



## CONSTRUCTIVE EXPLORATION OF HUMAN CHEMICAL VARIATION

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### ABSTRACT :

The current learning was observed the constructive exploration of human chemical variation. To assessed human chemical variation total thirty ( $n = 30$ ) tested subjects from Punjab, age group of 23-28 years and selected yogic movements were selected. Pre-test post - test design was used as experimental design in which tested subjects ( $n = 30$ ) were experimental group performed twelve - week yogic exercises after the collected pre and post test data, to judge chemical variation of twelve - week yogic exercises on testosterone, insulin and hematocrit percentage of male tested subjects, to identify any significant differences between the pre-tests and post-tests means values of experimental group for dependent variables paired t-test was employed with help of statistical package for the social sciences (SPSS) 16.0. The level of significance was set at 0.05 percent. The result was confirmed that, after participated in twelve - week's yogic exercises on selected variable like testosterone, insulin and hematocrit percentage were increased significantly among male subjects by the pre and post-test mean values.



**KEYWORDS :** Testosterone, Insulin and Hematocrit percentage

### INTRODUCTION:

Human body is entire structures of head, neck, trunk which includes the thorax and abdomen, two arms and hands and two legs and feet. Every part of the body is composed of various types of cells. By the time human reaches adulthood, the body consists of close to 100 trillion cells, the basic unit of life. These cells are organized biologically to ultimately form the whole body. In body many interacting of chemicals found in every step of human movement due to endocrine system by produce hormones that regulated metabolism, growth and development, tissue function, sexual function, reproduction, sleep, and mood, among other things.

### PROCEDURE AND METHODOLOGY

To assessed chemical variation total thirty ( $n = 30$ ) tested subjects from Punjab, age group of 23-28 years and yogic exercises were selected. Pre-test post - test design was used as experimental design in which tested subjects ( $n = 30$ ) were experimental group performed twelve - week yogic exercises after the collected pre and post test data, to judge chemical variation of twelve - week yogic exercises on testosterone, insulin and hematocrit percentage of male tested subjects, to identify any significant differences between the pre-tests and post-tests means values of experimental group for the

dependent variables paired t-test was employed with the help of statistical package for the social sciences (SPSS) 16.0. The level of significance was set at 0.05 percent.

## RESULTS

**Table 1 Comparison between pre-test and post-test mean values of experimental group**

Variable	Pre - test	Post - test	Diff. mean	't' ratio	P value
Testosterone hormone	436.4	612.5	-176.1	4.74*	.002 < 0.05
Insulin hormone	4.58	7.83	-3.25	6.26*	.000 < 0.05
Hematocrit percentage	41.84	42.54	-.700	8.573*	.000 < 0.05

\* Significant at .05 level

The results of pretest and posttest namely mean, t ratio and p values of testosterone, insulin and hematocrit percentage in male students are given in table - 4.1. This table demonstrates that the p values of above mention variables in male students were .002 < 0.05, .000 < 0.05 and .000 < 0.05 below than 0.05 level of significance. Further the table statistically revealed that the calculated mean difference -176.1, -3.25 and -.700 for testosterone, insulin and hematocrit percentage in male. Therefore the values of table - 4.1 confirm that, after the application of twelve - weeks' yogic exercises the chemical variation occurred significantly in male students.

## CONCLUSIONS

It was concluded that after the application of twelve - weeks' yogic exercises the testosterone hormone level increased significantly, in insulin hormone level after the application of twelve - weeks' yogic exercises the insulin hormone level also increased significantly and in case of hematocrit percentage after twelve - weeks' yogic exercises showed significantly variation in male students.

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