NUTRITION PROJECT – PERSONAL DIETARY ANALYSIS

Professor: Dr. Marilee Caldwell

This Analysis is your evaluation of the reports generated from the Diet and Wellness Plus program, Attach the reports listed below, saved in a PDF format and your written analysis (use Word Document) and submit on the due date to the DropBox located under "Assessments" on the Navigation Bar of D2L Nutrition.

RECORD YOUR DIET FOR 3 DAYS - Try to eat normally and not try to be "good"! I do not grade WHAT you ate...just how you evaluate your diet. You may choose to select a work/school days and a weekend or off day to see if the diet differs. The days do not need to be consecutive. Include all food/drinks including water and alcohol. Please don't add in your vitamin supplements since they will throw off your numbers significantly. I want you to see the nutrients that your diet provides.

ENTER THE DIET AND WELLNESS PROGRAM - the program is located on the icon bar to the right of "Cengage Mindtap Nutrition" with the "Apple +". Open the program and enter your personal Profile. You will see a small person icon at the top right (next to "reports"); drop down and select "Create New Profile". Next you will enter your foods/drinks in "Track Diet".

GENERATE YOUR DIETARY ANALYSIS REPORTS - This is the data you will use to complete the written analysis listed below. I want you to evaluate each day separately, so DO NOT use the 3 day Average option. When you request report for each day, you will enter the beginning date and the ending date the same. Scan down the reports and find advanced "Combination Report". You will generate the following reports (checked)

- **Energy Balance**
- **Fat Breakdown**
- **Intake vs Goals**
- **Macronutrient Ranges**
- **My Plate**
- **DRI Report**
- **Daily Food Log**
- **Intake Spreadsheet**

Save in PDF file so that you can submit the file with your written report to the Drop Box on the due date. You may want to print out the reports so that you will have easy access to them as you do an analysis of each day in the written report listed below.

BEGIN YOUR WRITTEN ANALYSIS HERE:

1. DIETARY PATTERNS (10 points)

   Using the data sheets, look at the DRI for each nutrient based on meeting your personal nutrient needs (This will be automatically calculated in the "Intake vs Goals" Report. Compare your actual

intake with what you should have obtained. **Discuss** implications of your nutrient adequacy (Remember that 2/3 of the required DRI is adequate for most individuals.) You need to discuss the nutrients that were very high and very low and any trends you see over the 3 days

2. THE MY PLATE (5 POINTS) Look at Day 1, Day 2 and Day 3 foods in MY PLATE (this will be automatically done using the program)

a. Write a specific evaluation of how your MY PLATE looks.
b. Provide suggestions that would have better met the recommendations.
c. What patterns do you see that may have negative effects on the nutritional adequacy of your diet?
d. Is this pattern fairly representational of your regular diet? Why or why not?

3. EVALUATION OF CALORIES (5 POINTS)

a. Does the caloric intake meet your needs? Consider if your recent weight is comfortable for you or if you would like to gain or lose weight.
b. What adjustments could you recommend if a change is needed?

4. CARBOHYDRATE EVALUATION (15 POINTS)

a. How many grams of carbohydrates did you consume daily?

How many kilocalories do they represent?

What percentage of your total calories were obtained from carbohydrates?

Compare this percentage of calories with the Recommended Percentage of Carbohydrates for a good diet plan.

b. Divide and **chart all your carbohydrate foods into 3 Categories** and calculate how many **grams** of carbohydrates were consumed in each of the categories. (List foods/grams in each) You will obtain this information from your **intake spreadsheet printout** under the carbohydrate column. (This will be a chart you will construct). You may use a graphing program to chart the information if you like.

Category 1: Complex Carbohydrate foods (Breads, pasta, grains, etc)

Category 2: Nutritious Simple Carbohydrates (milk sugars and fruit sugars)

Category 3: Concentrated Sugar foods (candy, cakes, donuts, soft drinks, etc)

Discuss what you observed in the patterns of the charting

c. What percentage of your total calories was derived from concentrated sugar foods? Use

"Category 3" above to total grams of sugar foods. Convert grams to calories by multiplying grams by 4 (4 kcal/gram for carbohydrates). Make a ratio of the average calories of sugar per day with your total average calories per day to obtain % of sugar calories. (Average Sugar Calories divided by the Average Day Calories X 100 = % of daily calories that were sugar) Nutritionists recommend 10% or less sugar calories per day. **Discuss.**

d. Based on this diet, estimate how many pounds of sugar you may consume in one year. (Total your grams of sugar for the 3 days and obtain an average grams for 1 day;

There are 365 days in a year and 1 pound of sugar =454 grams; (Average daily sugar grams times 365 days divided by 454 = pounds of sugar per year consumed) Compare to the average sugar consumption of the average American per year.

