**Post-Lab Analysis and Discussion**

Please type your answers on a separate sheet of paper.

1. Write a conclusion about each of the three food samples. Which contained contaminant Listeria DNA?
2. Did every lab team obtain correct results answers? Give a quantitative assessment of the consistency achieved.
3. List and describe at least two individual mistakes (human errors) that might have caused incorrect results. For each mistake, clearly explain the impact of the error on the results.
4. Did we find any systematic bias in our results? If so, list and describe the source of error and how it caused incorrect results. If not, describe at least one hypothetical systematic error and its impact.
5. Evaluate your technical results. What was the size of the Salmonella DNA band as calculated from your gel and reference standard graph. How does this compare to the known answer (511 base pairs)? What is the % error deviation of your answer from the known value? Explain any discrepancy.
6. Analyze these error sources. Gel A shows a correct outcome for the experiment, and Gels B, C, and D contain either systematic or individual errors. Describe one error that could have happened to give the results found in gels B, C and D. Justify your conclusion with a thorough explanation of how the error led to the outcome seen

