

Question 5

Body Temperature

1. Estimate the population mean body temperature of healthy resting adults with 95% confidence using technology.

$$\mu \in (97.938, 98.54)$$

2. Interpret, in a complete sentence, the confidence interval you just built. (See notes for proper interpretation sentences.)

I am 95% confident that the true mean is between 97.938 and 98.54 degrees Fahrenheit.

3. It is often stated that "normal" core body temperature is 98.6 degrees F. Based on your CI, is this a reasonable value for the mean core body temperature in the population? Answer the question and explain your answer in a complete sentence on the document. Based on my CI, it is not a reasonable value for the mean core body temperature in the population, because it is not within the range.

4. How would a larger sample size affect the confidence interval (CI)? EXPLAIN in a complete sentence on the document.

A larger sample size will make the CI smaller, assuming that the data points are within the CI.