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# EFFECT OF YOGIC LIFE STYLE INTERVENTION ON LIPIDS PROFILES OF RURAL BACKGROUND SPORTSMEN

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### ABSTRACT

The present investigation was taken during the year 2014-15 at Chaudhary Devi Lal University Sirsa (Haryana) with an objectives to assess the effect of yogic exercise on lipids profiles of rural background sports men. The study concluded that 15 week training of yogic exercise had positive effect on sugar, cholesterol, HDL, LDL of rural background sports men. The yogic exercise reduces the level of L.D.L, total cholesterol and sugar in the blood and also enhanced the level of HDL in blood. **Keywords**: Blood Sugar, HDL, LDL, Cholesterol and triglyceride.

### INTRODUCTION

Sports and physical activity has been considered on integral part of human life since its inception. It is universally accepted that sports and games fulfill the requirements at human activities. Revoluaticantly achievements of electronic media hahmado it all the more important not only in the lives of participants but also among the millions of spectators, viewers and listeners. Sports is how popularly conceived as both socially and personally beneficial activity.

In modern time, the spirit of extreme competition has changed the entire scenario in sports. The craze for winning medals in the Olympics and in other international completions has catalyzed the sport scientists to take interest in exploring all the aspects and possibilities which can contribute to enhance sports performance to under out height.

Direct assistance from various sports sciences such as sports physiology, sports medicine, biomechanics, and ports psychology and sports training have raised the sports performance to a great height. The sports scientists have how started looking beyond these horizons. several techniques of sports training are used to enhance performance. Yogic techniques are also used to now a days enhance the performance of sports person.

Yoga is a form of physical activity which may assist in achieving the recommended level of physical fitness. Now a day's yogic area popularity is at appeal not in India but all over the world. A recent survey has suggested that 15 million Americans have practiced yoga at least one in all life. Yoga is an ancient discipline designed to bring parlance and health to the physical, mental,, emotional and spiritual dimension of the individual. Yoga is often depicted metaphorically, as a tree and comprise eight aspects or "limbs" yam a (universal ethics), niyama (individual ethic), asana (physical postures), Prayanama (breath control), pratyahara (control of the senses), dharma (concentration), Dyane (meditation) and Samadhi (bliss).

Studies shour that yoga decreases levels of salivary cortical and blood glucose. It also have a position effect on the flexibility, muscular endurance and abdominal strength of the participants.

However, there are controversies about the effect of regular exercises compared with the studies on biochemistry of blood. Beside the studies reporting that there have been positive developments in the biochemistry fo blood as a result of acute exercise (A. Berg et al, 1983, B.Foger et al.1994)<sup>1-2</sup>, there are also studies stating that there have been improvements as a results of not acute but long term exercises

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(M.Sucic and I.Oreskovic 1995, R.Yanagibori et al. 1993)<sup>3-4</sup>. Moreover, it has been determined with the studies that in order to find out the effects of regular exercises on the lipoproteins, at least 5-week regular exercise is required to have positive effects on the lipid metabolism (R.M. Sekeroglu et all, 1997)<sup>5</sup>, exercises have positive effects on all body regimes and prevent the occurrence of health problems (F.Turgay et all, 2002)<sup>6</sup>.

Studies by Rajesh  $(2009)^7$  sivasankaran  $(2004)^8$  Yogendra  $(2004)^9$  and Manchanda  $(2000)^{10}$  found that total cholesterol, LDL, secrum triglyceride can be managed in the body with the help of yogic life style intervention.

The latest research in the field of physical finites and sports have recommended that the yogic exercise have a very positive effects on the physical and physiological variables of layman and even on sports person. There for this study was carried out to find the effect of yogic exercise on physiological variables of sports men of rural background.

#### **OBJECTIVE OF THE STUDY**

To find out whether there was any effect of yogic exercises on lipids profiles, blood sugar, total cholesterol LDL, HDL, hemoglobin and sercum triglyceride of rural background sports men.

#### MATERIAL AND METHODS:

The methods of study were spited our following heads :

- **1. Sampling**: In the present study, a purpose sampling plan was used for selecting the samples. The present investigation was conducted on a total 25 rural background sports men between the age of 16 to 25 years.
- 2. Collection of the data : The selected sample went through training for 15 weeks under the supervision of yoga experts and researchers. The intervention consists of yoga asana and prayanama were performed 60 minutes in the morning. These variables blood sugar, HDL, LDL, Cholesterol and secrum triglyceride were determine in pre test sample on the first and post test samples on the last day of the training. After getting the reports of both the samples, the data was analyzed statistically.
- **3. Statistical procedures**: Keeping in view the object as well as design of the study, the appropriate statistical techniques such as t-test, SD and mean were used to analyzed the data.

#### **RESULT & DISCUSSION**

TABLE 1: Mean SD and 'T' ratio of pre test and post test of rural background sports men on cholesterol.

Sources	Ν	Mean	SD	't' ratio
Pre test	25	140.92	9.74	10.14**
Post test	25	117.80	6.46	

\*\*Significant at .01 level of confidence.

Table 1 shows that the table 10.14\*\* have a high significant difference at .01 level of confidence. The lower mean value (117.20) of post test cholesterol as compare to the pre test mean value (140.52) shows that the yogic exercise has a positive effect on reducing the level of cholesterol rural background sports men.

