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## Effect of selected yogic Practices and Physical exercises on Bio-Chemical variables among college, women students

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### Abstract

The purpose of the study was Find out the Effect of Selected Yogic Practices and Physical Exercises on Bio-Chemical Variables among University Women Students. The study was conducted on 40 women students of Guru Ghasidas University, Chattisgarh, were selected as subjects. The selected subjects were divided in two groups. Group I underwent the selected yogic practices training and Group II underwent the physical exercises. The subject age ranged from 20 to 25 years. The subjects were selected at random from the University Women Students. The study was formulated as pre test - post test design. The yogic practice group had significant improvement in body cholesterol and improved triglyceride,

**Keywords:** Yogic practices, physical exercises, cholesterol, High Density

### 1. Introduction

Yoga was a boon of our ancients. Yoga is one of the six orthodox systems of Indian philosophy It was fruitful theory and practical behavior of human being. In the sense of biological, physiological and psychological yoga is the essential subject in daily life to develop good health The word "yoga" is derived from the Sanskrit root yuj which means "to yoke" the related meaning". In philosophical terms, the union of the individual self, paramatma, is yoga. In today's life day-to-day problems are the results of mental stress. Generally, your body is also affected due to fear whether it is obvious, imagined Yoga is a systematic discipline, originated in India, for self realization. However, now a day's scientific researchers find its utility for all round development of personality along with innumerable spiritual as well as therapeutically applications.

In the beginning while learning, it may be uncomfortable as any new thing is always uncomfortable in the beginning but after some practice the same becomes comfortable Exercise physiology is an interdisciplinary area, which has taken a prominent place in contributing scientific knowledge to physical education and sports. Scientific research has contributed to the body of knowledge in every field and that is true in case of Physical Education and Sports also. Physical activity provides a unique opportunity for self-expression, social interaction, and personal challenge. It can help students develop self-confidence and a positive self-image by giving them a sense of accomplishment while they are learning motor skills.

### 2. Methodology

To achieve the purpose of these study 40 university women students of Guru Ghasidas University, Bilaspur, Chhattisgarh were selected as subjects. The selected subjects were divided into two groups. Group I, underwent the selected yogic practices and Group II underwent the physical exercises. The subject's age ranged from 20 to 25 years. The subjects were selected at random from the University women students. The study was formulated as pre test and post test design. The statistical analysis of the result obtained from the selected yogic practices and physical exercises on bio-chemical variables for University women students and their age ranged from 20-25 years. To find out the effect of selected yogic practices and physical exercises on bio-chemical variables among college women students, and to determine the significant improvement of the study. To find out the mean differences between the selected yogic practices group and physical exercises group the 't' ratio was used as statistical techniques.

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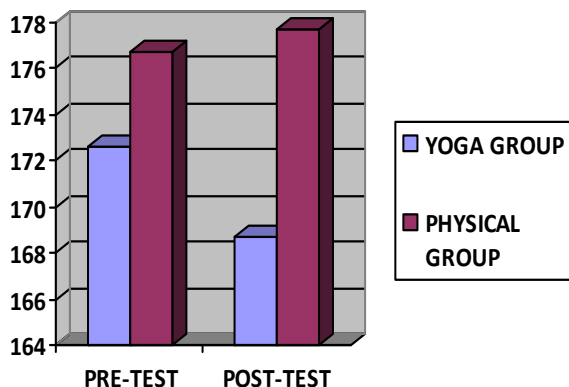
### 3. Results and Discussions

**Table I:** Significance Difference between the Initial and the Final Means of the Selected Yogic Practices and Physical Exercise Groups on Cholesterol

Group	Tests	Mean	Standard Deviation	Standard Error	"T" Ratio
Selected Yogic Practices Group (N=10)	Pre	172.6000	12.05636	3.51284	1.1771
	Post	168.7000	6.4000	2.03557	
Physical Pre-Test Exercise Group (N=10)	Pre	176.700	9.57200	3.05887	0.546
	Post	177.700	7.51460	2.37791	

No Significant at 0.05 level of confidence.

