

PREGNANCY PROJECT (50 POINTS)

PART I:

I. Identifying data (1 point)

- A. First name **ONLY** **Kaylyn**
- B. Description of the individual (including lifestyle - impoverished student, affluent lawyer's wife, busy, bored, etc.)
 - **Newly married, husband attending school, currently have one part-time job, athletic – stay active; love the outdoors**

II. Health history (10 points)

- A. Age **23**
- B. Previous obstetrical history, including: (1) parity and outcome; (2) interconceptual period; (3) birth weights of previous infants; (4) children's ages; and (5) lactation experience. **N/A**
- C. Estimated delivery date - **July 1, 2012**
- D. Laboratory data, if known - hematocrit, hemoglobin. **N/A**
- E. Any illnesses/sicknesses/chronic conditions - **no**
- F. Cigarette, drug, alcohol use - **no**
- G. Previous nutritional deficiencies - **none**
- H. Use of oral contraceptives, other medications - **none**
- I. Exercise/activity – **5 to 6 times a week for 90 minutes**
- J. Allergies, other food intolerances - **none**

III. Nutritional assessment (10 points)

- A. Obtain a 24-hour recall from your subject– **medium sized salad w/ chicken (~6 oz breast), black beans, tortilla chips, peppers, cheese and vinaigrette; chicken stir-fry and broccoli (~2 cups); Baskin-Robins chocolate ice cream (2 scoops); 1 cup of honey-nut cheerios w/ 1 cup of 1% milk**
- B. **DISCUSS** her macronutrient distributions (i.e. are they appropriate for pregnancy), how she is meeting (or not meeting) her food group equivalents and nutrient requirements. Compare with RDA and *ChooseMyPlate* (not including supplements).
- C. **ATTACH PRINTOUTS FROM USDA's SuperTracker TO PROJECT.** This should include the "Food Group and Calories" Report, the "Nutrients" Report, and the "Meal Summary" Report. Please print your reports as PDF documents.
- D. Do you use supplemental foods, WIC, SNAP, food bank, church resources, etc? - **no**
- E. Prenatal or Vitamin/mineral supplements? – **organic/whole food prenatal vitamins and omega 3 supplements**
- F. Estimate your percentage of income spent on food – **15%**
- G. What are some of your cooking, eating habits – **"we eat healthy, make most of our meals from scratch; breakfast we usually have a whole grain cereal or eggs; lunch – a salad or sandwich on whole grain bread – Subway and Café Rio are favorites; dinner – some sort of protein, a pasta or potatoes and a vegetable. Occasionally I make my husband take me to get ice cream."** -Kaylyn

IV. Weight graphed (4 points)

- A. State pre-pregnancy weight, height and Body Mass Index (BMI) – **180 lbs and 5'9" BMI: (26.578)= 27**

- B. Using the *Baby Your Baby* charts (posted on the *BYU Learning Suite*), plot your subjects weight gain on the graph - **ATTACH WEIGHT GAIN GRAPH TO PROJECT**
- C. Compare actual weight gain to expected weight gain according to prepregnancy BMI. Is your subject gaining too much weight? Not enough weight? Within the recommended range? *At her last doctors appointment in January I she weighed 176 lbs– she lost weight (4 lbs) during the 1st trimester, and therefore, is not gaining enough weight.*

V. Nutritional care plan (15 points)

- A. Summarize (1-2 paragraphs) what you think are the most significant nutritional risk factors present in this pregnancy, and explain how the subject could change her diet to reduce this risk.

Overall, she has very healthy habits. She is eating the right types of food and is making sure she is getting important nutrients, such as, whole grains, fruits, vegetables, and protein. Although she is demonstrating healthy habits that are definitely encouraged, I feel that the most serious risk factor present in her pregnancy is her weight loss. On her pregnancy weight gain chart, she is well below the minimal limit line. By the end of the first trimester, the healthy range is to gain at least one pound, and at most 4 lbs.

- B. Explain (1-2 paragraphs) any recommendations, suggestions, and education you plan to give this subject and rationale.

