

Brigham Young University

Pregnancy Project

The purpose of this project was to provide students with a “real-life” experience to enhance skills in assessing the nutritional status of a pregnant woman and in providing appropriate recommendations for dietary improvement based on nutrient requirements during pregnancy. The assignment included interview a “patient” to get a clinical history, completing and analyzing a 24-hour recall, and offering advice to the patient.

I. Identifying data

First name: Charity

Description of the individual: A BYU student majoring in elementary education who is expecting her first child. She is currently doing her student teaching, is very busy and says she does not have a lot of time for herself.

II. Health history

- A. Age: 25
- B. Previous obstetrical history:
 - parity and outcome: 0 (first pregnancy)
 - interconceptual period: N/A
 - birth weights of previous infants: N/A
 - children's ages: N/A
 - lactation experience: None
- C. Estimated delivery date: April 16
- D. Laboratory data, if known - hematocrit, hemoglobin: Unknown
- E. Any illnesses/sicknesses/chronic conditions: None
- F. Cigarette, drug, alcohol use: None
- G. Previous nutritional deficiencies: None
- H. Use of oral contraceptives, other medications: Oral contraceptives from June 2008-March 2010
- I. Exercise/activity: 45 minutes, twice a week
- J. Allergies, other food intolerances: None

III. Nutritional assessment

Macronutrient distribution was fairly good. Protein was at about 15%, carbohydrates 64% and fat at only 21% with 9% coming from saturated fat. However, there was not a lot of variety in the diet and the intake of fruits and vegetables was very low as was meat and bean intake.

Micronutrient intake was fairly good. Vitamin C was slightly low, meeting only 72% of RDA and folate was almost at the 600 mcg recommended. All other B vitamins and fat soluble vitamins were at the recommended amount. Some less common minerals such as copper, zinc and iodine were showing as low, though it could be due to insufficiencies in the twenty four hour recall.

Use of supplemental foods, WIC, food stamps, food pantry, church resources, etc: No

Prenatal or Vitamin/mineral supplements: Yes

Estimated percentage of income spent on food: 20%

Cooking, eating habits: She does not have a lot of time to cook and her husband enjoys cooking so he makes food, often with some type of cheese in it because he likes cheese. When he does not have time to cook they eat with his brother. She always makes sure to eat breakfast, though sometimes it is not until 10:00 am, and usually eats something quick, like a muffin, in class. She eats lunch around 11:30 am, eats a snack in the

afternoons, then eats dinner later in the evening. She says she feels like she is always eating.

IV. Weight graphed

State pre-pregnancy weight and Body Mass Index (BMI): 145 lbs, BMI of 25.7

The weight gain patterns are somewhat concerning. Within the first couple months of pregnancy her weight jumped five pounds, then a month or two later went back down in to the normal weight gain range, only to increase 3-4 pounds above the recommended range by the sixth month of pregnancy. She is not sure what she currently weighs, so she may be back in the normal range, but it seems she increases and decreases in weight frequently rather than steadily gaining as is recommended.

V. Nutritional care plan

The most concerning thing currently is the lack of fruits, vegetables and meat in her diet. Fruits and vegetables would be a lower calorie source of carbohydrate which could possibly help normalize her weight gain. They would also provide an excellent source of vitamins and minerals which would be helpful for both the mother and growing fetus. It is also important that the mother be consuming adequate amounts of protein to help meet the needs of a growing baby and also to insure she is getting enough iron. More meat, and possibly even more red meat, would help achieve this. In addition it may be beneficial for the mother to make eating more of a priority. Meals are often sporadic and rushed, which this could be part of the reason she is low in these three areas; all of the foods she does not eat are foods that are often more time consuming to prepare. By making time to eat she may possibly naturally increase her consumption of fruits, vegetables and meats just because she will not be having to eat things on the go all the time.

The first priority is to encourage her to make eating a priority because it seems that it would naturally correct the areas she needs improvement in. Next I would like to talk to her about how well she is doing meeting all of her nutritional needs (RDAs) and that by eating fortified cereal and drinking milk she is getting more than adequate amounts of many important nutrients. Then I would talk to her about the importance of protein and iron and how beneficial it would be to increase her meat and bean consumption. I would then talk to her about the importance of trying to add more fruits and vegetables in. She already tries to eat some each day, so I would talk to her about possibly increasing the quantity or frequency each week. At the same time I would explain to her weight gain trends and the benefits of not gaining excess weight during pregnancy and show how vegetables and fruits can be helpful by providing a low calorically dense food full of important nutrition. I would then ask her which of the benefits we talked about in the whole session interested her and discuss with her ways she could possibly implement those goals which are most important to her, ending by making a plan with her to accomplish the goals she had interest in.

Data Reported by Patient

Nutritional assessment

24-Hour Recall as reported by patient

Usually:

Breakfast: Usually I eat this as I run out the door, so it usually involves a bowl of cereal (about 2 cups of cornflakes and 2 cups milk), or 1 cup yogurt and 1/2 cup granola.

Morning snack: 1 small muffin

Lunch: 1 fruit or veggie (ie. 1 carrot, 1 orange, 1 cup pineapple, etc), and leftovers (usually about 2 cups worth of rice and beans, thai curry, alfredo and noodles, or some kind of soup)

Snack: 1 cup cornflakes and 1/2 milk

Dinner: 2 cups rice and beans, thai curry, alfredo and noodles, or some kind of soup

Water: 4 cups

Today:

3 cups cornflakes, 4 cups milk, 1 cup rice and beans, 1 cup pineapple, 1 fish taco (3 fish sticks, 1 tortilla, 1/2 pico de gayo), 1 eggroll, 3 cream cheese wantons, 4 cups water, 1 cupcake

Cooking, eating habits

Honestly, I don't cook very much. My husband loves to cook, so I let him do the cooking and I wash the dishes. :) He loves cheese, so the food he makes usually has some form of cheese in it. However, he's been really busy lately with school, so we eat over at his brother's house. . .and they do the cooking! :) Anyway. . . I always eat breakfast, sometimes eat around 10, (if I can do it without being noticed at school). :), lunch around 11:30, then a snack when I get home from school, and again when I eat dinner. I eat a lot it seems.

Pre-pregnancy weight and current weight

Umm. . . I'm not sure exactly. But I started off around 145, went up to 150 shortly after I got pregnant, then dropped down to 148 by the 3rd month. I stayed there until the end of month 4, and then jumped up to 160 by the beginning of the 6th month. (it was all Christmas . . . I couldn't stay away from the chocolate! :)) But I'm getting better at not eating it now. :))

65.9 kg 1.6 m