**Report: What Makes Cheese Taste Good?**

Directions: Your goal for each analysis is to determine if you can predict the taste score from each of the variables measured about cheese.

Analysis of Acetic Acid:

Explanatory Variable:

Response Variable:

*Create a scatterplot of the natural log of acetic acid vs. taste score and paste here:*

*Calculate and interpret the correlation of natural log of acetic acid vs. taste score:*

*Calculate the linear regression equation to predict taste score from acetic acid:*

 *Interpret the slope and y-intercept of your equation.*

*Explain if the equation is a good fit for the data. Justify your response with the residual plot and the r-squared value.*

*Would you trust predictions made from this regression equation? All predictions or just some? Explain using evidence from the residual plot and r-squared value.*

Analysis of Hydrogen Sulfide:

Explanatory Variable:

Response Variable:

*Create a scatterplot of the natural log of hydrogen sulfide (H2S) vs. taste score and paste here:*

*Calculate and interpret the correlation of natural log of H2S vs. taste score:*

*Calculate the linear regression equation to predict taste score from hydrogen sulfide:*

 *Interpret the slope and y-intercept of your equation.*

*Explain if the equation is a good fit for the data. Justify your response with the residual plot and the r-squared value.*

*Would you trust predictions made from this regression equation? All predictions or just some? Explain using evidence from the residual plot and r-squared value.*

Analysis of Lactic Acid:

Explanatory Variable:

Response Variable:

*Create a scatterplot of the concentration of lactic acid vs. taste score and paste here:*

*Calculate and interpret the correlation of concentration of lactic acid vs. taste score:*

*Calculate the linear regression equation to predict taste score from lactic acid:*

*Interpret the slope and y-intercept of your equation.*

*Explain if the equation is a good fit for the data. Justify your response with the residual plot and the r-squared value.*

*Would you trust predictions made from this regression equation? All predictions or just some? Explain using evidence from the residual plot and r-squared value.*

**Final Analysis:**

Which component of the cheese, acetic acid, hydrogen sulfide, or lactic acid is the most useful for making predictions about the taste of cheese? Justify your response.