Hum Your Way to Better Health To Investigate through Research and Experimentation: The Effect of Nasal Breathing and Meditative Humming Techniques on Lung Function

Brady, Caolann

Introduction: Nasal breathing is the preferred method of respiration for a myriad of physiological reasons, one of which relates to Nitric Oxide (NO) production in the paranasal sinuses, based on previously documented research. The Karolinska Institute found that ventilation of the paranasal sinuses increases greatly when a person practiced specifically defined humming techniques, proven to be attributable to the increase of NO production in the nose. This work links respiratory biochemical understanding with that of well-known Vedic eastern medical practices. With this in mind I developed a research project to measure the effects of humming on lung function. Hypothesis: Humming improves lung function and may be used as a natural treatment for asthma and other respiratory conditions. Method: Looking at various demographic sub populations and asthma sufferer subgroupings, a series of controlled experiments were carried out, measuring lung function by means of a peak flow meter. The test subject hums in a paper bag at a precise pitch for a specified length of time, 45 seconds, which yielded significant post, peak expiratory flow readings. Results: Test result analysis from this project has shown that the prescribed humming technique improves lung function across the range of ages, genders and breathing capabilities by an average of 10% with 99.9% statistical confidence. This positive impact on the respiratory system also lasts on average for a 45 minute duration. Conclusion: Humming combined with nasal breathing improves the general lung function of sufferers and non-sufferers alike, providing an alternative solution to commercial, pharma-intervention treatments for breathing disorders, thus validating ancient Vedic science.

Awards Won:

Second Award of $2,000