FDSN 214  Computer Dietary Analysis Assignment

Purpose:
To provide an opportunity for the student to assess his or her dietary intake and to use knowledge learned in class to make positive changes. The intent is for this to be a practical experience that will benefit you personally.

Specific objectives of this 2-part assignment:
Part I  3-Day Computer Dietary Analysis of Usual Diet
• Record your daily food intake for 3 days.
• Compare your nutrient intake with the Food Guide Pyramid, Dietary Guidelines for Americans, and the Dietary Reference Intakes (DRI).
• Determine your level of physical activity
• Determine level of food safety habits
Part II  3-Day Computer Dietary Analysis of Revised Diet
• Consume and evaluate a HEALTHY diet that meets the criteria specified by the Food Guide Pyramid the Dietary Guidelines for Americans, and the Dietary Reference Intakes (DRI).

Part I  3-Day Computer Analysis of Usual Diet (100 points)

Food Intake:
1. Using the Food Intake Record sheets, record everything you eat or drink for 3 days in a row, including one weekend day. This should include all meals, snacks, and beverages (including alcohol) for 24 hours (e.g. 6 AM to 6 AM the next day). Vitamins, minerals or supplements should be recorded on the Food Intake Record, but not entered into the computer. Instead, discuss any supplements in the written summary. Each day should be recorded on a separate Food Intake Record.
2. It is easier to record the food you eat as you eat it or immediately after you’ve eaten. This is so you don’t forget the little things like margarine, salad dressing, sugar, sweet & low, beverages, etc.
3. Whenever possible, break down recipes into individual food items. Example I, a grilled cheese sandwich would be better entered as cheese, 2 slices of bread and margarine, rather than the computer’s version. Example 2, a salad needs to be entered as 1 cup lettuce, ½ tomato and ¼ cucumbers with 2 tablespoons ranch dressing.
4. On your list be sure to include the amount of each item consumed and some detail about how it was prepared. Be specific- was the chicken fried with skin or broiled? When you get to the computer analysis, you will have to make a decision about quantities and preparation, so it will be better to have a detailed diet diary.
6. Try to eat what you would ordinarily eat. Knowing you have to record the food will undoubtedly make some difference in your choices. Try to keep this effect to a minimum. Remember, you will NOT be graded on what or how much you eat. This should be an objective analysis of your typical food intake for your own benefit.

7. When entering foods into the computer check for accuracy. Your analysis is only as good as the data you put into it.
   - Note that bread and cake can be entered as either slice or loaf.
   - Orange juice can be entered as the frozen concentrate or diluted into juice.
   - Ice cream as either a gallon or 1 cup.
   - Coffee creamer, powdered is listed as coffee whitener.
   - Beverages are to be recorded in fluid ounces rather than ounces.
   - Double check spelling of your entry if you get a message reading ‘item not found’.
   - Serving size for Fresh Fruit (e.g. apple) is entered as 1 each.
   - Some national fast food chains and brands are abbreviated (e.g. PH for Pizza Hut, W for Wendy’s, McD for McDonald’s)
   - Many fast food items are listed as whole meals vs. individual items (e.g. McDonald’s Chicken McNuggets).
   - To check for major data entry errors such as noted for bread, orange juice and cake, check each food entry for days when your calories are over 3000. Any projects turned in that have a major data entry error will be returned to you and 20 points will be taken off. You will have until the next time the class meets to correct the error, revise the results of your project and return it for grading. Failure to do so will result in an “F” for the project.

Physical Activity:

   - Using the Physical Activity Log, list any physical activity you are involved in during the recording period. Be sure to include the duration of each activity and how often you performed it throughout each day. A separate Physical Activity Log should be used for each day.

   - You don’t have to go to the gym to be physically active (although it can help!). Give yourself credit for walking to class, push mowing the yard, or dancing. Include any aerobic and strength-building activities.

