



## VIDEOS & BOOKS

Gil Hedley, Exquisite Lungs Breathing: (e.g. on youtube)

<https://www.youtube.com/watch?v=nJuFmyXeHkA&list=PLgOAbGS-6NzwfKdBFUc36wyb332qi4Pc0&index=4&t=87s>

Iyengar, BKS. Light on Pranayama: The Definitive Guide to th Art of Breathing. 2013. HarperCollins.

Chaitow L, Bradley D, Gilbert C (Eds.). *Recognizing and treating breathing disorders*. 2014. Elsevier.

Stephen M (2021). *Breath taking – The Power, Fragility, and Future of Our Extraordinary Lungs*. Atlantic Monthly Press. New York.

## SCIENTIFIC ARTICLES

Abishek K, Bakshi SS, Bhavanani AB. The Efficacy of Yogic Breathing Exercise Bhramari Pranayama in Relieving Symptoms of Chronic Rhinosinusitis. *Int J Yoga*. 2019 May-Aug;12(2):120-123. doi: 10.4103/ijoy.IJOY\_32\_18. PMID: 31143019; PMCID: PMC6521749.

Anshu, Singh N, Deka S, Saraswati P, Sindhwani G, Goel A, Kumari R. The effect of yoga on pulmonary function in patients with asthma: A meta-analysis. *Complement Ther Clin Pract*. 2023 Feb;50:101682. doi: 10.1016/j.ctcp.2022.101682. Epub 2022 Nov 8. PMID: 36403343.

Ashhad S, Kam K, Del Negro CA, Feldman JL. Breathing Rhythm and Pattern and Their Influence on Emotion. *Annu Rev Neurosci*. 2022 Jul 8;45:223-247. doi: 10.1146/annurev-neuro-090121-014424. Epub 2022 Mar 8. PMID: 35259917; PMCID: PMC9840384.

Bahi C, Irrmischer M, Franken K et al. Effects of conscious connected breathing on cortical brain activity, mood and state of consciousness in healthy adults. *Curr Psychol* (2023). <https://doi.org/10.1007/s12144-023-05119-6>

Balban MY, Neri E, Kogon MM, Weed L, Nouriani B, Jo B, Holl G, Zeitzer JM, Spiegel D, Huberman AD. Brief structured respiration practices enhance mood and reduce physiological arousal. *Cell Rep Med*. 2023 Jan 17;4(1):100895. doi: 10.1016/j.xcrm.2022.100895. Epub 2023 Jan 10. PMID: 36630953; PMCID: PMC9873947.

Banzett RB, Lansing RW, Binks AP. Air Hunger: A Primal Sensation and a Primary Element of Dyspnea. *Compr Physiol*. 2021 Feb 12;11(2):1449-1483. doi: 10.1002/cphy.c200001. PMID: 33577128.

Bellemare F, Jeanneret A, Couture J. Sex differences in thoracic dimensions and configuration. *Am J Respir Crit Care Med*. 2003 Aug 1;168(3):305-12. doi: 10.1164/rccm.200208-876OC. Epub 2003 May 28. PMID: 12773331.

Bellingham MC. Driving respiration: the respiratory central pattern generator. *Clin Exp Pharmacol Physiol*. 1998 Oct;25(10):847-56. doi: 10.1111/j.1440-1681.1998.tb02166.x. PMID: 9784928.

Benditt JO. Respiratory Care of Patients With Neuromuscular Disease. *Respir Care*. 2019 Jun;64(6):679-688. doi: 10.4187/respcare.06827. PMID: 31110036.

Bennett WD, Zeman KL. Effect of race on fine particle deposition for oral and nasal breathing. *Inhal Toxicol*. 2005 Nov;17(12):641-8. doi: 10.1080/08958370500188984. PMID: 16087570.

Bernardi L, Passino C, Wilmerding V, Dallam GM, Parker DL, Robergs RA, Appenzeller O. Breathing patterns and cardiovascular autonomic modulation during hypoxia induced by simulated altitude. *J Hypertens*. 2001 May;19(5):947-58. doi: 10.1097/00004872-200105000-00016. PMID: 11393679.

# Pranayama Yoga Teacher Training – References



- Bernardi L, Spadacini G, Bellwon J, Hajric R, Roskamm H, Frey AW. Effect of breathing rate on oxygen saturation and exercise performance in chronic heart failure. *Lancet.* 1998 May 2;351(9112):1308-11. doi: 10.1016/S0140-6736(97)10341-5. PMID: 9643792.
- Bhargava R, Gogate MG, Mascarenhas JF. Autonomic responses to breath holding and its variations following pranayama. *Indian J Physiol Pharmacol.* 1988 Oct- Dec;32(4):257-64. PMID: 3215678.
- Bhatt A, Rampallivar S. Effect of Pranayam on ventilatory functions in patients of bronchial asthma'. *Journal of Evolution of Medical and Dental Sciences,* 2016, 5(28)
- Bhavanani AB, Madanmohan, Udupa K. Acute effect of Mukh bhastrika (a yogic bellows type breathing) on reaction time. *Indian J Physiol Pharmacol.* 2003 Jul;47(3):297-300. PMID: 14723315.
- Bhavanani AB, Ramanathan M, Balaji R, Pushpa D. Differential effects of uninostril and alternate nostril pranayamas on cardiovascular parameters and reaction time. *Int J Yoga.* 2014 Jan;7(1):60-5. doi: 10.4103/0973-6131.123489. PMID: 25035609; PMCID: PMC4097918.
- Biersteker MW, Biersteker PA. Vital capacity in trained and untrained healthy young adults in the Netherlands. *Eur J Appl Physiol Occup Physiol.* 1985;54(1):46-53. doi: 10.1007/BF00426297. PMID: 4018054.
- Bilo G, Revera M, Bussotti M, Bonacina D, Styczkiewicz K, Caldara G, Giglio A, Faini A, Giuliano A, Lombardi C, Kawecka-Jaszcz K, Mancia G, Agostoni P, Parati G. Effects of slow deep breathing at high altitude on oxygen saturation, pulmonary and systemic hemodynamics. *PLoS One.* 2012;7(11):e49074. doi: 10.1371/journal.pone.0049074. Epub 2012 Nov 12. PMID: 23152851; PMCID: PMC3495772.
- Boiten FA, Frijda NH, Wientjes CJ. Emotions and respiratory patterns: review and critical analysis. *Int J Psychophysiol.* 1994 Jul;17(2):103-28. doi: 10.1016/0167-8760(94)90027-2. PMID: 7995774.
- Bouchard S, Bernier F, Boivin E, Morin B, Robillard G. Using biofeedback while immersed in a stressful videogame increases the effectiveness of stress management skills in soldiers. *PLoS One.* 2012;7(4):e36169. doi: 10.1371/journal.pone.0036169. Epub 2012 Apr 27. PMID: 22558370; PMCID: PMC3338628.
- Bradley D (2014b). Patterns of breathing dysfunction in hyperventilation and breathing pattern disorders. In: *Recognizing and treating breathing disorders.* Eds.: Chaitow L, Bradley D, Gilbert C. Elsevier, London.
- Buchanan TL, Janelle CM. Fast breathing facilitates reaction time and movement time of a memory-guided force pulse. *Hum Mov Sci.* 2021 Apr;76:102762. doi: 10.1016/j.humov.2021.102762. Epub 2021 Jan 29. PMID: 33524929.
- Budhi RB, Payghan S, Deepeshwar S. Changes in Lung Function MeasuresFollowing Bhastrika Pranayama (Bellows Breath) and Running in Healthy Individuals. *Int J Yoga.* 2019 Sep-Dec;12(3):233-239. doi: 10.4103/ijoy.IJOY\_43\_18. PMID: 31543632; PMCID: PMC6746052.
- Burgos J, Barrios C, Mariscal G, Lorente A, Lorente R. Non-uniform Segmental Range of Motion of the Thoracic Spine During Maximal Inspiration and Exhalation in Healthy Subjects. *Front Med (Lausanne).* 2021 Aug 30;8:699357. doi: 10.3389/fmed.2021.699357. PMID: 34527680; PMCID: PMC8435595.
- Byeon K, Choi JO, Yang JH, Sung J, Park SW, Oh JK, Hong KP. The response of the vena cava to abdominal breathing. *J Altern Complement Med.* 2012 Feb;18(2):153-7. doi: 10.1089/acm.2010.0656. PMID: 22339104.
- Campanelli S, Tort ABL, Lobão-Soares B. Pranayamas and Their Neurophysiological Effects. *Int J Yoga.* 2020 Sep-Dec;13(3):183-192. doi: 10.4103/ijoy.IJOY\_91\_19. Epub 2020 Sep 13. PMID: 33343147; PMCID: PMC7735501.

