

Pregnancy Project

**By
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**March 5, 2014
Nutrition through the Lifecycle**

PART I:

I. Identifying data (1 point)

- A. First name: **Whitnee**
- B. Description of the individual: **Fun creative person, loves camping and four wheeling, wife to a hard working machine operator, experimenting in tattoo work**

II. Health history (10 points)

- A. Age: **23 years old**
- B. Previous obstetrical history, including:
 - (1) Parity and outcome: **N/A**
 - (2) Interconceptual period (if applicable): **N/A**
 - (3) Birth weights of previous infants (if applicable): **N/A**
 - (4) Children's ages (if applicable): **N/A**
 - (5) Lactation experience (always applicable): **A little from family's knowledge**
- C. Estimated delivery date: **April 28th**
- D. Laboratory data, if known - hematocrit, hemoglobin: **None known**
- E. Any illnesses/sicknesses/chronic conditions: **None**
- F. Cigarette, drug, alcohol use: **No**
- G. Previous nutritional deficiencies (prior to pregnancy): **Low Iron**
- H. Use of medications or supplements (prior to pregnancy): **None**
- I. Exercise/activity (prior to pregnancy and currently):
 - **Previous: rock climbing, yoga, walking, and jujitsu**
 - **Current: yoga, walking**
- J. Allergies, other food intolerances: **None**

III. Nutritional assessment (10 points)

- A. Obtain a 24-hour recall from your subject. Enter her diet into *ChooseMyPlate's SuperTracker*. For this section, **ATTACH 3 PRINTOUTS FROM SuperTracker WITH PART I:**
 - (1) "Food Group and Calories" Report
 - (2) "Nutrients" Report
 - (3) "Meal Summary" Report
- B. **SUMMARIZE:**
 - (1) Your subject's macronutrient distributions (%) and whether the percentages are appropriate for pregnancy based on macronutrient recommendations

Based on Whitnee's 24 hour recall, her carbohydrate intake is over the recommended level. Within this category however, she is under the recommended level for her intake in whole grains. The

recommended intake of carbohydrates for pregnant women is 50-60%. Whitnee's level is 3% over this recommended level. This is not a major concern.

Whitnee consumes approximately 100 grams of protein a day which is well over the recommended level for pregnancy of 71 grams a day. However, it serves no threat to Whitnee and her baby. Whitnee's fat level is 21% of her calories. Both her omega-3 and omega-6 are barely under the recommended amounts (10 grams of omega-6 and 1.1 grams of omega-3). It would be important to inform Whitnee on the importance of omega-6 and omega-3 in hopes to increase these values.

(2) The number of MyPlate food group equivalents your subject consumed based on her actual intake and how she is meeting (or not meeting) her personalized MyPlate food group recommended levels.

According to the MyPlate food group equivalents, Whitnee is over in refined grains and under in whole grains. Whitnee is 1 ¾ cups below the recommended amount of vegetables. Whitnee consumes enough fruits, dairy, and is under the recommended amount for oils. According to the MyPlate report, Whitnee consumed no protein in terms of whole meats. Overall she is meeting, the majority of the MyPlate food group equivalents.

(3) Your subject's actual vitamin and mineral intake and how it compares to vitamin and mineral DRIs for pregnancy (i.e. is her diet high or low in any vitamins and minerals).

High in folate
Low in Vitamin D
High in iron
Low in Vitamin A
High in Vitamin C
Low in Vitamin E
High in calcium
High in Zinc

C. Use of food assistance programs such as WIC, SNAP, food bank, church resources, etc.:

Whitnee is not involved in any of the food assistance programs. However, being a young married couple, it might be beneficial to inform her on the purpose of these programs and possible opportunities with them.

D. Current use of prenatal or vitamin/mineral supplements:

Yes, Whitnee is taking an Kroger brand pregnancy supplement.

E. Estimated percentage of income spent on food:

Whitnee believes they spend an average of 5% of their income on food. They are both young college aged students so this amount is on the lower end.

F. What are your subject's cooking and eating habits:

"As healthy as I can. Lately, I've enjoyed pasta and vegetables." From my observation, Whitnee enjoys eating healthy. She and her husband prepare most of their meals.

