

## **NUTRITION FOR DENTAL HYGIENE PERSONAL ASSESSMENT PROJECT**

### **Objectives**

Upon completion of this project, student will be able to:

1. Objectively assess one's own personal dietary patterns using the *Dietary Guidelines for Americans*, MyPlate.gov, and Cronometer.com.
2. Practice the process of recording and analyzing food intake for its nutritive and cariogenic value.
3. Use one's nutritional and dental knowledge in contributing to better general and oral health for self and patients.

### **Procedure**

- Complete forms
- Type report

#### **1. Part I: Food Record/Dietary Analysis**

**A.** Record everything you eat for 3 consecutive days. A Food Diary Form is available for download in Canvas. Use two weekdays and one weekend day (Thursday, Friday, Saturday or Sunday, Monday, Tuesday).

- *Do not choose days when you are dieting, fasting, or ill.*
- Be accurate in determining the amounts eaten.
- Remember to include extras such as mayonnaise on your sandwich, butter on your toast, salad dressing, chewing gum, and fluids (e.g., water, alcohol).
- Use brand names whenever possible (e.g., Cheerios, McDonald's).
- Record food preparation methods, when applicable (e.g., baked, fried, grilled).

**B.** Enter data into an analysis program:

*Create a Personal Profile:*

- Go to <https://cronometer.com/>
- Click on Sign Up, set up a username and password, and fill in the Your Body Type information

*Food Recording*

- Near the top of the page, click on the Diary tab, select the correct date, and click on Add Food to enter your food intake for that day.
- Enter your food intake for 3 days (*Hint: If you eat the same items for any meal day to day, use the Copy functionality available as an option in the three vertical dots menu for faster and easier data entry.*)
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*Overall Report*

- Once the 3 days have been entered, click on the Trends tab and then

the Nutrition Report tab.

- Select "Last 7 Days" for the Daily Average and "Non-Empty Days" from the drop-downs.
- Print the report page from your browser to save a hardcopy or save electronically as a PDF. Note the following:
  - How do your total kilocalories compare to the recommended amount?
  - In which nutrients has your intake been inadequate?
  - In which nutrients has your intake exceeded the recommendations?

Think of some ways in which you could ensure that your total average daily kilocalories and nutrient intake more closely align with recommended amounts. This information will be used in your Written Assessment and Analysis (Section 3 below).

#### *Day-to-Day Report*

- Go back to the Diary tab and select the first day of the 3-day food intake.
- Print the page from your browser to save a hardcopy or save electronically as a PDF. Do this for each of the 3 days.

#### *Dietary Analysis*

- Using each *Day-to-Day Report*, transfer the values for each listed nutrient onto the Dietary Assessment Form, available for download on Canvas.
- Average the values for each row and enter those amounts in the *Average of 3 days* column.
- Use the Dietary Reference Intake tables on pages ii-v in the front of your textbook to find the recommended amount of each nutrient for your gender and age group. Mark these in the *Daily Allowance* column.
- Complete the *Comparison* section on the far right of the form to indicate whether your intake for each particular nutrient is adequate, inadequate, or high.

## **2. Part II: Carbohydrate Analysis**

- A. On each of the three Food Diary Forms completed from Section 1, circle each fermentable CHO in red or highlight.
- B. For each food circled/highlighted, comment on why it is cariogenic or not cariogenic. A sample Carbohydrate Intake Analysis Worksheet is available for download in Canvas.
- C. Total the number of minutes of acid exposure each day. Consider that one exposure may include several fermentable CHOs, and that not every meal is cariogenic. Average the 3 days; 2 hours/day is considered high.
- D. Comment on findings; give specific and realistic recommendations for modifications. Comment on your findings in relation to dental health.

E. The CHO Analysis is to be typed.

### **3. Part III: Written Assessment and Analysis**

1. Obtain and include a copy of your medical and dental history, intraoral and extraoral examinations, dental chart, and periodontal assessment. Highlight pertinent information on all clinic forms. Block out identifiers such as full name, birthdate, social security number, etc.

2. Summarize all of your information in a typed report following this guide. This section of the project is to be written in APA format (1" margins, Times New Roman, 12pt font). Add other pertinent comments. Start with a title page and an introduction. End the written assessment and analysis with your reference page.

#### **Title page in APA format:**

- Nutrition Assessment Project
- Your full name
- DH209
- Date
- Concorde Career College

#### **Introduction**

#### **Body of Paper:**

- A. Social history:** Discuss reasons why you choose the foods you consume. Use classroom notes and the textbook to get other ideas for food choices. Examples:
- Exercise?
  - How often eat away from home?
  - Who does cooking/shopping?
  - Who lives at home?
  - Number meal/snacks per day?
  - Working? Number of hours/week? Regular hours?
  - Number of credit hours?
- B. Medical history:** List all pertinent information as it appears on your medical history form from the clinic, including family history of disease, any surgeries, medications, smoking, supplements, and OTC and prescription drugs. Determine your BMI. Comment on findings. Include relationship of medication, alcohol, or smoking to your nutritional status. Which nutrients are affected? What are some suggestions for improvement?
- C. Dental history:** List all pertinent information from your dental/oral history form from the clinic, including:
- Oral hygiene status (i.e., amount of plaque)
  - Periodontal problems—includes description of gingival condition
  - Orthodontics

- Number of restorations
  - Does your dental health affect nutritional intake? Does your nutritional intake have an impact on your oral health?
- D.** Special dietary considerations (e.g., cultural, lactose intolerant, low fat, low calorie, allergies, intolerances, vegetarian, religious, or do you follow no special guidelines): Include foods you like and foods you dislike.
- E.** Compare your intake with the *Dietary Guidelines for Americans*. (<https://www.dietaryguidelines.gov/>):
- What dietary guidelines do you follow?
  - Where can you improve?
  - Provide specific and realistic recommendations.
  - Comment on the comparison of your intake with the MyPlate.gov recommendations.
- F.** Dietary assessment: Using the information recorded on the Dietary Assessment Form, comment on the following for each nutrient:
- How do you compare with the recommendation?
  - How can you improve?
  - What specific foods or beverages did you consume that helped you meet the recommendations?
  - What specific foods or beverages can you modify?
  - Explain items from your medical or dental history that require modification in your intake.
- G.** From the findings in your report, construct a list of foods you could add to meet all or most nutrient needs. Comment on the possibility of adding these foods to your diet. Identify foods from your diet that are in excess. Comment on the possibility of reducing these foods.
- H.** Conclusions and expected success of the program: What have you started to change, or what do you anticipate changing in your diet while in school? List at least three specific and measurable goals/objectives you plan to make this year. What did you do well? Summarize all of your comments on improving our dietary intake. Create a realistic menu for 1 day.

### Reference Page

Paper MUST include at least **2-3 credible** sources which may be the BMI calculator source, the textbook, the PDR, and the Dietary Guidelines for Americans.

- References need to be cited in correct **APA format**. Canvas is a great resource for this. Click on [APA Resources](#) in the navigation menu in Canvas.

### Edit your paper.

- Grammar/spelling/ punctuation
- Completeness—did you turn in all parts of the assignment? Food Diary Forms, Nutrient Analysis Forms, Average Day Intake Form, Fermentable CHO Analysis, and written evaluation
- Neatness
- Accuracy—correct values and calculations, information presented,

appropriate dental terms

- Logic of conclusions and appropriateness of recommendations—your conclusions must be consistent with the evidence, and your recommendations must be in line with current nutrition knowledge

***\*See rubrics in Canvas for grading criteria for parts 1, 2, and 3 of this project.***