# Pranayama Yoga Teacher Training – References



- Carreno FR, Frazer A. Vagal Nerve Stimulation for Treatment-Resistant Depression. *Neurotherapeutics*. 2017 Jul;14(3):716-727. doi: 10.1007/s13311-017-0537-8. PMID: 28585221; PMCID: PMC5509631.
- Casale TB, Romero FA, Spierings EL. Intranasal noninhaled carbon dioxide for the symptomatic treatment of seasonal allergic rhinitis. *J Allergy Clin Immunol*. 2008 Jan;121(1):105-9. doi: 10.1016/j.jaci.2007.08.056. Epub 2007 Oct 29. PMID: 18028997.
- Cephus JY, Stier MT, Fuseini H, Yung JA, Toki S, Bloodworth MH, Zhou W, Goleniewska K, Zhang J, Garon SL, Hamilton RG, Poloshukin VV, Boyd KL, Peebles RS Jr, Newcomb DC. Testosterone Attenuates Group 2 Innate Lymphoid Cell-Mediated Airway Inflammation. *Cell Rep*. 2017 Nov 28;21(9):2487-2499. doi: 10.1016/j.celrep.2017.10.110. PMID: 29186686; PMCID: PMC5731254.
- Chaitow L, Bradley D, Gilbert C (2014). What are breathing pattern disorders? In: *Recognizing and treating breathing disorders*. Eds.: Chaitow L, Bradley D, Gilbert C. Elsevier, London.
- Chaitow L, Bradley D, Gilbert C (2014b). The structure and function of breathing. In: *Recognizing and treating breathing disorders*. Eds.: Chaitow L, Bradley D, Gilbert C. Elsevier, London.
- Cicero G, Mazzotti S, Blandino A, Granata F, Gaeta M. Magnetic Resonance Imaging of the Diaphragm: From Normal to Pathologic Findings. *J Clin Imaging Sci*. 2020 Jan 13;10:1. doi: 10.25259/JCIS\_138\_2019. PMID: 31966931; PMCID: PMC6969382.
- Critchley HD, Nicotra A, Chiesa PA, Nagai Y, Gray MA, Minati L, Bernardi L. Slow breathing and hypoxic challenge: cardiorespiratory consequences and their central neural substrates. *PLoS One*. 2015 May 14;10(5):e0127082. doi: 10.1371/journal.pone.0127082. PMID: 25973923; PMCID: PMC4431729.
- D'Angelo OM, Diaz-Gil D, Nunn D, Simons JC, Gianatasio C, Mueller N, Meyer MJ, Pierce E, Rosow C, Eikermann M. Anesthesia and increased hypercarbic drive impair the coordination between breathing and swallowing. *Anesthesiology*. 2014 Dec;121(6):1175-83. doi: 10.1097/ALN.0000000000000462. PMID: 25275368; PMCID: PMC5464404.
- Da Cuña-Carrera I, Alonso-Calvete A, Soto-González M, Lantarón-Caeiro EM. How Do the Abdominal Muscles Change during Hypopressive Exercise? *Medicina (Kaunas)*. 2021 Jul 9;57(7):702. doi: 10.3390/medicina57070702. PMID: 34356983; PMCID: PMC8305934.
- Del Negro CA, Funk GD, Feldman JL. Breathing matters. *Nat Rev Neurosci*. 2018 Jun;19(6):351-367. doi: 10.1038/s41583-018-0003-6. PMID: 29740175; PMCID: PMC6636643.
- de Marco R, Locatelli F, Sunyer J, Burney P. Differences in incidence of reported asthma related to age in men and women. A retrospective analysis of the data of the European Respiratory Health Survey. *Am J Respir Crit Care Med*. 2000 Jul;162(1):68-74. doi: 10.1164/ajrccm.162.1.9907008. PMID: 10903222.
- Deepeshwar S, Budhi RB. Slow yoga breathing improves mental load in working memory performance and cardiac activity among yoga practitioners. *Front Psychol*. 2022 Sep 14;13:968858. doi: 10.3389/fpsyg.2022.968858. PMID: 36186291; PMCID: PMC9516310.
- Dick TE, Dutschmann M, Feldman JL, Fong AY, Hülsmann S, Morris KM, Ramirez JM, Smith JC; Respiratory Neurobiology Consortium. Facts and challenges in respiratory neurobiology. *Respir Physiol Neurobiol*. 2018 Dec;258:104-107. doi: 10.1016/j.resp.2015.01.014. Epub 2015 Jan 31. PMID: 25644207; PMCID: PMC4880533.
- Dick TE, Mims JR, Hsieh YH, Morris KF, Wehrwein EA. Increased cardio-respiratory coupling evoked by slow deep breathing can persist in normal humans. *Respir Physiol Neurobiol*. 2014 Dec 1;204:99-111. doi: 10.1016/j.resp.2014.09.013. Epub 2014 Sep 28. PMID: 25266396; PMCID: PMC4252616.
- Durmic T, Lazovic B, Djelic M, Lazic JS, Zikic D, Zugic V, Dekleva M, Mazic S. Sport-specific influences on respiratory patterns in elite athletes. *J Bras Pneumol*. 2015 Nov-Dec;41(6):516-22. doi: 10.1590/S1806-37562015000000050. PMID: 26785960; PMCID: PMC4723003.

