has been shown to increase cardio respiratory efficiency and performance quotient. In previous research from our labs, we showed that yoga-trained people can acquire a deep psychosomatic relaxation state that is related with a considerable reduction in oxygen use.

Yoga is both preventative and therapeutic, and it has been proved to improve the body and mind in both physical and mental ways. If we go back to the word's origins, we can see that the term 'Yoga' has Sanskrit roots. Yoga means "to unite," and it aids the body's integration with the mind's and spirit's other key metaphysical elements. It is also sometimes defined as a way of living that aspires for a healthy mind in a healthy body. Simply said, yoga is a collection of poses, or 'asanas,' combined with breathing techniques that assist to strengthen and stretch the body while also balancing the mind and its thoughts. Unlike other physical types of exercise, such as aerobics, yoga allows people to achieve not just physical but also mental and spiritual well-being. Yoga and yogic practises must be taught as well as practised in order to overcome physical, mental, and physiological issues. To a certain extent, our mind and body can withstand the strain of tension. If tension persists beyond that point, the equilibrium of psycho-physiological processes is disrupted, resulting in a variety

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of maladjustment symptoms. The mind displays tension in the form of impulses that move from the brain to numerous muscles throughout the body. As a result, the practise is an excellent supplement to other forms of fitness as well as a significant edge in any sport.

# **II. WHAT IS YOGA?**

Yoga is derived from the Sanskrit root yuj, which meaning "to join" or "to merge." This can be interpreted as the union of body, intellect, and soul, and it has been employed in literature as both an end and a means. Finally, yoga represents the ultimate level of 'personality unification.' Yoga, as a method, entails a variety of practises and procedures that are used to aid in the development of such integration. In the yogic literature, these practises and techniques are referred to collectively as 'Yoga.'

# **III. YOGA AND SPORTS**

Although most poses are not aerobic, they do send oxygen to the body's cells through conscious deep breathing and persistent stretching and contraction of various muscle groups. Yoga may help you improve and complement your ability in any sport you choose to participate in. Most sports increase muscular strength and stamina in specific body parts. Yoga can help to correct any muscle development imbalances and improve the efficiency of both your body and mind. Because your joints are lubricated, you will be less prone to sports injuries if your body is flexible and supple. Skiing necessitates both mental and physical attentiveness. Yoga asanas increase your concentration and poise while strengthening your muscles and releasing physical strain. Yoga strengthens, balances, and relaxes your limbs. One-sided or unequal muscular development may be a problem for golfers. Asanas in yoga can help to strengthen weak regions and relieve muscle stress. Standing poses enhance muscle flexibility and balance. When swimming, yoga breathing practises assist swimmers in breathing in a relaxed manner. Back bends can help bikers ease stiffness caused by leaning over handlebars. The muscles in a cyclist's back may get stiff as a result of being in one position for long periods of time. Stretches can help you with this. Leg and shoulder stiffness can also be relieved with gentle stretching exercises. Yoga asanas will also help you become more flexible. Racket sports can need a great deal of physical exertion. Yoga can aid players in relaxing and recharging their batteries after a long day of play.

It also encourages calm, clear thinking, even in situations that necessitate quick responses. Hipstand and shoulder flexibility can be improved with asanas for joint mobility.

# **IV. OBJECTIVES OF YOGA IN SPORTS**

The goals that combine yoga and physical education together for the benefit of the human individual are health, physical fitness, and mental stability. Physical fitness is a more precise term that conveys the 'feeling of well-being'. Health is a more general and comprehensive term that conveys the 'feeling of well-being.' Physical fitness refers to a person's ability to complete an activity at a specific time. Physical fitness and health are not static. They are constantly changing and can only be maintained by carefully selected physical activities known as 'exercise.' The value of a specific exercise programme can only be assessed in terms of the effects it has on promoting a specific aspect of physical fitness. One can overcome all challenges and eliminate all weaknesses by practising yoga on a regular basis. Pain can be transformed into joy, sadness into happiness, failure into success, and illness into perfect health. Determination, patience, and perseverance lead to a successful outcome.

