In Gul Tiryaki-Sonmez’s HSD 240, “Nutrition and Health” class, students completed a three-part food diary. They recorded the food they ate over two days, calculated their actual vitamin and mineral intake and compared it to USDA recommendations, and then composed a report with suggestions for improving their diet and reflections on the project as a whole. Below is the assignment description:

**Food Diary Assignment**

We decide what to eat, when to eat, and whenever to eat for a variety of reasons. To analyze your diet, you should track and assess the nutritional value of the foods you eat at least for two days. You may use the forms provided and Appendix A in your textbook or you may use computerized diet analysis.

You should create your own personal profile based on height, weight, age, sex, and activity level. You can then calculate your RDA/DRI goal percentages and actual intakes of vitamins, minerals, and other nutrients based on your personal profile and diet records. Then, you should compare the choices made in two days to the USDA Food Guide recommendation for your age, gender and activity level.

In the two-day diet diary, after recording and comparing your data, you should answer the questions which are provided to you are on a separate sheet of paper.
Fill this out in pencil and round off to the nearest whole number.

<table>
<thead>
<tr>
<th>Nutrient Intakes</th>
<th>Use one form for each day</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NAME</strong></td>
<td></td>
</tr>
<tr>
<td><strong>DATE</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Food</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Name</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Energy</strong> (KCAL)</td>
<td></td>
</tr>
<tr>
<td><strong>Pro</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Calc</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fat</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Sodium</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Cholesterol</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Zinc</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Vit A</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Vit D</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Vit E</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Vit B12</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Vit B6</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Vit B1</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Vit C</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Vit B2</strong></td>
<td></td>
</tr>
</tbody>
</table>
### Form 3

Comparison with Standard Intakes

<table>
<thead>
<tr>
<th>Standard Intake as a Percentage of the Average Daily Intake from Form 2</th>
<th>Energy (kcal)</th>
<th>Protein (g)</th>
<th>Fat (g)</th>
<th>Carbohydrates (g)</th>
<th>Total Cholesterol (mg)</th>
<th>Calcium (mg)</th>
<th>Phosphorus (mg)</th>
<th>Iron (mg)</th>
<th>Zinc (mg)</th>
<th>Riboflavin (mg)</th>
<th>Thiamine (mg)</th>
<th>Niacin (mg)</th>
<th>Vitamin A (IU)</th>
<th>Vitamin C (mg)</th>
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<td>Niacin (mg)</td>
<td>Vitamin A (IU)</td>
<td>Vitamin C (mg)</td>
</tr>
</tbody>
</table>

### Form 2

Average Daily Energy and Nutrient Intakes

<table>
<thead>
<tr>
<th>Average Daily Intake (Combined Total)</th>
<th>Energy (kcal)</th>
<th>Protein (g)</th>
<th>Fat (g)</th>
<th>Carbohydrates (g)</th>
<th>Total Cholesterol (mg)</th>
<th>Calcium (mg)</th>
<th>Phosphorus (mg)</th>
<th>Iron (mg)</th>
<th>Zinc (mg)</th>
<th>Riboflavin (mg)</th>
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<td>Vitamin A (IU)</td>
<td>Vitamin C (mg)</td>
</tr>
</tbody>
</table>

NAME
FORM 4
Percentage of Calories from Protein, Fat, and Carbohydrate

From Form 3:

Protein: \( \frac{\text{_____ g/day}}{\text{4 cal/g}} \times 4 \text{ cal/g} = (P) \frac{\text{______ cal/day}}{\text{}}.\)

Fat: \( \frac{\text{_____ g/day}}{\text{9 cal/g}} \times 9 \text{ cal/g} = (F) \frac{\text{______ cal/day}}{\text{}}.\)

Carbohydrate: \( \frac{\text{_____ g/day}}{\text{4 cal/g}} \times 4 \text{ cal/g} = (C) \frac{\text{______ cal/day}}{\text{}}.\)

