

Relation Of Regular Yoga Practice And Cardiovascular Fitness

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Abstract

Yoga has its origins in ancient Indian philosophy. Asanas, Pranayama and meditation practice that cultivate awareness and ultimately more profound states of consciousness. The practice of yoga can help an individual to improve their full potential and increase spiritual consciousness. The cardiovascular system is responsible for pumping blood throughout the body thereby providing a rapid-transport system to distribute oxygen to the body cells and also remove carbon dioxide from the body with other waste products. Heart problems and cardiovascular diseases is one of the leading causes of death worldwide. Regular practices of yoga offers an even more effective approach to put a stop to the increasing number of people suffering from heart diseases. Life without yoga contributes to the early onset and progression of life style disease such as cardiovascular disease, hypertension, diabetes and obesity. The lungs, heart, and circulatory system are also the focal points in health and fitness. Decreased physical fitness may result from various diseases, especially when accompanied by prolonged recumbence, or from inactivity such as a sedentary lifestyle and a low- level of physical activity associated with yoga decreased incidence of hypertension and cardio-related disorders.

Introduction

Yoga has multiple physical, mental and spiritual benefits and holds that the influence of the mind on body is far more powerful than the influence of body on mind. Yoga helps in gentle and automatic massaging of internal organs and thus helps in enhancing functioning of nervous system, and endocrine system, (Khalsa, et.al 2012). yoga has its origins in ancient Indian philosophy. Asanas, Pranayama and meditation practice that cultivate awareness and ultimately more profound states of consciousness. The practice of yoga can help an individual to improve their full potential and increase spiritual consciousness. Apart from the achieving physical health through pranayama and posture, one of the aims of the practice of the yoga is the ability to maintain cognitive ability and control, specifically the areas of memory, well-being, attention, and arousal control. It is well recognised, yoga helps to clear the mind and may have an effects on the ability to attend to relevant stimuli and recall information subsequently (Rangan ,Nagendra, Bhat 2009). Yoga training is largely associated with claims of increased blood flow to the brain (Nordqvist, 2013). The cardiovascular system is responsible for pumping blood throughout the body thereby providing a rapid-

transport system to distribute oxygen to the body cells and also remove carbon dioxide from the body with other waste products.

Cardiovascular disease

Cardiovascular disease as one caused by unhealthy lifestyle including smoking, poor diet and sedentary behaviour . Cardiovascular diseases have behavioural correlates and that physical inactivity is related to cardiovascular disease .Low cardiovascular fitness may result in high physical strain on the body .For Cardiovascular fitness, the activity components included are not only for muscular development and endurance training. The lungs, heart, and circulatory system are also the focal points in health and fitness. The reason for this is to improve stamina, immune system, and maintain good body composition. Cardiovascular fitness reduces the risk of cardiovascular diseases and other diseases like hypertension ,Diabetes obesity,

Importance of cardiovascular fitness

The importance of cardiovascular fitness to health for all individuals has been well documented. Physical fitness is a required element for all the activities in our life. Cardiovascular fitness of an individual is mainly dependent on lifestyle related factors such as daily physical activity levels. It was believed that the low cardiovascular fitness level of an individual is associated with higher mortality rate

Yoga Improve Blood Circulation :

Regular practice of Yoga has improved the cardio vascular system, decreased some of the risk factors leading to a cardiovascular disease, promoted fat loss, increased muscle mass, increased glucose intake by cells and enhanced well-being of the sedentary students. Yoga has been shown to decrease the risk of cardiovascular disease and improve total cholesterol and high density lipoprotein levels yoga also means total caloric expenditure promotes fat loss, and increases lean body mass

Yoga Improve cardiac output

As result yoga , the size of the heart change Regular practice of yoga increased cardiac output by 40-60% of maximal capacity during rest it is around liters/min. whereas while exercising, it increases up to 40 liters/minute.. When an individual suffers from stress, it constricts breathing passage, creates tension in the heart muscles, and increase heart rate.

Yoga Reduce Anxiety and Depression

Daily or regular yoga and yoga also known to effectively reduce anxiety or depression caused by stress and ultimately reduce the risk of cardiovascular Disease . Heart problems and cardiovascular diseases is one of the leading causes of death worldwide. Finding an effective cure against these type of diseases will greatly reduce to mortality rate. But regular yoga offers an even more effective approach to put a stop to the increasing number of people suffering from heart diseases.

Blood pressure

Blood pressure control due to yoga as the requirement of blood by the muscles is increased. The pressure exerted on the walls of the blood vessels increases as the heart pumps more and more blood to meet the requirement of muscles. Pulse become normal in the shorter duration after the cessation of activity in case of trained athletes. Yoga resulting as new capillaries are formed within the muscle fibers.

