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## BLOOD PARAMETERS AS A PREDICTOR FOR HEALTH OF TEACHERS

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### Abstract

*Blood parameters play an important role in the health of an individual. The blood parameters such as sugar level, Hemoglobin and triglycerides have its effect on the health of an individual. 315 teachers working in various schools and college of Meerut district participated voluntarily in this study. The results of the study showed that the mean of Hemoglobin in male teachers having age below 35 years is 14.79%, where as their female counterparts are having 11.51%. at the same time the male and female teachers of below 60 years of age where having 13.9 and 11.4 % respectively. The overall random Blood sugar level of teachers of all age was recorded 103.02. 4% of the teachers are having diabetes and 5% of teachers are in pre diabetic stage. The triglycerides level of the teachers was also tested, and it was seen that 30% of male and 54% of female teachers were having normal level whereas 1% males and 3% females were having high level of Triglyceride. The result of the study reveals that the fitness level of the teachers is not in good state. The non active lifestyle is affecting their health level. Therefore, it is suggested that regular cardio workout is very much needed and at the same time well-disciplined food habits must be adopted. The regular exercises such as running, cycling, yoga etc. can only save us from such diseases.*

**Keyword:** Hemoglobin, Triglycerides and Teacher

### Introduction

Blood parameters play an important role in the health of an individual. The blood parameters such as sugar level, Hemoglobin and triglycerides have it's effect on the health of an individual. Diabetes carries a high risk of atherosclerosis, and cardiovascular disease, especially coronary heart disease (CHD) and stroke, is by far the leading cause of death among patients with type 2 diabetes. The global prevalence of diabetes among adults above 18 years old has increased to 8.5% by now from 4.7% in 1980. Approximately 422 million people were found to be living with diabetes and approximately 1.6 million deaths were directly caused by diabetes in 2016.

The key risk factors often associated with the development and maintenance of Type 2 diabetes mellitus (T2DM) include sedentary lifestyle or an unhealthy diet and psychological stress. Psychological stress is strongly associated with both the risk factors and maintenance of the disease. In addition to the genetic background, the prediabetic state also contributes significantly to the development of T2DM.

### **Aim of the Study**

The aim of the study was to see the effect of lifestyle and daily routine on the health of the teachers.

### **Methodology**

#### **Selection of subjects:**

Teachers working in various Governments, Aided and Private Colleges of Meerut district were approached by the researcher for the study. Out of them 315 Teachers (245 males and 70 female) come forward voluntarily to take part in this study.

#### **Test Used:**

Blood samples was collected from the participating teachers and tested in certified pathological lab by the certified doctor in Meerut.

#### **Administration of Test:**

All the teachers were approached and asked come and give their blood sample at the pathologic lab of Meerut and the reports of the teachers were collected by the researcher after analysis.

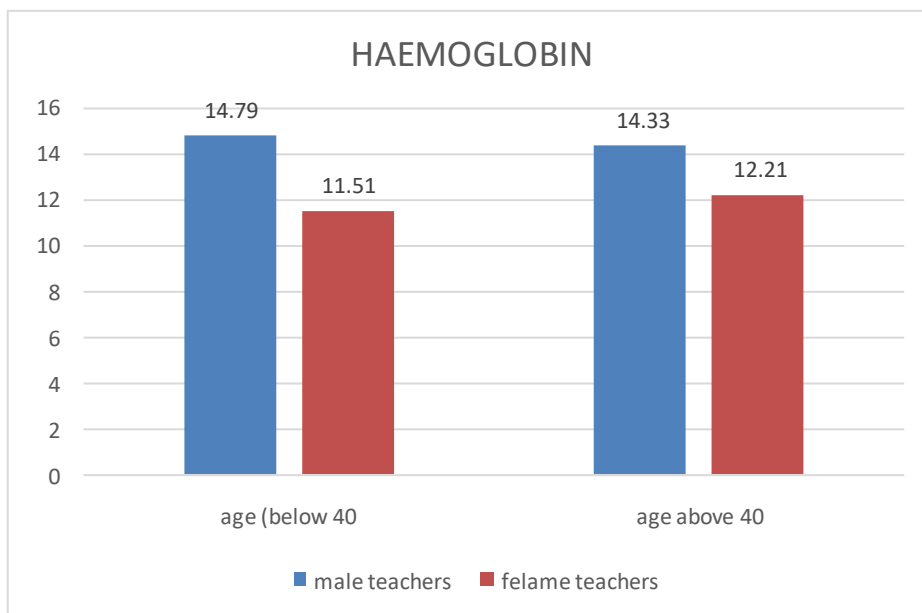
#### **Analysis of data and results:**

Mean was calculated for better understanding of test results.

