

# Yoga and Qigong for Health

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Yoga and qigong are ancient mind–body practices used in the East for thousands of years to promote inner peace and mental clarity. Both share breathing techniques and slow movements and are being used as alternative/complementary approaches to the management of disease, especially chronic problems with no effective conventional treatments.

Keywords: yoga ; qigong ; mind–body therapies ; health benefits

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## 1. Introduction

Yoga and qigong are ancient mind–body practices used in the East for thousands of years to promote inner peace and mental clarity. Both share breathing techniques and slow movements, which can be easily learned by anyone, empowering the practitioner with a tool for psycho-spiritual growth. Yoga and qigong are based in the same concept of a vital life-force energy that sustains life everywhere, which in yoga is called *prana* and in qigong is called *qi*. They place emphasis on attending to interoceptive, proprioceptive, and kinesthetic qualities of experience <sup>[1]</sup>.

Both yoga and qigong emphasize three common components in their fundamental practices: (1) stretching of muscles, tendons, and ligaments, where thousands of proprioceptive receptors are located; (2) controlled breathing leading to the harmonization of the somatic and autonomic nervous systems; (3) the obtention of a state of tranquility of the mind, which can be considered as meditation <sup>[2]</sup>.

Qigong is a Chinese traditional medicine that uses vegetative biofeedback therapy to promote health and wellbeing and to treat medical conditions <sup>[3]</sup>. It combines gentle body movements with breathing and mindfulness <sup>[4][5]</sup>. Traditionally, qigong has been defined as the harmonization of *qi* (the internal vital energy of the body) and blood in the body, aiming to prevent disease and improve health <sup>[6][7]</sup>. The biophysical effects of qigong as a vegetative biofeedback therapy can be measured and quantified using various methods, namely, the measurement of the electrical potential of the skin <sup>[3]</sup>. Qigong is particularly appropriate for older people due to its gentle and smooth movements <sup>[8]</sup>; qigong movements are usually slower and gentler than yoga movements.

While yoga has its roots in Indian Vedic scriptures, qigong emerged from Chinese Taoism; however, they may be considered as different paths to the same goal, given that both aim to improve body health, to quiet and clarify the mind, and to strengthen connection to the inner soul and humanity <sup>[9]</sup>. Historically, yoga and qigong have different movements, postures, and focuses, but they both similarly use the breath to move energy and invoke a meditative state. Their overall purpose is the same, even if the way in which they achieve it is a little different. Yoga began as more of a spiritual practice, while qigong emerged as a practice for health preservation and is associated with martial arts. In its spiritual approach, yoga's postures were originally created for building muscles so that the practitioner would be able to perform seated meditation for hours. Qigong, on the other hand, has less of a muscular focus, using more flowing movements, which are physically easier to practice. One final difference is that qigong (once one progresses past a beginner level) mostly focuses on balance, while a typical yoga session will probably only include one or two balancing poses.

## 2. Yoga and Qigong in Health and Disease

Mind-body therapies (MBTs), such as yoga and qigong, are currently used in the West as alternative/complementary approaches to the management of disease, especially chronic problems for which there is no effective conventional treatment. These two popular systems of self-performed bodily exercises are applied to the maintenance of a healthy state of the body and mind <sup>[2]</sup>.

## 2.1. Immune System and Inflammation

Several conditions that are responsive to yoga and qigong practices, such as fatigue, depression, and pain, comprise inflammatory processes <sup>[10]</sup>, which may explain researchers' growing interest in the impact of MBTs on inflammatory markers <sup>[11][12]</sup>. Overall, the findings of Morgan et al. suggest that MBTs may reduce inflammation, particularly among clinical populations, as evidenced by the significant reductions in C-reactive protein (CRP) <sup>[13]</sup>.

Vanketesh et al. <sup>[12]</sup> observed a downregulation of the inflammatory response in chronic disease through yoga practice. This had been previously reported by Falkenberg et al. <sup>[14]</sup>, even though the existing evidence is not entirely consistent. In particular, decreases in IL-1 beta, IL-6, and TNF-alpha have been described in RCTs <sup>[14]</sup>. The authors hypothesized that longer periods of yoga practice are necessary in order to attain consistent effects on circulating inflammatory markers.

According to Bower and Irwin <sup>[11]</sup>, the evidence for the effects of MBTs on IL-6 and other inflammatory markers was diverse, with the majority of the studies showing no changes. Of note, the studies with no significant alterations of the inflammatory markers presented beneficial effects on various symptoms, improving the patients' health status <sup>[11][15]</sup>.

