Nutritional Values in Breakfast

Student’s Name

Institution

Date

**Introduction**

The purpose of the study is to determine the range at which male and female takes breakfast daily. Breakfast is an important component of the meal. It is noted that variety of meals are taken during the breakfast to ensure that it is well balanced. Student takes meals rangers from toast, milk, fruits, cooked breakfast, juice, yoghurt and cereals. The study investigates the rate at which male and female students take cooked breakfast. The comparison is made on the way two sexes take place to determine the rate at which each sex takes calories.

1. The calculation of all relevant statistics (on excel as much as possible)

|  |  |  |  |
| --- | --- | --- | --- |
| *Male* |  | *Female* |  |
|  |  |  |  |
| Mean | 0.37563 | Mean | 0.42684 |
| Standard Error | 0.006990343 | Standard Error | 0.01103996 |
| Median | 0.375 | Median | 0.4375 |
| Mode | 0.33 | Mode | 0.44 |
| Standard Deviation | 0.098858373 | Standard Deviation | 0.156128617 |
| Sample Variance | 0.009772978 | Sample Variance | 0.024376145 |
| Kurtosis | 2.827550492 | Kurtosis | 2.884006361 |
| Skewness | -0.266950352 | Skewness | -0.533881685 |
| Range | 0.662 | Range | 0.922 |
| Minimum | 0 | Minimum | 0 |
| Maximum | 0.662 | Maximum | 0.922 |
| Sum | 75.126 | Sum | 85.368 |
| Count | 200 | Count | 200 |

1. **measures of the centre – mean, median, mode**

Mean for female is 0.4268, Standard Deviation is 01561 and the mode is 0.44. The mean for male is 0.3756, mode is 0.33 and standard deviation (SD) is 00.9886.

1. **measure of the spread – range, IQR, standard deviation**

Range of male is 0.66 and Female is 0.992.

Standard deviation of male is 0.098858373 and standard deviation for female is 0.156128617

The analysis of the data established that the mean of the cooked breakfast by female is higher than male. This means that female takes breakfast more often than male.

Graph 1: Comparison of breakfast male and female

**Graph 2: Female students cooked breakfast trend**

**Frequency Distribution Table**

|  |  |
| --- | --- |
| *Bin* | *Frequency* |
| 0 | 16 |
| 0.065857 | 0 |
| 0.131714 | 0 |
| 0.197571 | 3 |
| 0.263429 | 10 |
| 0.329286 | 44 |
| 0.395143 | 129 |
| 0.461 | 96 |
| 0.526857 | 50 |
| 0.592714 | 27 |
| 0.658571 | 13 |
| 0.724429 | 6 |
| 0.790286 | 2 |
| 0.856143 | 0 |
| More | 4 |

**Conclusion**

The study established that female students take breakfast more often compared to male students. It can be concluded that female students takes nutritious breakfast compared to male.