# Pranayama Yoga Teacher Training – References



- Doelman CJ, Rijken JA. Yawning and airway physiology: a scoping review and novel hypothesis. *Sleep Breath.* 2022 Dec;26(4):1561-1572. doi: 10.1007/s11325-022-02565-7. Epub 2022 Feb 5. PMID: 35122606; PMCID: PMC9663362.
- Dominelli PB, Molgat-Seon Y. Sex, gender and the pulmonary physiology of exercise. *Eur Respir Rev.* 2022 Jan 12;31(163):210074. doi: 10.1183/16000617.0074-2021. PMID: 35022254; PMCID: PMC9488949.
- Dutschmann M, Jones SE, Subramanian HH, Stanic D, Bautista TG. The physiological significance of postinspiration in respiratory control. *Prog Brain Res.* 2014;212:113-30. doi: 10.1016/B978-0-444-63488-7.00007-0. PMID: 25194196.
- Fincham GW, Strauss C, Montero-Marin J, Cavanagh K. Effect of breathwork on stress and mental health: A meta-analysis of randomised-controlled trials. *Sci Rep.* 2023 Jan 9;13(1):432. doi: 10.1038/s41598-022-27247-y. PMID: 36624160; PMCID: PMC9828383.
- Forum of International Respiratory Societies (2021). The Global Impact of Respiratory Disease, 3<sup>rd</sup> edition. <https://www.firsnet.org/resources/publications>
- Harbour E, Stöggli T, Schwameder H, Finkenzeller T. Breath Tools: A Synthesis of Evidence-Based Breathing Strategies to Enhance Human Running. *Front Physiol.* 2022 Mar 17;13:813243. doi: 10.3389/fphys.2022.813243. PMID: 35370762; PMCID: PMC8967998.
- Heck DH, Kozma R, Kay LM. The rhythm of memory: how breathing shapes memory function. *J Neurophysiol.* 2019 Aug 1;122(2):563-571. doi: 10.1152/jn.00200.2019. Epub 2019 Jun 19. PMID: 31215344; PMCID: PMC6734396.
- Hodges PW, Heijnen I, Gandevia SC. Postural activity of the diaphragm is reduced in humans when respiratory demand increases. *J Physiol.* 2001 Dec 15;537(Pt 3):999-1008. doi: 10.1111/j.1469-7793.2001.00999.x. PMID: 11744772; PMCID: PMC2278995.
- Hodges PW, Butler JE, McKenzie DK, Gandevia SC. Contraction of the human diaphragm during rapid postural adjustments. *J Physiol.* 1997 Dec 1;505 ( Pt 2)(Pt 2):539-48. doi: 10.1111/j.1469-7793.1997.539bb.x. PMID: 9423192; PMCID: PMC1160083.
- Holfelder B, Becker F. Hypoventilation training: a systematic review. *Sports Exerc. Med. Switzerland.* 66. Doi: 10.34045/SSEM/2018/23
- Gardner WN. The pathophysiology of hyperventilation disorders. *Chest.* 1996Feb;109(2):516-34. doi: 10.1378/chest.109.2.516. PMID: 8620731.
- Gargaglioni LH, Marques DA, Patrone LGA. Sex differences in breathing. *Comp Biochem Physiol A Mol Integr Physiol.* 2019 Dec;238:110543. doi: 10.1016/j.cbpa.2019.110543. Epub 2019 Aug 22. PMID: 31445081.
- Gerritsen RJS, Band GPH. Breath of Life: The Respiratory Vagal Stimulation Model of Contemplative Activity. *Front Hum Neurosci.* 2018 Oct 9;12:397. doi: 10.3389/fnhum.2018.00397. PMID: 30356789; PMCID: PMC6189422.
- Ghati N, Killa AK, Sharma G, Karunakaran B, Agarwal A, Mohanty S, Nivethitha L, Siddharthan D, Pandey RM. A randomized trial of the immediate effect of Bee- Humming Breathing exercise on blood pressure and heart rate variability in patients with essential hypertension. *Explore (NY).* 2021 Jul-Aug;17(4):312-319. doi: 10.1016/j.explore.2020.03.009. Epub 2020 Apr 28. PMID: 32620379.
- Gilliam EA, Cheung T, Kraemer K, Litrownik D, Wayne PM, Moy ML, Yeh GY. The impact of Tai Chi and mind-body breathing in COPD: Insights from a qualitative sub-study of a randomized controlled trial. *PLoS One.* 2021 Apr 8;16(4):e0249263. doi: 10.1371/journal.pone.0249263. PMID: 33831022; PMCID: PMC8031883.

# Pranayama Yoga Teacher Training – References



- Girard O, Brocherie F, Goods PSR, Millet GP. An Updated Panorama of "Living Low-Training High" Altitude/Hypoxic Methods. *Front Sports Act Living.* 2020 Mar 31;2:26. doi: 10.3389/fspor.2020.00026. PMID: 33345020; PMCID: PMC7739748.
- Guimard A, Zorgati H, Brulaire S, Amiot V, Prieur F, Collomp K. Physiological Dynamic Apnea Responses in Relation to Apnea Capacity in Triathletes. *Int J Sports Med.* 2017 Jul;38(7):521-526. doi: 10.1055/s-0043-101375. Epub 2017 May 17. PMID: 28514808.
- Gupta A, Gupta R, Sood S, Arkham M. Pranayam for Treatment of Chronic Obstructive Pulmonary Disease: Results From a Randomized, Controlled Trial. *Integr Med (Encinitas).* 2014 Feb;13(1):26-31. PMID: 26770079; PMCID: PMC4684118.
- Harbour E, Stögg T, Schwameder H, Finkenzeller T. Breath Tools: A Synthesis of Evidence-Based Breathing Strategies to Enhance Human Running. *Front Physiol.* 2022 Mar 17;13:813243. doi: 10.3389/fphys.2022.813243. PMID: 35370762; PMCID: PMC8967998.
- Hårdemark Cedborg AI, Bodén K, Witt Hedström H, Kyulenstierna R, Ekberg O, Eriksson LI, Sundman E. Breathing and swallowing in normal man--effects of changes in body position, bolus types, and respiratory drive. *Neurogastroenterol Motil.* 2010 Nov;22(11):1201-8, e316. doi: 10.1111/j.1365-2982.2010.01551.x. PMID: 20618836.
- Hopper SI, Murray SL, Ferrara LR, Singleton JK. Effectiveness of diaphragmatic breathing for reducing physiological and psychological stress in adults: a quantitative systematic review. *JBI Database System Rev Implement Rep.* 2019 Sep;17(9):1855-1876. doi: 10.11124/JBISRIR-2017-003848. PMID: 31436595.
- Jacomo RH, Nascimento TR, Lucena da Siva M, Salata MC, Alves AT, da Cruz PRC, Batista de Sousa J. Exercise regimens other than pelvic floor muscle training cannot increase pelvic muscle strength-a systematic review. *J Bodyw Mov Ther.* 2020 Oct;24(4):568-574. doi: 10.1016/j.jbmt.2020.08.005. Epub 2020 Sep 10. PMID: 33218562.
- 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 May-Aug;13(2):99-110. doi: 10.4103/ijoy.IJOY\_37\_19. Epub 2020 May 1. PMID: 32669763; PMCID: PMC7336946.
- Jefferson Y. Mouth breathing: adverse effects on facial growth, health, academics, and behavior. *Gen Dent.* 2010 Jan-Feb;58(1):18-25; quiz 26-7, 79-80. PMID: 20129889.
- Joseph CN, Porta C, Casucci G, Casiraghi N, Maffeis M, Rossi M, Bernardi L. Slow breathing improves arterial baroreflex sensitivity and decreases blood pressure in essential hypertension. *Hypertension.* 2005 Oct;46(4):714-8. doi: 10.1161/01.HYP.0000179581.68566.7d. Epub 2005 Aug 29. PMID: 16129818.
- Joshi M, Telles S. A nonrandomized non-naïve comparative study of the effects of kapalabhati and breath awareness on event-related potentials in trained yoga practitioners. *J Altern Complement Med.* 2009 Mar;15(3):281-5. doi: 10.1089/acm.2008.0250. PMID: 19243275.
- Jovanov E. On Spectral Analysis of Heart Rate Variability during Very Slow Yogic Breathing. *Conf Proc IEEE Eng Med Biol Soc.* 2005;2005:2467-70. doi: 10.1109/IEMBS.2005.1616968. PMID: 17282737.
- Kahana-Zweig R, Geva-Sagiv M, Weissbrod A, Secundo L, Soroker N, Sobel N. Measuring and Characterizing the Human Nasal Cycle. *PLoS One.* 2016 Oct 6;11(10):e0162918. doi: 10.1371/journal.pone.0162918. PMID: 27711189; PMCID: PMC5053491.
- Key J, Clift A, Condie F, Harley C. A model of movement dysfunction provides a classification system guiding diagnosis and therapeutic care in spinal pain and related musculoskeletal syndromes: a paradigm shift-Part 1. *J Bodyw Mov Ther.* 2008 Jan;12(1):7-21. doi: 10.1016/j.jbmt.2007.04.005. Epub 2007 Jun 11. PMID: 19083651.

