

I. Identifying data

Katelyn has finished school and works part-time ~15hrs/week in maintenance/office-work at Canyon Terrace housing complex. Towards the beginning of her pregnancy she had Mono and felt nauseated. She is trying hard to exercise lately.

II. Health history

24 year-old-female. No previous obstetrical history. Expected delivery date is May 10th. No previous illnesses/sicknesses/chronic conditions, although she reported having a cold a couple weeks ago. Katelyn said her doctor told her gestational diabetes was normal, but could not recall any lab values. No reported cigarette, drug, or alcohol use. No nutritional deficiencies prior to pregnancy. Katelyn and her husband had stopped taking birth control, and doctor recommended her taking prenatal vitamin. She was taking ½ prenatal vitamin because it was causing her to feel sick. Doctor had told her she was a little anemic as a result of pregnancy, but nothing to worry about. No reported use of medications or supplements prior to pregnancy, except for allergy medicine. Katelyn has seasonal and animal (cat, dog) allergies, but no food intolerances. Prior to pregnancy and wedding planning, Katelyn had gone to the gym regularly to work out. Towards the beginning of her pregnancy Katelyn was doing yoga on and off, and is currently trying to walk for exercise.

III. Nutritional assessment

See *Choose My Plate's Super Tracker* attachments

Katelyn does not participate in food assistance programs such as WIC, SNAP, food bank, church resources, etc. She understands she shouldn't go longer than three hours without eating, and takes a prenatal vitamin everyday. Katelyn doesn't like to cook but prepares food for her and her husband. They occasionally go to Wendy's to get a frosty, but they are trying to be healthier overall. Reported percentage of income spent on food was 30-40%.

(1) Macronutrient distributions

Carbohydrate target: 175 g. Average eaten 313g – acceptable.

Protein target: 10-35% calories. Average eaten 15% calories – acceptable.

Fat target: 20-35% calories. Average eaten 30% calories – WNL.

(2) *MyPlate* food group equivalents

Total grain intake was low (7 oz < 8 oz), consuming less whole grains and more refined grains.

Vegetable intake was acceptable (3 cups). Red & orange consisted of majority of vegetable consumption. No reported intake of dark green, beans & peas, and starchy vegetables.

Fruit intake was low (¾ cup < 2 cups), with no specific target for whole fruit vs fruit juice.

Dairy intake was over (3 ½ cups > 3 cups), with no specific target for milk & yogurt vs cheese.

Low protein intake (1 ½ oz < 6 ½ oz recommended). No specific target source.

Total caloric intake of 2175 kcal acceptable compared to total allowance of 2400 calories. High intake of empty calories (776 kcal > 330 kcal).

(3) Vitamins and minerals

Based on po intake only. Katelyn is taking a prenatal vitamin qd.

Linoleic acid, linolenic acid nutrient intake low

Potassium, Iron, vit D, E, K, choline nutrient intake low

IV. Weight graphed

Pre-pregnancy weight: 135#. CW: 150#. Ht: 5'6". BMI: 21.7 pre-pregnancy.

Katelyn is a little over 30 weeks into her pregnancy. She reported she did not gain a lot of weight in the first couple of months, but doctor told her that was okay. She has not lost any weight, and tries to eat an additional 300 calories every day.

Pre-pregnancy BMI 21.7, recommended weight gain 25-35#

1-4# total during first 3 months (first trimester). 2-4# per month during 4th to 9th month (second, third trimester)

Weight gain is inadequate according to pregnancy weight gain chart in pounds.

V. Nutritional care plan

- A. Summarize 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.

Nutrient requirements increase during pregnancy and lactation in order to maintain the mother's health and support the child's development. Based on her 24-hr recall, Katelyn has a low total grain, fruit, and protein intake. Katelyn also has inadequate weight gain for pre-pregnancy BMI related to 2175 kcal intake < 2400 kcal allowance. It is important to get additional calories so her weight gain will increase.

Long-chain polyunsaturated fatty acids (LC-PUFAs) are necessary for infant cognitive development. Linoleic acid and linolenic acid intake is low. The major LC-PUFAs, docosahexaenoic acid (DHA) and arachidonic acid (AA), may be derived directly from the diet or from the precursors α -linolenic acid (ALA) and linoleic acid (LA). The main dietary source of DHA is oily fish.

