

CAREER READINESS SKILL: ACADEMIC FOUNDATIONS

Health Science

Module Title/Topic: Academic Foundations-Health Maintenance Practices / My Plate

Overview/Annotation: Upon completion of this lesson you will extend your learning of appropriate health maintenance practices especially regarding nutrition intake. Lab activities to demonstrate these are performed. You will also explore personal health practices in order to educate the patient regarding their health choices related to nutrition specifically.

Essential Question(s):

- Are you aware of what you eat so you can make choices that are right for your body?
- Do you choose a variety of grains, fruits, & vegetables daily? Give examples from each food group.
- Can you identify health risks associated with inadequate nutrition?
- Through interpreting a nutrition label can you list the nutrients needed and nutrients to limit?
- What are some benefits of daily exercise?
- How much fluid intake is recommended daily?
- Are you maintaining proper weight for your height? Calculate your BMI to prove this.

Learning Objective(s): You will:

1. Describe fundamentals of health promotion & wellness.
2. Calculate mathematics operations for Body Mass Index.

Materials, Equipment, and Technology Resources:

Paper, Pen, Notebook, Computer with Internet Access, Printer, Pedometers, and *Healthcare Science Technology* Textbook

Procedures/Activities: You will work independently to complete the activities below. Complete the activities for this project based learning module in the order listed below and submit all sections.

1. Visit the website <http://www.choosemyplate.gov/> to view the newest version of the food pyramid which is a plate version called *My Plate*. Look at examples of each type of food on the plate to see if you choose a variety of the foods each day. Construct your own plate by using a word processing software and list examples of your favorite foods under each category (fruits, grains, vegetables, proteins, & dairy).
2. Use the internet and/or the *Healthcare Science Technology* textbook to research and create a list regarding the health risks associated with inadequate nutrition, benefits of daily exercise, and the recommended daily fluid intake. Place this information below your plate that you constructed in procedure #1.
3. Visit the website: <http://www.fda.gov/Food/ResourcesForYou/Consumers/NFLPM/ucm274593.htm> and study the parts of the nutrition label. Make a list of important information located on a nutrition label.
4. Bring in a nutrition label from your favorite food and answer the questions from **Handout #1 Examining your Nutrition Label**. Then partner with a classmate to answer the same questions using his/her nutrition label. Also, examine examples (provided by teacher) to explore the nutritional content of various foods (eggs, pringles, cake icing, milk, and other food items provided)
5. To continue the Health Maintenance Lesson, type out your most commonly eaten meal at McDonald's. Go to the website: <http://nutrition.mcdonalds.com/nutritionexchange/nutritionfacts.pdf> and create a spreadsheet showing your meal and the nutrition information for each category listed on the pdf document (calories, fat, cholesterol, sodium, etc.). Examine your findings based on the percent daily

value facts you learned from Activity #4. Write a paragraph to explain your results to include: what nutrients did this meal have too much of, too little of, how this meal might interfere with the rest of your day's food choices, & could you select other choices at McDonalds as healthier food alternatives.

6. Go to the website:

http://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/about_childrens_bmi.html and read about how child & teen BMI is calculated. Then compare it to adult BMI calculation at this link: http://www.cdc.gov/healthyweight/assessing/bmi/adult_BMI/index.html. Enter your own information into the Child/Teen BMI calculator to see if you are at appropriate weight for your height. Using the math formula for the adult calculate the examples on **Handout #2**. You may then check your answers by using the online Adult BMI calculator. Also, examine Table 1 & Table 2 at this link: <http://www.adph.org/worksitewellness/assets/BMIIndex.pdf>. A chart, such as this, is often used to show the patient what a healthier weight would be for them.

7. Create a daily consumption diary where you track what you eat from the time you wake up until the time you go to bed. Enter your diary data for one day into the website: <http://www.livestrong.com/myplate/>. Print your results paying special attention to the daily intake totals. Highlight what you ate too much of and too little.

8. After placing a pedometer on your waist walk or run for 30 minutes based on your individual ability to track how many calories you burn, steps you made, and the distance you went. Your last entry in this project should be about your reaction to calorie consumption verses calorie burning.

Assessment Strategies:

Use **Handout #3** grading rubric for *Academic Foundation-Health Maintenance Practices PBL* to score the project.

Handout #1
Academic Foundation-Health Maintenance Practices PBL

Examining Your Nutrition Label

Select a food item of your choice and answer the following questions:

1. What is a serving size of your food item?
2. How many servings are in the container?
3. How many calories are there per serving?
4. Name 3 nutrients on the label that you need to limit in your diet.
5. Name 3 nutrients you need to make sure you consume in your diet.
6. Does your selected item contain any trans fat?
7. How many grams of total fat are in your selected item?
8. What nutrient does your selected item contain in the largest percentage (hint: note % daily value)?
9. What nutrient does your selected item contain in the smallest percentage?
10. Most nutrition labels are based on a _____ calorie diet.
11. How many total grams of cholesterol should you limit yourself to in one day?
12. How many total carbohydrates should you have in one day?
13. Do you have any nutrients without a % daily value listed?
14. What are the first 5 ingredients in your selected item?

Handout #2
Academic Foundation-Health Maintenance Practices PBL

Body Mass Index

NAME _____

DATE _____

PRACTICE

Directions:

Calculate the following patient's BMI status.
List to the right their BMI number rounded to the nearest tenth.
List the category of the patient's BMI.

	BMI	Category
1. Ht: 5 ft 7 in Wt: 300 lbs		
2. Ht: 65 in Wt: 98 lbs		
3. Ht: 6ft 2 ¾ in Wt: 184 lbs		
4. Ht: 4ft 11in Wt: 133 lbs		
5. Ht: 75 in Wt: 200 lbs		
6. Ht: 5 ft 5 ½ in Wt: 128 lbs		
7. Ht: 67 in Wt: 180 lbs		
8. Ht: 74 in Wt: 205 lbs		
9. Ht: 48.5 in Wt: 150 lbs		
10. Ht: 65 in Wt: 190 lbs		

Handout #3
Academic Foundation-Health Maintenance Practices PBL

Grading Rubric

ITEMS EVALUATED	POSSIBLE POINTS	POINTS
Activity #1 My Plate construction	15	
Activity #2 Health Risks/Exercise Benefits/Daily Fluid Intake information listed under My Plate construction	5	
Activity #3 List of important information located on a nutrition label	10	
Activity #4 Handout # 1 answers on examining a nutrition label	15	
Activity #5 McDonalds Meal Spreadsheet	15	
Activity #6 Handout # 2 answers for calculating BMI	15	
Activity #7 My Plate daily intake totals	20	
Activity #8 Answer regarding calorie consumption versus burning	5	
TOTAL POINTS	100	

Additional Comments: