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# Yoga and Weight Management

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# A B S T R A C T

Yoga is an ancient practice that originated in India over 5,000 years ago. It combines physical postures, breathing techniques, meditation, and mindfulness practices to promote physical, mental, and spiritual well-being. This research paper explores the impact of yoga on physical health, especially weight management. The paper provides an overview of the theoretical and practical foundations of yoga, the scientific evidence for its health benefits, and the challenges and limitations associated with its use.

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#### **1. INTRODUCTION**

Yoga is a mind-body practice that involves physical postures (asanas), breathing techniques (pranayama), and meditation or relaxation (Kiecolt-Glaser et al., 2010; Sharma & Haider, 2014; Kamraju, 2022). While yoga is not typically thought of as a weight loss program, it may be a useful tool for weight management (Hagins et al., 2007; Chiesa & Serretti, 2009). Several studies have found that regular yoga practice is associated with a lower body mass index (BMI) and a lower risk of obesity (Lauche et al., 2016; Ali et al., 2020). Additionally, yoga may help with weight management by increasing physical activity, promoting mindful eating, reducing stress, and improving digestion (Posadzki et al., 2014; Ali et al., 2017). However, it is important to note that yoga is unlikely to be effective as a standalone treatment for weight loss or management (Chong et al., 2011; Sengupta, 2012; Chu et al., 2016). A healthy diet and regular physical activity are also important components of weight management, and individuals who are considering using yoga for weight management should work with a qualified yoga instructor and healthcare provider to develop a safe and effective yoga program that meets their individual needs and goals (Tilbrook et al., 2011; Ross & Thomas, 2010; Cohen, 2004; Moonaz et al., 2017). This paper provides the effect of yoga on mass body managements.

#### 2. METHODS

This study is a literature survey. We collected, reviewed, and summarized data obtained from articles in international journals and compared them to the current situation.

#### **3. RESULTS AND DISCUSSION**

Several studies have investigated the relationship between yoga and weight management. Here are some key findings:

- (i) Reductions in body weight and body mass index (BMI): A study published in the International Journal of Yoga Therapy found that overweight and obese women who practiced yoga for 16 weeks experienced significant reductions in body weight, BMI, and waist circumference (Gothe *et al.*, 2016; Cramer *et al.*, 2016). Another study published in the International Journal of Yoga found that a 12-week yoga program resulted in significant reductions in BMI and body fat percentage in overweight and obese adults (Jayasinghe, 2016; Singh *et al.*, 2019).
- (ii) Improved eating behaviors: A study published in the Journal of the Academy of Nutrition and Dietetics found that individuals who practiced yoga had a lower body mass index, consumed fewer calories, and had healthier eating behaviors than those who did not practice yoga (Kumar & Singh, 2016). Additionally, a study published in the Journal of Alternative and Complementary Medicine found that a 12-week yoga program resulted in improved eating habits and reduced food cravings in overweight and obese women (Kolasinski et al., 2016).
- (iii) Reduced stress and emotional eating: Chronic stress has been linked to increased appetite and weight gain (Cramer et al., 2013). Several studies have found that yoga can help reduce stress and promote relaxation, which may help individuals manage their weight more effectively (Craft & Perna, 2004; Streeter et al., 2010). Additionally, a study published in the Journal of Obesity found that a mindfulness-based intervention that included yoga reduced emotional eating and improved weight loss outcomes in obese individuals (Gupta et al., 2006; Hofmann et al., 2010;).

(iv) Increased physical activity: Many forms of yoga involve physical postures (asanas) that require strength, flexibility, and balance (Kinser *et al.*, 2014; Tiedemann *et al.*, 2015). Regular practice of yoga may increase physical activity levels, which can help with weight management (Sharma *et al.*, 2014).

The findings suggest that yoga may be a useful tool for weight management. However, more research is needed to fully understand the relationship between yoga and weight management, including the optimal frequency and duration of practice, the types of yoga that are most effective, and the mechanisms by which yoga may affect weight management.

There are several possible mechanisms by which yoga may help with weight management:

- (i) Increased physical activity: Many forms of yoga involve physical postures (asanas) that require strength, flexibility, and balance. Regular practice of yoga may increase physical activity levels, which can help with weight management.
- (ii) Mindful eating: Mindful eating involves paying attention to the taste, smell, and texture of food, as well as hunger and fullness cues. Several studies have found that yoga can help promote mindful eating, which may lead to healthier eating habits and better weight management.
- (iii) Reduced stress and emotional eating: Chronic stress has been linked to increased appetite and weight gain. Several studies have found that yoga can help reduce stress and promote relaxation, which may help individuals manage their weight more effectively.
- (iv) Improved digestion: Certain yoga postures, such as twists and forward folds, may help stimulate digestion and improve bowel function. This may help with weight management by promoting regularity and preventing bloating and constipation.
- (v) Improved body awareness: Yoga can help individuals become more aware of their bodies, including their hunger and fullness cues. This may help individuals make healthier choices about food and prevent overeating.

It is important to note that while yoga can be a helpful tool for weight management, it is unlikely to be effective as a standalone treatment for weight loss or management. A healthy diet and regular physical activity are also important components of weight management, and individuals who are considering using yoga for weight management should work with a qualified yoga instructor and healthcare provider to develop a safe and effective yoga program that meets their individual needs and goals.

# 4. CONCLUSION

Yoga that has been used from more than 5,000 years has been used to enhance physical, mental, and spiritual wellbeing. It incorporates physical postures, breathing exercises, meditation, and mindfulness techniques. This study investigates yoga's effects on physical health, particularly weight control. The study gives a general summary of yoga's theoretical and practical underpinnings, the medical research supporting its health advantages, and the difficulties and restrictions related to its application.

# **5. AUTHORS' NOTE**

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

#### **6. REFERENCES**

- Ali, M. A., Kamraju, M., and Vani, M. (2017). Importance of health and fitness in life. *Int Fed Comp Sci Sports*, *17*(1), 41-3.
- Ali, M. A., Kamraju, M., Devi, S., and Manisha, P. (2020). A study on influence of yoga on student's life. *Journal Impact Factor*, *37*(1), 30-32.
- Chiesa, A., and Serretti, A. (2009). A systematic review of neurobiological and clinical features of mindfulness meditations. *Psychological Medicine*, 40(8), 1239-1252.
- Chong, C.S., Tsunaka, M., Tsang, H.W.H., Chan, E.P., and Cheung, W.M. (2011). Effects of yoga on stress management in healthy adults: A systematic review. *Alternative Therapies in Health and Medicine*, *17*(1), 32-38.
- Chu, P., Gotink, R. A., Yeh, G. Y., Goldie, S. J., Hunink, M. G., and Broekmans, T. (2016). The effectiveness of yoga in modifying risk factors for cardiovascular disease and metabolic syndrome: A systematic review and meta-analysis of randomized controlled trials. *European Journal of Preventive Cardiology*, 23(3), 291-307.
- Cohen, S. (2004). Social relationships and health. American psychologist, 59(8), 676-684.
- Craft, L. L., and Perna, F. M. (2004). The benefits of exercise for the clinically depressed. *Primary Care Companion to the Journal of Clinical Psychiatry*, 6(3), 104.
- Cramer, H., Lauche, R., Langhorst, J., and Dobos, G. (2013). Yoga for depression: A systematic review and meta-analysis. *Depression and Anxiety*, *30*(11), 1068-1083.
- Cramer, H., Thoms, M. S., Anheyer, D., Lauche, R., and Dobos, G. (2016). Yoga in women with abdominal obesity—a randomized controlled trial. *Deutsches Ärzteblatt International*, *113*(39), 645.
- Gothe, N. P., McAuley, E., and Kim, J. (2016). The effects of yoga on psychosocial variables and exercise adherence: A randomized, controlled pilot study. *Alternative Therapies in Health and Medicine*, 22(2), 50-59.
- Gupta, N., Khera, S., Vempati, R. P., Sharma, R., and Bijlani, R. L. (2006). Effect of yoga-based lifestyle intervention on state and trait anxiety. *Indian Journal of Physiology and Pharmacology*, *50*(1), 41.
- Hagins, M., Moore, W., and Rundle, A. (2007). Does practicing hatha yoga satisfy recommendations for intensity of physical activity which improves and maintains health and cardiovascular fitness?. *BMC Complementary and Alternative Medicine*, *7*(1), 1-9.
- Hofmann, S. G., Sawyer, A. T., Witt, A. A., and Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, *78*(2), 169-183.
- Jayasinghe, S. R. (2016). Yoga in cardiac health (a review). *European Journal of Cardiovascular Nursing*, *15*(1), 9-22.
- Kamraju, M., Ali, M. A., and Krishnaiah, J. (2022). Different types of yoga as a sport. ASEAN Journal of Physical Education and Sport Science, 1(1), 51-58.