# Pranayama Yoga Teacher Training – References



- Key J, Clift A, Condie F, Harley C. A model of movement dysfunction provides a classification system guiding diagnosis and therapeutic care in spinal pain and related musculoskeletal syndromes: a paradigm shift-Part 2. *J Bodyw Mov Ther.* 2008 Apr;12(2):105-20. doi: 10.1016/j.jbmt.2007.04.006. Epub 2007 Jun 4. PMID: 19083663.
- Key J. The pelvic crossed syndromes: a reflection of imbalanced function in the myofascial envelope; a further exploration of Janda's work. *J Bodyw Mov Ther.* 2010 Jul;14(3):299-301. doi: 10.1016/j.jbmt.2010.01.008. Epub 2010 Mar 4. PMID: 20538229.
- Kolar P, Neuwirth J, Sanda J, Suchanek V, Svata Z, Volejnik J, Pivec M. Analysis of diaphragm movement during tidal breathing and during its activation while breath holding using MRI synchronized with spirometry. *Physiol Res.* 2009;58(3):383-392. doi: 10.33549/physiolres.931376. Epub 2008 Jul 18. PMID: 18637703.
- Kumar A, Kala N, Telles S. Cerebrovascular Dynamics Associated with Yoga Breathing and Breath Awareness. *Int J Yoga.* 2022 Jan-Apr;15(1):19-24. doi: 10.4103/ijoy.ijoy\_179\_21. Epub 2022 Mar 21. PMID: 35444370; PMCID: PMC9015084.
- Kume D, Akahoshi S, Yamagata T, Wakimoto T, Nagao N. Does voluntary hypoventilation during exercise impact EMG activity? *Springerplus.* 2016 Feb 24;5:149. doi: 10.1186/s40064-016-1845-x. PMID: 27026846; PMCID: PMC4766162.
- Kuppusamy M, Kamaldeen D, Pitani R, Amaldas J. Immediate Effects of Bhramari Pranayama on Resting Cardiovascular Parameters in Healthy Adolescents. *J Clin Diagn Res.* 2016 May;10(5):CC17-9. doi: 10.7860/JCDR/2016/19202.7894. Epub 2016 May 1. PMID: 27437210; PMCID: PMC4948385.
- Kuppusamy M, Dilara K, Ravishankar P, Julius A. Effect of *< i>Bhrāmarī Prāṇayāma</i>* Practice on Pulmonary Function in Healthy Adolescents: A Randomized Control Study. *Anc Sci Life.* 2017a Apr-Jun;36(4):196-199. doi: 10.4103/asl.ASL\_220\_16. PMID: 29269971; PMCID: PMC5726186.
- Kuppusamy M, Kamaldeen D, Pitani R, Amaldas J, Shanmugam P. Effects of *< i>Bhramari Pranayama</i>* on health - A systematic review. *J Tradit Complement Med.* 2017b Mar 18;8(1):11-16. doi: 10.1016/j.jtcme.2017.02.003. PMID: 29321984; PMCID: PMC5755957.
- Kuppusamy M, Kamaldeen D, Pitani R, Amaldas J, Ramasamy P, Shanmugam P, Vijayakumar V. Effects of yoga breathing practice on heart rate variability in healthy adolescents: a randomized controlled trial. *Integr Med Res.* 2020a Mar;9(1):28-32. doi: 10.1016/j.imr.2020.01.006. Epub 2020 Jan 20. PMID: 32025489; PMCID: PMC6997567.
- Kuppusamy M, Kamaldeen D, Pitani R, Amaldas J, Ramasamy P, Shanmugam P, Thirupathy VS. Effect of Bhramari pranayama practice on simple reaction time in healthy adolescents - a randomized control trial. *Int J Adolesc Med Health.* 2020b Jun 8;33(6):547-550. doi: 10.1515/ijamh-2019-0244. PMID: 32549168.
- Lemaître F, Seifert L, Polin D, Juge J, Tourny-Chollet C, Chollet D. Apnea training effects on swimming coordination. *J Strength Cond Res.* 2009 Sep;23(6):1909-14. doi: 10.1519/JSC.0b013e3181b073a8. PMID: 19675466.
- Lutfi MF. The physiological basis and clinical significance of lung volume measurements. *Multidiscip Respir Med.* 2017 Feb 9;12:3. doi: 10.1186/s40248-017-0084-5. PMID: 28194273; PMCID: PMC5299792.
- Magnon V, Dutheil F, Vallet GT. Benefits from one session of deep and slow breathing on vagal tone and anxiety in young and older adults. *Sci Rep.* 2021 Sep 29;11(1):19267. doi: 10.1038/s41598-021-98736-9. PMID: 34588511; PMCID: PMC8481564.
- McArdle WD, Katch FI, Katch VL (2010). *Exercise Physiology: Nutrition, Energy, and Human Performance.* 7<sup>th</sup> edition. Lippincott Williams & Wilkins, Baltimore, USA.

