



The effects of acute hypoxia on different muscle contraction to the energy path

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Abstract

The **purpose** of this study was to observe bodyweight strength endurance training and rowing ergometer training on blood lactate and NH_3 . Subject: eighth health college students participated in this study. **Methods:** Two diagnostics were used in this study, namely bodyweight strength endurance training and maximum load on rowing ergometer. Recording the blood lactate (La), and ammonia (NH_3) at 1st, 3rd, 5th, 7th, 10th and 15th min after two exercises. All parameters were analyzed by paired t-test. **Results:** The maximal level of lactate was observed at bodyweight strength endurance and rowing ergometer were 9.8 ± 2.0 mmol/l and 8.2 ± 1.7 mmol/l, different was 1.6 mmol/l but not significant ($p > .05$). NH_3 in t bodyweight strength endurance and rowing ergometer after the end of 5th were 101.1 ± 27 and 65.4 ± 27.4 μ mol/l, after the end of 10th minutes were had different ($39 \mu\text{mol/l}$) and significantly ($p < 0.05$). **Conclusion:** At the acute load of bodyweight strength endurance training, the lactate level and NH_3 were presented the symptoms of anaerobic energy metabolism. Therefore, if want to used bodyweight strength endurance training improve the muscle anaerobic energy metabolism, can be used before the specific training periods.

Keyword: Lactate, Ammonia ,Rowing Ergometer,