

# NAT160: NATURAL SCIENCE - NUTRITION

## PORTFOLIO PART 2 – NUTRIENT ANALYSIS

### STUDENT INSTRUCTIONS

<b>Submission Instructions</b>	To be submitted via Blackboard assignment dropbox in one document. Label it clearly (e.g. <b>Portfolio 2 – StudentName</b> )
<b>Value</b>	<b>25%</b> of final grade, out of <b>70 marks</b>
<b>Due Date</b>	Refer to course timeline posted on Blackboard for specific due date

<b>Course Learning Outcomes Covered in Assignment</b>	
<ul style="list-style-type: none"> <li>• <b>Outcome #2:</b> Explain the roles of the major food nutrients in the production of energy, maintenance of body tissues, regulation of body processes, and the prevention of illness.</li> <li>• <b>Outcome #3:</b> Discuss the concepts of energy balance, obesity, overweight (and underweight) to identify strategies for weight management and optimal health.</li> <li>• <b>Outcome #4:</b> Compare the calorie and nutrient content of different foods to develop a balanced diet with adequate nutrient intake.</li> <li>• <b>Outcome #5:</b> Evaluate food labels, nutritional claims, trends, and controversies to make informed dietary choices.</li> </ul>	

## Assignment

<p><b>General Instructions:</b></p> <ul style="list-style-type: none"> <li>• The purpose of this assignment is to allow you the opportunity to evaluate your current dietary regime along scientific guidelines, in order to identify things that you could change to improve it. <b>It is recommended that you work on this assignment at the same time as you work through Unit 2 of the module content.</b></li> <li>• Before you complete this assignment, please see both the general rubric at the bottom of this description as well as the more detailed one attached to this assignment. It describes the requirements for preparing and submitting your assignments and explains how they will be marked. This assignment <b>consists of two parts</b> – make sure to complete them all.</li> <li>• Please <b>include screen shots of pertinent sections</b> of your analysis.</li> </ul> <p><b>Helpful Resources:</b></p> <ul style="list-style-type: none"> <li>• Canada’s Food Guide</li> <li>• Nutrient Analysis app: <a href="https://foodstruct.com/diet-analysis">https://foodstruct.com/diet-analysis</a></li> <li>• Alternately, you may use an app of your choice for the nutrient analysis. If you choose to do this, clearly identify the app and provide a link to it in your submission.</li> </ul>
<p><b>Part A: Nutrient Analysis (10 marks)</b></p> <p><b>Instructions</b></p> <ul style="list-style-type: none"> <li>• Take photos of all the meals you eat in a typical day. Include photos of drinks and snacks. You will use these as reminders when entering the food and drink items into the nutrient analysis tool. <b>These photos must be included in your assignment.</b></li> <li>• Compare your photos to that of the food guide plate, and <b>answer the following questions in no more than 250 words:</b></li> </ul>

1. How does this one-day food record compare to the Canada Food Guide?
2. Does this day include any of the strategies for change or areas for improvement that were developed in Portfolio Part 1? Which ones? Or, why not?
3. Looking back at the photos you took of your food intake, try to remember what influenced you to make those choices at those times. Are any of them the same ones as you identified in the first Portfolio or are there some new ones?

### **Part B: Further Nutrient Analysis (55 marks)**

#### **Instructions**

Now it is time to use the given tool or an app of your choice for your nutrient analysis. **Answer the following questions in no more than 1000 words.**

1. **(5 marks):** Which nutrients (include vitamins – especially Vitamin D, minerals – especially sodium, potassium, and iron, water, fibre, sugar, saturated fat, unsaturated fat, trans fat and cholesterol) are higher than the recommendations? Note anything higher than 100% is above recommendations. Which of these is/are approaching the Upper Limits? Which nutrients are lower than recommendations? Of these, which are less than 50%?
2. **(5 marks):** Evaluate whether the calorie content supports optimal weight management. Provide your reasons why or why not.
3. **(10 marks):** What is your overall impression of the diet analysis you performed? For this part, consider the nutrients you analyzed above and some of the other nutrients which seem to be very high or very low. Your answer should also include a definition for an **adequate diet** and for a **balanced diet** and whether you consider your day's intake to be adequate or balanced.
4. **(5 marks):** Should you be concerned by the results of your analysis? Why or why not?
5. **(5 marks):** What are the possible health consequences over time if you continue to follow this current eating pattern?
6. **(5 marks):** Make a few specific suggestions that will bring the nutrients more in line with recommendations and that will also help your plate look more like the food guide plate. You may also wish to incorporate one or more of your strategies from the first Portfolio assignment if you think they will help.
7. **(10 marks):** With respect to the suggestions mentioned in Q.6, give an example of how you would achieve this by comparing 2 food labels – one for a food that is in the original menu and one that you believe will be an improvement, explaining why. Include photos of the labels, including ingredients and Nutrition Facts Tables. Use photos or a video of yourself comparing labels and include these with the assignment.
8. **(10 marks):** Run the nutrient analysis program again using your recommendations from your answers to Q.6. Did your suggestions help? Discuss whether more menu changes might be necessary. Include “before” and “after” screenshots from your analysis as proof.

### Grammar and Formatting (5 marks)

**Instructions:**

- Be sure to follow APA citation style in your submission.
- Ensure that correct spelling, grammar, and formatting is properly utilized.
- Make sure your work is properly organized, by section, with clear headers and divisions.

## Evaluation

Please see the rubric at the end of the document for general assignment breakdown criteria. Please see the 'Portfolio Rubric' linked to in the assignment for more specific details about what is expected, in terms of quality of answer, in each section.

## Submission

Submit your portfolio as one document (compile all the answers), and submit it to the assignment dropbox for this assignment (on Blackboard). Make sure to give it a representative name to make it easy for your instructor to organize (e.g. **Portfolio 2 – StudentName**). Make sure to **include screenshots** as needed per section, as specified in the questions above.

## Academic Integrity

As a scholar you are expected to exhibit academic integrity throughout this course. Academic Integrity is demonstrated by your behaviour and the work you produce. The work you produce must be your own and be free from plagiarized content - failure to do so could result in serious consequences. Please refer to the academic integrity/honesty policy of your registering college for more information. To learn more about Academic Integrity and your responsibilities, including how to cite, please visit [The Learning Portal - Research Hub](#).

## Assignment Rubric (General)

Criteria	Details	Points
Part A: Nutrient Analysis	As detailed in section	10
Part B: Further Analysis	As detailed in section	55
Grammar and Formatting	As detailed in section	5
<b>Total Points</b>		<b>70</b>
<b>Weighting</b>		<b>25%</b>

A - /10

B –

1 - /5

2 - /5

3 - /10

4 - /5

5 - /5

6 - /5

7 - /10

8 - /10

Grammar & Formatting - /5