



## EFFECT OF YOGIC PACKAGES ON SELECTED BIO-CHEMICAL VARIABLES AMONG VOLLEYBALL PLAYERS

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### ABSTRACT

The purpose of the study was to find out the effect of yogic packages on selected bio-chemical variables among volleyball players. To achieve the purpose of the present study, thirty men volleyball players from Kanyakumari district, Tamilnadu, India were selected as subjects at random and their ages ranged from 18 to 25 years. The subjects were divided into two equal groups of twenty players each. Group I acted as Experimental Group I (Yogic packages) and Group II acted as control group. Pre test was conducted for all the subjects on selected bio-chemical variables. This initial test scores formed as pre test scores of the subjects. The duration of experimental period was 12 weeks. After the experimental treatment, all the subjects were tested on their bio-chemical variables. This final test scores formed as post test scores of the subjects. The pre test and post test scores were subjected to statistical analysis using Analysis of Covariance (ANCOVA) to find out the significance among the mean differences, whenever the 'F' ratio for adjusted test was found to be significant, Scheffe's post hoc test was used. In all cases 0.05 level of significance was fixed to test hypotheses. The yogic packages group had shown significant improvement in all the selected bio-chemical variables among volleyball

**KEYWORDS:** Yoga, Volleyball, Bio-chemical Variables.

### INTRODUCTION

Health is the motto of yoga. Many people still think that yoga is religion: others believe it to be a kind of magic. In reality yoga is a system of physical, mental and spiritual development. Yoga does not mean just twisting and bending of the body. It is a comprehensive mode of culturing the body. It also secures a powerful tool in manifesting the hidden personality of man. Yoga may be the cheapest and most scientific method of ensuring soundness of the body and mind. Yogic practices, is the ideal complement to other forms of physical exercises such as running, cycling and swimming. Yogic postures systematically work on all the major muscle groups, including the back, neck and shoulders, deep abdomen, hip and ankles, feet, wrists and hands. By their very nature, yogic practice affect all the muscle groups and organs as they simultaneously impart strength, increase flexibility and bring nourishment to internal organs.

Volleyball has been described as an 'interval' sport with both anaerobic and aerobic components. At the higher skill levels, technical performance may be limited by physical characteristics as well as physical fitness, and performance characteristics. Volleyball is an Olympic team sport in which two teams of six active players, separated by a high net, each trying to score points by trying to ground the ball on the other team's court under organized rules. The complete rules of volleyball are extensive, but in general, play proceeds as follows: Points are scored by grounding the ball on the

opponents' court, or when the opponent commits a fault. The first team to reach 25 points wins the set and the first team to win three sets wins the match. Teams can contact the ball no more than three times before the ball crosses the net and consecutive contacts must be made by different players. The ball is usually played with the hands or arms, but players can legally strike or push (short contact) the ball with any part of the body. Spiking the ball is easy to hit and has a fair advantage that the other team will not be able to hit back.

### METHODOLOGY

The purpose of the study was to find out the effect of yogic packages on selected bio-chemical variables among volleyball players. To achieve the purpose of the present study, thirty men volleyball players from Kanyakumari district, Tamilnadu, India were selected as subjects at random and their ages ranged from 18 to 25 years. The subjects were divided into two equal groups of twenty players each. Group I acted as Experimental Group I (Yogic packages) and Group II acted as control group. Pre test was conducted for all the subjects on selected bio-chemical variables. This initial test scores formed as pre test scores of the subjects. The duration of experimental period was 12 weeks. After the experimental treatment, all the subjects were tested on their bio-chemical variables. This final test scores formed as post test scores of the subjects. The pre test and post test scores were subjected to statistical analysis using Analysis of Covariance (ANCOVA) to

find out the significance among the mean differences, whenever the 'F' ratio for adjusted test was found to be

significant, Scheffe's post hoc test was used. In all cases 0.05 level of significance was fixed to test hypotheses.

**RESULTS**

**TABLE I**

**SIGNIFICANCE OF MEAN GAINS & LOSSES BETWEEN PRE AND POST TEST SCORES ON SELECTED VARIABLES OF YOGIC PACKAGES GROUP**

S.No	Variables	Pre-Test Mean	Post-Test Mean	Mean difference	Std. Dev (±)	σ DM	't' Ratio
1	Total cholesterol	188.50	172.75	15.75	7.87	1.76	8.94*
2	Blood sugar	146.55	135.40	11.15	4.64	1.03	10.72*
3	Triglycerides	97.25	86.95	10.30	6.20	1.38	7.42*

