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Manuscript Title: Effect of High Intensity Intermittent Training on Immune Response in University Level Football Players and Track and Field Athelets

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Abstract : The immune system is a complex, dynamic, and beautifully orchestrated mechanism with enormous responsibility. It defends against foreign invasion by microorganisms, screens out cancer cells, adapts as we grow and modifies how we interact with our environment. When it malfunctions, disease, cancer or death can occur. Although it is not necessary to understand all the intimate details of the immune system, it is wise to have a basic grasp of its functions.

Keywords: intermittent training, cholesterol, tryglycerides, haemoglobin.

Introduction: It appears that the immune system has a training effect, similar to other areas of physiology (e.g., cardiovascular, muscular). In other words, a balanced training program of exercise and rest leads to better performance. Studies in the laboratory and epidemiological observations have shown improved immune function and fewer upper respiratory infections in athletes as compared to their couch-potato counterparts.

Review of literature: Several risk factors, other than hypertension, have also been identified for CVD, specifically, obesity, metabolic syndrome, dyslipidemia, and inflammatory factors (Artero et al., 2012).

Research objective: To determine whether the intermittent training would have better effect on the selected physiological and haematological variables of subjects towards enhancing immune response of subjects at the end

of 12 week of administration of training.

Research hypotheses:

1. There would be no significant differences on selected physiological (SBP, DBP, heart rate, haemoglobin, packed cell volume) and haematological (total cholesterol, HDL cholesterol, LDL cholesterol, triglycerides, total leukocyte count, neutrophil and lymphocyte) variables of the subjects at the end of 12 weeks of administration of high intensity intermittent training.
2. There would be no significant differences on immune response of subjects at the end of 12 weeks of administration of high intensity intermittent training.

Methodology:

Subjects: A total of 90 (Ninety) college male students – 30 played football and 30 played track and field events at University level representing the college and 30 non-players were taken as subjects for the study.

Reliability Of Data: The reliability of data was measured by ensuring instrument precision, tester competency and subjects' reliability. The instruments and equipments used in the present investigation were standardized ones and tested thrice for accuracy.

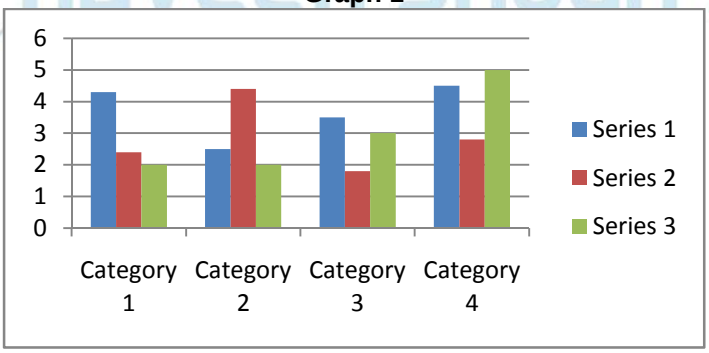
Criterion Measures: The estimates, recorded on the subjects in the test of physiological and haematological variables as immune status were considered as the criterion measures of the study.

Experimental Design: Random group design was adopted for the study and equal numbers of subjects were assigned at random to three groups of thirty subjects each.

Table 1

S.N.	Data	Data	Data

Graph 1



Results And Discussion: Result of data

Conclusions:

1. High intensity intermittent exercises for a period of twelve weeks duration was effective in developing the physiological and haematological parameters along with lipid profile status of University level football and track and field event players ranging in age between 22 to 27 years, which is responsible for immune response of the subjects.
2. High intensity intermittent training for a period of twelve weeks duration was effective in developing TLC, neutrophil and lymphocyte level of University level football and track and field event players ranging in age between 22 to 27 years.

Recommendations:

1. High intensity intermittent training, used in this study may be adopted by teachers of physical education, coaches and trainers for improving overall immune response of players and athletes.
2. High intensity intermittent training, used in this study may be adopted by teachers of physical education, coaches and trainers for improving selected physiological and hematological parameters along with lipid profile of players and athletes.

Acknowledgment: I'd like to express my appreciation to the principal of Tantia University, Sri Ganganagar (Raj.) for providing me the access to the field for my experiments. Dr. BrajKishor Choudhary, Associate Professor, Tantia University, Sri Ganganagar (Raj.) has been a wonderful supervisor throughout my project.

References:-

1. Artero, E. G., Lee, D., Ruiz, J. R., Sui, X., Ortega, F. B., Church, T. S., Blair, S. N. (2011).A prospective study of muscular strength and all-cause mortality in men with hypertension. Journal of the American College of Cardiology, 57(18), 1831–7.
2. Banz, W. J., Maher, M. A., Thompson, W. G., Bassett, D. R., Moore, W., Ashraf, M.,Zemel, M. B. 2003. Effects of Resistance vs Aerobic Training on Coronary Artery Disease Risk Factors.Experimental Biology and Medicine, 228, 434– 440.
3. Calders, P., Elmahgoub, S., Roman de Mettelinge, T., Vandenbroeck, C., Dewandele, I., Rombaut, L., Cambier, D. 2011. Effect of combined exercise training on physical and metabolic fitness in adults with intellectual disability: a controlled trial. Clinical Rehabilitation, 25(12), 1097–108.

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