



Client Diet Record Intake

First: NUTR 295-004-fall-LL
Middle:
Last: NUTR 295-004-fall-LL
Company:

Female
Identification Number:
Date of Birth: 4/1/1990
Height: 5 ft. 3 in. **Weight:** 100.00 lb.

Total Days: 3 **Total Foods:** 46
Avg. Daily Kcals: 1904.663 **Diet Name:** Diet Record 1

Percentage of Kcals
 Protein 21.5%
 Carbohydrate 45.1%
 Fat, total 33.5%
 Alcohol 0.0%

Food Item	Amount	Unit	Day	Meal
Bhaji, Potato And Onion	4.000	ounce(s)	Day 1	Lunch
Potatoes, Sweet, Baked in Skin	4.000	ounce(s)	Day 1	Lunch
Milk, Non Fat Skim or Fat Free	8.000	fluid ounce(s)	Day 1	Lunch
GENERAL MILLS CHEERIOS, HONEY NUT Cereal	1.000	cup(s)	Day 1	Lunch
Oatmeal, Cooked with Water	1.000	cup(s)	Day 1	Lunch
Sugar, Brown	2.000	teaspoon(s)	Day 1	Lunch
CONTESSA Orange Shrimp, with Sauce, Frozen	8.000	ounce(s)	Day 1	Dinner
Brown Rice, Boiled	8.000	ounce(s)	Day 1	Dinner
Cake, Carrot, Homemade, with Cream Cheese Icing	2.000	slice(s)	Day 1	Dinner
Milk, Non Fat Skim or Fat Free	8.000	fluid ounce(s)	Day 1	Dinner
Apples, Eating, Red Dessert, Raw, Weighed With Core	5.000	ounce(s)	Day 1	Dinner
Waffle, Plain, Prepared	0.250	item(s)	Day 2	Breakfast
Cream, Whipping, Heavy, Liquid	1.000	tablespoon(s)	Day 2	Breakfast
Syrup, Corn and Sugar	2.000	teaspoon(s)	Day 2	Breakfast
GENERAL MILLS HONEY NUT CHEERIOS	1.000	cup(s)	Day 2	Breakfast
Milk, Whole 3.3%	8.000	fluid ounce(s)	Day 2	Breakfast
Eggs, Scrambled with Milk and Butter	0.500	cup(s)	Day 2	Breakfast
Watermelon	8.000	ounce(s)	Day 2	Lunch
Beef, Eye of Round, Separable Lean and Fat, 0" Fat, Roasted	1.000	ounce(s)	Day 2	Lunch
LICK'S HOMEBURGERS & ICE CREAM Hotdog, Coney Island w/o Bun	0.500	serving(s)	Day 2	Lunch
LICK'S HOMEBURGERS & ICE CREAM Bun, Hotdog	0.400	serving(s)	Day 2	Lunch
MINUTE MAID Juice, Orange, Original, Low Pulp	8.000	fluid ounce(s)	Day 2	Lunch
Home Fries or Pan Fried Potatoes	2.000	ounce(s)	Day 2	Lunch
Chicken, Breast, Meat Only, Boneless, Skinless, Roasted	6.000	ounce(s)	Day 2	Dinner
BERTOLLI Pasta Sauce, Alfredo, Four Cheese Rosa	0.250	cup(s)	Day 2	Dinner
Brown Rice, Boiled	8.000	ounce(s)	Day 2	Dinner
FRESH EXPRESS Salad Blend, Green & Crisp w/ Iceberg & Romaine	2.000	cup(s)	Day 2	Dinner
Baby Food, Beets, Strained	4.000	ounce(s)	Day 2	Dinner
MINUTE MAID Juice, Orange, Original, Low Pulp	4.000	fluid ounce(s)	Day 2	Dinner
Milk, Non Fat Skim or Fat Free	8.000	fluid ounce(s)	Day 3	Breakfast
GENERAL MILLS CHEERIOS, HONEY NUT Cereal	1.000	cup(s)	Day 3	Breakfast
Eggs, Hard Boiled	1.000	item(s)	Day 3	Breakfast
Peach	1.000	item(s)	Day 3	Lunch
Chicken, Meat Only, Roasted	3.000	ounce(s)	Day 3	Lunch
Broccoli	1.000	cup(s)	Day 3	Lunch
Ice Cream, with Cone, Not Chocolate	1.000	item(s)	Day 3	Lunch
LICK'S HOMEBURGERS & ICE CREAM Bun, Hotdog	0.200	serving(s)	Day 3	Lunch
Pizza, Cheese, Thick Crust	0.500	slice(s)	Day 3	Lunch
HUNT'S Pudding, Snack Pack, Vanilla	0.500	item(s)	Day 3	Lunch
Tofu, Firm, with Calcium Sulfate and Magnesium Chloride (Nigari)	3.000	ounce(s)	Day 3	Lunch
Ketchup or Tomato Catsup	1.000	teaspoon(s)	Day 3	Lunch
Bream Fish, African, in Coconut Milk (Ikan Tilapia Masak Lemak)	6.000	ounce(s)	Day 3	Dinner
WHITE WAVE SILK Simply Soymilk, Vanilla	1.000	cup(s)	Day 3	Dinner
Apples, Eating, Red Dessert, Raw, Weighed With Core	4.000	ounce(s)	Day 3	Dinner
GENERAL MILLS HONEY NUT CHEERIOS	1.000	cup(s)	Day 3	Dinner
HEINZ Tomato Ketchup	1.000	teaspoon(s)	Day 3	Dinner

