

NUTR 1020 Assignment #2 DIET ANALYSIS PROJECT

INTRODUCTION:

During the course of the semester we have talked about various types of diets that people follow. This assignment is designed to give you first hand experience in following one of three popular diets. You will be assigned to follow either a high protein/low carbohydrate diet, a low fat diet, or a vegan diet for **2 days** and then analyze it using the diet analysis software that came with your textbook. The analysis will give you information on your kcalorie, micro- and macronutrient intake as compared to the RDA for your age, sex, and activity level.

Remember, these are diets that millions of Americans actually follow on a daily basis. After completing this assignment you will gain a new perspective from your own experiences regarding these popular eating habits. *Read the following instructions carefully for detailed instructions for completing this assignment.*

INSTRUCTIONS:

A) Pick one of the following three diets to follow, use the guidelines provided.

High protein, low carbohydrate: To follow this diet you should consume foods that are high in protein and/or fat, but low in carbohydrates. Ideally, you should consume no more than 50-75g of carbohydrates per day. Avoid bread, cereal, potatoes, rice, pasta, sweets (like chocolate and cookies, etc), crackers, juice, soda (diet soda is OK), fruit, and milk (contains milk sugar). Special low carbohydrate milk is available if you want to drink milk during the two days you follow this diet. All animal sources of protein are OK, so are all types of fat. Vegetables are also allowed (no carrots, peas, corn!) on this diet.

Low fat diet: To follow this diet you should avoid fat as much as possible. The goal is to keep your fat intake to less than 10% of your total calorie intake. Avoid fried foods, butter, margarine, any type of oil, any dairy (unless it is fat-free like skim milk or fat free cheese & yogurt), mayonnaise, sweets (typically high fat), avacados, nuts, snack foods (chips, etc.). You can eat as much fruits and vegetables as you want, meat and chicken should be very lean cuts (round and loin cuts are typically leanest). Avoid fatty cuts like hamburger, as well as chicken skin. Seafood is OK as long as it is prepared in a low fat method.

Vegan diet: To follow this diet you should avoid any food product that came from an animal. Simply put, no meat, chicken, fish, dairy, or eggs. Also, foods that have animal products as a major ingredient should be avoided, such as pudding and ice cream (soy ice cream is OK). All fruits, vegetables, and grains can be eaten. Acceptable protein sources in this diet are soybeans, nuts, and legumes. You can also have chocolate on this diet!

When you have completed this assignment, please hand in these printouts in the following order. Read the instructions below carefully so that you know how to complete this assignment.

DO NOT TURN IN ANY OTHER PRINTOUTS EXCEPT THE FOLLOWING:

1. Your personal profile printout.

2. A printout of the **“Daily Average”** for those 2 days.
3. A printout of the **foods and beverages** (your foodlist) consumed on each of the 2 days.
4. Answers to the questions in the “Summary and Interpretation” section.

STAPLE A COVER SHEET TO YOUR ASSIGNMENT WITH YOUR NAME AND STUDENT ID! This is to protect your privacy.

Part 1: Keeping records for your 2 day food intake:

You will record all of the food and beverages you consume for a 2 day period. Please choose 2 consecutive days to follow your diet. Use the “Nutrition-Calc” software to see how the diet you selected compared with the recommended nutrient intake in your personal RDA.

A. Keeping a 2 day record of your food intake:

For 2 days write down everything you eat along with exact portion sizes and quantity. Include all meals, snacks, beverages, and condiments (catsup, mustard, mayonnaise, etc), consumed. **DO NOT TAKE SUPPLEMENTS DURING THE 2 DAY EXPERIMENTAL PERIOD. The goal is to determine if you can get the recommended nutrients by following the diet.**

Part 2: Analysis of your food intake.

With the purchase of your textbook you will find a CD ROM entitled “Nutrition-Calc.” You will not be able to use the software at the University Computer Labs.

A- To Begin:

Enter personal data in first window that comes up after launching the program. If nothing comes up, click on File and “New”. Enter in your personal data and estimate your activity level. Next enter your student information, this will be printed out on all forms that you turn in for this assignment. You will get a confirmation window informing you that data was successfully saved.