## 2.2. Lower Back Pain

Lower back pain (LBP) is a condition affecting most people, and it results in functional limitations due to the lack of an effective treatment <sup>[16]</sup>.

Yoga is a good therapeutic approach to LBP treatment, with the majority of the RCT studies showing pain reduction, improvement of psychological distress, and increased energy levels <sup>[16]</sup>. However, there is limited research on how the practice of yoga relieves back pain <sup>[16]</sup>. It is assumed that the mind–body connection in yoga, which is achieved by mentally focusing on breath and movement, may provide benefits to LBP patients <sup>[16]</sup>. Through this focus, yoga may modify the perception of pain; it has been shown that yoga practitioners have larger pain thresholds during thermal and pain threshold tasks <sup>[17]</sup>. For spine-related conditions, the core point is that yoga postures make use of unusual positioning in which the body weight is supported by the arms, hips, or muscles of the body. By pitting one muscle group against another, such as in forward bends, each group—agonist and antagonist—is equally exerted and, thereby, strengthened.

Concerning qigong, there are very few studies on chronic LBP, so it is not clear if qigong can be useful in LBP treatment <sup>[16]</sup>. It was observed that qigong significantly decreased pain intensity, back functional impairment, heart rate, and respiratory rate, and it increased range of motion, core muscle strength, and mental status in office workers with chronic non-specific lower back pain compared to a waiting-list control group <sup>[18]</sup>. On the other hand, Park et al. conducted a narrative review of RCTs that included an active control group, reporting that qigong was not more effective than physical exercise or other alternative therapies <sup>[16]</sup>. In the only study comparing the effects of yoga and qigong on the reduction of chronic LBP, Teut et al. <sup>[4]</sup> showed that neither yoga nor qigong was better than no treatment in reducing pain and increasing quality of life (QoL).

## 2.3. Mood Disorders, Sleep Disturbance, Cognitive Impairment, and QoL

Depression is excessively common in people with chronic pain; MBTs (including both yoga and qigong) provide small to moderate reductions of depressive symptoms in the chronic pain context <sup>[19]</sup>. However, this research area is still underdeveloped <sup>[19]</sup>.

People come to yoga classes with a wide array of emotional conditions. For those experiencing depression, yoga can be helpful, as yoga classes may create space for healing emotional traumas and for achieving a steadier sense of serenity <sup>[20]</sup>. Yoga may serve as an efficacious supplement to pharmacotherapy, psychotherapy, and healthy lifestyle interventions for people with mental disorders <sup>[21]</sup>.

Stress reduction seems to be one of the most important benefits of qigong, in which the mind is used to guide activation and deactivation patterns through imagination <sup>[22]</sup>. According to Saed et al., qigong has shown inconsistent effectiveness as a complementary treatment for depression and anxiety <sup>[23]</sup>. On the other hand, according to Yeung et al. <sup>[24]</sup>, there is preliminary evidence that qigong may be potentially beneficial for the management of depressive and anxiety symptoms in healthy adults and patients with chronic illnesses. Guo et al. found that qigong-based exercises may be effective for alleviating depression symptoms in individuals with major depressive disorder <sup>[25]</sup>. In the context of drug abuse, Liu et al. <sup>[26]</sup> suggested that qigong may alleviate anxiety symptoms. However, the authors recommended that their results should be interpreted with caution given the limited numbers of RCTs and their methodological weaknesses <sup>[24][25][26]</sup>.

In comparison with an inactive control, yoga and qigong significantly reduced insomnia symptoms and improved sleep quality [27]. These practices may also improve cognitive function [28][29] everyday activities functioning, memory, resilience, and mindfulness in older adults with mild cognitive impairment, but further research evidence is still needed to make a more conclusive statement [29]. Yoga may improve cognitive functions—particularly attention and verbal memory—in patients with mild cognitive impairment [30]. This may occur through improved sleep, mood, and neural connectivity [30]. Additionally, Weber et al. [31] found that yoga and qigong seem to positively influence QoL, depressive symptoms, fear of falling, and sleep quality in old adults without mental health conditions.

