

## **Sodium/Salt Assessment and Its Comparison between Obese and Non-Obese Female Students of Banaras Hindu University**

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### **Abstract**

**Background:** The purpose of the study was to assess and compare the sodium/salt status of obese and non-obese female student of Banaras Hindu University.

**Method: Subjects:** For the purpose of the study, fifty female students of BHU (25 obese & 25 non-obese) had been randomly selected as the subjects for the study. The age level of the subjects was ranging from 18 to 28 years. **Variable:** Keeping the feasibility aspect in mind the following variable was selected for present study: Sodium/Salt Control Questionnaire. **Criterion Measure:** The following criterion was adopted for the present study: **To Assess Obesity:** Body Mass Index (BMI) approach was adapted. **To Assess Sodium/Salt Status:** Sodium/Salt Control was assessed by the total scores in Sodium/Salt Control Questionnaire. **Procedure:** With the help of the questionnaire related to sodium/salt assessment (Sodium/Salt Control Questionnaire) necessary data was collected. Data was collected with regard to sodium/salt aspects from 50 female students (25 obese & 25 non-obese) in two consecutive days at their respective institution. **Statistical Technique:** The data was analyzed by applying Descriptive Statistic & “t” test in order to assess and compare the sodium/salt assessment between obese and non obese female students of BHU. The level of significance was set at 0.05.

**Results:** The findings of the study in relation to Sodium/Salt Control showed insignificant difference was found between obese & non-obese female students of BHU.

**Conclusions:** On the basis of the findings of the study, the following conclusions were drawn: Insignificant difference was found between obese & non-obese female students of BHU in relation to sodium/salt control. Non obese females have high mean value in comparison to obese females in relation to sodium/salt control.

**Key words:** Sodium/Salt Control Questionnaire, Obese & Non-obese.

### **INTRODUCTION**

The original term was used by a sub-committee of the League of Nations (1932) referring to a set of medical tasks to determine the nutritional status of a population (Gibson, 2005). After 1976 (Bistrian & Blackburn et al), it became a standardized, hospital-based set of tools to predict nutrition and health outcomes in individual patients with post-op complications, trauma or malnutrition. In 1996, Theresa Schneider RD decided to take assessment tools out of the hospital to assess the health of athletes, those with chronic diseases and corporate executives. Today a nutrition assessment includes computerized food intake analysis, clinical nutrition body composition assessment (bioelectrical impedance), laboratory blood test results if applicable, anthropometrics, review of medications, lifestyle and fitness indicators. Whether your goal is to improve your athletic performance, or you want to make a nutrition lifestyle choice or you want to better manage your medical condition nutrition assessment can help you succeed.

The Objectives of the Study were:

- To assess the sodium/salt status of obese and non-obese female students of Banaras Hindu University.
- To compare the obese and non-obese female students of BHU in relation to Sodium/Salt Status.

It was hypothesized that there might have been significant difference in sodium/salt status of obese and non-obese female students of Banaras Hindu University.

## METHODOLOGY

**Subjects:** For the purpose of the study, fifty female students of BHU (25 obese & 25 non-obese) had been randomly selected as the subjects for the study. The age level of the subjects was ranging from 18 to 28 years.

**Variable:** Keeping the feasibility aspect in mind the following variable was selected for present study: Sodium/Salt Control Questionnaire.

**Criterion Measure:** The following criterion was adopted for the present study:

**To Assess Obesity:** Body Mass Index (BMI) approach was adapted.

**To Assess Sodium/Salt Status:** Sodium/Salt Control was assessed by the total scores in Sodium/Salt Control Questionnaire.

**Procedure:** With the help of the questionnaire related to sodium/salt assessment (Sodium/Salt Control Questionnaire) necessary data was collected. Data was collected with regard to sodium/salt aspects from 50 female students (25 obese & 25 non-obese) in two consecutive days at their respective institution.

**Statistical Technique:** The data was analyzed by applying Descriptive Statistic & “t” test in order to assess and compare the sodium/salt assessment between obese and non obese female students of BHU. The level of significance was set at 0.05.

## RESULTS

The findings pertaining to descriptive statistics and independent t ratio for the nutritional variable (Sodium/Salt Control) from 50 female students (25 obese & 25 non-obese) of BHU have been presented in table No.1to2.

