The Effect of Using Hydrogen-increasing Stick by Athletes in Resistance Training

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Absract

Previous studies has shown that the use of anti-oxidants during sport activities will reduce the level of Acid Lactic in the culmination of exercises. Considering the fact that most antioxidants are hydrogen donors, consuming hydrogen-rich water will increase body's antioxidant's capacity and it will have positive impacts on athlete's health.

Similar studies have been performed regarding the consumption of hydrogen-rich water (HRW) on athletes' efficiency. The present study has applied hydrogen-increasing stick for the production of hydrogen. Nine men athletes have been studied in a double-blinded way. First, they drank city water during their exercise and then, blood samples have been got from them through four levels including, before exercise, just after finishing exercise, one hour after exercise and 24 hours after exercise. This blood test has been repeated after 10 days of rest, and by drinking the produced HRW as a result of hydrogen-increasing stick. Then, the results of components such as Lactate Dehydrogenase (LDH), creatine phosphokinase (CPK) and Lactic Acid (LAC) have been compared with the results of city drinking water .

The impact of drinking hydrogen-rich water has been reduced until 19.39% just after exercises and it underwent a significant change. In addition, the amount of LDH, one hour after exercise has been reduced to a 40.2% that again underwent a significant change as compared to city's water. However, the changes in the amount of CPK was not significant in none of the study stages ($t<0.05$).

Conclusion: the results show that HRW (hydrogen rich water) has a positive impact on the reduction of lactate and the tiring impact of strengthening exercises and it will improve athletic performance in professional athletes. Hydrogen-increasing stick will produce an ideal water for the consumption of athletes and probably the long-term consumption of that will bring the athletes will more health-related benefits. Therefore, using this steak is recommended to all people.

Keywords: Hydrogen-increasing Stick, hydrogen-rich water, Resistance Training

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To whom it may concern,

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