

## ? Problem 5.1.2 Meal Planning Mission

### Purpose

It is important for a person to eat a balanced diet and to be active. That statement is vague, but consumers hear this often when making decisions on food purchases. What is a balanced diet? How active does a person need to be to live a healthy life? Consumers commonly ask these questions.

USDA has outlined nutritional guidelines for consumers to follow. The guidelines are specifically designed to help an individual achieve overall good health by following the recommended dietary allowance (RDA). Any person over the age of two can observe the guidelines and focus on two concepts. Consuming the proper amount of nutrients and maintaining a calorie balance. The guidelines are important to consumers as well as professionals. Food scientists need to understand the guidelines in order to develop various food products. By understanding nutritional guidelines, food scientists can develop foods for specific groups of people or situations. What other professionals use RDA in their careers?

Along with RDA, physical activity guidelines exist as well. The amount of calories a person should consume is dependent upon his or her age, gender, and activity level. When health professionals need to develop menus for various groups they take all of this information into account. Have you ever wondered what menus would look like in a facility feeding athletes in training for competition?

### Materials

#### Per student:

- Computer with Internet access
- Pencil
- *Agriscience Notebook*

### Procedure

You are a nutritionist recently graduated from college, and are applying to your dream job. The jobs you may choose from include working in a nursing home, in a training facility for elite athletes, a school, or other facility that you choose where groups of people are served meals. One component of the application process requires you to develop a two-week menu following the recommended dietary guidelines for the group of individuals at the facility.

You will work individually to complete the two-week menu plan for the application. Use the following resources and guidelines to assist you. When completed, present your written solution to the teacher.

### Resources:

- Calculate daily nutrient recommendations:  
<http://fnic.nal.usda.gov/fnic/interactiveDRI/>
- Dietary guidelines:  
<http://www.cnpp.usda.gov/MyPlate.htm>
- Your textbook pages 792 – 797

### Guidelines:

- Briefly describe the facility for which you are applying. Include the function of the facility, the life stage of the individual the facility serves, and the overall goals of the individuals.
- There are individuals in the facility that are restricted by doctors to follow a gluten free diet. When a menu item contains gluten, offer an alternative for those individuals.
- Describe the recommended dietary allowances for individuals at the facility based on gender, life stage, and activity.
- Design a two week varied menu. The menu must include at least three meals a day, balancing calories and necessary nutrients as determined by the dietary guidelines.

## Conclusion

1. What complications were there when trying to determine dietary needs for a group of individuals instead of just an individual?

*Groups of individuals are difficult because we have to generalize the dietary needs for the group. This will leave some needs un-addressed or some needs met at a higher level.*

2. What were factors you had to consider when determining alternatives for the restricted diet?

*When considering alternative diets, I looked at the recipe's ingredients. Then from the research we did in unit 2 & 3, I selected alternatives. In a school type setting, food sensitivities will be identified prior so alternative recipes can be selected & prepared. Prior knowledge is key.*

Description of Facility: Riverside Agricultural Academy is a 9-12 school focusing on agricultural career pathways. Female & male students arrive for breakfast in the morning, eat lunch in 2 shifts, & have the option to eat dinner after completing Career Development Event practices or Supervised Agricultural Experience programs.

Dietary Allowances: Student menus are based on a 2500 calorie diet. This allows for moderate activity level & active growth patterns.

Sample Menus:

Monday		Gluten Free Alternative
Breakfast	Peach & Blueberry Parfait	
Lunch	Tuna & White Bean Salad Red Bell Pepper & Hummus	
Dinner	BBQ Chicken Sandwich Cheesy Mushroom Bites	Gluten free bread
Tuesday		
Breakfast	Protein Pancakes	
Lunch	Spicy Chicken Celery Sticks Banana	
Dinner	Spicy Chicken with Rice & beans Peanut butter & carrots	