# Pranayama Yoga Teacher Training – References



- Melnychuk MC, Dockree PM, O'Connell RG, Murphy PR, Balsters JH, Robertson IH. Coupling of respiration and attention via the locus coeruleus: Effects of meditation and pranayama. *Psychophysiology*. 2018 Sep;55(9):e13091. doi: 10.1111/psyp.13091. Epub 2018 Apr 22. PMID: 29682753.
- Meuret AE, Wilhelm FH, Ritz T, Roth WT. Feedback of end-tidal pCO<sub>2</sub> as a therapeutic approach for panic disorder. *J Psychiatr Res.* 2008 Jun;42(7):560-8. doi: 10.1016/j.jpsychires.2007.06.005. Epub 2007 Aug 3. PMID: 17681544; PMCID: PMC2890048.
- Migliaccio GM, Russo L, Maric M, Padulo J. Sports Performance and Breathing Rate: What Is the Connection? A Narrative Review on Breathing Strategies. *Sports (Basel)*. 2023 May 10;11(5):103. doi: 10.3390/sports11050103. PMID: 37234059; PMCID: PMC10224217.
- Mitchell RA, Schaeffer MR, Ramsook AH, Wilkie SS, Guenette JA. Sex differences in respiratory muscle activation patterns during high-intensity exercise in healthy humans. *Respir Physiol Neurobiol*. 2018 Jan;247:57-60. doi: 10.1016/j.resp.2017.09.002. Epub 2017 Sep 7. PMID: 28890403.
- Mooventhan A, Khode V. Effect of Bhramari pranayama and OM chanting on pulmonary function in healthy individuals: A prospective randomized control trial. *Int J Yoga*. 2014 Jul;7(2):104-10. doi: 10.4103/0973-6131.133875. PMID: 25035619; PMCID: PMC4097894.
- Moreno-Muñoz MDM, Hita-Contreras F, Estudillo-Martínez MD, Aibar-Almazán A, Castellote-Caballero Y, Bergamin M, Gobbo S, Cruz-Díaz D. The Effects of Abdominal Hypopressive Training on Postural Control and Deep Trunk Muscle Activation: A Randomized Controlled Trial. *Int J Environ Res Public Health*. 2021 Mar 8;18(5):2741. doi: 10.3390/ijerph18052741. PMID: 33800428; PMCID: PMC7967465.
- Moriyama S, Ichinose M, Dobashi K, Matsutake R, Sakamoto M, Fujii N, Nishiyasu T. Hypercapnia elicits differential vascular and blood flow responses in the cerebral circulation and active skeletal muscles in exercising humans. *Physiol Rep*. 2022 Apr;10(8):e15274. doi: 10.14814/phy2.15274. PMID: 35466573; PMCID: PMC9035754.
- Navarro Brazález B, Sánchez Sánchez B, Prieto Gómez V, De La Villa Polo P, McLean L, Torres Lacomba M. Pelvic floor and abdominal muscle responses during hypopressive exercises in women with pelvic floor dysfunction. *Neurorol Urodyn*. 2020 Feb;39(2):793-803. doi: 10.1002/nau.24284. Epub 2020 Jan 27. PMID: 31985114.
- Niazi IK, Navid MS, Bartley J, Shepherd D, Pedersen M, Burns G, Taylor D, White DE. EEG signatures change during unilateral Yogi nasal breathing. *Sci Rep*. 2022 Jan 11;12(1):520. doi: 10.1038/s41598-021-04461-8. PMID: 35017606; PMCID: PMC8752782.
- Niinimaa V, Cole P, Mintz S, Shephard RJ. The switching point from nasal to oronasal breathing. *Respir Physiol*. 1980 Oct;42(1):61-71. doi: 10.1016/0034-5687(80)90104-8. PMID: 7444224.
- Nivethitha L, Mooventhan A, Manjunath NK, Bathala L, Sharma VK. Cerebrovascular Hemodynamics During the Practice of Bhramari Pranayama, Kapalbhati and Bahir-Kumbhaka: An Exploratory Study. *Appl Psychophysiol Biofeedback*. 2018 Mar;43(1):87-92. doi: 10.1007/s10484-017-9387-8. PMID:29188396.
- Nivethitha L, Mooventhan A, Manjunath NK, Bathala L, Sharma VK. Cerebrovascular hemodynamics during pranayama techniques. *J Neurosci Rural Pract*. 2017 Jan-Mar;8(1):60-63. doi: 10.4103/0976-3147.193532. PMID: 28149083; PMCID: PMC5225724.
- Nivethitha L, Mooventhan A, Manjunath NK. Evaluation of Cardiovascular Functions during the Practice of Different Types of Yogic Breathing Techniques. *Int J Yoga*. 2021 May-Aug;14(2):158-162. doi: 10.4103/ijoy.IJOY\_61\_20. Epub 2021 May 10. PMID: 34188389; PMCID: PMC8191218.
- Noble DJ, Hochman S. Hypothesis: Pulmonary Afferent Activity Patterns During Slow, Deep Breathing Contribute to the Neural Induction of Physiological Relaxation. *Front Physiol*. 2019 Sep 13;10:1176. doi: 10.3389/fphys.2019.01176. PMID: 31572221; PMCID: PMC6753868.