Interpreting the Results of Your Three-Day Food Record

Question 1: Calories

Report to reference: "Nutrition Summary"

How does your calorie intake compare with your goal calories (i.e. estimated needs)?

-My calorie intake is not sufficient. I averagely take 1904.663 Kcal calories each day, which is below the goal calories intake of 2200 Kcal each day.

- Are you within 90% - 110% of your goal? If so, you are on target and should state this.

-No, my average calorie intake per day is 1904.663 Kcal which is 87% of the 2200 Kcal goal and out of the 90%-110% range.

- If not, is your kcal intake higher or lower than your estimated needs? If your intake is significantly higher or lower than your calculated needs, indicate the kcal difference and explain this discrepancy as best you can.

-My kcal intake is lower than the estimated needs and is 13% below the calculated needs. I should increase carbohydrate in my diet while keep protein and total fat same portion of my diet. The calories I get from carbohydrate is 69% of goal and significant lower than other major energy sources. The calories I get from total fat and protein are around 85% of goal which is close to total intake's 87%. Because my total calorie intake is only 87% of the goal, one macronutrient achieving around 85% of the goal means this macronutrients takes sufficient portion in my diet.

- Do you think the estimate of your calorie needs is correct? If not, how many calories do you think are appropriate for you?

Give a number, and justify why you chose this number. Please consider the amount that you exercised during the three days and whether or not this was representative of your normal level of exercise.

-I agree the estimate of my calorie needs is correct. During the three days I do normal level exercise as usual so that the estimated calories is correct.

- Do you think the estimate of your calorie intake is correct? Why or why not?

-I think the estimate of my calories intake is correct. Because the calories intake is estimated by my age, weight and gender. Also, I do normal level of exercise daily so that my body do not require extra or lower intake of calories.

- Use the answers in the questions above to justify whether or not you think you need to change your calorie intake.

-I think I need to change my calorie intake. My total calorie intake is lower than the estimate, so I will increase total intake amount of food while keep most nutrients' portion the same as before. The carbohydrate portion should increased in my diet. I should take more monounsaturated and polyunsaturated fat.

Question 2: Macronutrients

Report to reference: "Nutrition Summary"

Examine the distribution of your calories between carbohydrate, protein, and fat. A table has been provided where you can input your numbers and provide the answers to the questions.

- Is the distribution appropriate?

-The distribution of 3 macronutrients is all inside the recommended range and appropriate.

- Are you eating too much or too little of any macronutrient?

-I eat too much saturated fat. 11.6% of my average intake calories come from saturated fat which exceed the <10% recommendation.

