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EFFECTS OF TRADITIONAL DAILY USE HERBS & YOGA IN DEALING WITH PERFORMANCE STRESS AND ANXIETY

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Abstract

Herbal medicine is commonly employed to cure mental disorders by various mechanisms of action in different systems. Anxiety (including generalized anxiety, panic, posttraumatic stress, obsessive-compulsive, and phobic disorders) is one of the principal symptoms of diverse mental disorders. Yoga, as described by Patanjali in the Yoga Sutras, encompasses more than just physical postures (asana). While many people associate yoga primarily with asana, the Yoga Sutras highlight a comprehensive approach to wellness, including conscious breathing, meditation, lifestyle adjustments, and other practices. Patanjali's eightfold path, or ashtanga, outlines this holistic approach to achieving awareness and enlightenment. Yoga is recognized as a mind-body medicine that addresses physical, mental, and spiritual health, particularly in managing stress-related conditions. Since stress is linked to various diseases, including heart disease, cancer, and stroke, effective stress management is crucial.

Keyword: Herbal Medicine, Eurycoma Longifolia, Bioactive Components, Medical/Scientific

Introduction:

'Herb' is defined as a soft-stemmed plant that dies after flowering, whereas herbalists define an 'herb' as any part of a plant that can be used for medicine, cooking, cosmetics, and as a scent or dye. In nature, many types of herbs can be found and have been used traditionally for many purposes. Athletes are among those who use herbs for their benefit. They believe that some herbs may help them improve their performance, speed up recovery, maintain health and fitness during intense periods of training, increase muscle mass, and reduce body fat. Ginseng, caffeine, ephedrine and recently Eurycoma longifolia Jack are among the popular herbs used to enhance exercise and sports performance. In this article, we review some of the studies of these herbs to investigate their effects on exercise and sports performance. Eurycoma longifolia Jack is one of the herbs found in Malaysia. It is commonly known as 'tongkat ali' in Malaysia and as 'pasak bumi' in Indonesia. It is also referred to as 'Malaysian ginseng' because it is well-known among various ethnic groups in Malaysia as a treatment for various diseases and enhancing health. Eurycoma longifolia Jack is a tall, single-stemmed, slender, shrubby, slowly growing tree, and it can be found on sandy soil. It belongs to the Simaroubaceae family and grows wildly in Southeast Asian countries, that as, Malaysia, Indonesia, Thailand, Myanmar, Laos, and Cambodia. This herb has been used as an anticoagulant for complications during childbirth, a treatment for dysentery, an aphrodisiac, an antimalarial agent, an antibacterial ointment [, an anticancer medicine, an antihyperglycemic therapy, and an anxiolytic. The

pharmacological activity of this plant is attributed to these various quassinoids and also to the squalene derivatives biphenylneolignans, tirucallane-type triterpenes, xanthine-6-1, and β-carboline alkaloids. Mohd Tambi reported that consumption of water-soluble extract of Eurycoma longifolia Jack, even at a high dose of 600 mg, is nontoxic in humans.

Turmeric is a spice that has received much interest from both the medical/scientific worlds as well as from the culinary world. Turmeric is a rhizomatous herbaceous perennial plant (Curcuma longa) of the ginger family. The medicinal properties of turmeric, the source of curcumin, have been known for thousands of years; however, the ability to determine the exact mechanism(s) of action and to determine the bioactive components have only recently been investigated. Curcumin (1,7-bis(4-hydroxy-3-methoxyphenyl)-1,6-heptadiene-3,5-dione), also called diferuloylmethane, is the main natural polyphenol found in the rhizome of Curcuma longa (turmeric) and others Curcuma spp. Curcuma longa has been traditionally used in Asian countries as a medical herb due to its antioxidant, anti-inflammatory, antimutagenic, antimicrobial, and anticancer properties. Tulsi is an aromatic shrub in the basil family Lamiaceae (tribe ocimene) that is thought to have originated in north central India and now grows native throughout the eastern world tropics. Within Ayurveda, Tulsi is known as “The Incomparable One,” “Mother Medicine of Nature” and “The Queen of Herbs,” and is revered as an “elixir of life” that is without equal for both its medicinal and spiritual properties. Within India, Tulsi has been adopted into spiritual rituals and lifestyle practices that provide a vast array of health benefits that are just beginning to be confirmed by modern science. This emerging science on Tulsi, which reinforces ancient Ayurvedic wisdom, suggests that Tulsi is a tonic for the body, mind, and spirit that offers solutions to many modern-day health problems.