# Pranayama Yoga Teacher Training – References



- Novaes MM, Palhano-Fontes F, Onias H, Andrade KC, Lobão-Soares B, Arruda-Sanchez T, Kozasa EH, Santaella DF, de Araujo DB. Effects of Yoga Respiratory Practice ("Bhastrika pranayama") on Anxiety, Affect, and Brain Functional Connectivity and Activity: A Randomized Controlled Trial. *Front Psychiatry*. 2020 May 21;11:467. doi: 10.3389/fpsyg.2020.00467. PMID: 32528330; PMCID: PMC7253694.
- Obayashi H, Urabe Y, Yamanaka Y, Okuma R. Effects of respiratory-muscle exercise on spinal curvature. *J Sport Rehabil*. 2012 Feb;21(1):63-8. doi: 10.1123/jsr.21.1.63. Epub 2011 Nov 15. PMID: 22104255.
- Okamoto T, Masuhara M, Ikuta K. Acute effects of self-myofascial release using a foam roller on arterial function. *J Strength Cond Res*. 2014 Jan;28(1):69-73. doi: 10.1519/JSC.0b013e31829480f5. PMID: 23575360.
- Park HD, Barnoud C, Trang H, Kannape OA, Schaller K, Blanke O. Breathing is coupled with voluntary action and the cortical readiness potential. *Nat Commun*. 2020 Feb 6;11(1):289. doi: 10.1038/s41467-019-13967-9. PMID: 32029711; PMCID: PMC7005287.
- Patel N, Chong K, Baydur A. Methods and Applications in Respiratory Physiology: Respiratory Mechanics, Drive and Muscle Function in Neuromuscular and Chest Wall Disorders. *Front Physiol*. 2022 Jun 14;13:838414. doi: 10.3389/fphys.2022.838414. PMID: 35774289; PMCID: PMC9237333
- Peper, E., Williams, E.A. (1981). Dysponesis. In: From the Inside Out. Springer, Boston, MA.  
[https://doi.org/10.1007/978-1-4684-1060-0\\_7](https://doi.org/10.1007/978-1-4684-1060-0_7)
- Perciavalle V, Blandini M, Fecarotta P, Buscemi A, Di Corrado D, Bertolo L, Fichera F, Coco M. The role of deep breathing on stress. *Neurol Sci*. 2017 Mar;38(3):451-458. doi: 10.1007/s10072-016-2790-8. Epub 2016 Dec 19. PMID: 27995346.
- Perl O, Ravia A, Rubinson M, Eisen A, Soroka T, Mor N, Secundo L, Sobel N. Human non-olfactory cognition phase-locked with inhalation. *Nat Hum Behav*. 2019 May;3(5):501-512. doi: 10.1038/s41562-019-0556-z. Epub 2019 Mar 11. PMID: 31089297.
- Pramanik T, Pudasaini B, Prajapati R. Immediate effect of a slow pace breathing exercise Bhramari pranayama on blood pressure and heart rate. *Nepal Med Coll J*. 2010 Sep;12(3):154-7. PMID: 21446363.
- Pramanik T, Sharma HO, Mishra S, Mishra A, Prajapati R, Singh S. Immediate effect of slow pace bhastrika pranayama on blood pressure and heart rate. *J Altern Complement Med*. 2009 Mar;15(3):293-5. doi: 10.1089/acm.2008.0440. PMID: 19249921.
- Prem V, Sahoo RC, Adhikari P. Comparison of the effects of Buteyko and pranayama breathing techniques on quality of life in patients with asthma – a randomized controlled trial. *Clin Rehabil*. 2013 Feb;27(2):133-41. doi: 10.1177/0269215512450521. Epub 2012 Jul 26. PMID: 22837543.
- Radaelli A, Raco R, Perfetti P, Viola A, Azzellino A, Signorini MG, Ferrari AU. Effects of slow, controlled breathing on baroreceptor control of heart rate and blood pressure in healthy men. *J Hypertens*. 2004 Jul;22(7):1361-70. doi: 10.1097/01.hjh.0000125446.28861.51. PMID: 15201553.
- Raghuraj P, Telles S. Immediate effect of specific nostril manipulating yoga breathing practices on autonomic and respiratory variables. *Appl Psychophysiol Biofeedback*. 2008 Jun;33(2):65-75. doi: 10.1007/s10484-008-9055-0. Epub 2008 Mar 18. PMID: 18347974.
- Rajesh SK, Ilavarasu JV, Srinivasan TM. Effect of Bhramari Pranayama on response inhibition: Evidence from the stop signal task. *Int J Yoga*. 2014 Jul;7(2):138-41. doi: 10.4103/0973-6131.133896. PMID: 25035624; PMCID: PMC4097899.
- Recinto C, Efthemeou T, Boffelli PT, Navalta JW. Effects of Nasal or Oral Breathing on Anaerobic Power Output and Metabolic Responses. *Int J Exerc Sci*. 2017 Jul 1;10(4):506-514. PMID: 28674596; PMCID: PMC5466403.

# Pranayama Yoga Teacher Training – References



- Robertson C, Lodin-Sundström A, O'Hara J, King R, Wainwright B, Barlow M. Effects of Pre-race Apneas on 400-m Freestyle Swimming Performance. *J Strength Cond Res.* 2020 Mar;34(3):828-837. doi: 10.1519/JSC.0000000000002711. PMID: 29939897.
- Röttger S, Theobald DA, Abendroth J, Jacobsen T. The Effectiveness of Combat Tactical Breathing as Compared with Prolonged Exhalation. *Appl Psychophysiol Biofeedback.* 2021 Mar;46(1):19-28. doi: 10.1007/s10484-020-09485-w. PMID: 32757097.
- Romei M, Mauro AL, D'Angelo MG, Turconi AC, Bresolin N, Pedotti A, Aliverti A. Effects of gender and posture on thoraco-abdominal kinematics during quiet breathing in healthy adults. *Respir Physiol Neurobiol.* 2010 Jul 31;172(3):184-91. doi: 10.1016/j.resp.2010.05.018. Epub 2010 May 25. PMID: 20510388.
- Romieu I, Fabre A, Fournier A, Kauffmann F, Varraso R, Mesrine S, Leynaert B, Clavel-Chapelon F. Postmenopausal hormone therapy and asthma onset in the E3N cohort. *Thorax.* 2010 Apr;65(4):292-7. doi: 10.1136/thx.2009.116079. Epub 2010 Feb 8. PMID: 20142267; PMCID: PMC2962872.
- Russo MA, Santarelli DM, O'Rourke D. The physiological effects of slow breathing in the healthy human. *Breathe (Sheff).* 2017 Dec;13(4):298-309. doi: 10.1183/20734735.009817. PMID: 29209423; PMCID: PMC5709795.
- Rybnikova EA, Nalivaeva NN, Zenko MY, Baranova KA. Intermittent Hypoxic Training as an Effective Tool for Increasing the Adaptive Potential, Endurance and Working Capacity of the Brain. *Front Neurosci.* 2022 Jun 21;16:941740. doi: 10.3389/fnins.2022.941740. PMID: 35801184; PMCID: PMC9254677.
- Sales de Campos P, Olsen WL, Wymer JP, Smith BK. Respiratory therapies for Amyotrophic Lateral Sclerosis: A state of the art review. *Chron Respir Dis.* 2023 Jan-Dec;20:14799731231175915. doi: 10.1177/14799731231175915. PMID: 37219417; PMCID: PMC10214054.
- Sánchez Crespo A, Hallberg J, Lundberg JO, Lindahl SG, Jacobsson H, Weitzberg E, Nyrén S. Nasal nitric oxide and regulation of human pulmonary blood flow in the upright position. *J Appl Physiol (1985).* 2010 Jan;108(1):181-8. doi: 10.1152/japplphysiol.00285.2009. Epub 2009 Oct 29. PMID: 19875719.
- Santino TA, Chaves GS, Freitas DA, Fregonezi GA, Mendonça KM. Breathing exercises for adults with asthma. *Cochrane Database Syst Rev.* 2020 Mar 25;3(3):CD001277. doi: 10.1002/14651858.CD001277.pub4. PMID: 32212422; PMCID: PMC7096190.
- Saxena T, Saxena M. The effect of various breathing exercises (pranayama) in patients with bronchial asthma of mild to moderate severity. *Int J Yoga.* 2009 Jan;2(1):22-5. doi: 10.4103/0973-6131.53838. PMID: 21234211; PMCID: PMC3017963.
- Schöne B, Gruber T, Graetz S, Bernhof M, Malinowski P. Mindful breath awareness meditation facilitates efficiency gains in brain networks: A steady-state visually evoked potentials study. *Sci Rep.* 2018 Sep 12;8(1):13687. doi: 10.1038/s41598-018-32046-5. PMID: 30209327; PMCID: PMC6135840.
- Schulz A, Schilling TM, Vögele C, Larra MF, Schächinger H. Respiratory modulation of startle eye blink: a new approach to assess afferent signals from the respiratory system. *Philos Trans R Soc Lond B Biol Sci.* 2016 Nov 19;371(1708):20160019. doi: 10.1098/rstb.2016.0019. Epub 2016 Oct 10. PMID: 28080976; PMCID: PMC5062107.
- Sharma K, Wernicke AG, Rahman H, Potters L, Sharma G, Parashar B. A Retrospective Analysis of Three Focused Attention Meditation Techniques: Mantra, Breath, and External-Point Meditation. *Cureus.* 2022 Mar 28;14(3):e23589. doi: 10.7759/cureus.23589. PMID: 35386478; PMCID: PMC8967094.
- Singh V, Wisniewski A, Britton J, Tattersfield A. Effect of yoga breathing exercises (pranayama) on airway reactivity in subjects with asthma. *Lancet.* 1990 Jun 9;335(8702):1381-3. doi: 10.1016/0140-6736(90)91254-8. PMID: 1971670.