#### The graphical representation of the Cholesterol between the Yogic Practice and Physical Exercise Group



't' value required at 0.05 level = 2.262 with the degrees of freedom = 9. The statistical result shown in Table I indicate that the final mean (168.70) is decreased than the initial mean (172.60) for selected yogic practices group. This shows the cholesterol level is decreased in selected yogic practices group. In the physical exercise group the final mean (177.70) is higher than the initial mean (176.70). The "t" value (1.1771) for selected yogic practices group and (0.546) for the physical exercise group derived from 't' test is lower than the table value (2.262) with degrees of freedom 9 and at 0.05 level of confidence. Hence, the result shown by the selected yogic practices and physical exercise group for cholesterol is not significant.

#### 4. Analysis of Tryglycerides

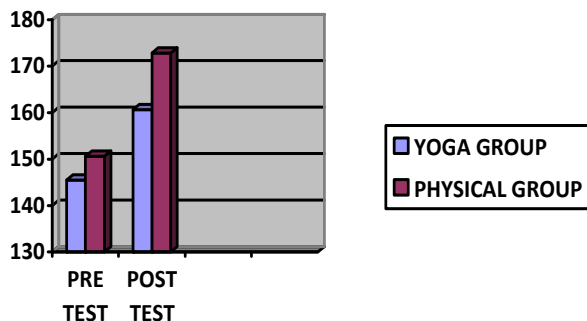
The table of statistical description revealed that effect of selected yogic practices and physical exercise groups on triglycerides.

**Table II:** Significance Difference between the Initial and the Final Means of Selectedyogic Practices and Physical Exercise Groupson Triglycerides in Mg/dl

Group	Tests	Mean	Standard Deviation	Standard Error	"T" Ratio
Selected Yogic Practices Group (N=10)	Pre	145.50	18.57609	6.17634	3.727*
	Post	160.60	15.83190	5.11507	
Physical Pre-Test Exercise Group (N=10)	Pre	150.60	19.83380	5.40254	2.201
	Post	172.80	37.52946	12.10080	

\*Significant at 0.05 level of confidence.

#### The Graphical Representation of the Triglycerides between Yogic Practice and Physical Exercise Group



"t" value required at 0.05 level = 2.262 with the degrees of freedom = 9.

The statistical result presented in the table II denotes that in both the selected yogic practices and the physical exercise groups the final means are higher than the initial means. The calculated "t" value for selected yogic practices group is (3.727) is higher than the table value which is observed to be highly significant at 0.05 level of confidence. In physical exercise group the "t" value is (2.201) almost it reaches the table value but it is not significant.

#### 5. Discussion on Findings

Based on the analysis of statistical results, of the selected yogic practices and physical exercise groups on all selected bio-chemical variables, it is clearly observed that the selected yogic practices for eight weeks helped to decrease the body cholesterol levels. The result show that for both the selected yogic practices and the physical exercise groups the triglycerol level has increased through the eight week training programme. Hence the hypothesis was accepted here. The statistical analysis shown that the selected yogic practices and the physical exercise programme helped in increasing the "good" cholesterol that is HDL. The selected yogic practices group has improved higher than the physical exercise group. The statistical actual results obtained from the "t" test showed that there were some decrements in LDL ("bad" cholesterol). Hence it was not significant. On the basis of statistical analysis of the result and discussion on findings of this study, it was evident that regular selected yogic practices programme and physical exercise programme has helped to improve "good" cholesterol HDL, triglycerides and also helps to reduce the LDL "bad" cholesterol levels in the body. Hence, the tentatively assumed hypothesis has been accepted in case of triglycerides and HDL "good" cholesterol. The hypothesis was rejected in case of LDL "bad" cholesterol and cholesterol levels. Hence the hypothesis of the study was partially accepted.

#### 6. Conclusions

From the statistical analysis of data, with the limitations imposed by the experimental conditions the following conclusions were drawn:

1. The selected yogic practices group had significantly improved in body cholesterol
2. The selected yogic practices group had insignificantly improved in triglyceride, HDL and LDL.
3. The reason may be for insignificant was the selected subjects were under gone various physical activities in their curriculum, so no possibility of improvement on above variables

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