

Summary

Effect of high Physical load on the concentrated Lactic and the Power of hydrogen in Blood by using interval Rest For (400) meters athletes

This dissertation encompass of fine chapters and appendix :
The first chapter consists of:

Introduction , Problem ,Importance Of the research, The purposes of Research , hypotheses and Terminology which Used in this research.

The Purpose of the research was delineate as the following :

1 - To know the changes which occurs in (Lactic-Power of hydrogen and Pulls rates as a results of effected high Physical Load by using Changeable (7-9-11-13 min.) rest among each repetitions for 400 meters athletes .

2 - To know the changes which occurs in (Lactic - The power of hydrogen in the blood and pulls rate) As a result of high physical Load using Specific Rest (5 min.) among each repetitions . for 400 metes athletes .

3 - To determine the suitable rest in between which could Repeat The high physical Load for 400 meter athletes .

* The second chapter includes the theory and the review of Literature and studies which consists of ; concept of Training Load , degrees of Training Load , control in the training load , Types of The Load , Kinds Of Training Load , Control in The Training Load , types of the Load , kinds of training Load , Quantity and quality of training load , physiological effect of high physical load of training.

- Out line about the energy - lactic acid ,importance to measure lactic acid in physical field , formation of lactic in the blood , Principles which due to increase the lactic , affect of accumulation of Lactic acid during Physical activities , training effect information

Lactic a acid , Post pond the tired which causes: the accumulation of Lactic - acid , and how to get red of it .

_ The power of hydrogen , the concept of power of hydrogen ,

Product the ion of hydrogen in the Body , The acid at it kinds , body balance of acid and in training participant ,and how could regularity the power of hydrogen , regularity the Bo, and Physiological regulation .

- Pulls dentist to standardizing the physical load , factors which effect The Pulls rate

rest , it Importance , types of it when athlete does meet the Rest ?
_ 400 meters . event.

Then display studies which have been done in this field and comment on it , beside how could we get benefit From it .

* third Chapter : this chapter concerns with procedure which was as

The following method , researcher used the experiment method by Using pre - and post test on one group ,which fits this study.

Sample :

Sample was selected deliberately , it was the best six " 6 " athletes who met

Stander of 400 m , beside they are in the national team For Season 95 / 96 .on of this s ample was excel according to bad Health .

There fore Sample was " 5" athletes only . there age average was " 22, 2 " . This sample represented Ahally , Zamalik and Tersenal Clubs .

3 - The Pilot duty was done by using one athlete only from the Sample who met the minimum stander of that group.

The aim of selecting this athlete to see how the method of the study is suitable or not ,/how ever the pilot study was done to determine the suitable distance , density (Load) and the repetitions, also to determine the minimum rest among repetitions .

4 - The experiment was taken two days in between one day rest to grant the disappearance the Fatigue of the first day on the blood measures for The Second day , the measures which done were as the following ;

First day :

Blood was taken from the sample before the activity to measure concentrated ratio of lactic acid in the Blood , also the power of hydro-

gen , and the pulls rate to determine the level of these variables in the rest before the experiment takes Place .

_ Four times for 400 meters . after worming up with in each repetition .

Maximum effort , in between Rest was Changeable (7- 9 - 11 - 13)min.

* Blood was taken in the Last " 30" Second of the rest in each Repetition .

Second Day :

The same Procedure for the first day was used , in the repetitions and Tenacity of the load but rest among the repetition was " 5 " min. blood was taken with the same method of the first day .

5 - Spectro photo metric apparatus was used to analyze the lactic acid in blood , while blood gas machine "pH" was used also to analyze the power of hydrogen , also pulls rate was measure for "15"S

* Chapter four was handle the results and the study interpretation discussions through the statistical Procedures:

* Chapter Five: Includes conclusions and recommendation .

The most important conclusions were as the following :

- There is a significant differences among the average of the lactic acid in the blood, pulls rate, and between the time of the pre - measure and among the average after each changeable rest (7 - 9 - 11 -13)min. in favor of post test .

-There is a significant differences among the lactic acid average in the blood , pulls rate and between the time of the pre - measure and among their averages after each repetition when the rest in between was " 5 " min. in favor of the post test .

-There is a Significant differences among the averages of the power hydrogen in blood in pre test and among scores average in the changeable rest (7 - 9 - 11 - 13)min. in favor of the Pre test .

_ There is a Significant differences between the power of hydrogen

Averages in the blood in the pre_ test and between scares average in Specific Rest "5" min. in favor of pre test after each repetition.

-average of lactic acid , pulls rate and times of performance increase when the repetitions increase using changeable rest (7 - 9- 11 - 13)min. .

-Average of lactic acid, pulls rate and performance time when the repetition increase using specific rest" 5 " min. .

-Average scores of the power of hydrogen "pH" in blood decreases when the repetitions increase using changeable rest (7 - 9 - 11 -13) min.

- average Scores of power of hydrogen "pH" in blood decreases when repetitions increase when the specific rest determine by "5" min.

It was found "5" min. as a rest among each repetition using high load consider a better Than The changeable Rest (7-9-11-13) min. but The "5 min. rest not enough to the lactic acid and the power of hydrogen "pH" in blood also pulls rate to be in a normal as before the activity takes place .

* Researcher recommend to use the result of this study and standardizing the load specially the high load which display a good result .

* At the end of the references (Arabic and English) then the appendixes.

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