



**INFLUENCE OF DIFFERENT COMBINATION OF YOGIC TECHNIQUES ON  
SELECTED HEMATOLOGICAL VARIABLES AMONG RESIDENTIAL  
SCHOOL BOYS**

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**Abstract**

The purpose of the study was to find out the influence of different yogic techniques on selected hematological variables among residential school boys. To achieve the purpose of the present study, forty residential school boys from Velammal Matriculation Higher Secondary School, Viraganoor, Madurai, Tamilnadu, India were selected as subjects at random and their ages ranged from 15 to 17 years. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (n=40) were randomly assigned to two equal groups as combined asana and pranayama with meditation group (CAPWMG) and control group (CG) in an equivalent manner. The asana and pranayama with meditation group participated for a period of eight weeks for alternate three days in a week and the post-tests were taken. To find out the difference between the two groups paired 't' test was used. . The result reveals that the asana with meditation group showed better performance on high density lipoprotein and low density lipoprotein than the control group owing to the influences of combined asana and pranayama with meditation.

**Key words:** Yogic Techniques, HDL, LDL, School Boys. .

## **Introduction**

Yogasanas are not to design muscles, but to bring the whole body to the peak of physical perfection and top efficiency. Yogasanas which have an effect on the diaphragm, massage the heart, and also massage the abdominal organs. They are not as exercise for reducing and increasing weight. The endocrine system which regulates the entire system, it helps to keep the body in proper shape and to increase the power of resistance. Technically it is useful for removal of 'tug of war' type of conflict at the level of muscles. Asanas are postures, which contribute to stability and sense of well-being. The stability here refers not merely of the posture but of the mind and the body as a whole. There were originally 84,00,000 asanas representing 84,00,000 incarnations. **(Iyengar, 2008).**

Pranayama is generally defined as Breath Control. The word Pranayama is comprised of two roots, Prana, Yama. Prana here means vital energy or life force. Yama means control. There are five types of Prana. They are Parna, Aparns, Samana, Udana, and Vyana. Breath means life. Every breath, you take energy into yourself, with each out-breath you let go of all tension, all struggle, all worries and all sufferings. Deep breathing practice involve the technique of filling the lungs with oxygen that help the child by promoting calmness of the mind and enriching the blood supply. Very early in life, the child realizes the manifold benefits of good breathing technique, something that elude even the grown up. **(Joshi, 2001)**

Meditation is a process that anyone can use to clam oneself, cope with stress, and for those with spiritual inclination, feel as one with God or the universe. Meditation can be practiced individually or in groups and is easy to learn. It requires no change in belief system and is compatible with most religious practices. Mind is a kin to monkey they say, and true for children as well. What might vary is the nature of thoughts that emanate. Children have boundless energies and always want to indulge in activities, sometimes aimlessly flitting from one activity to another. Though this conveys the innate curiosity in children that promotes learning, yet it also signifies the agitated nature of the mind. Meditation comes in handy, stilling the jumping monkey within and recharging batteries. Meditation will improve concentration in studies, get over disappointment, promote

healthy competitive spirit, and infuse positive evaluation of self, creating a confident and winning personality (Sengupta, 2012).

### **Purpose of the study**

The purpose of the study was to find out the influence of different yogic techniques on selected hematological variables among residential school boys.

### **Hypothesis**

It was hypothesized that the combined asana and pranayama with meditation group would show significant improvement on selected hematological variables than control group.

### **Methodology**

To achieve the purpose of the present study, forty residential school boys from Velammal Matriculation Higher Secondary School, Viraganoor, Madurai, Tamilnadu, India were selected as subjects at random and their ages ranged from 15 to 17 years. The study was formulated as a true random group design, consisting of a pre-test and post-test. The subjects (n=40) were randomly assigned to two equal groups as combined asana and pranayama with meditation group (CAPWMG) and control group (CG) in an equivalent manner. The asana and pranayama with meditation group participated for a period of eight weeks for alternate three days in a week and the post-tests were taken. To find out the difference between the two groups paired 't' test was used.

### **Results and Discussions**

The primary objective of the paired 't' ratio was to describe the differences between the pre-test and post-test mean of residential school boys.

**TABLE – I**  
**SUMMARY OF ‘t’ RATIO ON SELECTED HEMATOLOGICAL VARIABLES**  
**OF EXPERIMENTAL GROUP (APWMG)**

S.No	Variables	Pre-Test Mean	Post-Test Mean	Mean difference	Std. Dev (±)	σ DM	‘t’ Ratio
1	High Density Lipoprotein	51.89	56.87	4.98	3.47	0.77	6.41*
2	Low Density Lipoprotein	121.25	112.17	9.08	6.32	1.41	6.24*

An examination of table - I indicates that the obtained ‘t’ ratios were 6.41 and 6.24 for high density lipoprotein and low density lipoprotein respectively. The obtained ‘t’ ratios were found to be greater than the required table value of 2.14 at 0.05 level of significance for 1, 14 degrees of freedom. Hence it was found to be significant.