Benefits of ginger Nausea and vomiting during pregnancy: Ginger steeped in hot water and boiled with tea leaves has been used as a standard cure to relieve nausea and vomiting brought on by pregnancy. The American College of Obstetrics and Gynecology recommends the consumption of ginger in moderation to curb pregnancy-associated nausea. Chemotherapy-induced nausea: Results from two separate studies in adults who took powdered ginger root three times a day reported lesser severity of nausea. In these studies, participants began their ginger supplement three times a day along with standard antinausea pills about three days before starting chemotherapy.

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Benefits of Turmeric, also known by the scientific name Curcuma longa, is an ancient Indian spice, medicinal herb, and food dye in the ginger family. It is an essential ingredient in Indian curries, with a taste that is often described as bitter and peppery. Nearly all of the world’s turmeric is grown and consumed in India. Turmeric’s root stalks, called rhizomes, are bright yellow or orange. They’re usually dried and ground into powder.(5)

The college years are a period of time when young adults experience a significant amount of change and a variety of novel challenges. Academic performance, social demands, adjusting to life away from home, and financial challenges are just a few of the burdens college students must confront (Humphrey et al., 2000; Paule and Gilson, 2010; Aquilina, 2013). In addition to these stressors, collegiate athletes are required to spend a substantial amount of time participating in activities related to their sport, such as attending practices and training sessions, team meetings, travel, and competitions (Humphrey et al., 2000; López de Subijana et al., 2015; Davis et al., 2019; Hyatt and Kavazis, 2019). These commitments, in addition to the normal stress associated with college life, may increase a collegiate-athlete's risk of experiencing both physical and mental issues (Li et al., 2017; Moreland et al., 2018) that may affect their overall health and wellness. For these reasons, it is essential that coaches understand the types of stressors collegiate athletes face in order to help them manage the potentially deleterious effects stress may have on athletic and academic performanc

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Strength and conditioning coaches are allied health care professionals whose primary job is to enhance fitness of individuals for the purpose of improving athletic The college years are a period of time when young adults experience a significant amount of change and a variety of novel challenges. Academic performance, social demands, adjusting to life away from home, and financial challenges are just a few of the burdens college students must confront (Humphrey et al., 2000; Paule and Gilson, 2010; Aquilina, 2013). In addition to these stressors, collegiate athletes are required to spend a substantial amount of time participating in activities related to their sport, such as attending practices and training sessions, team meetings, travel, and competitions (Humphrey et al., 2000; López de Subijana et al., 2015; Davis et al., 2019; Hyatt and Kavazis, 2019). These commitments, in addition to the normal stress associated with college life, may increase a collegiate-athlete's risk of experiencing both physical and mental issues (Li et al., 2017; Moreland et al., 2018) that may affect their overall health and wellness. For these reasons, it is essential that coaches understand the types of stressors collegiate athletes face in order to help them manage the potentially deleterious effects stress may have on athletic and academic performance. Strength and conditioning coaches are allied health care professionals whose primary job is to enhance fitness of individuals for the purpose of improving athletic

Aim and objective:

In this study, we examine the effects of traditional herbs & Yoga in dealing with performance stress & anxiety in athletes. We want to check performance of student athlete and also effect of stress and minimize stress in student athlete.

Material and Method:

Google Scholar, Pub Med, the Physiotherapy Evidence Database, and the Cochrane Database were used to conduct a title and abstract search of an electronic database. Only full-text articles were used for the review, and everything was double-checked. To determine how well the effect traditional herbs in dealing with performance stress & anxiety in athletes. Arkan B. Mohamed, Mohammed A.M., AI-Rubaee,Ali Q Jalil ,2012.study was conducted to explore the usage of different levels of ginger at concentrationof 0.1 and 0.2% respectively supplemented to diets on the Performance and blood serum traits of the Broiler Chickens. 180 (ROSS) 3 weeks old broiler chicks raised to 6 weeks of age. The birds were distributed into3 treatment groups with three replicates per treatment (20 birds per replicate + 10 females). Ginger (Zingiber officinale) was supplemented at the rate 0.1 and 0.2% in the diets to treatments T2 and T3 respectively while treatment one served as control. The result of performance parameter showed significant difference between treatments.