IV. Weight graphed (4 points)

A. State:

(1)Pre-pregnancy weight: **175 lbs**

(2)Height (in or cm): **6'2"**

(3)Pre-pregnancy Body Mass Index (BMI): **22 (Normal)**

- B. **Plot Weight Gain:** Using the *Baby Your Baby* charts (posted on the *BYU Learning Suite*), plot your subjects weight gain on the graph - **ATTACH PLOTTED WEIGHT GAIN GRAPH TO PROJECT.**
- C. **Interpret Weight Gain:** Compare actual weight gain to expected weight gain according to pre-pregnancy BMI. Is your subject gaining too much weight? Not enough weight? Within the recommended range?

Whitnee is gaining just barely the right amount of weight. She is within the recommended range; however, she is on the lowest end.

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.

Whitnee is on the verge of not gaining enough weight. This could result in low birth weight of the baby or preterm birth. She is within the recommended level currently so there is not a huge concern yet. However, Whitnee should be informed on this issue and be given advice how to prevent complications. I am also concerned with Whitnee's low Vitamin D intake. Her intake is significantly below the recommended levels of 600 IU/day. Whitnee should increase her weight slightly by adding on simple snack a day to boost calories. It would be beneficial for Whitnee to consume a snack high in Vitamin D such as milk as well as spending some time outside. Protein is also a concern at this time for Whitnee, she needs to increase her intake in this food group as well as vegetables. Her diet high in grains is another concern. Whitnee should consider switching some of her high grain foods for foods in either the protein or vegetable food group.

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

This being Whitnee's first pregnancy, it is important to educate Whitnee on the purpose behind the nutrition her body needs. Primarily, I would educate her on the appropriate amount of weight she needs to gain. Although she is within the recommended level, I would caution her to watch her weight as it should be increasing rapidly towards the end of pregnancy. With her vitamin D level being low, I would tell her to increase her calorie intake and vitamin D consumption through eating at least one extra snack high in vitamin D. I would explain to Whitnee how vitamin D is important for her baby's fetal bone development. I also plan to educate Whitnee on the purpose of WIC, as I propose she and her family may qualify for some of its benefits. Another area I would like to address with Whitnee is information on the benefits of breastfeeding. She has heard a little information from family members; however, I feel it would be beneficial to teach her about the concept of latching on, different stages of milk production, and the benefits that come to her and her baby from using breast feeding.

PART II (Complete Section I – II):

- I. **Education (5 points):** 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). Summarize (1-2 paragraphs) what you discussed with your subject.

Whitnee is getting ready to pop. As she is getting towards the end of her pregnancy, I feel it is important to pick only a few topics that would be of the most important to her during this time in her pregnancy. The first topic I emailed her about was information on her weight gain. I informed her that during her initial assessment, Whitnee was on the verge of not gaining enough weight. I explained how failure to gain enough weight during pregnancy could potentially lead to low birth weight of the child or even preterm birth. Thankfully, she

is almost to the end of her term and she will just be informed to be cautious and she will have this information for the future. Another topic I addressed in the email was Whitnee's Vitamin D intake. Although her 24 recall only represents one day of her typically diet, I wanted her to be cautious about this vitamin. In order to sum up this information, I provided Whitnee a few simple snacks she could eat that would boost her Vitamin D intake such as milk and graham crackers or adding mushrooms to meals because of their high Vitamin D content. The last topic I addressed in Whitnee's email address was her low intake of vegetables and excessive intake in grains. I wrote to Whitnee that this is typically of an American diet and how she can make simple changes to replace refined grains with various, nutrient filled vegetables. I explained how humus can be a delicious snack with various vegetables such as carrots or celery if the taste of vegetables is not her favorite. Doing this would also help her boost calories and keep her weight gain within the recommended level.

I also felt it was important to inform Whitnee on WIC because even though she is nearing the end of her pregnancy, she and her husband still have the potential to receive help from WIC as she has a newborn infant. Although I said I do not know for sure, I believe she could potentially qualify and it would not hurt to look into the program.

- II. **Reflection (5 points):** Write 1-2 paragraphs about your overall impressions of how your subject received your advice (e.g., do you think she will follow your advice? Why or why not?). Also describe how you could have improved the education you gave.

I think Whitnee is ready to meet her daughter and I get the impression that she is not as concerned about nutrition as she originally was at the beginning of her pregnancy. This does not necessarily mean she is ignoring nutrition, but I believe she will casually remember my advice instead of fully implementing the topics I taught because she is close to labor. She said thanks for the creative snack ideas and she seemed willing to look into WIC and stated she had not previous thought of it before.

I think I could have improved the information I gave Whitnee by double checking I taught everything with the simplest tone—without demeaning—in order to make the clearest understanding of goals for nutrition during pregnancy.