Biology 1200 - Nutrition Assignment

Overview: This assignment involves keeping track of your food intake for two 24-hour days, entering and analyzing your data at an interactive web site, and presenting and discussing your results in a paper.

Objectives:

- To connect your knowledge of the chemistry of nutrition with requirements of the human body.
- To make you more aware of your diet and whether are not you are getting adequate nutrition.
- To interpret graphs and tables to assess nutritional value of foods.
- To apply knowledge when making independent decisions regarding food choices and preparation.

Steps:

- A. Access the interactive web site and get an idea of the food data and portions required by the program.
 - 1. Go to: www.choosemyplate.gov
 - 2. > SuperTracker (in the blue box halfway down the page)
 - 3. > Create your profile (blue box under "get started"
 - 4. Fill in your username & password etc.
 - 5. Go to tab "track food & activity" at the top & choose "food tracker"
 - 6. **Practice** searching for your common food items and selecting quantities
- B. For two separate days (consecutive optional) for 24 hours day, keep track of **everything** you eat and drink, and the **amounts**, as accurately as possible. Do not include any vitamin supplements. Remember, this exercise is only as valuable as the accuracy of your data. The old saying about data is "garbage in (enter bad information); garbage out (get faulty results)." Use your list of foods, beverages, and snacks to complete your analysis.
- C. Create the following reports and export in pdf, excel or word. Print the tables/graphs (you will submit these with new titles written by you).
 - 1. Food groups and calories report
 - 2. nutrients report
- D. Write your paper. The paper will include:
 - 1. Title page (descriptive title, name, course and date)
 - 2. Introduction (purpose and relevant background information) \sim 2-3 pages.
 - 3. Materials and methods (someone should be able to repeat what you did)
 - 4. Results: your two reports, a graph showing target values and actual values of the food groups and calories reports.

- 5. Summary of results (a brief summary stating where you are over or under targets significantly.
- 6. Discussion (part I) (A comparison of the two days, analysis of circumstances leading to your particular diet choices. What did you find interesting? What have you learned? How does this relate to your lifestyle? To your upbringing? What might you change? Would it be easy or difficult to change your diet?) ~ 1 ½ -2 pages
- 7. Discussion (part II) (This is your choice of a topic related to nutrition). $\sim 1 \frac{1}{2}$ -2 pages Some topics students have tackled in the past include:
 - i. How does a vegetarian diet meet nutritional needs?
 - 11. How do these recommendations compare with the Canada Food Guide?
 - iii. What is the problem with fad diets?
 - iv. Are organic foods better at meeting nutritional needs?
 - v. What are the advantages/disadvantages of eating locally-grown foods only?
 - vi How does exercise affect food choices?
- 8. References (use the format in Pechenik, Jan A. 2004. A short guide to writing about biology, 5th ed. Longman; New York. pp. 72-74)
- E. This exercise is for your own benefit and self-knowledge. I will return the work to you and the information will remain confidential Remember, this is a drug-free campus. Don't joke and enter illegal drugs or medicines.
- F. All of the work submitted must be your work and in your words. Be sure not to plagiarize If any copying is found, the report will receive a zero mark. If you are unsure about the concept of plagiarism, read from page 29 in Pechenik's Guide to Writing About Biology.
- G. HEALTH NOTE: After SMOKING (the #1 controllable killer in North America), the #2 controllable killer is DIET.