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## Effect of Aerobic Exercises on Chest Wall Expansion, Breath Holding Time and Respiratory Rate in College Level Students

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**Abstract:** This study sought to assess the impact of aerobic exercises on chest wall expansion, breath-holding duration, and respiratory rate among college-level students. The research focused on a population of collegiate students aged 20 to 25 years from the academic community of Kuhi, Nagpur (M.S.). Thirty subjects were selected for the study, all of whom were non-sports individuals with no previous active involvement in any sports or physical activities. The selection process employed a simple random sampling technique. To achieve the study's objectives, a pretest was administered to the treatment group, assessing the selected variables. Subsequently, the group engaged in a seven-week aerobic exercise program tailored to their respective fitness levels. Following the training period, a posttest was conducted to evaluate the same variables. Descriptive analysis, mean comparison, and the paired t-test, with a significance level set at 0.05, were employed to analyze the data. The findings revealed a significant increase in chest wall expansion, breath-holding time, and respiratory rate among participants engaged in aerobic exercises. The pivotal outcome of this investigation underscores the notable influence of aerobic exercise on the respiratory system.

**Keywords:** Aerobic exercises, Chest wall expansion, Breathing holding time and Respiratory rate

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