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## Exercise effect on BMI of school children

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### Abstract

**Introduction:** Evidence suggested that exercise may effects level of BMI. Participation is exercise decrease level of BMI or intake food and poor exercise increase the level of BMI. In this context the researcher intend to know whether exercise or food habit positively or negatively effect on BMI.

**Aim:** Determine whether participation in exercise may effect of BMI.

**Method:** 120 female subject mean age 13.5 years participating in this study. They were practice exercise 40 minutes per day 2 days per weeks for 2 years. The level of BMI was assessed by measurement at height and weight.

**Result:** 24 student in pre-test and 15 student were below normal range.

**Discussion and conclusion:** It may be concluded that exercise effect on BMI.

**Keywords:** Exercise, BMI, school children

### Introduction

Body mass index is a measure of body fat based on height and weight. The BMI is an attempt to quantify the amount of tissue mass (muscle, fat and bone) in an individual and then categorized that person as underweight, normal weight or obese base on that value. It is already established that exercise may affect BMI. Participation of exercise may decrease level of BMI. In this contest the researcher intend to know whether exercise may positively effect on BMI level.

### Aim

Determining whether participation in exercise may decrease level of BMI.

### Method

A number of 120 female students were chosen for this study. The age of the subject ranged between 10-14 years and the study area was Howrah District, West Bengal. They were practice exercise 40 minutes per day, 2 days per week in 2 year. The level of Body mass index was calculated by each individuals body weight in kg divided by height (mts.) squared.

### Result

Range of BMI

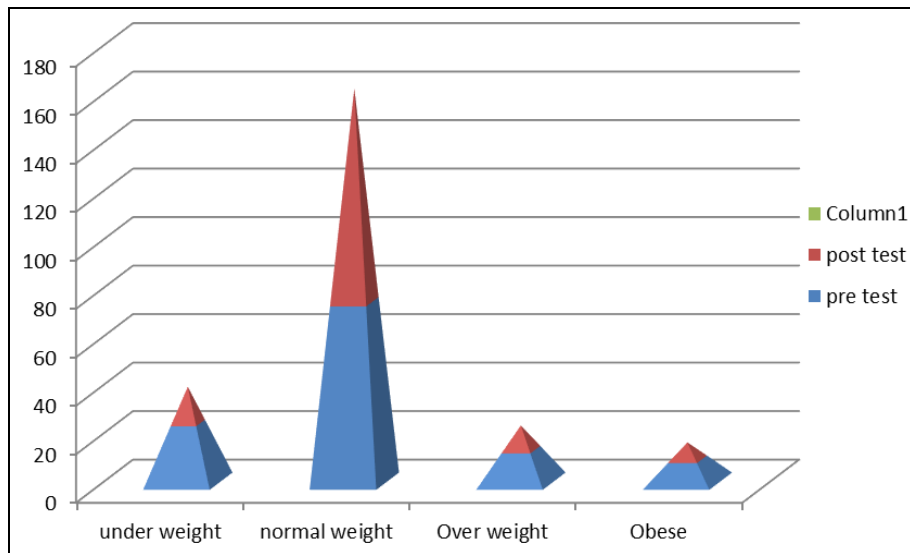
**Table 1:** Range of BMI

Under weight	16.00 to 18.5
Normal weight	18.5 to 25
Over weight	25 to 30
Obese	30 above

**Table 2:** Pre-test and post-test of BMI

Comparative range of BMI	Pre-test	Post-test
Under weight (16.00to 18.5)	24	15
Normal weight (18.5 to 25)	74	88
Over weight (25 to 30)	13	10
Obese (30 above)	9	7

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**Fig 1:** Comparison of pretest and posttest BMI

Comparison of pre-test and post-test BMI Pre-test BMI level, 24 subject was underweight and post-test 15 subject was under weight. Pre-test normal weight subject was 74 and post-test normal weight was 88. Pre-test over weight subject was 13 and post-test over weight subject was 10. Pre-test Obese subject was 9 and post-test Obese subject was 7.

#### Discussion

The study revealed the 20% girl students in pre-test were found underweight where as 12.6% of girls student in post-test were found under weight. In pre-test 61.66 percent girls students were normal weight where as 73.33% girls student were normal weight in post-test. But in case of overweight 10.83% girl student were found in pre-test and 8.3% of girl student were overweight in post-test. In pre-test 7.5% girl student were found obese and 5.83% students were obese in post-test.

Conclusion: It may be concluded that exercise may effect on BMI and it control obese.

Exercise: Asana, free hand exercise, kho kho, kabaddi. Drill, Marching Athletics.

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