#### **The norms of hemoglobin**

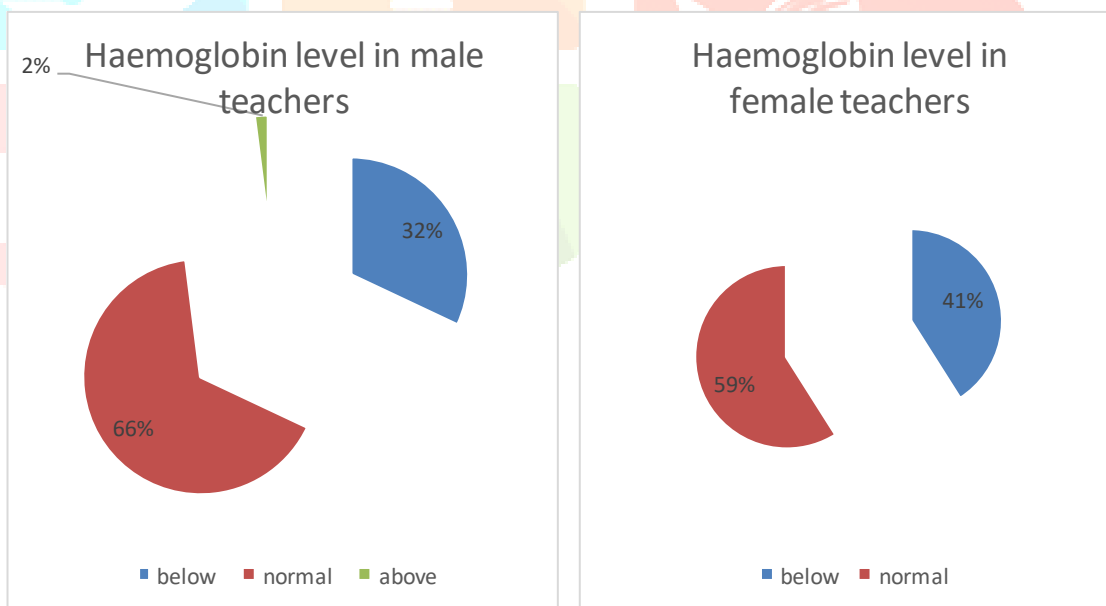
<b>Level</b>	<b>Male</b>	<b>Female</b>	<b>Suggested Action</b>
Low level	<13.5	<12	Consult the doctor
Normal	13.5 to 17.5	12 to 15.5	Take healthy diet and do regular exercise for maintenance

The mean of hemoglobin found in the blood of teachers are as follows



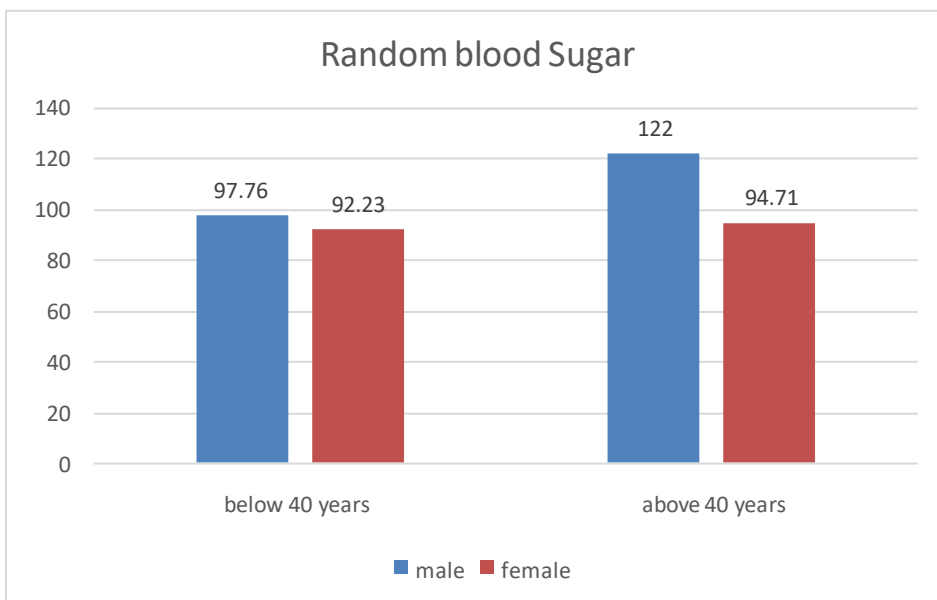
The mean value of hemoglobin found in male and female teacher in age category below 40 years was 14.79 and 11.51, whereas in the age category above 40 years it was found 14.33 and 12.21 respectively.