Alcohol
\( \frac{\text{_____ cal/day}}{\text{}}.\)

TOTAL CALORIES
\( = (T) \frac{\text{______ cal/day}}{\text{}}.\)

Percentage of calories from protein:
\[
\text{Protein calories} \quad \text{Total calories} \quad \times 100 = \text{_____} \% \text{ of total calories}
\]

Percentage of calories from fat:
\[
\text{Fat calories} \quad \text{Total calories} \quad \times 100 = \text{_____} \% \text{ of total calories}
\]

Percentage of calories from carbohydrates:
\[
\text{CHO calories} \quad \text{Total calories} \quad \times 100 = \text{_____} \% \text{ of total calories}
\]

Percentage of calories from alcohol, if any:
\[
\text{alcohol calories} \quad \text{Total calories} \quad \times 100 = \text{_____} \% \text{ of total calories}
\]
THE 2-DAY DIET DIARY

On a separate sheet of paper, answer the following questions. This report should be typed. Your name and date should be on the pages.

1a. Which of your vitamin intakes were found to be below the DRI (< 90%)?
   b. For each vitamin listed in #1a, list two good food sources and the amounts you
      would consume to increase your intake of that vitamin, indicating the amount of that
      vitamin that would be found in each of the two good food sources.

2a. Which of your mineral intakes were below the DRI (< 90%)?
   b. For each mineral listed in #2a, list two good food sources and the amounts you
      would consume to increase your intake of that mineral, indicating the amount of that
      mineral that would be found in each of the two good food sources.

3a. What is your average total grams of carbohydrate consumed?
   b. What percentage of your total calories came from carbohydrate?
   c. The recommended level of calories from CHO is between 45-65%. Do you need to
      make any dietary adjustments to better meet the recommendation?

4a. On the average, how many grams of dietary fiber do you consume each day?
   b. List the foods you consumed with the most dietary fiber per serving.
   c. If you did not meet the recommended minimum of 25 grams, what three
      foods in what amounts would you be willing to eat regularly that contains 3 or more
      grams of fiber per serving? What foods would you have to add to your daily diet in
      what amounts to obtain 25 g of fiber in your daily diet?

5a. How many grams of protein did you consume?
   b. Calculate your DRI for protein.
   c. What percentage of the DRI for protein are you consuming?
   d. If you are consuming more or less of the recommended level, how could you alter
      your diet to meet it more closely?
   e. List 3 protein-rich foods that you consumed from both animal and plant sources.

6a. How many grams of fat did you consume?
   b. What percentage of your calories came from fat?
   c. If it is higher than the recommended 30%, do you feel you should reduce your
      percentage of calories from fat? Why or why not. If yes, what changes would you
      make to decrease it?

7. Are you getting 5-9 servings of fruit and vegetables a day? If not, what changes can
   you make in your diet to achieve this intake? Give specific foods and amounts that
   you can add to your diet.

8. Suggest a healthy diet plan to a friend or family member by first listing and then
   implementing the 5 principles of healthy diet.
9. What did you learn from this project?

10. Do not include vitamin and mineral supplements as part of your diet analysis. List them in detail on a separate sheet of paper and include amounts. Then discuss why you are taking the supplements.

Your diet analysis and discussion will not be graded on how well you eat. That's your business. It will be graded on how well you discuss and analyze it.

REPORT MUST BE TYPED!!!!

Common Mistakes:

- When recording your nutrient intake, ignore superscripts; values that read $<1 = 0$; tr (trace) = 0. Do not include more than one decimal column.
- Be careful when adding columns, if you find that a nutrient is more than 150% of the DRI, recheck you math. Be precise using decimal points.
- Sodium should be below or within the range, so do not say you will increase it.
- Do not get nutrient values off food labels, they are not complete. Look up the food or a similar food in Appendix A of the text.
- If you chose to do a computerized nutrient analysis, you must still complete forms 2, 3, and 4 and answer the questions.