# Pranayama Yoga Teacher Training – References



- Sinha AN, Deepak D, Gusain VS. Assessment of the effects of pranayama/alternate nostril breathing on the parasympathetic nervous system in young adults. *J Clin Diagn Res.* 2013 May;7(5):821-3. doi: 10.7860/JCDR/2013/4750.2948. Epub 2013 May 1. PMID: 23814719; PMCID: PMC3681046.
- Skytioti M, Elstad M. Respiratory Sinus Arrhythmia is Mainly Driven by Central Feedforward Mechanisms in Healthy Humans. *Front Physiol.* 2022 Jul 7;13:768465. doi: 10.3389/fphys.2022.768465. PMID: 35874518; PMCID: PMC9301041.
- Sodhi C, Singh S, Bery A. Assessment of the quality of life in patients with bronchial asthma, before and after yoga: a randomised trial. *Iran J Allergy Asthma Immunol.* 2014 Feb;13(1):55-60. PMID: 24338229.
- Sodhi C, Singh S, Dandona PK. A study of the effect of yoga training on pulmonary functions in patients with bronchial asthma. *Indian J Physiol Pharmacol.* 2009 Apr-Jun;53(2):169-74. PMID: 20112821.
- Spahija J, de Marchie M, Grassino A. Effects of imposed pursed-lips breathing on respiratory mechanics and dyspnea at rest and during exercise in COPD. *Chest.* 2005 Aug;128(2):640-50. doi: 10.1378/chest.128.2.640. PMID: 16100149.
- Stephen M (2021). *Breath taking – The Power, Fragility, and Future of Our Extraordinary Lungs.* Atlantic Monthly Press. New York.
- Stancák A Jr, Kuna M, Novák P, Srinivasan MA, Dostálek C, Vishnudevananda S. Observations on respiratory and cardiovascular rhythmicities during yogic high- frequency respiration. *Physiol Res.* 1991a;40(3):345-54. PMID: 1751482.
- Stancák A Jr, Kuna M, Srinivasan, Vishnudevananda S, Dostálek C. Kapalabhati --yogic cleansing exercise. I. Cardiovascular and respiratory changes. *Homeost Health Dis.* 1991b;33(3):126-34. PMID: 1818666.
- Stassen THA, Bartley J, White DE. Inhaled nasopharyngeal nitric oxide concentrations during unilateral nostril breathing - A pilot study. *Respir Physiol Neurobiol.* 2021 Nov;293:103734. doi: 10.1016/j.resp.2021.103734. Epub 2021 Jun 29. PMID: 34214661.
- Stromberg SE, Russell ME, Carlson CR. Diaphragmatic breathing and its effectiveness for the management of motion sickness. *Aerospace Med Hum Perform.* 2015 May;86(5):452-7. doi: 10.3357/AMHP.4152.2015. PMID: 25945662.
- Swift AC, Campbell IT, McKown TM. Oronasal obstruction, lung volumes, and arterial oxygenation. *Lancet.* 1988 Jan 16;1(8577):73-5. doi: 10.1016/s0140-6736(88)90282-6. PMID: 2891980.
- Tavares BS, de Paula Vidigal G, Garner DM, Raimundo RD, de Abreu LC, Valenti VE. Effects of guided breath exercise on complex behaviour of heart rate dynamics. *Clin Physiol Funct Imaging.* 2017 Nov;37(6):622-629. doi: 10.1111/cpf.12347. Epub 2016 Mar 14. PMID: 26987469.
- Telles S, Gandharva K, Sharma SK, Gupta RK, Balkrishna A. Body Temperature and Energy Expenditure During and After Yoga Breathing Practices Traditionally Described as Cooling. *Med Sci Monit Basic Res.* 2020 Jan 7;26:e920107. doi: 10.12659/MSMBR.920107. PMID: 31907342; PMCID: PMC6977599.
- Telles S, Nagarathna R, Nagendra HR. Physiological measures of right nostril breathing. *J Altern Complement Med.* 1996 Winter;2(4):479-84. doi: 10.1089/acm.1996.2.479. PMID: 9395677.
- Telles S, Sharma SK, Yadav A, Singh N, Balkrishna A. Immediate changes in muscle strength and motor speed following yoga breathing. *Indian J Physiol Pharmacol.* 2014 Jan-Mar;58(1):22-9. PMID: 25464673.
- Telles S, Gupta RK, Gandharva K, Vishwakarma B, Kala N, Balkrishna A. Immediate Effect of a Yoga Breathing Practice on Attention and Anxiety in Pre-Teen Children. *Children (Basel).* 2019 Jul 22;6(7):84. doi: 10.3390/children6070084. PMID: 31336661; PMCID: PMC6678429.

