



EFFECT OF RESISTANCE TRAINING ENDURANCE TRAINING AND COMBINED TRAINING ON SELECTED LIPID PROFILES

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Abstract

The motivation behind the examination was to discover the impact of opposition preparing, intense exercise and consolidated preparing on chosen lipid profiles. Sixty male students matured in the vicinity of 17 to 22 years were chosen for the investigation. They were partitioned into four equivalent gatherings, each gathering comprising of fifteen subjects in which, assemble I experienced opposition preparing, aggregate II experienced aerobic exercise, amass III experienced blend preparing, three days for every week for twelve weeks and gathering IV went about as control, which did not partake in any preparation. The subjects were tried on chosen foundation factors, for example, add up to cholesterol, triglycerides and high thickness lipoproteins at preceding and instantly after the preparation time frame. For testing the lipid profiles were tried in the wake of taking 5 ml of blood tests by venous cut strategy, by utilizing Boehringer Mannheim Kit Method. The investigation of covariance (ANCOVA) was utilized to discover the noteworthy distinction assuming any, between the trial gatherings and control bunch on chosen standard factors independently. Since there were four gatherings engaged with the present investigation, the Scheffé S test was utilized as post-hoc test. The chose measure factors, for example, add up to cholesterol and triglycerides were diminished fundamentally and high thickness lipoproteins was enhanced altogether for all the preparation bunches when contrasted and the control gathering.

Keywords: Resistance training, endurances training, leg strengths, back strength and tidal volume.

INTRODUCTION

An example of lipids in the blood and a lipid profile as a rule incorporates the levels of aggregate cholesterol, high-thickness lipoprotein (HDL) cholesterol, triglycerides, and the computed low-thickness lipoprotein (LDL) 'cholesterol. Blood lipids (or blood fats) are lipids in the blood, either free or bound to different particles. They are for the most part transported in a protein case, and the thickness of the lipids and sort of protein decides the destiny of the molecule and its effect on digestion. The convergence of blood lipids relies upon admission and discharge from the digestive tract, and take-up and emission from cells. In science, a lipid is a substance of organic starting point that is dissolvable in nonpolar solvents. It contains a gathering of normally happening atoms that incorporate fats, waxes, sterols, fat-dissolvable vitamins, (for example, vitamins A, D, E, and K), monoglycerides, diglycerides, triglycerides and phospholipids. The principle natural elements of lipids incorporate putting away vitality, flagging, and going about as auxiliary segments of cell membranes. Lipids have applications in the corrective and sustenance ventures and in nanotechnology. Lipids likewise envelop particles, for example, unsaturated fats and their subsidiaries (counting tri-. di-monoglycerides, and phospholipids), and in addition other sterol-containing metabolites, for example, cholesterol. Blood lipids are for the most part unsaturated fats and

cholesterol. Hyperlipidema is the nearness of raised or unusual levels of lipids or potentially lipoproteins in the blood, and is a noteworthy hazard factor for cardiovascular malady.

Opposition preparing is any activity that makes the muscles contract against an outer obstruction with the desire for increments in quality, tone, mass, and additionally endurance.[8] Prabakaran et al[9] found that obstruction preparing favorably affects lipid profile and muscle versus fat ratio in sound, inactive, premenopausal ladies. Kraus et al[11] found that the expanding the volume of high-impact practice has diminished the measure of aggregate cholesterol and increment in HDL. Tambalis(2008) additionally prescribe that consolidated oxygen consuming and obstruction preparing have brought down LDL and expanded HDL.

STRATEGIES

In this investigation it was intended to discover the impact of opposition preparing, intense exercise and joined preparing on chosen lipid profiles. To accomplish the reason sixty male learners the individuals who were gone to summer training camp at Chennai, Tamil Nadu were chosen as subjects aimlessly from the aggregate populace of 108 understudies. They were separated into four equivalent gatherings of fifteen each and additionally isolated as three trial gatherings and one

control gathering, in which the gathering I (n=15) experienced obstruction preparing, assemble II (n = 15) experienced aerobic exercise and gathering III (n = 15) experienced the blend preparing for three days for each week for twelve weeks, and gathering IV (n=15) went about as control which did not take part in any unique preparing separated from the standard physical instruction program of the educational modules. For each preparation program there would be a change in different structure and frameworks in human body. Along these lines, the scientists counseled with the specialists and afterward chose the accompanying factors as model factors: 1. add up to cholesterol, 2. triglycerides and 3. high thickness lipoprotein.

Lipid profiles were surveyed by utilizing the Boehringer Mannheim Kit technique. With the end goal of accumulation of information the subjects were requested to report at early morning, one day earlier and

one day after trial period, in fasting condition. 5 ml of blood was gathered from each subject by venous cut technique and the blood in this way gathered was put away in little jugs for pre and post-test for estimating the aggregate cholesterol, triglycerides and high thickness lipoprotein.

EXAMINATION OF THE DATA

Examination of covariance was utilized to decide the distinctions, assuming any, among the balanced post test implies on chosen basis factors independently. At whatever point the 'F' proportion for balanced post test mean was observed to be noteworthy, the Scheffé S test was connected as post-hoc test. The level of noteworthiness was settled at .05 level of certainty to test the 'F' proportion acquired by investigation of covariance.