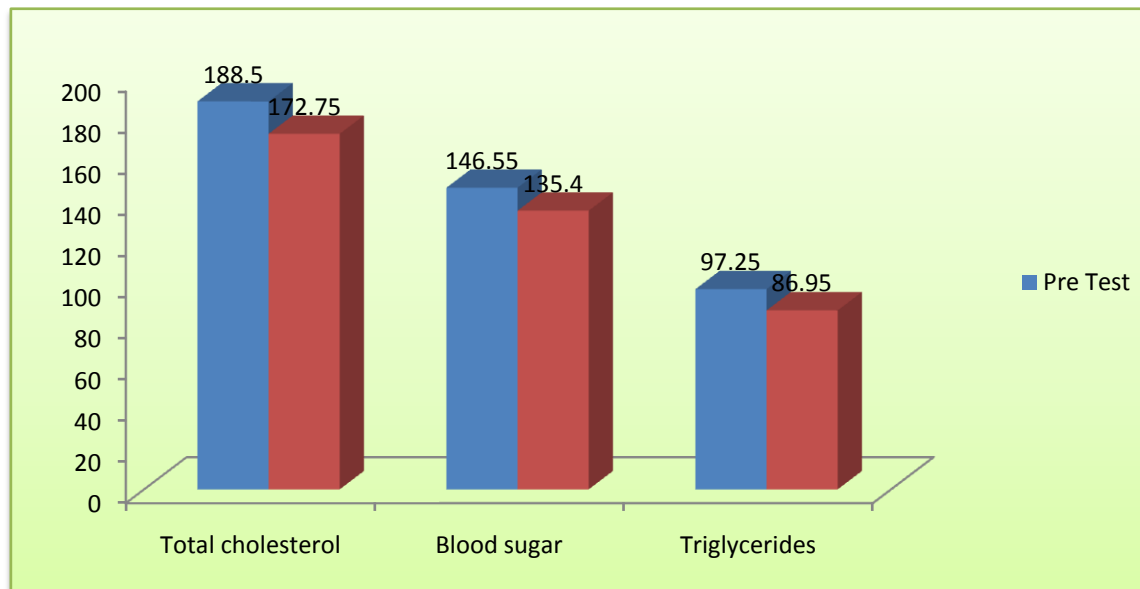
\* Significant at 0.05 level

An examination of table-I indicates that the obtained 't' ratios were 8.94, 10.72 and 7.42 for total cholesterol, blood sugar and triglycerides respectively. The obtained 't' ratios on the selected variables were found to be greater than the required table value of 2.09

at 0.05 level of significance for 19 degrees of freedom. So it was found to be significant. The results of this study showed that statistically significant and explained its effects positively.

**FIGURE I**

**PRE AND POST TEST DIFFERENCES OF THE YOGIC PACKAGES GROUP ON SELECTED VARIABLES**



**TABLE II**  
**SIGNIFICANCE OF MEAN GAINS & LOSSES BETWEEN PRE AND POST TEST SCORES ON SELECTED VARIABLES OF CONTROL GROUP**

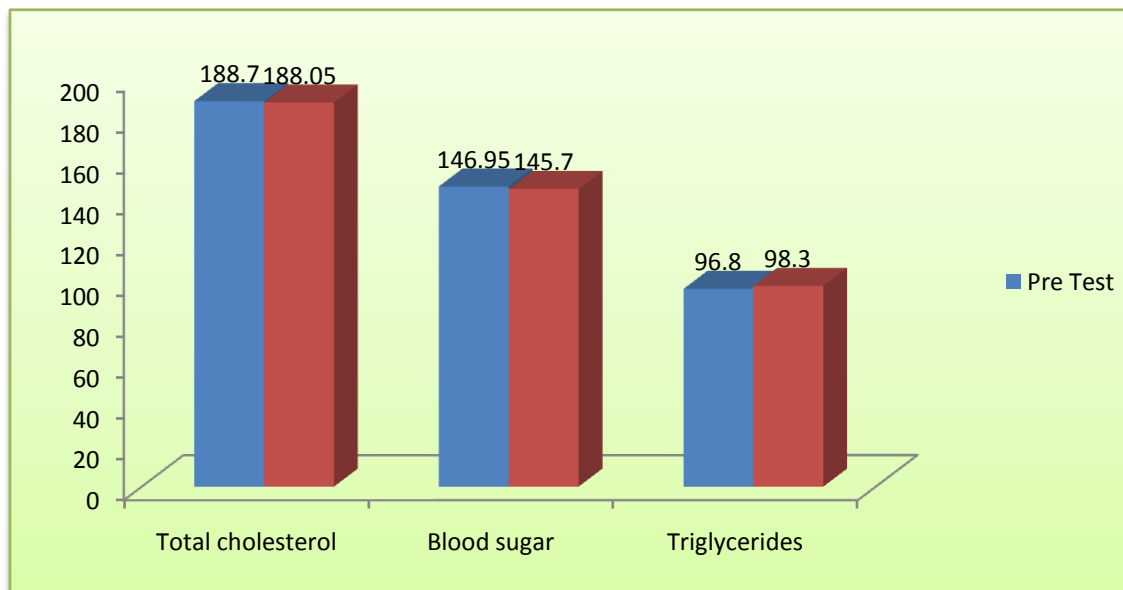
S.No	Variables	Pre-Test Mean	Post-Test Mean	Mean difference	Std. Dev (±)	σ DM	't' Ratio
1	Total cholesterol	188.70	188.05	0.65	7.74	1.73	0.37
2	Blood sugar	146.95	145.70	1.25	4.42	0.98	1.26
3	Triglycerides	96.80	98.30	1.50	7.81	1.74	0.85

\* Significant at 0.05 level

An examination of table II indicates that the obtained 't' ratios were 0.37, 1.26 and 1.59 for total cholesterol, blood sugar and triglycerides respectively. The obtained 't' ratios on the selected variables were

found to be lesser than the required table value of 2.09 at 0.05 level of significance for 19 degrees of freedom. So it was found to be insignificant.

**FIGURE II**  
**PRE AND POST TEST DIFFERENCES OF THE CONTROL GROUP ON SELECTED VARIABLES**



**CONCLUSION**

From the analysis of the data, the following conclusion was drawn:

1. The yogic packages group had shown significant improvement in all the selected bio-chemical variables among volleyball players after undergoing yogic packages for a period of twelve weeks than the control group.

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