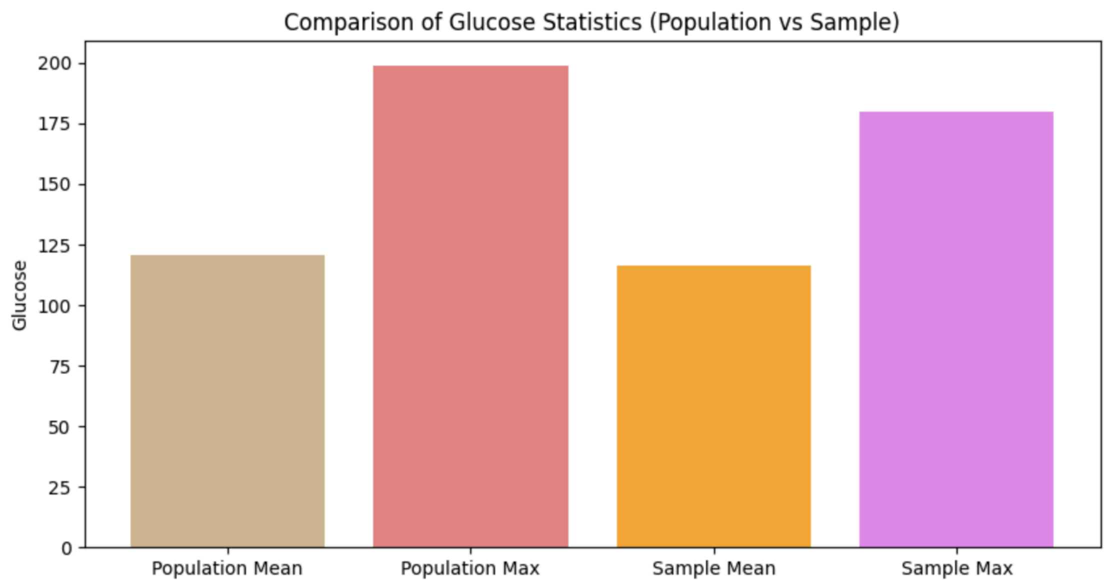
Results



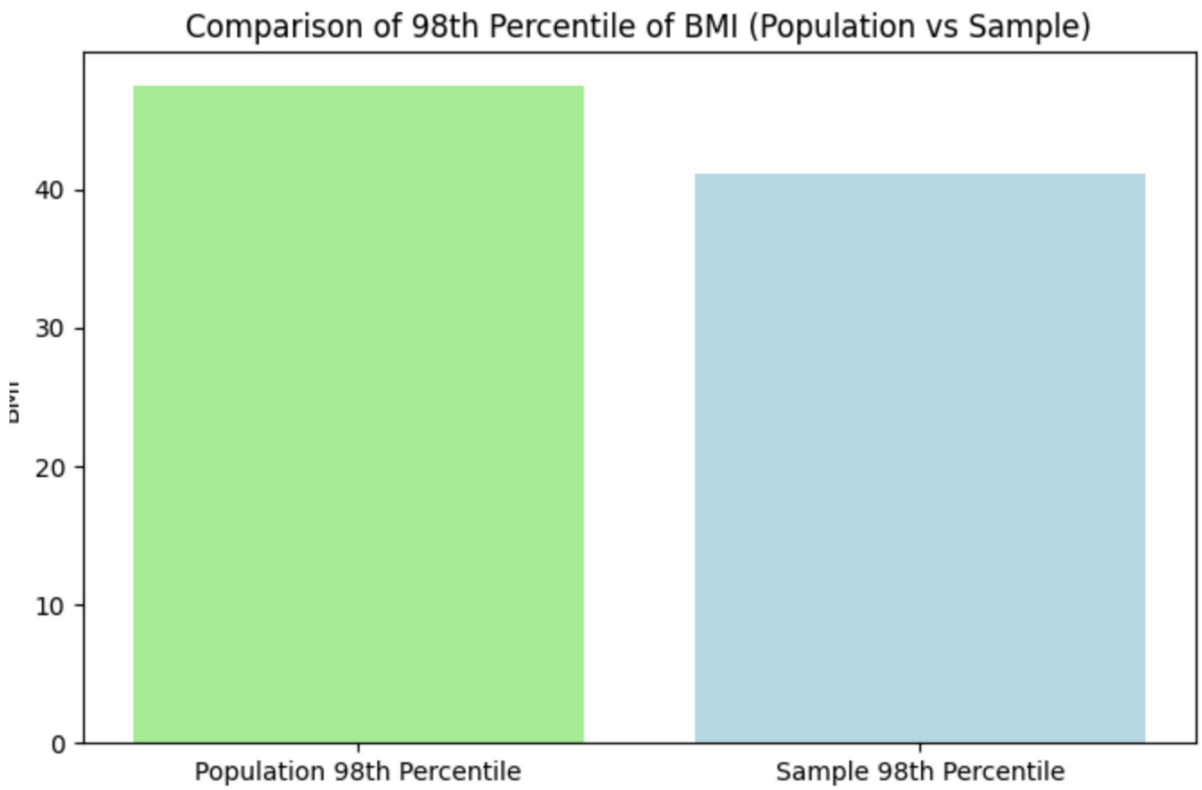
The graph compares two sets of glucose statistics: a population and a sample. The x-axis of the graph simply says “Glucose” and the y-axis is labeled “Frequency”. There are four data points plotted on the graph.

