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Effect of yogic practices on total cholostral

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Abstract
The present study was undertaken primarily to assess the effectiveness of yogic practices on reducing cholesterol. For the purpose of the study, 30 middle aged men aged between 35 and 40 years (mean ± S.D. 37.5 ± 1.5 years) were randomly selected. The selected subjects for the present study were divided into two groups, namely yogic practice group and control group. The control group was not given any training. The experimental group practiced yoga, weekly six days i.e. Monday to Saturday, between 6.00 A.M. to 8.00 A.M., for a period of twelve week., as recommended by Cromwell Anxiety was significantly decrease as a result of yoga practice. The results of this study showed that there was a significant difference between yogic practice group and control group on self-confidence. The results of the study showed that there was a significant difference between yogic practice group and control group on total cholesterol. Moreover, the result of the study also shown that there was a significant decrease in total cholesterol after the yogic practice when compared with the control group.

Keywords: Effect, yogic, undertaken primarily

1. Introduction
Yoga has also been described as wisdom in work or skillful living amongst activities, harmony and moderation. "Yoga is not for him who gorges too much, nor for him who starves himself. It is not for him who steps too much, nor for him who stays awake. By moderation in eating and resting, by regulation in working and by concordance in sleeping and waking, yoga destroys all pain and sorrows".
Yoga is an ancient philosophical and religious tradition which is thought to have originated in India in at least 1000 B.C. It refers to a large body of values, attitudes and techniques whose primary objective is the pursuit of enlighten or self-knowledge. The word yoga is probably derived from the Sanskrit word "Yuj" which means to "unite" or "connect" and, in the higher levels of yoga, this is often said to mean the experience of union of the individual self with the universal sel

2. Methodology
The present study was undertaken primarily to assess the effectiveness of yogic practices on controlling Cholesterol. For the study, 30 middle aged men aged between 35 and 40 years (mean ± S.D. 37.5 ± 1.5 years) were randomly selected. The selected subjects for the present study were divided into two groups, namely yogic practice group and control group. The control group was not given any training. The experimental group practiced yoga, weekly six days i.e. Monday to Saturday, between 6.00 A.M. to 8.00 A.M., for a period of twelve week. Test administration one day prior to the commencement of training and one day after the completion of training.

2.1 Estimation of Total Plasma Cholesterol: For the purpose of the study, all the thirty subjects were tested for an amount of total cholesterol in 150 ml. of blood.

2.2 Procedure for cholesterol estimation: CHOD-POP method, recommended by Katterman, Jaworek and Moller [1] was used for this purpose. The kit used for this purpose was Boehringer Mannheim, West Germany with Photometer – 4010 (auto analyzer). Boehringer Mannheim kit consisted of one bottle.
Bottle 1: Cholesterol reagent (MPR1).
Preparation: MPR1 dissolve contents of one bottle 1 by adding 32 ml redistilled water. The reagent solution is ready to use after 10 minutes.
Procedure:
Wave length: Hg 546 nm (470 – 560 nm)
Spectrophotometer: 500nm
Cuvette: 1 cm light path
Incubation temperature: 20 – 25^{O}C or 37^{O}C
Measure against reagent blank (RB)
One reagent blank is sufficient for each assay series.
Sample material pipette into test tubes will 0.02 ml and reagent solution pipette into test tubes 2.00 ml of reagent blank (RB) and 2.00 ml of sample. Mix and incubate RB and sample for 10 minutes at 20 – 25^{O} C or 5 minutes at 37^{O} C. Read absorbance of sample against RB within 1 hour = A sample.
Dilution threshold: 1000 mg/dl.
At higher cholesterol concentrations, dilute 0.1 ml of sample material with 0.2 ml of 0.9% of NaCl solution and repeat assay (result x 3).
Calculation: Cholesterol concentration (C) in the samples was calculated by the following formula:
Hg 546 nm – c = 853x A sample
500 nm – c = 575 x A sample
2.3 Total Cholesterol: The data collected prior to and after the experimental period on total cholesterol for yogic practice group and control group were analysed and presented in Table - 1.

Table 1: Analysis of Covariance on Total Cholesterol of Yogic Practice Group and Control Group

	Yogic Practice Group	Control Group	Source of Variance	Sum of Square	df	Mean Square	'F' ratio
Pre- test Mean S.D.	190.73 14.945	191.80 14.683	Between Within	8.533 6145.33	1 28	8.533 219.476	0.039
Post-test Mean S.D.	186.27 13.551	192.93 12.109	Between Within	333.333 4623.87	1 28	333.333 165.138	2.019
Adjusted Post-test Mean	186.665	192.535	Between Within	258.144 1203.22	1 27	258.144 44.564	5.793*

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence with df 1 and 28 and 1 and 27 were 4.20 and 4.21 respectively).

Table – 1 showed that the pre-test mean values of total cholesterol for yogic practice group and control group were 190.73 ± 14.945 and 191.80 ± 14.683 respectively. The obtained 'F' ratio value of 0.039 for pretest scores of yogic practice group and control group on total cholesterol was less than the required table value of 4.20 for significance with df 1 and 28 at .05 level of confidence.

The post-test mean values for total cholesterol for yogic practice group and control group were 186.27 ± 13.551 and 192.93 ± 12.109 respectively. The obtained 'F' ratio value of 2.019 for post-test scores of yogic practice group and control group was lesser than the required table value of 4.20 for significance with df 1 and 28 at .05 level of confidence.

The adjusted post-test mean values of total cholesterol for yogic practice group and control group were 186.665 and 192.535 respectively. The obtained 'F' ratio value of 5.793 for adjusted post-test scores of yogic practices group and control group were higher than the required table value of 4.21 for significance with df 1 and 27 at .05 level of confidence.

The mean values of yogic practice group and control group on total cholesterol were graphically represented in Figure - 1.

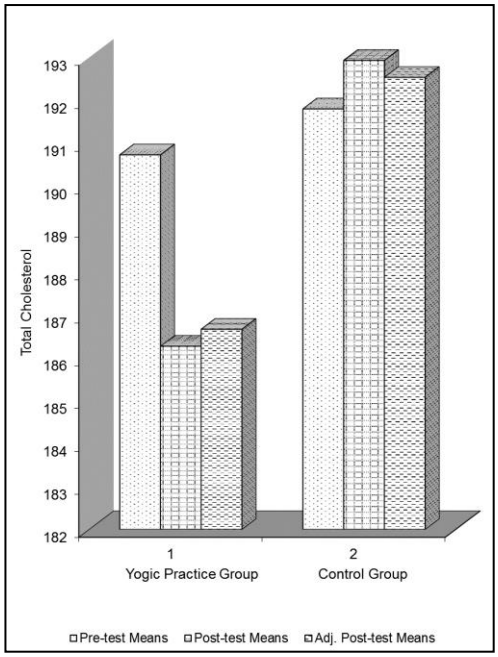

Fig 1: Bar Diagram Showing the Mean Values of Yogic Practice Group and Control Group on Total Cholesterol

3. Discussion

The results of the study showed that there was a significant difference between yogic practice group and control group on total cholesterol. Moreover, the result of the study also shown that there was a significant decrease in total cholesterol after the yogic practice when compared with the control group.

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