Calculation: $[(24.558\text{g} \times 9 \text{ kcal/g}) / 1904.663 \text{ kcal}] * 100\% = 11.6\%$

- What are the possible consequences of eating too much/too little of these macronutrients?

-Eating too much saturated fat may be caused by eating too much fat. Saturated fat is a type of fat. Although my fat intake is inside the range, percentage of calories from fat is close to the upper bound of the recommendation. Eating too much saturated fat would increase the LDL level in blood and increase the risk of having heart disease and obesity.

Nutrient	% of Calories (from 3-day average)	Recommended	Assessment
Carbohydrate	45.1%	45-65%	Inside range
Protein	21.5%	10-35%	Inside range
Fat	33.5%	20-35%	Inside range
Saturated fat	11.6%	<10%	Slightly too much

Question 3: Micronutrients

Report to reference: "Nutrition Summary"

Are there any micronutrients that you are eating too much (over) or too little (under) of? (You can assume that consuming 75 – 125% of each nutrient is on-target.) You can add more lines to the table below as needed.

-I eat too much vitamin C, vitamin D, vitamin B1, B2, B3, B6, B12, sodium and zinc. I eat too little vitamin E, vitamin K and potassium.

- What are the possible consequences of eating too much/too little of **each** of these micronutrients? If the table doesn't provide enough space, elaborate in the extra space below the table.
- If consumption of a micronutrient is low/high but you do not think it is a problem, indicate why.

Micronutrient	Over/Under	Consequences
Vitamin A	Normal	*
Vitamin C	Over	Not a problem: it is water soluble, 131% is not a megadose so that inside the range of being excreted by urine without any risk of disease
Vitamin D	Over	Hypercalcemia: caused by high blood calcium, result in harden soft tissues
Vitamin E	Under	Hemolysis: oxidation of PUFA in membranes Neuromuscular dysfunction in spinal cord and retina of eye
Thiamin (B1)	Over	Not a problem: water soluble, can be excreted by urine
Rboflavin (B2)	Over	Not a problem: water soluble
Niacin (B3)	Over	Not a problem: water soluble
Vitamin (B6)	Over	Not a problem: water soluble

Folate (B9)	*	If intake high dose: mask deficiency of B12
Vitamin B12	Over	Mask deficiency of folate (B9)
Biotin (B7)	Normal	*
Pantothenic Acid (B5)	Normal	*
Vitamin K	Under	Bleeding: blood hard to clot
Sodium	Over	(when potassium intake is low at the same time) -High blood pressure -Increase risk of heart disease and stroke
Potassium	Under	Hypertension Higher blood pressure Kidney stone Bone turnover Salt sensitivity (when sodium intake is high at the same time) -High blood pressure -Increase risk of heart disease and stroke
Calcium	Normal	*
Iron	Normal	*
Zinc	Over	Not a problem: only 4 times of RDA would cause toxicity effects. My diet is 179% of the recommendation.

Question 4: Food Groups

Report to reference: "MyPlate Analysis"

Compare your intake to your recommended servings from MyPlate.

- For which food groups are you consuming too many servings?

-I consume too many protein foods. Eating too many protein foods may cause high cholesterol intake and would increase the risk of getting heart diseases and stroke.

Too much of empty calories may lead to a deficiency of micronutrients: vitamins and minerals.

- Too few servings?

-Too few servings of grains, vegetables, fruits and dairy. Too few servings of these food groups would cause insufficient intake of all vitamins and dietary fiber. May also cause deficiency of minerals like calcium.

Food group	Your Target	Your Average Eaten	Assessment
Grains	7.0 oz.	5.0 oz.	Too few
Vegetables	3.0 cups	1.3 cups	Too few
Fruits	2.0 cups	1.3 cups	Too few
Dairy	3.0 cups	1.8 cups	Too few
Protein Foods	6.0 oz.	11.0 oz.	Too many
Empty Calories	290 kcal	711 kcal	Too much

Question 5: Risk Factors for Osteoporosis

Given that most American young adults do not consume adequate calcium, evaluate your risk of osteoporosis later in life.

