International Journal of Physical Education, Vol. 2 No. 1&2 : 1-4 (April & October, 2009)

Research Paper :

Effect of weight training and physical exercises on bio-chemical variables among college football players

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Accepted : *January, 2009*

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ABSTRACT

The procedures and methods were applied in selection of subjects. experimental design, selection of variables, selection of tests, reliability of the data, orientation of the subjects, training programme, administration of tests, collection of data and statistical procedure followed in this study. To achieve the purpose of this study, 20 male college Football players of Koviloor Andavar College of Sports Science, Tamil Nadu were selected as subjects. The selected subjects were divided into two groups. Group I. underwent the weight training exercises and Group II under went the physical exercises. The subjects age ranged from 20 to 25 years. The subjects were selected at random from the College Football players. The study was formulated as pre post test and pre experimental design. The weight training group had significant improvement in body cholesteral and improved triglyceride, HDL and LDL.

Key words : Cholesterol, Triglyceride, High density lipoprotein, Low density lipoprotein, Physical exercise

Weight training is concerned with improving the condition of the body in terms of strength, power and endurance, through the use of respective movements against a resisting load of some kind. When weight training occurs on a regular basis and is accompanied by wise eating habits various systems of the body change in positive ways. Muscles become stronger, assume greater work bands and show less fatigue with each additional session of training (Anonymous, 2001).

Research methodology involves the systematic procedure by which the research starts from the initial identification of the problem to its final conclusions. The role of the methodology is to carry on the research work in a scientific and valid manner.

Buchannan and Marsh (2002) conducted a research on biochemical changes that may result from prolonged strenuous exercise. Doctors and athletes should be aware of the potentially adverse biochemical changes, especially hyponatraemia, that may result from prolonged strenuous exercise.

METHODOLOGY

Research methodology involved the systematic procedure by which the research started from the initial identification of the problem to its final conclusions. The procedures and methods were applied in selection of subjects. experimental design. selection of variables, selection of tests, reliability of the data. orientation of the subjects, training programme, administration of tests, collection of data and statistical procedure followed in this study.

To achieve the purpose of this study, 20 male college football players Koviloor Andavar College of Sports Science, Tamil Nadu were selected as subjects. The selected subjects were divided into two groups. Group I underwent the weight training exercises and Group II under went the physical exercises. The subjects age ranged from 20 to 25 years. The subjects were selected at random from the college football players. The study was formulated as pre post test pre experimental design.

The statistical analysis of the result obtained from the weight training and physical exercise group before and after the training programme, on the collected data and discussion on findings are presented. The study was conducted to determine the effect of weight training and physical exercises on bio-chemical variables for college level football players and their age ranged from 20 to 25 years.

OBSERVATIONS AND DISCUSSION

Training programme was administered to the subjects for eight weeks. The experimental group Group-I underwent weight training programme for weekly three days that is on Monday, Wednesday and Friday. Group-II underwent general physical exercise programme on natural flat surface weekly three days that is on Tuesday, Thursday and Saturday. Both groups under went training between 6.30 am to 7.30 in the mornings.