TABLE – I
ANALYSIS OF COVARIANCE AND 'F' RATIO FOR TOTAL CHOLESTEROL, TRIGLYCERIDES AND HIGH DENSITY LIPOPROTEIN OF RESISTANCE TRAINING GROUP, ENDURANCE TRAINING GROUP AND COMBINED TRAINING GROUP AND CONTROL GROUP

Variable Name	Group Name	R.T..G	E.T.G	C.T.G	C..G	'F' Ratio
Total Cholesterol (mg/dl)	Pre-test Mean ± S.D.	166.67 ± 7.00	166.87 ± 6.63	165.67 ± 3.87	166.40 ± 6.90	0.106
	Post-test Mean ± S.D.	161.40 ± 6.85	158.53 ± 6.77	157.80 ± 3.23	167.93 ± 7.16	8.27*
	Adj. Post-test Mean	161.144	158.085	158.504	167.933	110.70*
Triglycerides (mg/dl)	Pre-test Mean ± S.D.	102.40 ± 6.92	103.20 ± 5.17	100.00 ± 7.00	101.40 ± 10.12	0.51
	Post-test Mean ± S.D.	99.13 ± 6.96	97.33 ± 5.05	95.33 ± 7.13	102.13 ± 9.76	2.27
	Adj. Post-test Mean	98.502	95.926	97.032	102.473	68.68*
High Density Lipoprotein (mg/dl)	Pre-test Mean ± S.D.	49.60 ± 3.16	48.47 ± 2.70	49.13 ± 2.00	49.53 ± 3.96	0.442
	Post-test Mean ± S.D.	52.07 ± 3.22	54.40 ± 3.11	53.00 ± 1.73	49.33 ± 3.94	7.11*
	Adj. Post-test Mean	51.667	55.07	53.047	49.006	57.96*

* Significant at 0.05(2.77).

TABLE - II
SCHEFFÉ POST HOC TEST FOR ADJUSTED POST-TEST MEAN OF TOTAL CHOLESTEROL, TRIGLYCERIDES AND HIGH DENSITY LIPOPROTEIN

Adjusted Post-test Mean for Total Cholesterol (mg/dl)					
R.T.G	E.T.G	C.T.G	C..G	M..D	C..I
161.144	158.085			3.059*	1.766
161.144		158.504		2.64*	1.766
161.144			167.933	6.789	1.766
	158.085	158.504		0.419	1.766
	158.085		167.933	9.848*	1.766
		158.504	167.933	9.429*	1.766
Adjusted Post-test Mean for Triglycerides (mg/dl)					
98.502	95.926			2.576*	1.411
98.502		97.032		1.47*	1.411
98.502			102.473	3.971*	1.411
	95.926	97.032		1.106	1.411
	95.926		102.473	6.547*	1.411
		97.032	102.473	5.441*	1.411
Adjusted Post-test Mean for High Density Lipoprotein					
51.667	55.070			3.403*	1.353
51.667		53.047		1.38*	1.353
51.667			49.006	2.661*	1.353
	55.070	53.047		2.023*	1.353
	55.070		49.006	6.064*	1.353
		53.047	49.006	4.041*	1.353

* Significant at 0.05 level of confidence.

RESULTS

Table – I demonstrates that there was a noteworthy distinction among opposition preparing gathering, intense exercise gathering, consolidated obstruction and continuance and opposition preparing gathering and control bunch on add up to cholesterol, triglycerides and high thickness lipoprotein. Table – II demonstrates that the Scheffé S Test for the distinction between balanced post-test mean on add up to cholesterol of opposition preparing gathering and aerobic exercise gatherings (1.751), obstruction preparing gathering and joined preparing gathering (2.64), opposition preparing gathering and control gathering (6.789), intense exercise gathering and control gathering (9.848) and consolidated preparing gathering and control gathering (9.429), which were huge at .05 level of certainty. However, there was no critical contrast between aerobic exercise gathering and consolidated preparing gathering (0.419) on add up to cholesterol after the preparation program.

Table – II likewise demonstrates that the Scheffé S Test for the distinction between balanced post-test mean contrast in triglycerides between obstruction preparing gathering and continuance gathering (2.576), opposition preparing gathering and consolidated

preparing gathering (1.47), obstruction preparing gathering and control gathering (3.971), aerobic exercise gathering and control gathering (6.547) joined preparing gathering and control gathering (5.441) were noteworthy at .05 level of certainty. Be that as it may, there was no critical contrast between intense exercise gathering and joined preparing gatherings (1.106) on triglycerides after the preparation program.

Table – II demonstrates that the Scheffé S Test for the distinction between balanced post-test mean contrast in high thickness lipoprotein between opposition preparing gathering and continuance gathering (3.403), obstruction preparing gathering and consolidated preparing gathering (1.38), obstruction preparing gathering and control gathering (2.661), aerobic exercise gathering and joined preparing gathering (2.023), intense exercise gathering and control gathering (6.064) consolidated preparing gathering and control gathering (4.041) were critical at .05 level of certainty.

CONCLUSIONS

1. It was closed from the aftereffects of the investigation that the aggregate cholesterol and triglycerides were diminished and high

thickness lipoprotein have enhanced altogether after the separate preparing programs.

2. When contrasted and the control gathering, the whole preparing bunch has altogether varied in all the basis factors.

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