Do you feel this is a normal sugar consumption pattern for you? Why or why not?

e. How much fiber did you consume? How does this compare to the recommendation of 25 grams per day? What foods provided fiber in your diet? If low, what foods could you add to your diet to increase the fiber content?

5. EVALUATION OF FATS/LIPIDS: (15 POINTS)

a. How many grams of fat did you consume daily?
How may kilocalories do these represent?
What percentage of you total calories per day were fat calories?

How does yours compare to the recommended percentage of fat per day for American?

b. How much polyunsaturated fat did you consume? How does this compare to the recommendation of 20% of calories? How much saturated (animal) fats did you consume? How does this compare to the recommendation of 10% of calories?

c. How much cholesterol did you consume daily? How does this compare to the recommendation of not more than 300 mg daily? Which food contributed the highest levels of cholesterol in your diet?

d. **Chart the foods** each day that provided high amounts of **SATURATED FATS VS UNSATURATED FATS**. (This will be a chart that you will construct) List the grams of saturated and unsaturated fats provided by each and total. **Discuss and summarize** the nutritional implications of these food choices.

6. EVALUATION OF PROTEIN (15 POINTS)

a. How many grams of protein did you consume daily?
How many kilocalories do these represent?

What percentage of your total calories daily was protein?

How does this compare to the recommendation for Americans?

b. Calculate your personal protein needs (see text) and compare your actual protein intake with your need?
.8 X kg body weight. To determine wt in kg: divide your weight in pounds by 2.2

c. **Chart** a comparison of dietary protein sources from **ANIMAL vs PLANT**. (This will be a chart you will construct) List the foods, grams, and totals of protein provided in each category. If you take a protein supplement, you may discuss that in this section. It has been suggested that 2/3 of our protein sources should be from plant and 1/3 from animals. How did yours compare? What effect does your protein sources contribute to your total fat intake for the day? Should your pattern be adjusted? How?

7. EVALUATION OF VITAMINS: (15 POINTS)

a. In general, answer these questions for **each of the vitamins in your analysis**.

What percentage of the RDA did you have? Which foods contributed the most of the vitamin in your diet?

b. Water Soluble Vitamins:

1. Suggest alternative food sources and amounts for Riboflavin for people who do not like to drink milk?

2. Suggest alternative food sources and amounts for Vitamin C for people who do not like citrus fruit?

c. Fat Soluble Vitamins:

1. Was most of your Vitamin A derived from animal or plant sources?

What foods contributed the most Vitamin A in your diet?

2. Evaluate your Vitamins D, E, & K adequacy by **discussing the implications** of the following questions:

a. Do you drink fortified milk in adequate amounts to obtain Vitamin D?

Do you eat fortified breakfast cereals to obtain Vitamin D?

Are you in the sun frequently so that adequate amounts are converted from Ergosterol in the skin?

b. Did you eat vegetable oils to obtain adequate amounts of Vitamin E (1 tsp. Per day is adequate)

c. Vitamin K: Available in green leafy vegetables, did your diet include

Green leafy vegetables in adequate amounts to obtain Vitamin K?

Antibiotics destroy the microflora production of Vitamin K in the small intestines. Have you been on antibiotics?

Discuss

8. **EVALUATION OF MINERALS**: (10 POINTS)

a. **Calcium**: Did your meet your RDA levels?
What foods contributed the most calcium in your diet?

b. **Sodium**: Estimate your sodium intake daily. Approximately how much salt do you add to your foods (1 tsp. = 2 grams of sodium). How does your diet compare to the recommendation of 1 to 3.3 grams of sodium per day? What foods contributed the most sodium to your diet?

c. **Iron**: What percentage of your RDA did you consume? Which foods provided the most iron in your diet? Since heme-iron (blood source/meats) are much more usable in the human body when compared to iron in plant sources, which type of iron did your consume? Give implications for nutritional adequacy.

9. SUMMARY (10 POINTS)

a. In general, what did you learn about your eating patterns and nutritional adequacy by completing this analysis?

b. What surprises did you find?

c. If you were a professional nutritional counselor, what SPECIFIC advice would you give yourself regarding changes in your diet that would provide better nutritional status for you? You need to list at list 10 specific recommendations to better meet your nutritional adequacy.