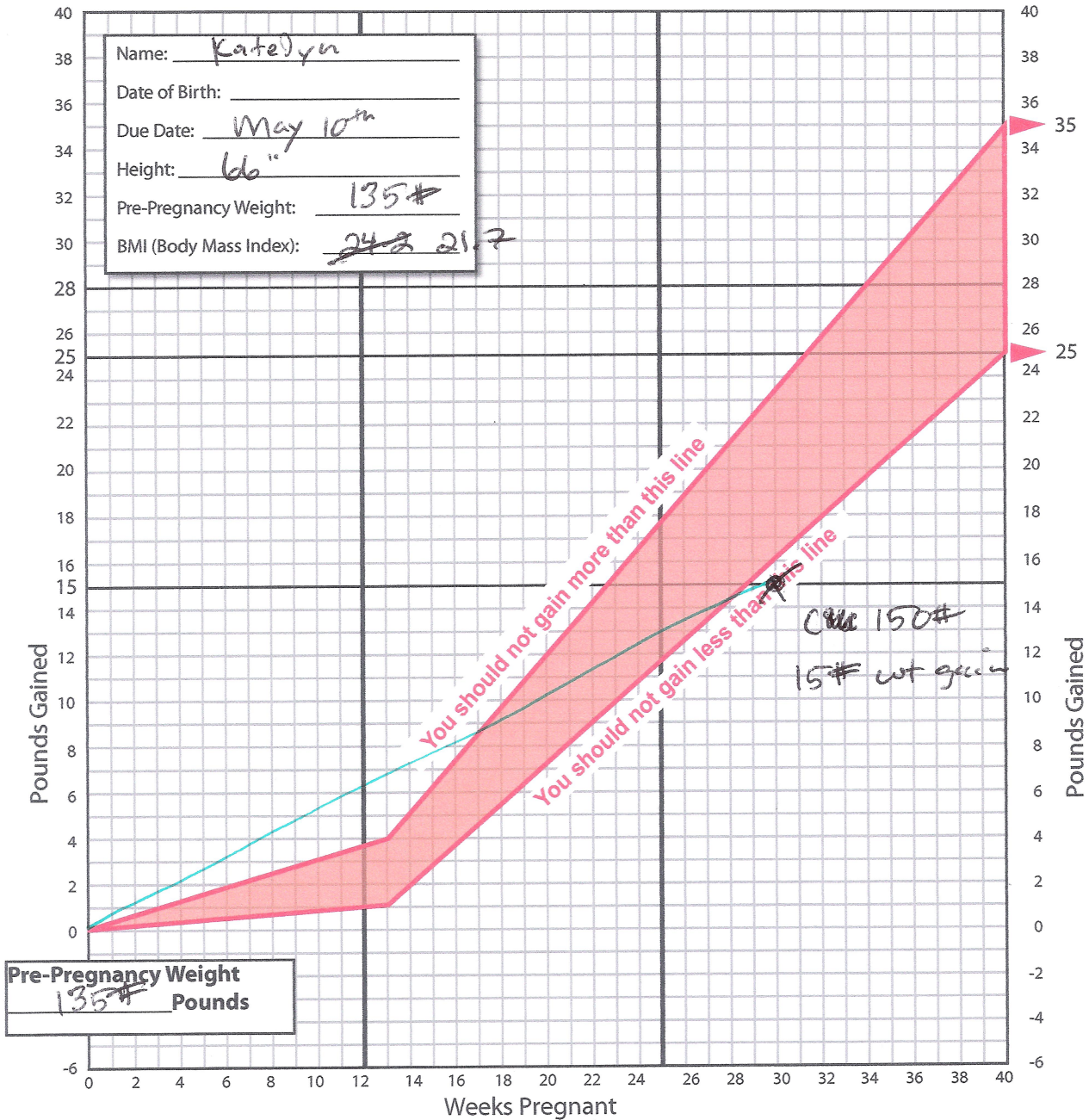
- B. Explain any recommendations, suggestions, and education you plan to give this subject and rationale.

Recommend eating more nutrient dense foods—whole grains and fruits. Recommend eating less processed meats e.g. pepperoni, and eat more lean meats e.g. chicken, poultry. Eat larger portions at meals and more snacks throughout the day to make up the additional 300 calories needed per day during pregnancy. Recommend eating 4 oz fish x2 per week. Keep in mind to eat <12 oz per week (<6 oz per week of canned white "albacore" tuna; <12 oz per week canned light tuna is ok). Continue to take an approved prenatal vitamin to meet additional nutrient needs of the baby.

Pregnancy Weight Gain Chart in Pounds

Pre-pregnancy BMI **18.5-24.9, 25-35 pounds**

If your pre-pregnancy BMI is between 18.5 and 24.9, then the recommended weight gain range for your pregnancy is 25 to 35 pounds. The red area shows the weight gain recommendation.



