

NUTR 35.210 – LAB 1

OBJECTIVE:

To practice collecting dietary data using a 24-hour recall and then using the information to plan healthful meals that follow the MyPlate and Dietary Guidelines recommendations.

In order to successfully complete this lab you must:

1. Use the daily intake wheel to determine the correct number of servings your partner needs daily from each food category as recommended by My Plate. Enter the recommended calories and servings onto the Raw Data: Daily Food Plan sheet (In class)
2. Complete a 24-h recall (see directions below) with your partner (see raw data table that can be used to collect this information). (In class)
3. Get your rubric signed by your instructor (In class)
4. Compare what your partner is actually eating to what the dietary guidelines are for his or her age and activity level. (at home) A good reference for this is <http://www.choosemyplate.gov/>
5. Complete a lab report (at home) that has all correct elements (see below)

Here is some background information to help you complete this lab:

Guidelines for 24-hour recalls:

- Do not express in words or facial expressions either approval or disapproval of foods/drinks the subject consumes.
- Do not ask leading questions about foods/drinks that would lead the subject to feel they should or should not have consumed something.
- Use probes that relate to time, activities, and foods already reported.
- "Think back to yesterday, what was the first thing you ate or drank?"
- "What time was that?"
- "How much did you eat or drink?"
- "Did you add anything to it?"
- "What did you have next?"

Definitions:

24-hour recall : A dietary tool in which an individual is asked to recount all food, beverage and nutritional supplements consumed during a 24 hour period.

The Dietary Guidelines: Nutrition guidelines that are updated every 5 years by the USDA and the Department of Health and Human Services. They provide advice about consuming fewer calories, making informed food choices, and being physically active to attain and maintain a healthy weight, reduce risk of chronic disease, and promote overall health. Recommendations are intended for Americans ages 2 years and over, including those at increased risk of chronic disease.

MyPlate: The current nutrition guide published by the USDA, depicting a place setting with a plate and glass divided into five food groups. MyPlate is divided into sections of approximately 30 percent grains, 30 percent vegetables, 20 percent fruits and 20 percent protein, accompanied by a smaller circle representing dairy, such as a glass of low-fat/nonfat milk or a yogurt cup. MyPlate is supplemented with additional recommendations, such as "Make half your plate fruits and vegetables," "Switch to 1% or skim milk," "Make at least half your grains whole," and "Vary your protein food choices." The guidelines also recommend portion control while still enjoying food, as well as reductions in sodium and sugar intakes.

My Daily Food Plan Worksheet

Check how you did today and set a goal to aim for tomorrow

Food Group	Tip	Based on a Calorie pattern. Your Goals Are:	Match Your Food Choices with Each Food Group	Estimate Your Total
 <p>GRAINS</p>	Make at least half your grains whole grains	<p>ounce equivalents (1 ounce equivalent is about 1 slice bread; 1 ounce ready-to-eat cereal; or ½ cup cooked rice, pasta, or cereal)</p>	_____	_____
 <p>VEGETABLES</p>	Aim for variety every day; pick vegetables from several subgroups: Dark green, red & orange, beans & peas, starchy, and other veggies	<p>cups (1 cup is 1 cup raw or cooked vegetables, 2 cups leafy salad greens, or 1 cup 100% vegetable juice)</p>	_____	_____
 <p>FRUITS</p>	Select fresh, frozen, canned, and dried fruit more often than juice	<p>cups (1 cup is 1 cup raw or cooked fruit, ½ cup dried fruit, or 1 cup 100% fruit juice)</p>	_____	_____
 <p>DAIRY</p>	Include fat-free and low-fat dairy foods every day	<p>cups (1 cup is 1 cup milk, yogurt, or fortified soy beverage; 1½ ounces natural cheese; or 2 ounces processed cheese)</p>	_____	_____
 <p>PROTEIN FOODS</p>	Aim for variety—choose seafood, lean meat & poultry, beans, peas, nuts, and seeds each week	<p>ounce equivalents (1 ounce equivalent is 1 ounce lean meat, poultry, or seafood; 1 egg; 1 Tbsp peanut butter; ¼ cup cooked beans or peas; or ½ ounce nuts or seeds)</p>	_____	_____
 <p>PHYSICAL ACTIVITY</p>	Be active every day. Choose activities that you like and fit into your life.	<p>Be physically active for at least 60 minutes each day.</p>	Some foods and drinks, such as sodas, cakes, cookies, donuts, ice cream, and candy, are high in fats and sugars. Limit your intake of these.	_____

How did you do today? Great So-So Not so Great

My food goal for tomorrow is: _____

My activity goal for tomorrow is: _____

Raw data: 24-hour recall

Today's date:

Date of intake:

Partner's name:

Total minutes of physical activity each day:

Time:	Description of Food or Drink (include serving size)
<i>8am</i>	<i>1 Banana, 2 cups coffee, 1 tsp sugar in each cup, 2 Tbsp cream in each cup, 12 ounces of water</i>

Lab report (Please type the final report) DO NOT FORGET YOUR NAME

Introduction:

Your introduction should include a short title for this lab.

You also need a discussion of why this lab is important, what you hope to learn from it, and what the information gathered can be used for.

Materials and Procedures:

This section should include a list of any materials or supplies you used to complete this lab.

You also need to include a step by step description of what you did during this lab.

Results and Analysis:

You will need to attach your two raw data sheets to this lab.

Conclusions:

You will need to summarize the main findings Discuss your overall analysis of your partner's diet. Be sure to mention what is healthy about their eating and what they should improve on. Give some suggestions on how they could make improvements.

Conclusions Part 2

For this, you must write out a sample meal plan for your partner. Using the "Goals" from the Dietary Guidelines worksheet (that you filled out in class), write a day's worth of food for your partner that meets the goals. Try to include food you think your partner would actually eat.

Before leaving have the instructor sign your grading report (next page). You will need to turn this in with your lab report to ensure you get full credit for participating in the lab.

Instructor Signature _____

	Excellent (3 pts)	Good (2 pts)	Adequate (1 pts)	Needs Work (0.5 pt)	Not attempted (0)
Introduction	Includes the question or purpose to be answered by the lab, states the reason why this is important and has a short, relevant title.	One of the "excellent" conditions is not met, two conditions met	Two of the "excellent" conditions is not met, one is met	Introduction present, no exemplary conditions met	
Materials and Procedures	Description or step-by-step process is included, could be repeated by another scientist	Description included, some steps are vague or unclear	The description gives generalities, enough for reader to understand how the lab was conducted	Would be difficult to repeat, reader must guess at how the data was gathered or lab was conducted	
Results and Analysis	Results and data are clearly recorded, organized so it is easy for the reader to see trends. All appropriate labels are included	Results are clear and labeled, trends are not obvious or there are minor errors in organization	Results are unclear, missing labels, trends are not obvious, disorganized, there is enough data to show the experiment was conducted	Results are disorganized or poorly recorded, do not make sense; not enough data was taken	
Conclusions	1. Summarizes data used to draw conclusions 2. Conclusions follow data (not wild guesses or leaps of logic), 3. Discusses applications or real world connections	2 of 3 of the "excellent" conditions is met	1 of 3 of the "excellent" conditions is met	Conclusion section is present but no conditions are met	
Conclusions part 2	Answers all additional questions required correctly.	Answers 2 or 3 additional questions correctly.	Answers 1 of 3 additional questions correctly.	Attempts to answer questions but none are correct.	