## 2.4. Cardiovascular, Neurologic, Respiratory, and Metabolic Diseases

The practice of qigong reduces the systolic and diastolic blood pressure in comparison with those of control groups [6][32][33]. Qigong may be an alternative non-pharmacological strategy for hypertension management, namely, in an elderly population group that usually takes too many medications [6]. In patients in an early stage of recovery from stroke, qigong showed more changes than conventional respiratory training in the improvement of trunk control ability, respiratory muscle functions, and ability to perform daily life tasks [34].

Yoga might be considered as an effective adjuvant for patients with various neurological disorders, such as stroke, Parkinson's disease, multiple sclerosis, epilepsy, Alzheimer's disease, dementia, headache, myelopathy, and neuropathies [35].

Reychler et al. [36] found that qigong and yoga improve the main symptoms of chronic obstructive pulmonary disease. Both therapies produced an effect that was slow but increased with time, with a good rate of adherence and long-lasting effects. Yoga (including *pranayama*) has been suggested as an adjuvant therapy in the treatment of childhood asthma, although it cannot yet be recommended as a standard of care due to the insufficiency of data on its efficacy [37]. A Cochrane review on this pathology showed moderate-quality evidence that yoga may provide small improvements in asthma patients' symptomatology [38]. In patients with respiratory diseases, namely, asthma, *pranayama* has physiological and psychological benefits, although more high-quality RCTs are required to obtain definitive evidence [39].

Yoga may promote significant improvements in the management of type 2 diabetes (DM2), as shown by the glycemic control (including HbA1c) [40][41], lipid levels [40][41], and body composition [41]. More limited data suggest that yoga may also lower oxidative stress and blood pressure, enhance pulmonary and autonomic function, mood, sleep, and QoL, and reduce medication use in adults with DM2 [41]. Qigong was not found to have any advantages in reducing fasting blood glucose or postprandial blood glucose in patients with DM2, but demonstrated better control of HbA1c than that of other aerobic exercises [42].

Cramer et al. [43], who based their meta-analysis on the use of yoga for the management of metabolic syndrome, stated that no recommendation could be made for or against yoga's effects on the parameters of metabolic syndrome. However, they also stated that, in spite of the methodological problems found in the evaluated studies, yoga could be preliminarily considered an effective intervention for reducing waist circumference and systolic blood pressure in people with metabolic syndrome who do not want to practice conventional forms of exercise [43]. Regarding qigong, Zou et al. [33] suggested that it might be an effective intervention for improving the risk factors for cardiovascular disease in the metabolic syndrome.

## 2.5. Cancer

Yoga and qigong have been shown to improve the anxiety and mood changes that are commonly associated with pain in cancer patients, even though these MBTs were not able to reduce the pain [44]. Evidence supports recommending yoga for the improvement of psychological outcomes and, probably, physical symptoms in adult cancer patients undergoing treatment [45]. For childhood patients, the evidence is insufficient [45].

Gentle hatha and restorative yoga are effective practices for treating sleep disruption, cancer-related fatigue, cognitive impairment, psychosocial distress [45][46], and musculoskeletal symptoms in cancer survivors and cancer patients under treatment [46].

As an adjuvant therapy, yoga seems effective for QoL improvement in women with breast cancer, with better results with increasing intervention time [47]. Specifically, it seems to increase the psychological and social wellbeing of breast cancer survivors by helping to restore their body image and self-esteem and easing the return to their previous daily lives [47]. Future directions for yoga research in oncology should comprise: enrollment of participants with various cancer types, standardization of self-reported assessments, general use of active control groups and objective measures, and addressing yoga interventions' heterogeneity [48].

Concerning qigong, and according to some authors, evidence on QoL improvement has not yet been established [47][49], but according to other authors, qigong seems to be a good strategy for cancer-related symptoms and QoL in cancer survivors [50], at least in women with breast cancer [51].

As described for yoga, statistically significant and clinically meaningful effects of qigong interventions were observed for symptoms of fatigue [52][53], sleep quality [53], and immune function [52] in cancer patients. Additionally, Carlson et al. [54] reported that both qigong and yoga might improve QoL in these patients.

## 2.6. Menopause Symptoms

Shepherd-Banigan et al. reviewed studies on the efficacy of yoga and qigong on the improvement of symptoms of peri- or post-menopausal women, namely, vasomotor symptoms, psychological symptoms, and QoL [55]. The authors did not identify any systematic reviews or RCTs using qigong in this context [55]. Concerning yoga, small to moderate benefits in the reduction of hot flash severity and psychological symptoms were observed, without an impact on QoL [55]. On the contrary, Cramer et al. reported that yoga can reduce psychological, somatic, vasomotor, and urogenital menopausal symptoms [56]. A more recent meta-analysis on menopause symptoms found that yoga significantly improved physical QoL, but its effects on the general, psychological, sexual, and vasomotor symptom QoL scores were not significant [57].