Fatemeh Fadaki, Mehrad Modaresi, Iinaz sajjadian.2017.In current study the effects of ginger extract and diazepam on anxiety reduction of laboratory mice were investigated. Sixty female mice (25-30g) were divided into six groups including control, anxiety, diazepam and 50, 100 and 200 mg/kg extract doses. After receiving the last dose, all groups except control group were placed in dark box to enforce anxiety. Next, anxiety evaluation test was carried out using plus elevated maze. The number of open and close arms were considered as anxiety indices. Results: According to results, ginger extract reduced anxiety in all doses in proportion to control and diazepam groups. Also, movement activity was increased in 200 mg/kg dose significantly.

Sabri Benkermiche, Samir Djemli, Meriem Haloui, Mohamed Lamine Benaned, Abdelkrim Tahraoui.2022,This is an experimental study conducted on 22 adult rats randomly divided into five groups of five rats each, the untreated control group and the foir groups are treated daily with ginger extract (500 mg/kg/day) and nigella sativa oil (2ml/kg/day) for four weeks, The administration of mercuric chloride (4mg/kg/day) will be from by behavioural tests that the administration of inorganic mercury (HgCL2) Significantly increases the state of anxiety and depression of rats compared to control rats, while the groups pre-treated wih antioxidants can reduce the damage of these behavioural disorders.

Toma's Eduardo,Helmrick, Katie, Zachary,Kelley RN,Golder James 2017this study was to investigated the anxiolytic and antidepressant effects of curcumin, a compound from turmeric (Curcuma longa), and its effects on the benzodiazepine site of the γ-aminobutyric acid receptor A (GABAA) receptor. Utilizing a prospective, between-subjects group design, 55 male Sprague-Dawley rats were randomly assigned to 1 of the 5 intraperitoneally injected treatment groups: vehicle, curcumin, curcumin + flumazenil, midazolam, and midazolam + curcumin. Behavioral testing was performed using the elevated plus maze, open field test, and forced swim test. A 2-tailed multivariate analysis of variance and least significant difference post hoc tests were used for data analysis. In our models, curcumin did not demonstrate anxiolytic effects or changes in behavioral despair.

Result and Conclusion: This review also analysed published literature from India to understand the effects of traditional Herbs & Yoga in dealing with performance stress & anxiety in athelets also in mental health and the implications for stress management and treatment in the Indian context. Results from Indian studies were consistent with those found in global meta-analyses. The Indian government has made public data on interventions, such as the effects of different amounts of physical exercise. Exercises have been shown to be effective traditional herbs & Yoga for a variety of stress & anxiety on performance. Expanding the availability and scope of these programs is a pressing concern for social support networks as well as global health and fitness providers.

This review assessed the current evidence for the effectiveness of traditional daily use herbs & yoga in dealing with performance stress and anxiety in athletes. This review aimed to synthesize the effectiveness of traditional daily use herbs in dealing with performance stress and anxiety in athletes of to role of this herbs & yoga had a beneficial effect on improving performance of athlete to reduce stress and anxiety in athletes.

Negar Jamshidi, Marc M. Cohen ,2017.The reviewed studies reinforce traditional uses and suggest tulsi is an effective treatment for lifestyle-related chronic diseases including diabetes, metabolic syndrome, and psychological stress. Further studies are required to explore

mechanisms of action, clarify the dosage and dose form, and determine the populations most likely to benefit from tulsi's therapeutic effects.(122)

Cecilia Jennings, Paul Jones,Turmeric 2024 investigated the efficacy of oral turmeric and its curcuminoids in treating various diseases and disorders. However, with the development of absorption-enhanced curcuminoid formulations in the past decade, dozens of clinical studies were conducted examining this spice's actions toward inflammatory conditions and glucose/lipid dysregulation. This narrative review of human trials addresses the scientific evidence for potential health benefits of turmeric and its curcuminoids in the treatment of arthritis, diabetes, and the metabolic syndrome and discusses recommendations for future research.These traditional herbs & yoga gives significant positive effects in stress & anxiety and performance in athletes.Therefore, ginger extract in 200 mg/kg dose can be an appropriate replacement for diazepam to reduce anxiety symptoms.

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