Almost all the male teachers were having the hemoglobin in normal range whereas female teachers are having low level of hemoglobin.

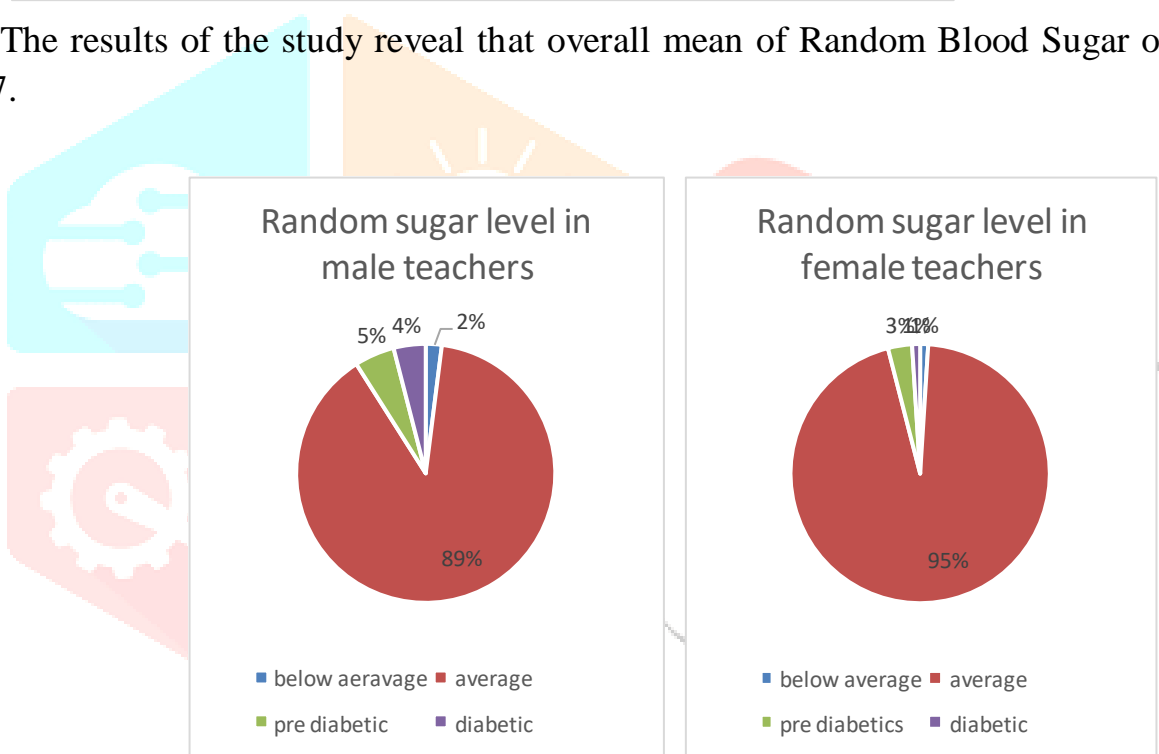


### Random Blood Sugar

Mg/dl	Level	Suggested Action
<79	Low Level	Consult the doctor
79 to 140	Normal	Do regular exercise for maintenance
141 to 200	Pre diabetic	Consult the doctor
>200	Diabetic	Seek immediate medical attention