- In your evaluation, take into account all of the risk factors for osteoporosis, dietary and non-dietary, modifiable and non-modifiable, that are applicable to you. Remember that these risk factors were discussed in class.

- I consume sufficient calcium and vitamin D from diet but I am still under the risk of osteoporosis.

The non-modifiable risk factors for osteoporosis which are applicable for me are: female gender, small frame, Asian heritage and family history of osteoporosis. Later in life, the older age and estrogen deficiency would be new non-modifiable osteoporosis risks applicable for me. As getting older, women body would absorb calcium less and secrete estrogen less.

The modifiable risk factors applicable for me are lifestyle sedentary, low body weight and diet excess in protein, sodium. I should do more physical activity and eat more to increase my body weight but decrease the portion of protein and sodium in my diet.

- Think about the foods that are easily available to you: What are the foods high in calcium and (bone-health nutrients)? How difficult is it to eat adequate amounts of calcium (and other bone-health nutrients) to prevent osteoporosis? What changes would you like to see happen in our food system (grocery stores, restaurants, cafeterias, convenience stores, etc.) that would make it easier to eat more nutrients for bone health?

-Milk, milk products, tofu, broccoli are the food high in calcium. Salmon, tofu and mushroom are the food high in vitamin D.

Vitamin D helps the absorption of calcium. It is not difficult to eat adequate amounts of calcium. Drinking a cup of milk per meal or eating vegetables containing high amount of calcium or vitamin D would meet the recommendation intake amount of bone-health nutrients.

-In grocery stores, I hope the stores would label out the foods rich in vitamin D and calcium to encourage people to eat more bone-health foods. The grocery stores and restaurants should have little poster on table to advertise risk factors of osteoporosis, the RDA of vitamin D & calcium for different populations and provide a list of bone-health food to make people know what food are helpful to osteoporosis.

Question 6: Risk Factors for Heart Disease

Given that many Americans are at increased risk for heart disease, evaluate your risk of heart disease later in life.

- In your evaluation, take into account all of the risk factors for heart disease, dietary and non-dietary, modifiable and non-modifiable, that are applicable to you. Remember that these risk factors were discussed earlier in class.

Modifiable risk factors for heart disease: Eating too much saturated fat would result in too high LDL blood level. Not consume sufficient amount of monounsaturated fat and polyunsaturated fat to lower blood cholesterol level. Not consume sufficient amount of antioxidant, like vitamin E, to prevent heart diseases. Lack of physical activity also is a risk factor for heart disease.

Non-modifiable factors: increase of age and family history of heart attack are heart diseases applicable for me. Women at 55 or older would have a greater risk of having a heart attack.

- Think about the foods that are easily available to you: What are the nutrients that are of key importance in maintaining cardiovascular health? How difficult is it to eat a diet that contains appropriate amounts of these nutrients? What changes would you like to see happen in our food system (grocery stores, restaurants, cafeterias, convenience stores, etc.) that would make it easier to eat a diet that promotes cardiovascular health?

-Taking sufficient unsaturated fat and antioxidants are of key importance in maintaining cardiovascular health. Also, get rid of alcohol, illegal drugs and tobacco to protect heart. Eat fish twice a week would supply the body sufficient amount of polyunsaturated

fat which would protect the heart by lowering blood LDL level. Replace saturated fat and trans fat to unsaturated fat in diet. For example, use olive oil to replace butter in salad.

-If the grocery stores label the type of fat contained in each food would easier for us to lead a heart health diet. For example, the grocery stores set little labels on beef states that the beef contains saturated fat and set labels on olive oil states olive oil are high in monounsaturated fat. Restaurants should contain as less saturated fat in their dishes as they can and prohibit the use of trans fat if possible, because saturated fat and trans fat would increase blood LDL level and increase risk of heart diseases.

Question 7: Overall Diet

Indicate any changes you need to make in your diet based on the analysis of your three-day diet record. Do you think that this three day record was representative of your usual dietary intake? Why or why not?