The leftmost data point shows the population mean. The population mean is represented by a blue bar and it extends to a height of 150 on the y-axis. The next data point shows the population maximum. The population maximum is also represented by a blue bar and it extends to a height of 200 on the y-axis.

The third data point shows the sample mean. The sample mean is represented by a green bar and it extends to a height of 125 on the y-axis. The final data point shows the sample maximum. The sample maximum is also represented by a green bar and it extends to a height of 175 on the y-axis.

Based on the graph, the population has a higher mean and maximum glucose level than the sample.

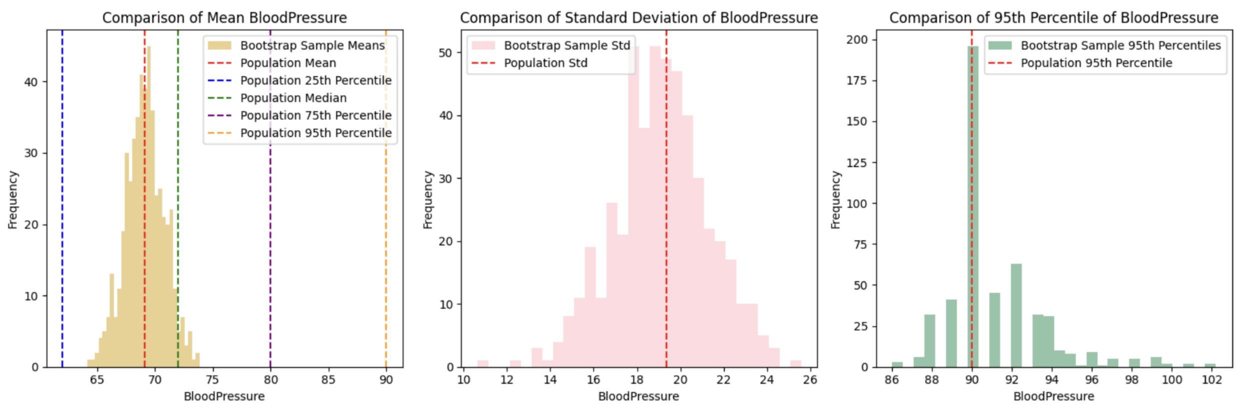
Without additional information about the size and selection of the sample, it is difficult to draw any conclusions about the representativeness of the sample to the population.



The graph shows a comparison of the 98th percentile of Body Mass Index (BMI) between a population and a sample. The y-axis shows the BMI, while the x-axis isn't labeled.

The graph shows that the 98th percentile of BMI is higher in the population than in the sample. This means that 98% of the population has a BMI lower than the value shown for the population (on the left), and 98% of the sample has a BMI lower than the value shown for the sample (on the right).

Without knowing more about the sample, it’s difficult to say why the BMI is lower in the sample than the population. For instance, the sample may have been taken from a group that tends to have a lower BMI, such as athletes or people who are on a weight loss program.



The three graphs visualize the distribution of blood pressure readings for a population alongside a bootstrap sample. Bootstrap samples are repeatedly generated random samples with replacement from the original data set. By creating many bootstrap samples, researchers can estimate the sampling distribution of different statistics, like the mean and standard deviation, which are more difficult to calculate for the entire population.

The first graph compares the **mean blood pressure** between the population and the bootstrap samples. The x-axis represents blood pressure readings, and the y-axis shows the frequency. The blue line represents the distribution of blood pressure readings in the population, while the green line represents the distribution of the means of the bootstrap samples.

The second graph compares the **standard deviation of blood pressure** between the population and the bootstrap samples. The x-axis again represents blood pressure readings, and the y-axis shows the frequency. The blue line represents the distribution of blood pressure readings in the population, and the green line represents the distribution of the standard deviations of the bootstrap samples.

The third graph compares the **95th percentile of blood pressure** between the population and the bootstrap samples. The x-axis represents blood pressure readings, and the y-axis shows the frequency. The blue line represents the distribution of blood pressure readings in the population, and the green line represents the distribution of the 95th percentiles of the bootstrap samples.

By comparing these graphs, we can see how closely the bootstrap samples resemble the original population in terms of these three statistics.