# V. BENEFITS OF YOGA ON SPORTS PERFORMANCE

• Mental Health: Let's start with the mental health benefits of Yoga. After all, maintaining excellent mental health is critical to maintaining physical health. Breathing technique is an important aspect of Yoga, as previously stated. 'How?' Is that what you're asking? It's fairly simple: by breathing deeply and correctly, as you would when doing Yoga, you are inhaling more oxygen and allowing your body's cells to have access to that oxygen for a longer amount of time. Breathing solely from one nostril at a time while closing the other with the tip of your finger is a classic yoga technique. According to medical study, this stimulates the opposing side of the brain's activity, resulting in improved cognitive performance and tasks connected with the opposite side of the brain. Children with attention deficit disorder, as well as those suffering from anxiety, sadness, and mood swings,

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benefit from regular yoga practise. It also aids in the relaxation of the mind and the reduction of tension, resulting in an enhancement in a person's overall well-being.

- Strength Asanas: Have you ever wondered why, after a long day at work, so many of us come home and collapse on our sofas, unable to even get a glass of water for ourselves? Lack of inner strength is the source of this. Yoga asanas aid in the development of inner strength. Inner strength is necessary for day-to-day tasks as well as injury prevention. This is especially beneficial as we age and require more energy and power to perform the same task.
- Flexibility Asanas: It is a common misconception that you must be flexible in order to do yoga; in reality, you should practise yoga in order to become more flexible. You will find it easier to complete chores if you have a flexible body. Many of the poses in Yoga are designed to stretch and improve flexibility.
- Yoga works not just the muscles but also the softer tissues of the body, resulting in reduced lactic acid build-up, which causes stiffness in various sections of the body. Yoga increases the range of motion of the inner muscles that aren't used as much and aids in joint lubrication. The end result is a more flexible body that can readily do duties.
- **Pranayama Cardiovascular:** Yoga has numerous beneficial impacts on our body's cardiovascular system. Heart attacks, strokes, and hypertension can all be avoided with a healthy cardiovascular system. Heart disease is an issue that stems from a sedentary lifestyle, a poor diet, and negative thoughts. Our bodies are affected by our thoughts, emotions, and feelings, and negative emotions/thoughts trigger a cascade of complex and unhealthy chemical reactions throughout the body, signalling that something is wrong. By bringing in fresh life-giving oxygen, yoga seems to control them. Yoga's antioxidant capabilities aid in the prevention of bad emotions and enhance physical well-being.
- Memory Improvement Dhyanam: Due to its emphasis on concentration and meditation, yoga aids in the retention of information for a longer period of time. More blood rushes to the brain when you breathe properly, concentrate, and meditate, making it supple and ready to take more information and reproduce it when needed.

# **VI. CONCLUSION**

As previously stated, researchers discovered that yoga in sports is as vital as others believe, and that it benefits us in various ways and at various levels in a sportsman's life. Yoga practise on a daily basis helps us to improve our performance. A person must have a high level of concentration and focus, as well as a calm and regulated mind, in order to accomplish an athletic action efficiently and effectively. Even during stress and/or difficulty, yoga can help a sportsperson maintain mental balance and control of their thoughts. Yoga can assist a sportsperson perform at their top levels by establishing mind control and concentration, and yoga can help us a lot.

As previously stated, researchers discovered that yoga in sports is as vital as others believe, and that it benefits us in various ways and at various levels in a sportsman's life. We have improved our performance by practising yoga on a daily basis. In order to perform a sporting action efficiently and effectively, a person must have a high level of concentration and focus, as well as a calm and controlled mind. Yoga can assist a sportsperson in maintaining mental calmness and control, even in the face of stress and/or adversity. Yoga can assist a sportsperson perform at their best by cultivating mind control and concentration, which can help them perform at their best levels, and yoga can help us a lot. Yoga opens up fresh learning opportunities for a broader range of pupils than standard sports or fitness curriculum, making it an important component of any educational programme. Yoga, as a variation of standard physical education, can also be included to a school's curriculum to help create a quality physical education programme. Yoga in sports is just as significant as other people believe; it benefits us in a variety of ways and at various levels in a sportsman's life. Yoga can help a sportsperson develop mind control and concentration, which will help them perform better on the field. It provides children and adults with the opportunity to succeed in physical activity, which can aid in the development of a strong foundation for life.

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