Table 2 : Mean SI	) and 'T'	ratio of p	re test and	post test o	of rural	background	sports men	on Blood
sugar.								

Sources	Ν	Mean	S.D.	't' Ratio
Pre test	25	121.16	25.44	3.42**
Post test	25	113.60	7.29	

\*\*Significant at .01 level of confidence.

Table 2 shows that the table't' ratio 3.42\*\* have a high significant difference at .01 level of confidence. The lower mean value (113.60) of post of sugar as compare to the pre test mean value (121.16) shows that the yogic exercise have a positive effect as reducing the level of sugar of rural background sports men.

**Table 3** : Mean SD and 'T' ratio of pre and post test of rural background sports men on HDL.

Sources	Ν	Mean	S.D.	't' Ratio
Pre test	25	37.80	5.41	5.49**
Post test	25	44.52	2.83	

\*\*Significant at .01 level of confidence

Table 3 shows that the table't' ratio 5.49\*\* have a high significant difference at .01 level of confidence. The higher mean value (44.52) of post of test HDL compare to the pre test mean value (34.80) shows that the yogic exercise have a positive effect on increase the level of HDL of rural background sports man.

**Table 4** : Mean SD and 't' ratio of pre and post test of rural background sports men on LDL

Sources	N	Mean	S.D.	't' Ratio
Pre test	25	127.20	5.22	16.91**
Post test	25	105.68	3.63	

\*\*Significant at .01 level of confidence.

Table 4 shows that the table't' ratio 16.91\*\* have a high significant difference at .01 level of confidence. The lower mean value (105.68) of post of post test LDL as compare to the pre test mean value (127.20) shows that the yogic exercise have a positive effect on reducing the level of LDL of rural background sports men.

**Table 5 :** Mean SD and 'T' ratio of pre and post test of rural background sports men on Secrum Triglyceride

Sources	Ν	Mean	S.D.	't' Ratio
Pre test	25	129.04	20.04	4.65**
Post test	25	109.60	5.75	

Significant at .01 level of confidence.

Table 5 shows that the table't' ratio 4.65\*\* have a high significant difference at .01 level of confidence. The lower mean value (109.60) of post of post test Secrum Triglyceride as compare to the pre test mean value (129.04) shows that the yogic exercise have a positive effect on reducing the level of LDL of rural background sports men.

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#### CONCLUSION

Based on the present study, it was calculated that the yoga training that was given had a positive effect on reducing the level of blood sugar (glucose), cholesterol, L.D.L. and Sacrum Triglyceride was found to be beneficial in enhancing the HDL level in the blood of rural background sports men. Thus if polluted correctly and scientifically examined, yoga can be promising investigation in improving the pathology of definite conditions among rural background sports men. The selected lipid profiles play an important role since the rural sports men are more prove to complication arising due to the high bold sugar level, High LDL, high Triglyeried and lessee HDL level related disorders.

#### **References**:

- 1. BERG, A., JOHN, J., BAUMSTALK, M., 1983, Change on HDL subfractions after a single extended episode of physicalexercise. Atherosclerosisl: 47:231-40.
- FOGER, B., WOHLFARTER, T., RISTCH, A., LECHLEINER, M., MILLER, CH., PATSCH, JR., 1994 Kinetics of lipids, apolipoproteins, and cholesterol ester transfer protein in plasma after a bicycle marathon. Metabolism ; 43:633-9.
- 3. SUCIC, M., ORESKOVI, C., 1995, I. Effect of kinesiologic recreation on plasma lipoproteins and polipoproteins in fertile women. Metabolism;44:701-4.
- 4. YANAGIBORI, R., KAWAKUBO, K., GURJI, A., AOKI, K., MIYOSHITA, M., 1993, Effects of 12 week-exercise woaling on serum lipids, lipoproteins and apolipoproteins in middle aged women; does menopause status influence training effects. Nippon Koshu Eisei Zasshi 1993; 40:459-67.
- 5. SEKEROGLU, R.M., ASLAN, R., TARAKCIOGLU, M., KARA, M., 1997 Sedanter Erkeklerd eakut Ve Programli Egzesizin Serum Apolipoproteinleri Ve Lipitleri Ueine Eikileri Genel Tip Dergisi; 7(1):5-8.
- 6. TURGAY, F., KARAMIZRAK, S.O., ISLEGEN, C., SESSIZ, H., ACARBAY, S., 2002, Aerobik Ve anaerobic Esik Hizlarinda Yapnlan lki Degsik Egzerzin Kan Lipid Ve Lipoportieinleri Uzenine Etkisi, Ege Universitesi Spor Hekimligi dersgisi 37(1):7-8.
- 7. K. Rajesh "Effect of Yogic life Style in tervention on body weight and Blood Chemitstry of Middle age women" (M.Phill thesis, 2009).
- 8. Sivasankram, S. The effect of Six Week Yoga training and mediation programme on endothetial function. American Heaet Association Scientific sessions New Orleams, (2004).
- 9. Yogendra, J. Benificial effect of life style on seversibility of ischaemic heart disease : Caring heart project of international board of yoga. J.Assoc Physicians India, (2011) 52 : 283-289.
- 10. Manchanda, S.C. Retardation of Coronary atherosclerosis with yoga life style intervention. The journal of the association s of physicians of india, (2000), 48 : 687 194.