Your **Personal Profile** will now appear in a new window. A series of icons will also appear at the top of the window. Place the mouse pointer on the icons and a text message will be displayed at the bottom of the page that tell you what the icon is for. Click on the icon that reads “1” to enter your food record for the first day.

B- To enter your food record:

1) Type in a food (like apple). Press return or enter. A menu will pop up with a list of foods containing the word apple. Scroll down the list and find the one that fits your food choice the best. If I ate an apple with peel I would scroll down the list and look for “fresh apple w/ peel-lrg 3 ¼” and then hit the “OK” button. Next select the amount of the food you ate. In this example with apples I will select “1” for the amount and “E” (for Each) in the unit line. Then hit the enter key. Now the food and amount is saved. Type in a new food on the next line and repeat the process.

If you initially typed in the wrong food, simply click on the “cancel” button on the popup menu and it will go back to the food list window. Then click on the food you typed and hit “delete” key to erase it.

2) When you are finished with Day 1, select from the Menu Bar the next day, Day 2. You will get a confirmation window stating that Day 1 foods have been saved. Hit the “OK”

button to move to the Day 2 window. Repeat the process outlined above to enter Day 2 foods.

C- Obtain printouts:

1) Print your "personal profile" by clicking on the print icon. Next click on the "daily average" icon (it looks like a calendar). Print this form by clicking on the print icon. Last, click on the "1" icon to open your foodlist from day one, print this list by clicking on the print icon. Do the same for the day two foodlist. **DO NOT print nutrient analysis reports for each day.**

Turn in your "personal profile," "daily average," and foodlists in that order along with a coversheet with your name on it.

SUMMARY AND INTERPRETATION OF RESULTS

Use the information from the Bar Graph, Ratios and Percents, and your Personal Profile printouts to answer the following questions. You may write on this form.

CIRCLE TYPE OF DIET FOLLOWED: **high protein/low carbohydrate**
vegan diet
low fat diet

1. Was the percentage of fat you consumed less than or equal to the recommended amount of 30%? Circle your response.

Yes **No**

If no, what are some foods that you could eliminate from your diet or replace with lower fat alternatives. If yes, what are some foods that you avoid or eat in moderation to keep your overall dietary fat content down?

2a. What is the recommended percentage of calories from saturated fat in the diet? This information can be found from the software, check the green pie chart icon for a listing of the percentage of total kcals that came from saturated fat. The recommended amount of saturated is listed in parentheses beside each type of fat in the pie chart.

_____ %

2b. What percentage of your total caloric intake came from saturated fat?

_____ %

2c. Is this within the recommendations? **Yes** **No**

2d. Given what we have discussed regarding saturated fat and heart disease, would you consider your diet to be “heart healthy” or not? Please explain WHY.

3. What is your Recommended Daily intake for protein? Find this on your Profile printout.

_____grams

3b. From your dietary analysis, what is your protein intake (in grams)? _____

3c. How does your intake compare to your Profile Recommendations for protein? Circle one:

Higher

Lower

Similar

3d. Do you consider the diet you followed to be “healthy” in terms of protein intake? WHY?

4a. List all of the vitamins and / or minerals in your diet that fell below 75% of the RDA .

4b. Why do you think that you did not achieve the RDA for the vitamins or minerals listed above? What foods were you missing from your diet that could have helped?

4c. Are you getting at least 400 mcg of folic acid (folate)? **Yes** **No**

4d. Why is it important for women of childbearing age to get adequate folic acid?

5a. How many grams of TOTAL fiber did you consume on average in the diet you followed?

_____ Grams

5b. How many grams of soluble fiber? _____ Grams

5c. How many grams of insoluble fiber? _____ Grams

5d. How does this compare with recommendations regarding fiber intake?

Higher

Lower

Similar

5e. List two possible health problems that are associated with low fiber intake.

6a. Are you getting 1000 mg of calcium?

Yes

No

6b. What disease is associated with persistent low calcium intake?

7a. Based on your computer analysis, do you think the diet you followed provided the nutrients you need to maintain good health?

Yes

No

Maybe

7b. Based on your response to question 7, explain why or why not you felt the diet you followed was healthy or not.

8. For the purpose of this assignment you were not to include any supplements. Based on the analysis of your experimental diet, would supplements have been beneficial for others following this diet? What type would you recommend?