# Pranayama Yoga Teacher Training – References



- Timon R, Martinez-Guardado I, Brocherie F. Effects of Intermittent Normobaric Hypoxia on Health-Related Outcomes in Healthy Older Adults: A Systematic Review. *Sports Med Open*. 2023 Feb 26;9(1):19. doi: 10.1186/s40798-023-00560-0. PMID: 36843041; PMCID: PMC9968673.
- Törnberg DC, Marteus H, Schedin U, Alving K, Lundberg JO, Weitzberg E. Nasal and oral contribution to inhaled and exhaled nitric oxide: a study in tracheotomized patients. *Eur Respir J*. 2002 May;19(5):859-64. doi: 10.1183/09031936.02.00273502. PMID: 12030725.
- Toubekis AG, Beidaris N, Botonis PG, Koskolou M. Severe hypoxemia induced by prolonged expiration and reduced frequency breathing during submaximal swimming. *J Sports Sci*. 2017 Jun;35(11):1025-1033. doi: 10.1080/02640414.2016.1209304. Epub 2016 Jul 19. PMID: 27431779.
- Triebner K, Johannessen A, Puggini L, Benediktsdóttir B, Bertelsen RJ, Bifulco E, Dharmage SC, Dratva J, Franklin KA, Gíslason T, Holm M, Jarvis D, Leynaert B, Lindberg E, Malinovschi A, Macsali F, Norbäck D, Omenaas ER, Rodríguez FJ, Saure E, Schlußnissen V, Sigsgaard T, Skorge TD, Wieslander G, Zemp E, Svanes C, Hustad S, Gómez Real F. Menopause as a predictor of new-onset asthma: A longitudinal Northern European population study. *J Allergy Clin Immunol*. 2016 Jan;137(1):50-57.e6. doi: 10.1016/j.jaci.2015.08.019. Epub 2015 Oct 2. PMID: 26435006.
- Trincat L, Woorons X, Millet GP. Repeated-Sprint Training in Hypoxia Induced by Voluntary Hypoventilation in Swimming. *Int J Sports Physiol Perform*. 2017 Mar;12(3):329-335. doi: 10.1123/ijsspp.2015-0674. Epub 2016 Aug 24. PMID: 27294771.
- Trivedi GY, Saboo B. Bhramari Pranayama - A simple lifestyle intervention to reduce heart rate, enhance the lung function and immunity. *J Ayurveda Integr Med*. 2021 Jul-Sep;12(3):562-564. doi: 10.1016/j.jaim.2021.07.004. Epub 2021 Aug 5. PMID: 34364739; PMCID: PMC8377171.
- Trivedi G, Sharma K, Saboo B, Kathirvel S, Konat A, Zapadia V, Prajapati PJ, Benani U, Patel K, Shah S. Humming (Simple Bhramari Pranayama) as a Stress Buster: A Holter-Based Study to Analyze Heart Rate Variability (HRV) Parameters During Bhramari, Physical Activity, Emotional Stress, and Sleep. *Cureus*. 2023 Apr 13;15(4):e37527. doi: 10.7759/cureus.37527. PMID: 37193427; PMCID: PMC10182780.
- Troisi RJ, Speizer FE, Willett WC, Trichopoulos D, Rosner B. Menopause, postmenopausal estrogen preparations, and the risk of adult-onset asthma. A prospective cohort study. *Am J Respir Crit Care Med*. 1995 Oct;152(4 Pt 1):1183-8. doi: 10.1164/ajrccm.152.4.7551368. PMID: 7551368.
- Uzun AB, Iliescu MG, Stanciu LE, Ionescu EV, Ungur RA, Ciortea VM, Irsay L, Motoaşca I, Popescu MN, Popa FL, Pazara L, Tofolean DE. Effectiveness of Intermittent Hypoxia-Hyperoxia Therapy in Different Pathologies with Possible Metabolic Implications. *Metabolites*. 2023 Jan 25;13(2):181. doi: 10.3390/metabo13020181. PMID: 36837800; PMCID: PMC9961389.
- Veerabhadrappa SG, Baljoshi VS, Khanapure S, Herur A, Patil S, Ankad RB, Chinagudi S. Effect of yogic bellows on cardiovascular autonomic reactivity. *J Cardiovasc Dis Res*. 2011 Oct;2(4):223-7. doi: 10.4103/0975-3583.89806. PMID: 22135480; PMCID: PMC3224442.
- Vialatte FB, Bakardjian H, Prasad R, Cichocki A. EEG paroxysmal gamma waves during Bhramari Pranayama: a yoga breathing technique. *Conscious Cogn*. 2009 Dec;18(4):977-88. doi: 10.1016/j.concog.2008.01.004. Epub 2008 Mar 4. PMID: 18299208.
- Vicente-Campos D, Sanchez-Jorge S, Terrón-Manrique P, Guisard M, Collin M, Castaño B, Rodríguez-Sanz D, Becerro-de-Bengoa-Vallejo R, Chicharro JL, Calvo-Lobo C. The Main Role of Diaphragm Muscle as a Mechanism of Hypopressive Abdominal Gymnastics to Improve Non-Specific Chronic Low Back Pain: A Randomized Controlled Trial. *J Clin Med*. 2021 Oct 27;10(21):4983. doi: 10.3390/jcm10214983. PMID: 34768502; PMCID: PMC8584898.
- Welch, J. F., Kipp, S., and Sheel, A. W. (2019). Respiratory muscles during exercise: mechanics, energetics, and fatigue. *Curr. Opin. Physiology* 10, 102–109. doi:10.1016/j.cophys.2019.04.023

# Pranayama Yoga Teacher Training – References



- Weitzberg E, Lundberg JO. Humming greatly increases nasal nitric oxide. *Am J Respir Crit Care Med.* 2002 Jul 15;166(2):144-5. doi: 10.1164/rccm.200202-138BC. PMID: 12119224.
- Woorons X, Mucci P, Richalet JP, Pichon A. Hypoventilation Training at Supramaximal Intensity Improves Swimming Performance. *Med Sci Sports Exerc.* 2016 Jun;48(6):1119-28. doi: 10.1249/MSS.0000000000000863. PMID: 26741118.
- Woorons X, Mucci P, Aucouturier J, Anthierens A, Millet GP. Acute effects of repeated cycling sprints in hypoxia induced by voluntary hypoventilation. *Eur J Appl Physiol.* 2017 Dec;117(12):2433-2443. doi: 10.1007/s00421-017-3729-3. Epub 2017 Oct 14. PMID: 29032393.
- Yackle K, Schwarz LA, Kam K, Sorokin JM, Huguenard JR, Feldman JL, Luo L, Krasnow MA. Breathing control center neurons that promote arousal in mice. *Science.* 2017 Mar 31;355(6332):1411-1415. doi: 10.1126/science.aai7984. Epub 2017 Mar 30. PMID: 28360327; PMCID: PMC5505554.
- Yasuma F, Hayano J. Respiratory sinus arrhythmia: why does the heartbeat synchronize with respiratory rhythm? *Chest.* 2004 Feb;125(2):683-90. doi: 10.1378/chest.125.2.683. PMID: 14769752.
- Zaccaro A, Piarulli A, Laurino M, Garbelli E, Menicucci D, Neri B, Gemignani A. How Breath-Control Can Change Your Life: A Systematic Review on Psycho-Physiological Correlates of Slow Breathing. *Front Hum Neurosci.* 2018 Sep 7;12:353. doi: 10.3389/fnhum.2018.00353. PMID: 30245619; PMCID: PMC6137615.
- Zhang Z, Wang B, Wu H, Chai X, Wang W, Peng CK. Effects of slow and regular breathing exercise on cardiopulmonary coupling and blood pressure. *Med Biol Eng Comput.* 2017 Feb;55(2):327-341. doi: 10.1007/s11517-016-1517-6. Epub 2016 May 18. PMID: 27193228.
- Zelano C, Jiang H, Zhou G, Arora N, Schuele S, Rosenow J, Gottfried JA. Nasal Respiration Entrains Human Limbic Oscillations and Modulates Cognitive Function. *J Neurosci.* 2016 Dec 7;36(49):12448-12467. doi: 10.1523/JNEUROSCI.2586-16.2016. PMID: 27927961; PMCID: PMC5148230.
- Zoretić, d., Grčić-Zubčević, n., & Zubčić, k. (2014). The effects of hypercapnic-hypoxic training program on hemoglobin concentration and maximum oxygen uptake of elite swimmers.
- Zwaag J, Naaktgeboren R, van Herwaarden AE, Pickkers P, Kox M. The Effects of Cold Exposure Training and a Breathing Exercise on the Inflammatory Response in Humans: A Pilot Study. *Psychosom Med.* 2022 May 1;84(4):457-467. doi: 10.1097/PSY.0000000000001065. Epub 2022 Feb 23. PMID: 35213875; PMCID: PMC9071023.
- Zwaag J, Timmerman H, Pickkers P, Kox M. Modulation of Pain Sensitivity by a Hyperventilatory Breathing Exercise and Cold Exposure Training. *J Pain Res.* 2023 Jun 13;16:1979-1991. doi: 10.2147/JPR.S400408. PMID: 37333948; PMCID: PMC10276601.