- You may list the changes necessary (rather than writing an essay).
- Be sure to list specific foods/beverages and indicate why you are adding or subtracting these items from your diet. In other words, indicate what nutrients will be added or subtracted as a result of the addition or deletion of that food/beverage.
- You **MUST** use food and not supplements to correct any deficiencies.
- When adding foods, be mindful not to exceed your overall calorie needs.
- List as many changes as necessary but try to pick changes that will address as many nutrient deficiencies or excesses as possible.
- You must address all nutrients for which you are consuming too much or too little.

- You must address the MyPlate groups where you are eating too much or too little.

-This three day record was representative of my usual dietary intake. The three days are made of two weekday and one weekend day so that the three recorded day can represent the average of my diet. During the three days, I ate as usual and lead a lifestyle as usual. I do normal level of physical activity as usual.

The necessary changes of my diet:

-Replace the one cup whole milk to fat-free milk: decrease fat intake while keep the calcium intake amount

-Remove the thick crust pizza: decrease fat, sodium and cholesterol intake

-Add one cup of salads to each meal: increase vitamin K intake, increase dietary fiber intake, increase “vegetable” portion intake in

MyPlate

-Add one cup of fruit to each meal: increase vitamin K intake, increase dietary fiber intake, increase vitamin E intake, increase “fruit”

intake in MyPlate

-Add a serving size of rice each meal: increase total calorie intake, increase the portion of calories from carbohydrate, meet the “grain”

requirement in MyPlate

-Replace lean beef into salmon: increase intake of polyunsaturated fat

-Add olive oil as dressing in salads: increase intake of monounsaturated fat

-Add fat-free milk: drink more in the morning to increase “diary” intake of MyPlate

-Decrease the intake amount of General Mill Cheerios: fortified food contains too much micronutrients

- Decrease roasted chicken intake: half of the original amount to decrease the “protein” portion in MyPlate
- Add vitamin E containing nuts(almond) into lunch: increase vitamin E intake

Question 8: Goals

Now that you have thoroughly analyzed your diet, set three goals for improvement. Aim for your goals to be SMART (Specific, Measureable, Attainable, Relevant, Time-bound). Use the example below to help you formulate your goals.

Goal 1: I want to eat 5 servings of fruits each day to increase potassium intake.

Strategies to accomplish this goal: I will eat a bowl of cutted melons each meal. I use meal plan and all dinning halls on campus supply melons as fruit. I can get apple and banana from dining halls. I will eat one apple in the afternoon and one banana at night around 21:00.

Goal 2: I want to eat 3 servings of dark leafy vegetables each day.

Strategies to accomplish this goal: I use meal plan and all dining halls on campus supply romaine and spinach as salads. I will eat a bowl of salad made by romaine and spinach each meal to increase my vitamin k and vitamin E intake.

Goal 3: I want to eat 1 serving of nuts rich in vitamin E each day.

Strategies to accomplish this goal: I will buy a bag or box of unsalted roasted almond because almond is rich in vitamin E. I will eat 10 almonds each day to incese my vitamin E intake.

Diet analysis project (Part 2)

70 points

GRADING RUBIC

Item	Points Earned/ Possible Points	Comments
Questions 1-4: Appropriately compared intake of specified nutrients and food groups to recommended levels, and answered questions fully.		
• Question 1: Calorie intake	/5	
• Question 2: Macronutrient distribution	/5	
• Question 3: Micronutrient deficiencies and excesses	/5	
• Question 4: MyPlate servings	/5	
Questions 5-6: Related current diet to disease risk, according to evidence-based risk factors.		
• Recognized personal risk factors for chronic disease	/5	
• Appropriately identified foods and nutrients associated with these disease risks.	/7	
• Discussed societal changes that would make it easier to eat a diet to lower disease risk.	/7	
Questions 7-8: Identification of appropriate dietary changes and goals.		
• Addressed all nutrients and food groups that were outside of recommended levels	/6	
• Specific food changes/substitutions were appropriate and reasonable.	/7	
• Goals and strategies were SMART.	/5	
• All recommended changes/goals were in agreement, and were within nutritional guidelines.	/7	
Overall:		
Completed project assembled according to directions	/3	
Free of typos/grammatical errors	/3	
Total	/70	