I think that she should continue on with her habits of what she is choosing to eat. She understands the importance of nutrition and exercise. She should continue to exercise because that is one of the healthiest things she could be doing. Along with exercise at the level she does, she needs to increase her caloric intake to meet her daily requirements, and enough for the baby too. Her goal should be to eat 3200 calories a day. She could do this by eating many of the same foods she is currently eating, but maybe just in larger amounts.

Kaylyn's Food Groups and Calories Report 02/07/12 - 02/07/12

Your plan is based on a **3200 Calorie** allowance during your 3rd trimester of pregnancy.

Food Groups	Target	Average Eaten	Status
Grains	10 ounce(s)	4½ ounce(s)	Under
Whole Grains	≥ 5 ounce(s)	½ ounce(s)	Under
Refined Grains	≤ 5 ounce(s)	3½ ounce(s)	OK
Vegetables	4 cup(s)	3¼ cup(s)	Under
Dark Green	2½ cup(s)/week	1 cup(s)	Under
Red & Orange	7½ cup(s)/week	½ cup(s)	Under
Beans & Peas	3 cup(s)/week	½ cup(s)	Under
Starchy	8 cup(s)/week	¼ cup(s)	Under
Other	7 cup(s)/week	1 cup(s)	Under
Fruits	2½ cup(s)	0 cup(s)	Under
Fruit Juice	No Specific Target	0 cup(s)	No Specific Target
Whole Fruit	No Specific Target	0 cup(s)	No Specific Target
Dairy	3 cup(s)	2½ cup(s)	Under
Milk & Yogurt	No Specific Target	1¼ cup(s)	No Specific Target
Cheese	No Specific Target	1¼ cup(s)	No Specific Target
Protein Foods	7 ounce(s)	9 ounce(s)	Over
Seafood	11 ounce(s)/week	0 ounce(s)	Under
Meat, Poultry & Eggs	No Specific Target	9 ounce(s)	No Specific Target
Nuts, Seeds & Soy	No Specific Target	0 ounce(s)	No Specific Target
Oils	11 teaspoon	6 teaspoon	Under
Limits	Allowance	Average Eaten	Status
Total Calories	3200 Calories	2069 Calories	OK
Empty Calories*	≤ 596 Calories	581 Calories	OK
Solid Fats	*	345 Calories	*
Added Sugars	*	231 Calories	*
Alcohol	*	5 Calories	*

*Calories from food components such as added sugars and solid fats that provide little nutritional value. Empty Calories are part of Total Calories.

Note: If you ate Beans & Peas and chose "Count as Protein Foods instead," they will be included in the Nuts, Seeds & Soy subgroup.

Kaylyn's Nutrients Report 02/07/12 - 02/07/12

Your plan is based on a **3200 Calorie** allowance during your 3rd trimester of pregnancy.

Nutrients	Target	Average Eaten	Status
Total Calories	3200 Calories	2069 Calories	OK
Protein (g) ^{***}	71 g	132 g	OK
Protein (% Calories) ^{***}	10 - 35% Calories	26% Calories	OK
Carbohydrate (g) ^{***}	175 g	192 g	OK
Carbohydrate (% Calories) ^{***}	45 - 65% Calories	37% Calories	Under
Dietary Fiber	28 g	20 g	Under
Total Fat	20 - 35% Calories	38% Calories	Over
Saturated Fat	< 10% Calories	14% Calories	Over
Monounsaturated Fat	No Daily Target or Limit	11% Calories	No Daily Target or Limit
Polyunsaturated Fat	No Daily Target or Limit	9% Calories	No Daily Target or Limit
Linoleic Acid (g) ^{***}	13 g	17 g	OK
Linoleic Acid (% Calories) ^{***}	5 - 10% Calories	7% Calories	OK
α -Linolenic Acid (g) ^{***}	1.4 g	2.0 g	OK
α -Linolenic Acid (% Calories) ^{***}	0.6 - 1.2% Calories	0.9% Calories	OK
Omega 3 - EPA	No Daily Target or Limit	20 mg	No Daily Target or Limit
Omega 3 - DHA	No Daily Target or Limit	52 mg	No Daily Target or Limit
Cholesterol	< 300 mg	374 mg	Over
Minerals	Target	Average Eaten	Status
Calcium	1000 mg	1331 mg	OK
Potassium	4700 mg	3357 mg	Under
Sodium ^{**}	< 2300 mg	4069 mg	Over
Copper	1000 μ g	1183 μ g	OK
Iron	27 mg	18 mg	Under
Magnesium	350 mg	400 mg	OK
Phosphorus	700 mg	1843 mg	OK
Selenium	60 μ g	144 μ g	OK
Zinc	11 mg	18 mg	OK
Vitamins	Target	Average Eaten	Status
Vitamin A	770 μ g RAE	1339 μ g RAE	OK
Vitamin B6	1.9 mg	3.9 mg	OK
Vitamin B12	2.6 μ g	5.9 μ g	OK

