

results of the present study do not contribute endorsement of the product by the authors or ACSM.

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REFERENCES

1. ARMSTRONG, R. B. Muscle fiber recruitment patterns and their metabolic correlates. In: *Exercise, Nutrition and Energy Metabolism*, E. S. Horton and R. L. Terjung (Eds.). New York: MacMillan, 1988, pp. 9-26.
2. BAR-O, O. The Wingate anaerobic test: an update on methodology, reliability and validity. *Sports Med.* 4:381-94, 1987.
3. BORG, G. A. V. Psychophysical bases of perceived exertion. *Med. Sci. Sports Exerc.* 14:377-381, 1982.
4. CANDEVIA, S. C., K. J. KILLIAN, and E. J. M. CAMPBELL. The effect of respiratory muscle fatigue on respiratory sensation. *Clin. Sci.* 60:463-466, 1981.
5. COAST, J. R., P. S. CLIFFORD, and T. W. HENRICH. Maximal inspiratory pressure following maximal exercise in trained and untrained subjects. *Med. Sci. Sports Exerc.* 22:811-815, 1990.
6. DEVRIES, H. A., and T. J. HOUSH. *Physiology of Exercise*. Champaign, IL: Wm. C. Brown Communications, Inc., 1994, pp. 527-535.
7. GROSSER M. (Ed.). *Schnelligkeitstraining (Speed Training)*. Munich: BLV Verlagsgesellschaft mbH, 1991, pp. 79-86.
8. HAMNEGARD C. H., S. WRAGG, D. KYROUSSIS, R. AQUILINA, J. MOXHAM, and M. GREEN. Portable measurement of maximum mouth pressures. *Eur. Respir. J.* 7:398-401, 1994.
9. JENSEN, K. Test procedures for rowing. *FISA Coach* 5(4):1-6, 1994.
10. JOHNSON, B. D., M. A. BABCOCK, O. E. SUMAN, and J. A. DEMPSEY. Exercise-induced diaphragmatic fatigue in healthy humans. *J. Physiol.* 460:385-405, 1993.
11. JOHNSON, B. D., E. A. AARON, M. A. BABCOCK, and J. A. DEMPSEY. Respiratory muscle fatigue during exercise: implications for performance. *Med. Sci. Sports Exerc.* 28:1129-1137, 1996.
12. KARVONEN, J. Importance of warm-up and cool down on exercise performance. In: *Medicine in Sports Training and Coaching: Medicine Sport Science*, Vol 35, J. Karvonen, P. W. R. Lemon, and I. Iliev (Eds.). Basel: Karger, 1992, pp. 189-214.
13. KILLIAN, K. J., P. LEBLANC, D. H. MARTIN, E. SUMMERS, N. L. JONES, and E. J. M. CAMPBELL. Exercise capacity and ventilatory, circulatory, and symptom limitation in patients with chronic airflow limitation. *Am. Rev. Respir. Dis.* 146:935-940, 1992.
14. KOUTEDAKIS, Y., and N. C. C. SHARP. Fitness assessment of elite competitors. *Rheumatol. Now* 1(5):18-20, 1990.
15. LARSON, J. L., M. K. COVEY, C. A. VITALO, C. G. ALEX, M. PATEL, M. J. KIM. Maximal inspiratory pressure: learning effect and test-retest reliability in patients with chronic obstructive pulmonary disease. *Chest* 104:448-53, 1993.
16. LOKE, J., D. A. MAHLER, and J. A. VIRGULTO. Respiratory muscle fatigue after marathon running. *J. Appl. Physiol.* 52:821-824, 1982.
17. MAHLER, D. A., C. R. SHUHART, E. BREW, and T. A. STUKEL. Ventilatory responses and entrainment of breathing during rowing. *Med. Sci. Sports Exerc.* 23:186-192, 1991.
18. MCCONNELL, A. K., M. P. CAINE, and G. R. SHARPE. Inspiratory muscle fatigue following running to volitional fatigue: The influence of baseline strength. *Int. J. Sports Med.* 18:169-173, 1997.
19. MIER-JEDRZEJOWICZ, A., C. BROPHY, and M. GREEN. Respiratory muscle weakness during upper respiratory tract infections. *Am. Rev. Respir. Dis.* 138:5-7, 1988.
20. ROUSSOS, C. S., and P. T. MACKLEM. Diaphragmatic fatigue in man. *J. Appl. Physiol.* 43:189-197, 1977.
21. SCHABORT, E. J., J. A. HAWLEY, W. G. HOPKINS, and H. BLUM. High reliability of performance of well-trained rowers on a rowing ergometer. *J. Sports Sci.* 17:627-632, 1999.
22. SECHER, N. H. Physiological and biomechanical aspects of rowing: implications for training. *Sports Med.* 15:24-42, 1993.
23. SHELLOCK, F. G., and W. E. PRENTICE. Warming-up and stretching for improved physical performance and prevention of sports-related injuries. *Sports Med.* 2:267-278, 1985.
24. STEINACKER, J. M., M. BOTH, and B. J. WHIPP. pulmonary mechanics and entrainment of respiration and stroke rate during rowing. *Int. J. Sports Med.* 14(Suppl. 1):S15-S19, 1993.
25. STEINACKER, J. M., U. MARX, M. GRUNERT, W. LORMES, and R. E. WODICK. Vergleichsuntersuchungen über den Zweistufentest und then Mehrstufentest bei der Ruderspiroergometrie (Comparison of spirometric values between the two-stage test and the multiple stage test in rowing ergometry). *Leistungssport* 15:47-51, 1985.
26. VOLIANITIS, S., A. K. MCCONNELL, Y. KOUTEDAKIS, and D. A. JONES. The influence of prior activity upon inspiratory muscle strength in rowers and non-rowers. *Int. J. Sports Med.* 20:542-547, 1999.
27. WEISER, P. C., R. A. KINSMAN, and D. A. STAMPER. Task specific symptomatology changes resulting from prolonged submaximal bicycle riding. *Med. Sci. Sports* 5:79-85, 1973.
28. WEN, A. S., M. S. WOO, M. S., and T. G. KEENS. How many manoeuvres are required to measure maximal inspiratory pressure accurately? *Chest* 111:802-807, 1997.