## 3. Conclusions

Summing up, yoga and qigong have resulted from thousands of years of experience in using mind–body practices to treat diseases, promote health and longevity, improve fighting skills, and achieve different levels of development of awareness and spirituality.

Yoga and qigong seem to have similar effects; this may be expected, since both are comparable mind–body approaches. There are many similarities between them, and their overall purpose is the same, even though the way in which they achieve it may be slightly different. In general, they have been used for similar health conditions, even though more research has been conducted on yoga in comparison with qigong. Moreover, for yoga, most trials have been conducted on relatively younger healthy participants across India and the United States, while for qigong, most trials have been conducted with relatively older ill people in China and the United States [58].

Participants' preferences between yoga and qigong apparently differ, but this is probably due to the lower availability of qigong classes and the comparative lack of knowledge about qigong.

Studies comparing yoga and qigong are warranted in order to assess differences/similarities between the two approaches in the health context. Such studies have not been published to date, but are certainly needed.

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## References

1. Schmalzl, L.; Crane-Godreau, M.A.; Payne, P. Movement-based embodied contemplative practices: Definitions and paradigms. *Front. Hum. Neurosci.* 2014, 8, 205.
2. Leung, P.C. Yoga & Qigong—A Self-reliant Practice for Health of Body & Mind. In *Complementary Therapies for the Body, Mind and Soul*; Marcelo, S., Ed.; INTECH: Houston, TX, USA, 2015.
3. Matos, L.C.; Machado, J.; Greten, H.J.; Monteiro, F.J. Changes of skin electrical potential in acupoints from Ren Mai and Du Mai conduits during Qigong practice: Documentation of a clinical phenomenon. *J. Bodyw. Mov. Ther.* 2019, 23, 713–720.
4. Teut, M.; Knilli, J.; Daus, D.; Roll, S.; Witt, C.M. Qigong or Yoga versus No Intervention in Older Adults with Chronic Low Back Pain-A Randomized Controlled Trial. *J. Pain.* 2016, 17, 796–805.
5. Manzanegue, J.M.; Vera, F.M.; Maldonado, E.F.; Carranque, G.; Cubero, V.M.; Morell, M.; Blanca, M.J. Assessment of immunological parameters following a qigong training program. *Med. Sci. Monit.* 2004, 10, CR264–CR270.
6. Ching, S.M.; Mokshashri, N.R.; Kannan, M.M.; Lee, K.W.; Sallahuddin, N.A.; Ng, J.X.; Wong, J.L.; Devaraj, N.K.; Hoo, F.K.; Loo, Y.S.; et al. Effects of qigong on systolic and diastolic blood pressure lowering: A systematic review with meta-analysis and trial sequential analysis. *BMC Complement. Med. Ther.* 2021, 21, 8.
7. Van Dam, K. Individual Stress Prevention through Qigong. *Int. J. Environ. Res. Public Health* 2020, 17, 7342.
8. Feng, F.; Tuchman, S.; Denninger, J.W.; Fricchione, G.L.; Yeung, A. Qigong for the Prevention, Treatment, and Rehabilitation of COVID-19 Infection in Older Adults. *Am. J. Geriatr. Psychiatry* 2020, 28, 812–819.