Vitamin C	85 mg	156 mg	OK
Vitamin D	15 μ g	6 μ g	Under
Vitamin E	15 mg AT	9 mg AT	Under
Vitamin K	90 μ g	308 μ g	OK
Folate	600 μ g DFE	969 μ g DFE	OK
Thiamin	1.4 mg	1.5 mg	OK
Riboflavin	1.4 mg	2.5 mg	OK
Niacin	18 mg	44 mg	OK
Choline	450 mg	387 mg	Under

Information about dietary supplements.

** If you are African American, hypertensive, diabetic, or have chronic kidney disease, reduce your sodium to 1500 mg a day. In addition, people who are age 51 and older need to reduce sodium to 1500 mg a day. All others need to reduce sodium to less than 2300 mg a day.

*** Nutrients that appear twice (*protein, carbohydrate, linoleic acid, and α -linolenic acid*) have two separate recommendations:

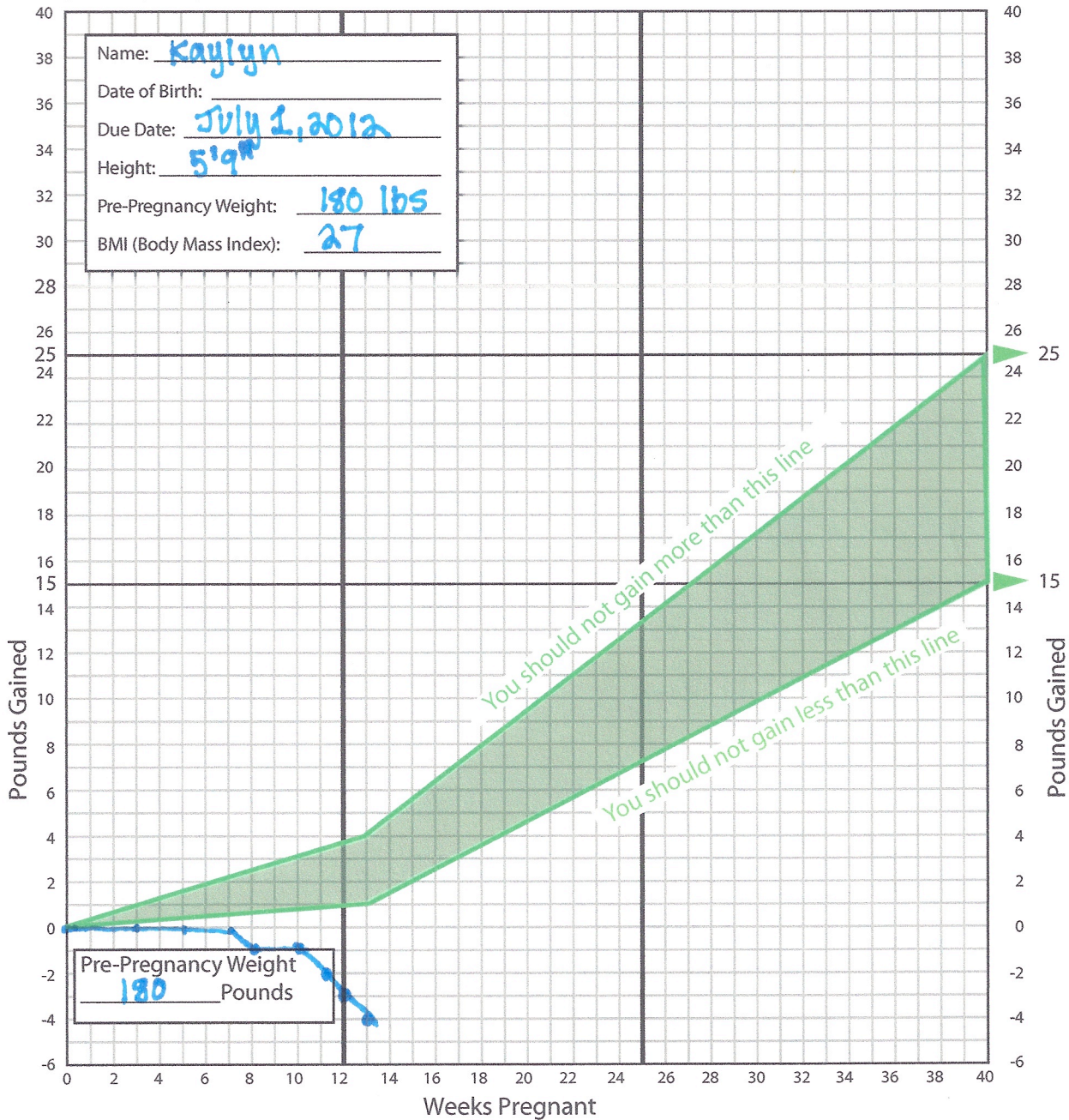
- 1) Amount eaten (in grams) compared to your minimum recommended intake.
- 2) Percent of Calories eaten from that nutrient compared to the recommended range.

