Biology 1400 - Fundamentals of Nutrition

Diet Analysis Paper

This course is designed to introduce you to the basic concepts of nutrition. By the end of the course you should be able to evaluate nutritional information and recommend changes to a diet based on the knowledge you have gained during this course.

Your knowledge should include:

The purpose and recommended amounts of all nutrients;

the possible consequences of deficiencies or excesses of various nutrients;

the recommended number of calories;

the modifications necessary to improve your diet.

In order to successfully complete the diet analysis paper's goals you must create a detailed food log, generate specific dietary reports, analyze the data to determine if your diet meets nutritional standards which promote health and wellness, and make recommendations on how you can improve your diet.

The data for this paper must cover at least **3 days of diet**. You must create a diet log for your diet. (You may do more than 3 days if you desire. The more days you do will result in better data.) _The food log must include everything you ingest_. You need to include all beverages including water and you **MUST** include the size of your servings. The daily food log form **MUST** be submitted with your paper.

DO NOT submit all the iProfile reports with your paper. You need to only submit with your paper:

the DRI report

the three day food log,

the iProfile Spreadsheet Report

and iProfile's "My Plate" report.

The following will assist you in composing your paper:

Basic Components (Percent based on your personal profile):

These percentages refer to how close you are to your goal _based on your profile_. In other words _100% means you have taken in the correct amount of the nutrient._ Over 100% you have exceeded your goal and less than 100% you have not achieved your goal. _This may be good or bad based on the nutrient you are looking at._ Do not expect to hit exactly 100%, this is why ranges are given for each component.

Below are the different nutrient categories that must be included in your paper. Furthermore, on your printout for the 3-Day Average you must highlight the following with a "yellow" marker. Note: a separate worksheet has been provided to help you organize the data (see www.mc3cb.com/nutrition to print worksheet).

Basic Components (Percent based on your personal profile):

- Calories below 80% or above 120%
- Protein below 100% or above 200%
- Carbohydrate below 130 grams
- Fiber less that 80%
- Fat and saturated fat above 100%
- Mono and Poly unsaturated fat below 80%
- Cholesterol above 100%
- Vitamins and minerals (Except sodium and potassium) below 80% or above 200%
- Potassium below 100%
- Sodium above 100%

Source of Calories (Percent based on calories you consumed):

- Carbohydrate below 45% or above 65% of calories
- Fat below 20% or above 35%
- Protein below 10% or above 35%

Source of Fat (Percent based on calories you consumed):

- Saturated fat above 10%
- Mono and polyunsaturated fat below 10%

Your paper <u>must</u> address the adequacy or inadequacy of all the basic components of your diet. You must address **calories, carbohydrates, proteins, fats, vitamins and minerals**.

In particular you must note any dietary changes that should be made based on any component that is above or below the recommended amount. **The suggested changes must be specific, not just a general statement such as, "I need to cut the saturated fat in my diet".**

Evaluate you're My Plate data and make suggestions of any dietary changes that you might reasonably be expected to make that would bring you into compliance with the recommendations for the different food groups. You should also *include other lifestyle changes* (i.e. including exercise, stop smoking, etc.). .

This assignment must be written as a paper not just a list of independent statements with no connections. All sentences must be complete and no abbreviations should be used. The paper must be typed and use a "spell and grammar checker" before you turn in the paper. The introduction must clearly explain the purpose of the paper and the conclusion should summarize the analysis of the paper and make an original statement.