BIOT 1020 – PROBIOTIC LAB REPORT

Due Nov 3, 2020

This lab report should be a FORMAL write up. Please hand in a computer typed copy using 12-point font and double spaced. Sabrina will be primarily marking the scientific content (and how well you follow the instructions below!), but some points will be awarded for the quality of your scientific writing.

What to Include:

Title Page – title, your name, instructor's name

Purpose – 1 to 2 sentences describing the reason for carrying out this exercise

Materials and Methods – You would normally need to reference the lab manual by writing 'refer to page xx of the BIOT 1020 Lab Manual' with the following changes: blah blah blah. When referencing the Lab Manual you can treat Food Technology Program as the author, BCIT as the publisher, September 2018 as the publication date and Burnaby, B.C. as the city. **HOWEVER, for this report we do not require a materials and methods section.** Instead, please submit your dilution schematic to the relevant section on ELearn.

Results – This section is where you would normally provide your results and any observations you made, and present any relevant data. **However, since the results were given to you, we will not require that this section be included.** Instead, please submit your table of results to the relevant section on ELearn.

Discussion – Talk about your results, beginning by restating your purpose (in a different way). **Make sure to use scientific language when describing your results!**
For the discussion section of this report please include the following:

- Briefly describe the importance of probiotic foods and supplements (you can refer to your lab protocol, but please present 1-2 sentences IN YOUR OWN WORDS that briefly summarize their importance).
- Explain what a serial dilution and plate count is, and why they are useful for determining the number of CFU in a sample.
- Was your calculated CFU at least as high as what was advertised on your product?

- Give two possible reasons (other than false advertising, or student error) that someone might find a count that is significantly lower than what is advertised on the packaging.
- Give two specific reasons that your count may not be fully accurate (eg, likely sources of error).
- How could serial dilutions be applied in the real world? Give two different examples.
- **How did the bacterial counts of the samples you calculated differ from the other data in the table?** Did all sample types yield similar results? Judging ONLY from the class results, can you say whether it is more effective to take probiotic supplements instead of eating probiotic foods?
- **Concluding statement**

Note: Do not answer these in a question and answer format – these are just the elements that need to be incorporated in your discussion!