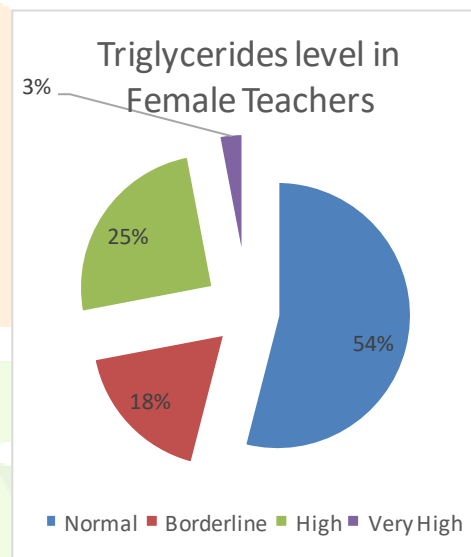
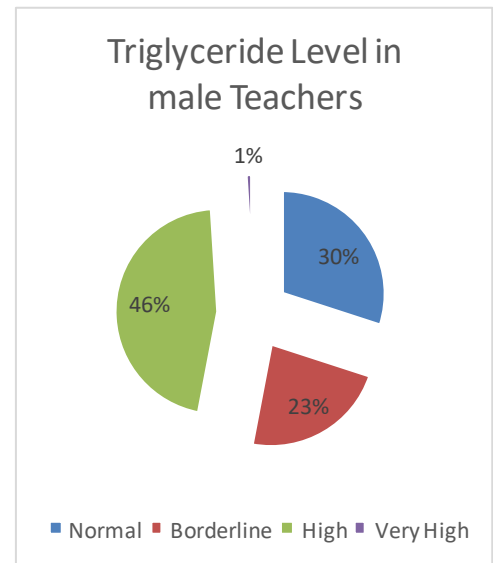
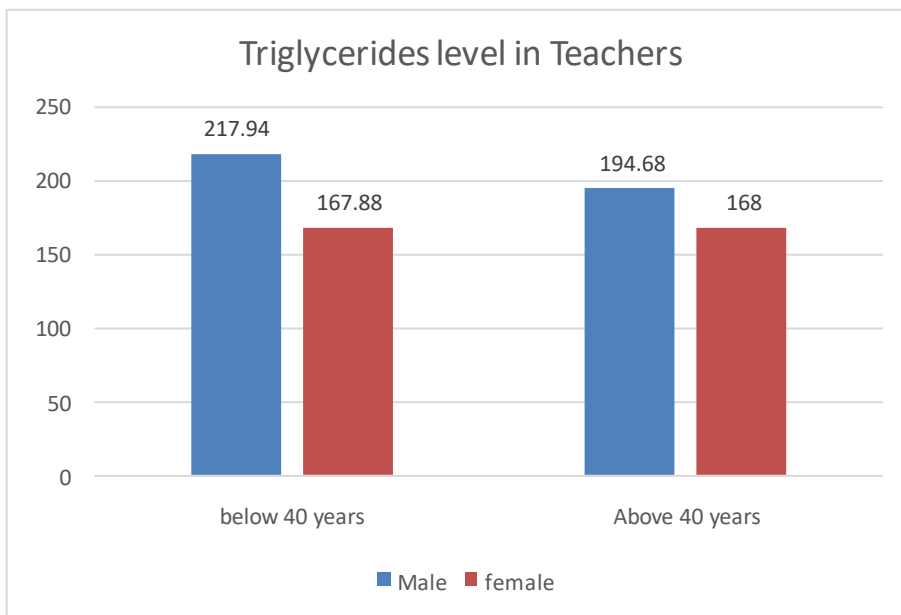
The results of the study reveal that overall mean of Random Blood Sugar of teachers is 101.67.



The results of the study show that 4% male and 1% female teachers are having diabetes and 5% male and 3% female teachers are in pre diabetic stage, otherwise near to 90% are in normal range.

### Norms for Triglyceride (mg/dl)

Normal (Desirable)	Borderline	High	Very High
<150	150 to 200	201 to 500	>500



The study reveals that 30% male and 54% females are having normal Triglyceride level whereas 1% male and 3% female are having very high level of Triglyceride.

### Conclusion

The mean value of hemoglobin found in male and female teacher in age category below 40 years was 14.79 and 11.51, whereas in the age category above 40 years it was found 14.33 and 12.21 respectively. Almost all the male teachers were having the hemoglobin in normal range whereas female teachers are having low level of hemoglobin.

The results of the study reveal that overall mean of Random Blood Sugar of teachers is 101.67. The results of the study show that 4% male and 1% female teachers are having diabetes and 5% of male and 3% of female teachers are in pre diabetic stage, otherwise near to 90% are in normal range.

The study reveals that 30% male and 54% females are having normal Triglyceride level whereas 1% male and 3% female are having very high level of Triglyceride.

It is therefore advised to all to follow healthy lifestyle, exercise regularly, take sound sleep, eat healthy food and keep the stress away.

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