9. Orlansky, D. *Complementary Pract of Yoga and Qigong*; Kripalu Center for Yoga & Health: Stockbridge, MA, USA; Available online: <https://kripalu.org/resources/complementary-practices-yoga-and-qigong> (accessed on 17 March 2021).
10. Irwin, M.R.; Cole, S.W. Reciprocal regulation of the neural and innate immune systems. *Nat. Rev. Immunol.* 2011, 11, 625–632.
11. Bower, J.E.; Irwin, M.R. Mind-body therapies and control of inflammatory biology: A descriptive review. *Brain Behav. Immun.* 2016, 51, 1–11.
12. Venkatesh, H.N.; Ravish, H.; Wilma, D.; Silvia, C.R.; Srinivas, H. Molecular Signature of the Immune Response to Yoga Therapy in Stress-related Chronic Disease Conditions: An Insight. *Int. J. Yoga* 2020, 13, 9–17.
13. Morgan, N.; Irwin, M.R.; Chung, M.; Wang, C. The effects of mind-body therapies on the immune system: Meta-analysis. *PLoS ONE* 2014, 9, e100903.
14. Falkenberg, R.I.; Eising, C.; Peters, M.L. Yoga and immune system functioning: A systematic review of randomized controlled trials. *J. Behav. Med.* 2018, 41, 467–482.
15. Manzanque, J.M.; Vera, F.M.; Rodriguez, F.M.; Garcia, G.J.; Leyva, L.; Blanca, M.J. Serum cytokines, mood and sleep after a qigong program: Is qigong an effective psychobiological tool? *J. Health Psychol.* 2009, 14, 60–67.
16. Park, J.; Krause-Parello, C.A.; Barnes, C.M. A Narrative Review of Movement-Based Mind-Body Interventions: Effects of Yoga, Tai Chi, and Qigong for Back Pain Patients. *Holist. Nurs. Pract.* 2020, 34, 3–23.
17. Desai, R.; Tailor, A.; Bhatt, T. Effects of yoga on brain waves and structural activation: A review. *Complement. Clin. Pract.* 2015, 21, 112–118.
18. Phattharasupharerk, S.; Purepong, N.; Eksakulkla, S.; Siriphorn, A. Effects of Qigong practice in office workers with chronic non-specific low back pain: A randomized control trial. *J. Bodyw. Mov. Ther.* 2019, 23, 375–381.
19. Sud, A.; Lai, K.S.P.; Cheng, D.K.; Chung, C.; Pico-Espinosa, O.J.; Rice, D.B. Mind-Body Interventions for Depressive Symptoms in Chronic Pain: A Systematic Review of Meta-Analyses. *Pain Phys.* 2021, 24, 61–72.
20. Weintraub, A. *Yoga for Depression: A Compassionate Guide to Relieve Suffering through Yoga*; Broadway Books: New York, NY, USA, 2004.
21. Vancampfort, D.; Stubbs, B.; Van Damme, T.; Smith, L.; Hallgren, M.; Schuch, F.; Deenik, J.; Rosenbaum, S.; Ashdown-Franks, G.; Mugisha, J.; et al. The efficacy of meditation-based mind-body interventions for mental disorders: A meta-review of 17 meta-analyses of randomized controlled trials. *J. Psychiatr. Res.* 2021, 134, 181–191.
22. Matos, L.C.; Sousa, C.M.; Goncalves, M.; Gabriel, J.; Machado, J.; Greten, H.J. Qigong as a Traditional Vegetative Biofeedback Therapy: Long-Term Conditioning of Physiological Mind-Body Effects. *Biomed Res. Int.* 2015, 2015, 531789.
23. Saeed, S.A.; Cunningham, K.; Bloch, R.M. Depression and Anxiety Disorders: Benefits of Exercise, Yoga, and Meditation. *Am. Fam. Phys.* 2019, 99, 620–627.
24. Yeung, A.; Chan, J.S.M.; Cheung, J.C.; Zou, L. Qigong and Tai-Chi for Mood Regulation. *Focus Am. Psychiatr. Publ.* 2018, 16, 40–47.
25. Guo, L.; Kong, Z.; Zhang, Y. Qigong-Based Therapy for Treating Adults with Major Depressive Disorder: A Meta-Analysis of Randomized Controlled Trials. *Int. J. Environ. Res. Public Health* 2019, 16, 826.
26. Liu, F.; Cui, J.; Liu, X.; Chen, K.W.; Chen, X.; Li, R. The effect of tai chi and Qigong exercise on depression and anxiety of individuals with substance use disorders: A systematic review and meta-analysis. *BMC Complement. Med. Ther.* 2020, 20, 161.
27. Wang, X.; Li, P.; Pan, C.; Dai, L.; Wu, Y.; Deng, Y. The Effect of Mind-Body Therapies on Insomnia: A Systematic Review and Meta-Analysis. *Evid. Based Complement. Altern. Med.* 2019, 2019, 9359807.
28. Zhang, Y.; Li, C.; Zou, L.; Liu, X.; Song, W. The Effects of Mind-Body Exercise on Cognitive Performance in Elderly: A Systematic Review and Meta-Analysis. *Int. J. Environ. Res. Public Health* 2018, 15, 2791.
29. Farhang, M.; Miranda-Castillo, C.; Rubio, M.; Furtado, G. Impact of mind-body interventions in older adults with mild cognitive impairment: A systematic review. *Int. Psychogeriatr* 2019, 31, 643–666.
30. Brenes, G.A.; Sohl, S.; Wells, R.E.; Befus, D.; Campos, C.L.; Danhauer, S.C. The Effects of Yoga on Patients with Mild Cognitive Impairment and Dementia: A Scoping Review. *Am. J. Geriatr. Psychiatry* 2019, 27, 188–197.
31. Weber, M.; Schnorr, T.; Morat, M.; Morat, T.; Donath, L. Effects of Mind-Body Interventions Involving Meditative Movements on Quality of Life, Depressive Symptoms, Fear of Falling and Sleep Quality in Older Adults: A Systematic Review with Meta-Analysis. *Int. J. Environ. Res. Public Health* 2020, 17, 6556.

