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| **Data/Analysis**  [BACK](http://docs.google.com/data2.html)  Figure 6 displays the average zone of inhibition related to the concentration of GSE for each day. Notice how the zones of inhibition decrease for each day and also have a positive correlation between the concentration and the zones of inhibition.  **Statistical Analysis**  In order to show that there is a significant difference between the mean zones of inhibition for each concentrations of grape seed extract, we performed a statistical **ANOVA** test. After inputting all of the **raw** data into a calculator, the calculator finds each mean and calculates a P-value. The P-value is significant at .05 to reject the null hypothesis and accept the alternative hypothesis.  For each day the Ho and Ha are:  **Ho:** According to our null hypothesis the average zones of inhibition for each concentration are the same. (undesired)  **Ha:** According to our alternative hypothesis, the average zones of inhibition for each concentration are not the same. (desired)  (refer to figure 1.a-1.c)   |  |  |  | | --- | --- | --- | | **DAY** | **F-Value** | **P-Value** | | Day 1 | 35.69 | 7.46x 10^ -12 | | Day 2 | 207.73 | 1.59x10^-3 | | Day 3 | 9.86 | 4.2x10^-5 |   Because the P-values are all less than .001 we reject the null hypothesis (Ho) and the notion that the average zones of inhibition are the same for each concentration of grape seed extract. This test does not indicate which average is largest or smallest, but we can conclude this from data in figures 1,2, and 6. These graphs indicate that the larger concentrations are more effective at inhibiting the growth of Staphylococcus Epidermidis.  1%concentration  .75% concentration  [[Home](http://docs.google.com/home.html)][[Introduction](http://docs.google.com/introduction.html)][[Hypothesis](http://docs.google.com/hypothesis.html)][[Procedure](http://docs.google.com/procedure.html)][[Data](http://docs.google.com/data.html)][[Conclusions](http://docs.google.com/conclusions.html)][[Bilio/Links](http://docs.google.com/biblio.html)]  [[2001 Projects](http://docs.google.com/index.html)][[2000 Projects](http://docs.google.com/AP2000/index.html)][[1999 Projects](http://docs.google.com/AP99/index.html)][[1998 Projects](http://docs.google.com/AP98/index.html)] |