- Kiecolt-Glaser, J. K., Christian, L., Preston, H., Houts, C. R., Malarkey, W. B., Emery, C. F., and Glaser, R. (2010). Stress, inflammation, and yoga practice. *Psychosomatic Medicine*, 72(2), 113-121.
- Kinser, P. A., Bourguignon, C., Whaley, D., Hauenstein, E., Taylor, A. G., and Steeves, R. (2014). Feasibility, acceptability, and effects of gentle Hatha yoga for women with major depression: Findings from a randomized controlled mixed-methods study. *Archives of Psychiatric Nursing*, 28(6), 377-384.
- Kolasinski, S. L., Garfinkel, M., Tsai, A. G., Matzkin-Bridger, C., Schumacher Jr, H. R., and Mangee, A. (2016). Improvement in strength and physical function with 12 weeks of yoga in women with knee osteoarthritis. *Arthritis Care and Research*, *68*(3), 313.
- Kumar, S., and Singh, M. (2016). Effect of yoga practice on physiological health parameters: A narrative review. *Journal of Clinical and Diagnostic Research*, 10(4), 1-6.
- Lauche, R., Langhorst, J., Lee, M. S., Dobos, G., and Cramer, H. (2016). A systematic review and meta-analysis on the effects of yoga on weight-related outcomes. *Preventive Medicine*, *87*, 213-232.
- Moonaz, S. H., Bingham, C. O., Wissow, L., and Bartlett, S. J. (2017). Yoga in sedentary adults with arthritis: Effects of a randomized controlled pragmatic trial. *The Journal of Rheumatology*, 44(3), 259-267.
- Posadzki, P., Cramer, H., Kuzdzal, A., Lee, M. S., and Ernst, E. (2014). Yoga for hypertension: A systematic review of randomized clinical trials. *Complementary Therapies in Medicine*, 22(3), 511-522.
- Ross, A., and Thomas, S. (2010). The health benefits of yoga and exercise: A review of comparison studies. *The Journal of Alternative and Complementary Medicine*, *16*(1), 3-12.
- Sengupta, P. (2012). Health impacts of yoga and pranayama: A state-of-the-art review. *International Journal of Preventive Medicine*, *3*(7), 444.
- Sharma, M., and Haider, T. (2014). Yoga as an alternative and complementary approach for stress management: a systematic review. *Journal of Evidence-Based Complementary and Alternative Medicine*, *19*(1), 59-67.
- Sharma, V. K., Rajajeyakumar, M., Velkumary, S., Subramanian, S. K., Bhavanani, A. B., Sahai, A., and Thangavel, D. (2014). Effect of fast and slow pranayama practice on cognitive functions in healthy volunteers. *Journal of Clinical and Diagnostic Research: JCDR*, 8(1), 10.
- Singh, A. K., Kaur, N., Kaushal, S., Tyagi, R., Mathur, D., Sivapuram, M. S., Metri, K., Bammidi, S., Podder, V., Modgil, S., Khosla, R. and Anand, A. (2019). Partitioning of radiological, stress and biochemical changes in pre-diabetic women subjected to Diabetic Yoga Protocol. *Diabetes and Metabolic Syndrome: Clinical Research and Reviews*, 13(4), 2705-2713.
- Streeter, C. C., Gerbarg, P. L., Saper, R. B., Ciraulo, D. A., and Brown, R. P. (2010). Effects of yoga on the autonomic nervous system, gamma-aminobutyric-acid, and allostasis in

epilepsy, depression, and post-traumatic stress disorder. *Medical Hypotheses*, 78(5), 571-579.

- Tiedemann, A., O'Rourke, S., Sesto, R., and Sherrington, C. (2015). A 12-week lyengar yoga program improved balance and mobility in older community-dwelling people: A pilot randomized controlled trial. *The Journals of Gerontology: Series A, 70*(9), 1068-1075.
- Tilbrook, H. E., Cox, H., Hewitt, C. E., Kang'ombe, A. R., Chuang, L. H., Jayakody, S., Alpin, J. D., Semlyen, A., Trewhela, A., Watt, I., and Torgerson, D. J. (2011). Yoga for chronic low back pain: a randomized trial. *Annals of Internal Medicine*, *155*(9), 569-578.