32. Xiong, X.; Wang, P.; Li, S.; Zhang, Y.; Li, X. Effect of Baduanjin exercise for hypertension: A systematic review and meta-analysis of randomized controlled trials. *Maturitas* 2015, 80, 370–378.
33. Zou, L.; Zhang, Y.; Sasaki, J.E.; Yeung, A.S.; Yang, L.; Loprinzi, P.D.; Sun, J.; Liu, S.; Yu, J.J.; Sun, S.; et al. Wuqinxi Qigong as an Alternative Exercise for Improving Risk Factors Associated with Metabolic Syndrome: A Meta-Analysis of Randomized Controlled Trials. *Int. J. Environ. Res. Public Health* 2019, 16, 1396.
34. Zheng, Y.; Zhang, Y.; Li, H.; Qiao, L.; Fu, W.; Yu, L.; Li, G.; Yang, J.; Ni, W.; Yong, Z.; et al. Comparative Effect of Liuzijue Qigong and Conventional Respiratory Training on Trunk Control Ability and Respiratory Muscle Function in Patients at an Early Recovery Stage From Stroke: A Randomized Controlled Trial. *Arch. Phys. Med. Rehabil.* 2021, 102, 423–430.
35. Mooventhan, A.; Nivethitha, L. Evidence based effects of yoga practice on various health related problems of elderly people: A review. *J. Bodyw. Mov. Ther.* 2017, 21, 1028–1032.
36. Reyhler, G.; Poncin, W.; Montigny, S.; Luts, A.; Caty, G.; Pieters, T. Efficacy of yoga, tai chi and qi gong on the main symptoms of chronic obstructive pulmonary disease: A systematic review. *Respir. Med. Res.* 2019, 75, 13–25.
37. Das, R.R.; Sankar, J.; Kabra, S.K. Role of Breathing Exercises and Yoga/Pranayama in Childhood Asthma: A Systematic Review. *Curr. Pediatr. Rev.* 2019, 15, 175–183.
38. Yang, Z.Y.; Zhong, H.B.; Mao, C.; Yuan, J.Q.; Huang, Y.F.; Wu, X.Y.; Gao, M.Y.; Tang, J.L. Yoga for asthma. *Cochrane Database Syst. Rev.* 2016, 4, CD010346.
39. Jayawardena, R.; Ranasinghe, P.; Ranawaka, H.; Gamage, N.; Dissanayake, D.; Misra, A. Exploring the Therapeutic Benefits of Pranayama (Yogic Breathing): A Systematic Review. *Int. J. Yoga* 2020, 13, 99–110.
40. Cui, J.; Yan, J.H.; Yan, L.M.; Pan, L.; Le, J.J.; Guo, Y.Z. Effects of yoga in adults with type 2 diabetes mellitus: A meta-analysis. *J. Diabetes Investig.* 2017, 8, 201–209.
41. Innes, K.E.; Selfe, T.K. Yoga for Adults with Type 2 Diabetes: A Systematic Review of Controlled Trials. *J. Diabetes Res.* 2016, 2016, 6979370.
42. Meng, D.; Chunyan, W.; Xiaosheng, D.; Xiangren, Y. The Effects of Qigong on Type 2 Diabetes Mellitus: A Systematic Review and Meta-Analysis. *Evid. Based Complement. Altern. Med.* 2018, 2018, 8182938.
43. Cramer, H.; Langhorst, J.; Dobos, G.; Lauche, R. Yoga for metabolic syndrome: A systematic review and meta-analysis. *Eur. J. Prev. Cardiol.* 2016, 23, 1982–1993.
44. Deng, G. Integrative Medicine Therapies for Pain Management in Cancer Patients. *Cancer J.* 2019, 25, 343–348.
45. Danhauer, S.C.; Addington, E.L.; Sohl, S.J.; Chaoul, A.; Cohen, L. Review of yoga therapy during cancer treatment. *Support Care Cancer* 2017, 25, 1357–1372.