You may see different messages in the status column for these 2 different recommendations.

Pregnancy Weight Gain Chart in Pounds

Pre-pregnancy BMI 25.0-29.9, 15-25 pounds

If your pre-pregnancy BMI is between 25.0 and 29.9, then the recommended weight gain range for your pregnancy is 15 to 25 pounds. The green area shows the weight gain recommendation.



You have gained too little weight if:

- Your weight gain is below the green area on the chart OR
- You weigh less during your first trimester of pregnancy (from conception through week 13 of pregnancy) than you did before you became pregnant OR You have lost more than 2 pounds between week 13 of your pregnancy and delivery

You have gained too much weight if:

- Your weight gain is above the green area on the chart OR
- You have gained more than 7 pounds per month (1 month equals 4 weeks)

Talk to your health care provider if you fall above or below the recommended weight



- A. Provide your subject with the recommendations/advice you suggested in Part I (*after you review the instructor's comments*). Ideally, this should be done in-person (but email and phone are acceptable, too).

In reference to my recommendations in part I, as well as the instructors comments, I provided a few recommendations to my subject that were suitable to her needs.

- B. Summarize what you discussed with your subject.

I gave her an overview of the basic nutritional needs during pregnancy. Then I went into detail about her specific nutritional needs and what I thought might be beneficial for her during her pregnancy. I used a picture of the "my plate" diagram and showed her that she was eating foods from most of the food groups. I told her that she was making healthy food choices, and encouraged her to keep making those selections, but that she needed to increase the quantity of all of them. I also advised her to make sure and get some more fruit in her diet. She told me that she did not want to be like other women who ate tons of junk food during their pregnancy and got really fat. I told her that weight gain is necessary during pregnancy, but that she would not experience excessive weight gain if she ate the right things. I explained that increasing the quantity of these healthy foods she was eating would help her gain a healthy amount of weight. I told her that according to her prepregnancy weight (180lbs), height (5'9"), and BMI (27) she should have the goal of gaining 15-25lbs during her pregnancy. I showed her the pregnancy weight gain chart and reviewed her current progress with her. I showed her how to figure out your pregnancy weight gain status and explained that any of the green area was healthy. I used the charts from Choose My Plate that were created based on all of her information, and showed her that she should eat 3,200 calories a day during her second trimester of pregnancy. Using these charts as visuals as I taught her what they all meant really helped my subject understand how she could make even healthier decisions during her pregnancy.

