

## **A STUDY OF UNDER GRADUATE STUDENT FOR THE EFFECT ON SELECTED BIO-CHEMICAL VARIABLE OF ASANAS**

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### **ABSTRACT**

The purpose of the study was to find out a study of under graduate students for the effect on selected bio-chemical variable of Asanas. To achieve the purpose, thirty under graduate students were selected by using body mass index technique from Ramesh Dhawad Sharirik Shikshan Mahavidhyalaya, R.T.M. Nagpur University their age ranged from 19 to 25 years, they were divided into two groups and designed as Experimental group, and control group. The experimental group was given asanas training for a period of twelve weeks, morning, for six days in a week, whereas control group was not arranged any specific training programme other than their routine physical activities programme. The data were collected before and after the training programmes and statistically analyzed by using 'T' test. The results showed that asanas can be an effective training programme to maximize the HDL and minimize the LDL lipoprotein among under graduate student.

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**Key Words :** Asanas, Bio-chemical variables, High-density lipoprotein and low-density lipoprotein.

### **OBJECTIVES:**

1. To study the effect of selected biochemical variables on the graduate student through asanas.
2. To study the effect of high-density lipoprotein and low-density lipoprotein on physical fitness through asanas.

### **INTRODUCTION**

There searcher has proved that yogic practices have significant role in maintaining vigor and vitality of the organism & thus improving health related fitness of the individuals. In temporary days asanas has become more popular globally counter the contraindication of sedentary life style and vice versa.

## METHODOLOGY

### Subject

Thirty male under graduate student subjects for the present study recruited by virtue of selected Body Mass Index technique from Ramesh Dhawad Sharirik Shikshan Mahavidhyalaya, R.T.M. Nagpur University at random.

### Tools and equipments

For measuring body fat percentage the Body Composition Analyzer and WHO'S used BMI norms table were used, the BMI was calculated easily from the following formula.

### Procedure

The experimental group underwent a selected twelve weeks asanas programme including Sarvangasana, Pawanmuktasana, Halasana, Bhujangasana, Ardha Salabhasana, Ardha Matsyendrasana, Gomukhasana, Vrikshasana, Tadasana, Savasana, and Makrasana.

### Result

To find out the significance differences between the pre-test and post-test Means of experimental group and control group on the serum level i.e. High-density Lipoprotein (HDL) and low density Lipoprotein (LDL) the T test was applied. The obtained 'T' ratio was tested for the significant difference at the 0.05 level of confidence. The findings pertaining to it are presented in Table 1 to 4.

**Table -1**

Significance differences in Pre-test (HDL) of obese college men between Control and Experimental group.			
Group	Men	S.D.	Y ratio
Control group	37.13	3.11	1.01
Experimental group	35.73	4.09	

Significant at 0.05 level  $10.05 (28) = 2.04$

It is observed from table 1 that the calculated T (1.01) is less than the tabulated T (2.04). Hence, it may be considered that there was no significant difference found between the control and experimental group on the pre test scores of High-density Lipoprotein samples (HDL).

**Table -2**

Significance differences in Post-test (HDL) of obese college men between Control and Experimental group.			
Group	Men	S.D.	Y ratio
Control group	36.13	2.61	4.90

Experimental group	41.13	2.82	
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Significant at 0.05 level  $10.05(28) = 2.04$

Table -2 reveals that there was significant difference found between the control and experimental group on the post test scores of High-density Lipoprotein samples (HDL) at .05 level of significance because the calculated T (4.90) is more than the 'T' (2.04).

**Tabel -3**

Significance differences in Pre-test (LDL) of obese college men between Control and Experimental group.			
Group	Men	S.D.	Y ratio
Control group	86.49	16.05	0.32
Experimental group	84.56	14.52	

Significant at 0.05 level  $10.05(28) = 2.04$

It is observed from table 3 that the calculated 'T' (1.01) is than the tabulated 'T'(2.04). Hence it may be considered that there was no significant difference found between the control and experimental group on the pre test scores of Low-density Lipoprotein samples (LDL)

**Tabel -4**

Significance differences in Post-test (LDL) of obese college men between Control and Experimental group.			
Group	Men	S.D.	Y ratio
Control group	87.96	14.75	2.26
Experimental group	77.10	10.23	

Significant at 0.05 level  $10.05(28) = 2.04$

It is observed from table 4 that the calculated 'T' (2.26) more than the tabulated 'T'(2.04). Hence it may be considered that there was significant difference found 3 control and experimental group on the post test scores of Low-density Lipoprotein samples (LDL), thus we can say weeks asanas training programme can mate anges in low-density lipoprotein of obesence.

## DISCUSSION

The above result have clearly that the experimental groups had shown in Highly Lipoprotein (HDL) and Low-density Lipoprotein (LDL) ident through respective Y values due to the twelve gim practice when compared to control group. The gim practice might be the reason for the evident increase in high density lipoprotein and decrease in lipoprotein of the subject belonging to experimental group. The finding of the study are in agreement with the finding of. Bijlani, Rantesh letal. (2005) who were proved biochemical variables of audults could be improved

through Bio-chemical variables i.e. fasting plasma glucose, serum total cholesterol, low density lipoprotein(LDL cholesterol, very- HDL cholesterol) the ratio of total cholesterol to high density lipoprotein(HDL) cholesterol, and total triglycerides were significant lower and HDL cholesterol significantly higher.

## CONCLUSION

Based on the results of the present investigation it may be concluded that a well designed and systematically administered 12 weeks asanas training programme may help increase in the level of HDL and decrease in the level of LDL among meals. There was increase in HDL following 12 weeks of asanas practices for the experimental group LDL was reduced in obese males as result of 12 weeks asanas practices.

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