Microbiology of Food—Laboratory Report Guide

• Read the general guide on how to write a lab report.
• Your report must include all the following sections for full credit.

Title
Provide a specific title that is descriptive. You will want to include the food you analyzed as well as what you compared it to.

Introduction (~1-2 pages)
Describe what food contamination is, and some current issues. You must include at least one specific example related to microbial contamination of food. This could be a published paper that describes a specific type of bacteria known to be found in food; epidemiological data about food borne illnesses; toxins associated with food-borne pathogens; etc. You must include your source of information and it has to be a published scientific paper (i.e. journal article of some kind)

Methods (~1-2 pages). Describe what samples were collected; how they were prepared; the media used; the methods calculating CFU/gm food; and how data was analyzed.

Results (~1-2 page written plus ~1 page Figures/Tables):
The goal of this section is to present your findings and also those of the entire class (both rooms). You will need Tables and Figures to accomplish this. A table is a good way to show all the data and the actual numbers, while a figure such as a bar graph is a good visual way for your reader to compare the data.

Please present your data in two ways that make the most sense to you. Each Table or Figure should have a legend that describes what data is shown in each. This means you will have two Figures or Tables.

In the text, describe the class findings, and refer to each table or figure.

Discussion (~1-2 pages)
Follow the general laboratory guidelines. In addition, address these points in your discussion:

1. Start out with a description of what you found--how did the density of bacteria and variety differ between food types, sources and treatments.
2. Describe what types of bacteria are known to associate with one of the food items, by searching Pubmed, the Foodnet (CDC) or FoodHACCP websites. If your specific found cannot be found, use the closest relative. Provide at least two examples, and either pathogen or non-pathogen is fine. Cite your information sources.
3. Describe a follow up experiment.

References
Site your sources according to the general guidelines.