- C. Follow-up within 2 weeks of giving your suggestions and recommendations. This can be done by phone, email or in-person.

After 2 weeks I followed up with my subject and I asked her about the recommendations I had given her. She really had implemented a lot of what I had advised her to do. She told me some examples of things she had done at mealtime to increase her caloric intake, like add more salad dressing, or have one cup of rice with her chicken instead of half a cup. I went ahead and asked her for another 24-hour recall. I recorded what she had eaten and she told me that was a good example of the types of things she eats on a daily basis. I entered in this new 24-hour recall and saw that she was doing a great job implementing my recommendations for her.

- D. Write 1-2 paragraphs explaining the impact of the education you gave, why you think the subject followed or did not follow your advice, and how could you have improved the education you gave.

I feel like there was a significant impact of the education I gave her. Whether it was because of me, or her doctor, she really did follow almost all of my advice. My subject is a married college student with a limited income. She wants to be healthy and do the best she can for her and the baby, and I think the education I provided her was even more meaningful to her. The Pregnancy weight gain charts and the charts from Choose My Plate were of great interest to her. She was excited to see these wonderful resources that are available to the public. I feel like instead of me just telling her what to change in her diet, the fact that I used these educational resources as well as my recommendations really helped her seriously consider my suggestions. In efforts of improving the education I gave her, I could have gathered more information from her. Instead of just using a 24-hour recall, I could have asked her to keep a food diary for a week so I could have had a better idea of what her diet is like. Seeing more records of her day-to-day diet would help me really figure out the best recommendations possible for her. Overall I feel like the Baby Your Baby pregnancy weight gain chart was one of the best sources of education for her. She can now record her weight gain and check her progress for the duration of her pregnancy.

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Whole Fruit	No Specific Target	3¾ cup(s)	No Specific Target
Fruit Juice	No Specific Target	1½ cup(s)	No Specific Target
Dairy	3 cup(s)	4¼ cup(s)	Over
Milk & Yogurt	No Specific Target	1 cup(s)	No Specific Target
Cheese	No Specific Target	3¼ cup(s)	No Specific Target
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Seafood	11 ounce(s)/week	0 ounce(s)	Under
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Oils	11 teaspoon	6 teaspoon	Under
Limits	Allowance	Average Eaten	Status
Total Calories	3200 Calories	3158 Calories	OK
Empty Calories*	≤ 596 Calories	470 Calories	OK
Solid Fats	*	247 Calories	*
Added Sugars	*	224 Calories	*

*Calories from food components such as added sugars and solid fats that provide little nutritional value. Empty Calories are part of Total Calories.

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Carbohydrate (% Calories) ^{***}	45 - 65% Calories	60% Calories	OK
Dietary Fiber	28 g	48 g	OK
Total Fat	20 - 35% Calories	23% Calories	OK
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Omega 3 - DHA	No Daily Target or Limit	49 mg	No Daily Target or Limit
Cholesterol	< 300 mg	277 mg	OK
Minerals	Target	Average Eaten	Status
Calcium	1000 mg	2017 mg	OK
Potassium	4700 mg	5537 mg	OK
Sodium ^{**}	< 2300 mg	4152 mg	Over
Copper	1000 μ g	2980 μ g	OK
Iron	27 mg	23 mg	Under
Magnesium	350 mg	630 mg	OK
Phosphorus	700 mg	2453 mg	OK
Selenium	60 μ g	193 μ g	OK
Zinc	11 mg	28 mg	OK
Vitamins	Target	Average Eaten	Status
Vitamin A	770 μ g RAE	2485 μ g RAE	OK
Vitamin B6	1.9 mg	11.4 mg	OK
Vitamin B12	2.6 μ g	26.5 μ g	OK

Vitamin C	85 mg	323 mg	OK
Vitamin D	15 μ g	8 μ g	Under
Vitamin E	15 mg AT	15 mg AT	OK
Vitamin K	90 μ g	483 μ g	OK
Folate	600 μ g DFE	3317 μ g DFE	Over
Thiamin	1.4 mg	3.3 mg	OK
Riboflavin	1.4 mg	4.0 mg	OK
Niacin	18 mg	57 mg	OK
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