stat2050 final Project

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STAT-2050-001

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1. Find a 99% confidence interval for the average number of grams of fiber per day that people eat. Interpret the results.
2. Construct 95% confidence interval for the effect of gender on smoking.
3. Do the sample data provide evidence that the effect of gender on smoking is statistically significant? In other words, Is there evidence of a difference in the percentage of current smokers by gender?
4. Does smoking decrease beta-carotene levels in the blood (betaPlasma)? Justify your answer with confidence interval and a p-value.
5. Construct 90% confidence interval for the effect of sex on beta-carotene levels in the blood.
6. Does sex have any significant effect on beta-carotene levels in the blood?
7. Are the amount of alcohol consumption and the age of the people significantly related?
8. Which variables listed in the dataset are significantly related to plasma beta carotene?
9. Is there sufficient evidence that the proportions of smoking status (prior-smoke)- Never, former and current are equal?
10. Consider the following variables: fat grams consumed in a day, cholesterol consumed in mg per day, and age in years. Which of the above factors significantly affects the variable calories consumed in a day at a 5% level of significance?
11. Estimate the effect of smoking on cholesterol levels and provide a 95% confidence interval for it.
12. Is the effect of smoking on cholesterol levels significant? Make your decision based on confidence interval and p-value.
13. Do the sample data provide evidence that vitaminuse affects retinol (micronutrient in the blood) levels? Justify your answer with a p-value.
14. Who (Man or Woman) is more likely to take a vitamin? Is there a significant association between vitaminuse and the sex of the participants?