



## Evaluation of Respiratory Musculature Work in High Performance Athletes

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### ABSTRACT

**Introduction:** The high yield sport is an activity where athletes need to improve performance, seeking expected results. Breathing supports, influencing the supply and transport of oxygen; reduction in fatigue, feeling of effort and athlete's decision. **Goals:** Increase muscle strength and respiratory capacity, verifying cardiorespiratory repercussions in training. **Methodology:** The study was conducted at Sport Club do Recife, with 5 male Handball players individuals. Were submitted to respiratory assessment through POWER BREATHE carehealth 2 controlled by the breathlink software, performing 2 sessions 10 minutes long, 2 times a week, for 5 weeks. The charge for first session was 60% of the maximum inspiratory pressure (Pimáx) increased by 5%. **Results:** There has been an increase in Pimax in 80% of athletes, being 75% raised the average volume of air inspired by incursion. All presented beneficial physiological adaptations with the progression of respiratory load imposed and improves the sense of effort by the Borg scale. **Conclusion:** It was evidenced that the respiratory muscle training is an important tool in the preparation of high performance athletes, due to provide increased inspiratory muscle force, pulmonar volumes and capacities; and, reducing the sensation of dyspnea and muscle fatigue.

**Keyword:** Analysis; Athletes; Respiratory Muscles; Training; Athletes.

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