46. Lin, P.J.; Peppone, L.J.; Janelins, M.C.; Mohile, S.G.; Kamen, C.S.; Kleckner, I.R.; Fung, C.; Asare, M.; Cole, C.L.; Culakova, E.; et al. Yoga for the Management of Cancer Treatment-Related Toxicities. *Curr. Oncol. Rep.* 2018, 20, 5.
47. Husebo, A.M.L.; Husebo, T.L. Quality of Life and Breast Cancer: How Can Mind(-)Body Exercise Therapies Help? An Overview Study. *Sports* 2017, 5, 79.
48. Danhauer, S.C.; Addington, E.L.; Cohen, L.; Sohl, S.J.; Van Puymbroeck, M.; Albinati, N.K.; Culos-Reed, S.N. Yoga for symptom management in oncology: A review of the evidence base and future directions for research. *Cancer* 2019, 125, 1979–1989.
49. Tao, W.W.; Jiang, H.; Tao, X.M.; Jiang, P.; Sha, L.Y.; Sun, X.C. Effects of Acupuncture, Tuina, Tai Chi, Qigong, and Traditional Chinese Medicine Five-Element Music Therapy on Symptom Management and Quality of Life for Cancer Patients: A Meta-Analysis. *J. Pain Symptom Manag.* 2016, 51, 728–747.
50. Wayne, P.M.; Lee, M.S.; Novakowski, J.; Osypiuk, K.; Ligibel, J.; Carlson, L.E.; Song, R. Tai Chi and Qigong for cancer-related symptoms and quality of life: A systematic review and meta-analysis. *J. Cancer Surviv.* 2018, 12, 256–267.
51. Meng, T.; Hu, S.F.; Cheng, Y.Q.; Ye, M.N.; Wang, B.; Wu, J.J.; Chen, H.F. Qigong for women with breast cancer: An updated systematic review and meta-analysis. *Complement. Ther. Med.* 2021, 60, 102743.
52. Klein, P.J.; Schneider, R.; Rhoads, C.J. Qigong in cancer care: A systematic review and construct analysis of effective Qigong therapy. *Support. Care Cancer* 2016, 24, 3209–3222.
53. Zeng, Y.; Xie, X.; Cheng, A.S.K. Qigong or Tai Chi in Cancer Care: An Updated Systematic Review and Meta-analysis. *Curr. Oncol. Rep.* 2019, 21, 48.
54. Carlson, L.E.; Zelinski, E.; Toivonen, K.; Flynn, M.; Qureshi, M.; Piedalue, K.A.; Grant, R. Mind-Body Therapies in Cancer: What Is the Latest Evidence? *Curr. Oncol. Rep.* 2017, 19, 67.

55. Shepherd-Banigan, M.; Goldstein, K.M.; Coeytaux, R.R.; McDuffie, J.R.; Goode, A.P.; Kosinski, A.S.; Van Noord, M.G.; Befus, D.; Adam, S.; Masilamani, V.; et al. Improving vasomotor symptoms; psychological symptoms; and health-related quality of life in peri- or post-menopausal women through yoga: An umbrella systematic review and meta-analysis. *Complement. Ther. Med.* 2017, 34, 156–164.
  56. Cramer, H.; Peng, W.; Lauche, R. Yoga for menopausal symptoms-A systematic review and meta-analysis. *Maturitas* 2018, 109, 13–25.
  57. Nguyen, T.M.; Do, T.T.T.; Tran, T.N.; Kim, J.H. Exercise and Quality of Life in Women with Menopausal Symptoms: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *Int. J. Environ. Res. Public Health* 2020, 17, 7049.
  58. Lauche, R.; Wayne, P.M.; Dobos, G.; Cramer, H. Prevalence, Patterns, and Predictors of T'ai Chi and Qigong Use in the United States: Results of a Nationally Representative Survey. *J. Altern. Complement. Med.* 2016, 22, 336–342.
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