



THE EFFECT OF 6-WEEK PLYOMETRICS EXERCISE ON HYDROXYPROLIN SERUM OF ADULT AND YOUNG VOLLEYBALL MEN

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ABSTRACT

Hydroxiprolin is the main bio-chemical criterion which shows the ruin of the collage tissue. It is a kind of amino acid which increases the resistance of the collage tissue of tendons, because the Hydroxiprolin contains inter-molecule heterogenic connections in its own poly peptide chains. Plyometric exercises are those kinds of exercises in which occurs a severe shortening contraction and then a long contraction will follow. The purpose of this study is to investigate the rate of changes of Hydroxiprolin serum in young and adult volleyball men in 6 week Plyometric exercise.

The method of this study is quasi-experimental. The participants of this study were chosen among the volleyball players of Kohgiluyeh and Buayerahmad province, Iran. 12 young men volleyball players and 12 adult volleyball players were chosen. The sampling process was random. The players were divided into two groups namely, young and adult. Before performing the exercises, the players were asked to fill the questionnaire and testimonial form.

The Plyometric exercise decreased the rate of serum Hydroxiprolin in young and adult men volleyball players after 6 week exercise, and this decrease was equal between the two groups. It can be said that performing the 6 week Plyometric exercise make the tendon tissue more adaptable which can prevent the ruin of the other tissues by using regular physical exercises and keep them in a very high condition for a long time. By this method the tissue will not be exposed to arthritis and will continue maintaining their natural biosynthesis and gain a kind of adaptability by performing the Plyometric exercises which include inside and outside contractions.

Keyword:

Hydroxiprolin
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