**FIGURE – I**  
**PRE AND POST TEST DIFFERENCES OF THE EXPERIMENTAL GROUP ON**  
**SELECTED HEMATOLOGICAL VARIABLES (CAPWMG)**

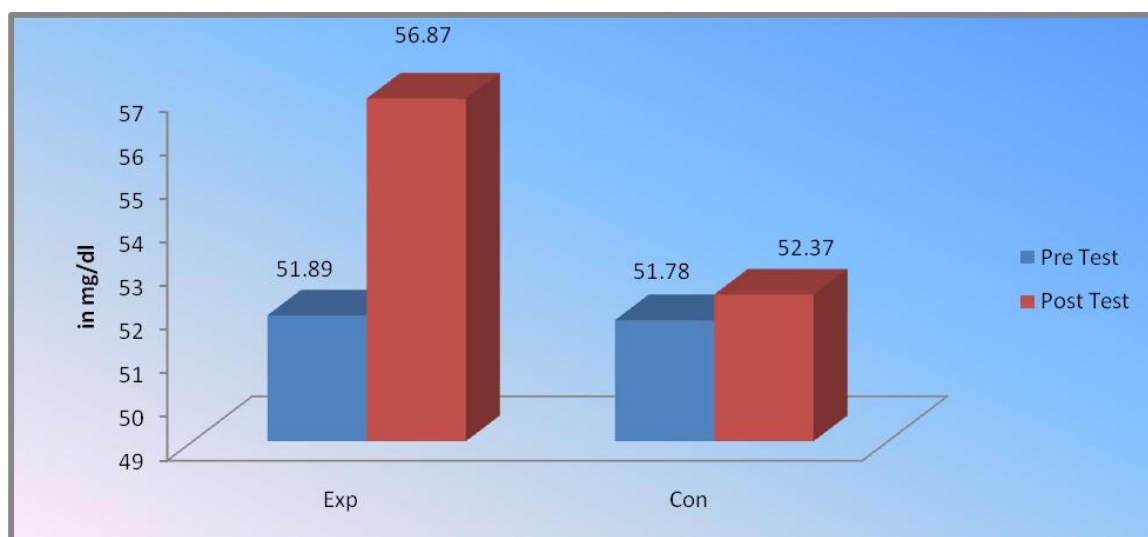


TABLE – II

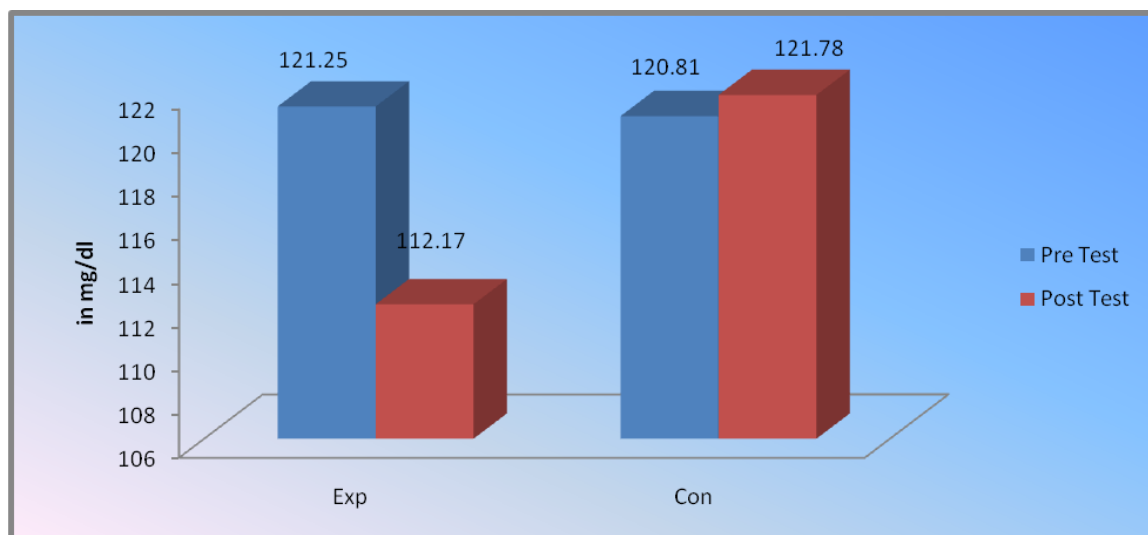
**SUMMARY OF ‘t’ RATIO ON SELECTED HEMATOLOGICAL VARIABLES  
OF CONTROL GROUP (CG)**

S.No	Variables	Pre-Test Mean	Post-Test Mean	Mean difference	Std. Dev (±)	$\sigma$ DM	‘t’ Ratio
1	High Density Lipoprotein	51.78	52.37	0.58	2.41	0.53	1.08
2	Low Density Lipoprotein	120.81	121.78	0.97	4.03	0.90	1.07

An examination of table - II indicates that the obtained ‘t’ ratios were 1.08 and 1.07 for high density lipoprotein and low density lipoprotein respectively. The obtained ‘t’ ratios on all the selected variables were found to be lesser than the required table value of 2.14 at 0.05 level of significance for 1, 14 degrees of freedom. Hence it was found to be insignificant. The results of this study showed that the control group were statistically insignificant.

FIGURE – II

**PRE AND POST TEST DIFFERENCES OF THE CONTROL GROUP ON  
SELECTED HEMATOLOGICAL VARIABLES**



## Discussions and Conclusions

In case of hematological variables i.e. high density lipoprotein and low density lipoprotein the results between pre and post (8 weeks) test has been found significantly higher in experimental group in comparison to control group. The findings of the present study have strongly indicates that eight weeks of combined asana and pranayama with meditation group had significant influence on selected hematological variables i.e. high density lipoprotein and low density lipoprotein of residential school boys. Hence the hypothesis earlier set that combined asana and pranayama with meditation would have been significant influence on selected hematological variables in light of the same the hypothesis was accepted. The result reveals that the asana with meditation group showed better performance on high density lipoprotein and low density lipoprotein than the control group owing to the influences of combined asana and pranayama with meditation.

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