**Table-1: Descriptive Statistics of Obese & Non-Obese Female Students of Banaras Hindu University**

<i>Sodium/Salt Control Questionnaire</i>		
Mean	6.8	7.2
Standard Deviation	1.607275	2.27303
Kurtosis	3.39582	0.000987
Skewness	1.596877	0.865383
Range	7	8
Minimum	5	5
Maximum	12	13

It is evident from table - 1 that mean and standard deviation scores of obese and non obese female students of BHU in relation to Sodium/Salt Control questionnaire have been found 6.8 & 7.2 and 1.60 & 2.27 respectively whereas range of scores was found 5 & 5 respectively.

**Table-2: t-Ratio for the comparison of Means of Obese and Non-Obese Female Students of Banaras Hindu University in Sodium/Salt Control Questionnaire**

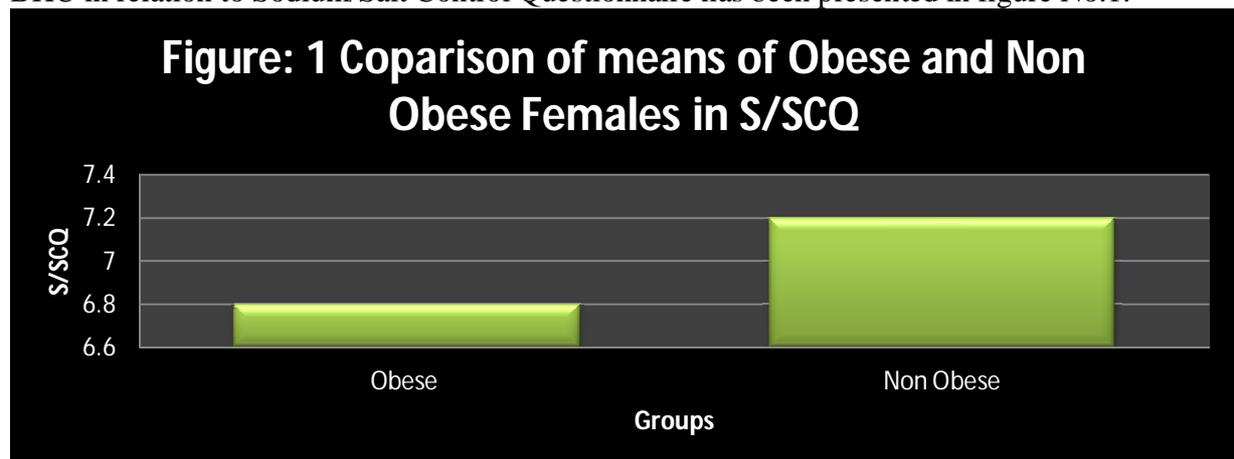
Groups				t-Ratio
Obese		Non-Obese		
Mean	Variance	Mean	Variance	.718*
6.8	2.58	7.2	5.17	

Level of Significance at 0.05 level

T-Value required at 48 df = 1.67

Table-2 revealed that insignificant difference was found between obese & non-obese female students of BHU in relation to Sodium/Salt Control Questionnaire, since t-value of .718 was found lower than the required tabulated value of 1.67 with 48 df at 0.05 level of significance.

The graphical representation of means between obese & non-obese female students of BHU in relation to Sodium/Salt Control Questionnaire has been presented in figure No.1.



### Discussion of Findings

The scholar examined the nutritional differential between obese and non-obese female students of BHU. The results of the study in general revealed that there was significant difference in nutritional variable i.e. Sodium/Salt Control between obese and non-obese female students of BHU.

From the findings of the study, in case of sodium/salt control questionnaire it was evident that the insignificant difference was found between obese & non-obese female students of BHU. Further, graphical picture represents that obese females have less mean value in comparison to calorie control obese females in relation to sodium/salt control questionnaire. The findings may be attributed to the fact that sodium or salt control which affects blood pressure and obese females may be conscious about their health due to overweight which lead to risk of cardiovascular risks and in habit of less intake of sodium/salt rich diet in comparison to non obese females who have in tendency of consuming sodium/salt rich diet.

It became apparent; however, in the present study that there was insignificant difference in nutritional variable of obese and non obese females of BHU in relation to Sodium/Salt Control.

### **Discussion of Hypothesis**

The findings of the present study strongly indicate that there was insignificant difference in nutritional variable of obese and non obese females of BHU. Hence, the hypothesis earlier set that there might have been significant difference in nutritional variables i.e. Sodium/Salt Control of obese and non obese females is rejected.

### **CONCLUSIONS**

On the basis of the findings of the study, the following conclusions were drawn: Insignificant difference was found between obese & non-obese female students of BHU in relation to sodium/salt control.

Non obese females have high mean value in comparison to obese females in relation to sodium/salt control.

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