Cardio- Respiratory Effects:

Heart rate shows a gradual adaptation to an increased work load by increasing proportionally to the modern yoga and will plateau at a given level for about 2 to 3 minutes. The rate of oxygen consumption can be estimated by taking the heart

rate. The amount of blood flowing to the various organs increases due to yoga.

Conclusions

Cardiovascular diseases is one of the leading causes of death worldwide. regular yoga offers an even more effective approach to put a stop to the increasing number of people suffering from heart diseases. . Finding an effective cure against these type of diseases will greatly reduce to mortality rate. Finally, this paper provide a greater insight to eliminate the risks of diseases such as hypertension, and cardio vascular problems to the people. Yoga has been shown to decrease the risk of cardiovascular disease and improve total cholesterol and high density lipoprotein levels yoga also means total caloric expenditure promotes fat loss, and increases lean body mass

References:

1. Beets, M. & Mitchell, E. "Effects of yoga on stress, depression, and health-related quality of life in a nonclinical, bi-ethnic sample of adolescents: A pilot study". *Hispanic Health Care International*, 2010 8(1), 47-35
2. Bellhouse, B. "Yoga for mind, body, soul, and school". *Physical & Health Education Journal*, 76(2), (2010), 41-42.
3. Best JR. 'Effects of physical activity on children's executive function: contributions of experimental research on yoga. *Dev Rev.* 2010; 30(4):331-51.
4. Connor-Smith, J. K., Compas, B. E., Wadsworth, M. E., Tomsen, A. H., & Saltzman, H. (2000). Responses to stress in adolescence: measurement of coping and involuntary stress responses. *Journal of Consulting and Clinical Psychology*, 68, 976-992.
5. Davidson RJ, Dunne J, Eccles JS, Engle A, Greenberg M, Jennings P, Vago D. Contemplative practices and mental training: Prospects for american education. *Child Dev Perspect.* 2012;6(2):146-153.
6. Gothe, N., & McAuley, E. "Yoga and Cognition: A Meta-Analysis of Chronic and Acute Effects". *Psychosomatic Medicine*, 78:4-797. doi:10.1097/PSY.0000000000000218. (2015). 77(7),
7. Kauts A and Sharma N. 'Effect of yoga on academic performance in relation to stress. *Int J Yoga.* 2009 Jan-Jun; 2(1): 39-43.

8. Kondam A.G , Nagadeepa W, Jagan N, Jyothinath K, Suresh M, Chandrasekhar M. "The effect of yoga in improved cognitive functions in medical students: A comparative study". *National Journal of Physiology, Pharmacy and Pharmacology*. 2016 38-42
9. Manjunath NK, Telles S Spatial and verbal memory test scores following yoga and fine arts camps for school children. *Indian J PhysiolPharmacol*(2004) 48(3): 353-356.
10. Nordqvist C. "Yoga Improves Brain Function More Than Yoga". *Medical news today*, 2013.
11. Sarokte . S and Rao M.R, "Effects of MedhyaRasayana and Yogic practices in improvement of short-term memory among school- children," *AYU: An International Quarterly Journal of Research in Ayurveda*, vol. 34, no. 4, pp. 383–389, 2013 .
12. Schoon I, Jones E, Cheng H, Maughan B. 'Family hardship, family instability, and cognitive development'. *JEpidemiol Community Health*.(2012); 66(8):716-22.
13. Serwacki ML, Cook-Cottone C. Yoga in the schools: A systematic review of the literature. *Int J Yoga Therap*. 2012;(22):101–109.
14. Singh AN. 'Role of yoga therapies in psychosomatic disorders.' *International Congress Series*. (2006); 1287,91-96.
15. Stromswold K. Biological and psychosocial factors affect linguistic and cognitive development differently: A twin study. *Proceedings of the Annual Boston University Conference On Language Development*; 2;595-606. 2006.
16. Telles, . Singh N. Bhardwaj,A.K . Kumar.A, and Balkrishna.A. "Effect of yoga or physical yoga on physical, cognitive and emotional measures in children: a randomized controlled trial," *Child and Adolescent Psychiatry and Mental Health*, vol. 7, no. 1, article 37, 2013.
17. Vhavle S, Rao MR, "Manjunath NK, Ram AR. Effects of a Yoga Program on Health, Behaviour and Learning Ability in School Children: A Single Arm Observational Study". *Int J Complement Alt Med* (2017) 5(1):
18. WacharasinChintana RN, Barnard Kathryn E, Spieker RN, Susan J. Factors affecting toddler cognitive development in low income families: implications for practitioners. *Infants & Young Children* (2003); 16(2):175-81.
19. White LS 'Reducing stress in school-age girls through mindful yoga. *J Pediatr Health Care* (2012) 26(1): 45-56.
20. Williamson, L. A. "Yoga in public schools. *The Education Digest*", (2013).78(5), 35-37.