Food Safety Habits:

   - Complete the Food Safety Quiz and determine your score.
Part II  3-Day Computer Dietary Analysis of Revised Diet  (150 points)  
(5 points extra if turned in early in class)

For 3 days you are to consume and evaluate a healthy diet following the Food Guide Pyramid and the Dietary Guidelines for Americans. Keep a complete diet diary and physical activity log for 3 days, including one weekend day. Analyze your diet on the computer as you did before.

Your goals:
- According to the 3-day average
  - Fat content between 20-25% of kcals
  - Carbohydrate should be above 55% of kcals
  - Kcals between 70-110%
  - Vitamins & Minerals at 70% or more
- 30 minutes of accumulated physical activity each day
- Meet the criteria of the Food Guide Pyramid and the Dietary Guidelines for Americans

Take note:
- Although the computer program makes it look like there is a RDA for fat, you know that there is not. To determine if you have met the fat guidelines, look at the percent of kcal from fat, on your 3-day average, not the RDA.
- Most students have a hard time meeting the mineral guidelines due to inadequate intake of vegetables and whole grains. You might want to pay special attention to these items.
- You may also find that as you lower the fat intake, you also lower the Vitamin E intake, what should you do?
- In terms of the Pyramid, you need to eat at least the minimum number of servings. If you don’t succeed, points will be deducted.
- Make sure your calories are at an appropriate level for you. If it seems that there are way too many calories suggested, perhaps you need to lower you stated activity level. Most of you will fit into the light activity category. Some of you more athletic types may have to de-emphasize the activity that you put in as well.
- Plan your diet out ahead of time. Start by using the Food Guide Pyramid with the right number of servings in each category and make sure you are following the Dietary Guidelines for Americans. By doing this, you should come out close to the goals on the computer analysis. However, you should check the computer analysis ahead of time so you can make adjustments if needed.
- You will need 6 copies of the Food Intake Record, 6 copies of the Physical Activity Log, and 2 copies of the Food Guide Pyramid/ Dietary Guidelines for Americans Checklist.
WHAT YOU NEED TO TURN IN FOR EACH PART (I & II) OF THE ASSIGNMENT:

Using a pocket folder, without stapling pages together, turn in the following:

1. Computer program printouts including the student profile (personal information sheet) food list, spreadsheet for each day and the 3-day average. (use the Print All option).
2. Completed Food Guide Pyramid/ Dietary Guidelines for Americans Checklist
3. Completed Food Intake Record sheets (1 per day)
4. Completed Physical Activity Log sheets (1 per day)
5. Food Safety Quiz (Part I only)
6. Using the Spreadsheet generated by the computer program, identify, by circling or highlighting the foods on each day that had the MOST:
   - Calories (Cal)
   - Folic Acid (Fola)
   - Iron (Iron)
   - Caffeine (Caff)
   - Total Fat (Fat)
   - Vitamin C (Vit C)
   - Potassium (Potas)
   - Saturated Fat (Sat)
   - Calcium (Calc)
   - Sodium (Sod)

7. Type a 1-2 page analysis of the results. Include:
   - What nutrients were lacking, and what nutrients were in great excess, compared to the DRI on your 3-day average printout?
   - How did you do with respect to the Food Guide Pyramid & Dietary Guidelines for Americans?
   - How did your recommended caloric intake (RDA) compare with your actual caloric intake? What might you conclude if these values are different?
   - Were you surprised by any findings in the analysis- e.g. did any foods have surprising amounts of a particular nutrient?
   - Discuss any supplements taken.
   - Based on your dietary analysis what would you like or feel you need to change (Part I)? How difficult was it to achieve these changes (Part II)?
   - Was your level of physical activity within the recommendations of the Dietary Guidelines for Americans? If not, what could you do to become more physically active?
   - Part I only, what was your score for the Food Safety Quiz? What areas do you need to change?
   - Points will be taken off for spelling and grammatical errors.

Good Luck, please don’t hesitate to ask questions, and don’t wait till the last minute!