You have gained too little weight if:

- Your weight gain is below the red area of 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 red 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



Katelyn's Food Groups and Calories Report 03/05/13 - 03/05/13

Your plan is based on a **2400 Calorie** allowance during your 3rd trimester of pregnancy.

Food Groups	Target	Average Eaten	Status
Grains	8 ounce(s)	7 ounce(s)	Under
Whole Grains	≥ 4 ounce(s)	2 ounce(s)	Under
Refined Grains	≤ 4 ounce(s)	5½ ounce(s)	Over
Vegetables	3 cup(s)	3 cup(s)	OK
Dark Green	2 cup(s)/week	0 cup(s)	Under
Red & Orange	6 cup(s)/week	2¼ cup(s)	Under
Beans & Peas	2 cup(s)/week	¼ cup(s)	Under
Starchy	6 cup(s)/week	0 cup(s)	Under
Other	5 cup(s)/week	¾ cup(s)	Under
Fruits	2 cup(s)	¾ cup(s)	Under
Whole Fruit	No Specific Target	¾ cup(s)	No Specific Target
Fruit Juice	No Specific Target	0 cup(s)	No Specific Target
Dairy	3 cup(s)	3½ cup(s)	Over
Milk & Yogurt	No Specific Target	2 cup(s)	No Specific Target
Cheese	No Specific Target	1½ cup(s)	No Specific Target
Protein Foods	6½ ounce(s)	1½ ounce(s)	Under
Seafood	10 ounce(s)/week	0 ounce(s)	Under
Meat, Poultry & Eggs	No Specific Target	1½ ounce(s)	No Specific Target
Nuts, Seeds & Soy	No Specific Target	0 ounce(s)	No Specific Target
Oils	7 teaspoon	0 teaspoon	Under
Limits	Allowance	Average Eaten	Status
Total Calories	2400 Calories	2175 Calories	OK
Empty Calories*	≤ 330 Calories	776 Calories	Over
Solid Fats	*	448 Calories	*
Added Sugars	*	328 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.

Katelyn's Nutrients Report 03/05/13 - 03/05/13

Your plan is based on a **2400 Calorie** allowance during your 3rd trimester of pregnancy.

Nutrients	Target	Average Eaten	Status
Total Calories	2400 Calories	2175 Calories	OK
Protein (g) ^{***}	71 g	79 g	OK
Protein (% Calories) ^{***}	10 - 35% Calories	15% Calories	OK
Carbohydrate (g) ^{***}	175 g	313 g	OK
Carbohydrate (% Calories) ^{***}	45 - 65% Calories	57% Calories	OK
Dietary Fiber	28 g	29 g	OK
Total Fat	20 - 35% Calories	30% Calories	OK
Saturated Fat	< 10% Calories	12% Calories	Over
Monounsaturated Fat	No Daily Target or Limit	11% Calories	No Daily Target or Limit
Polyunsaturated Fat	No Daily Target or Limit	4% Calories	No Daily Target or Limit
Linoleic Acid (g) ^{***}	13 g	10 g	Under
Linoleic Acid (% Calories) ^{***}	5 - 10% Calories	4% Calories	Under
α -Linolenic Acid (g) ^{***}	1.4 g	0.7 g	Under
α -Linolenic Acid (% Calories) ^{***}	0.6 - 1.2% Calories	0.3% Calories	Under
Omega 3 - EPA	No Daily Target or Limit	1 mg	No Daily Target or Limit
Omega 3 - DHA	No Daily Target or Limit	0 mg	No Daily Target or Limit
Cholesterol	< 300 mg	141 mg	OK
Minerals	Target	Average Eaten	Status
Calcium	1000 mg	1587 mg	OK
Potassium	4700 mg	3058 mg	Under
Sodium ^{**}	< 2300 mg	4228 mg	Over
Copper	1000 μ g	1643 μ g	OK
Iron	27 mg	26 mg	Under
Magnesium	350 mg	361 mg	OK
Phosphorus	700 mg	1663 mg	OK
Selenium	60 μ g	94 μ g	OK
Zinc	11 mg	17 mg	OK
Vitamins	Target	Average Eaten	Status
Vitamin A	770 μ g RAE	1067 μ g RAE	OK
Vitamin B6	1.9 mg	3.2 mg	OK
Vitamin B12	2.6 μ g	9.0 μ g	OK

Vitamin C	85 mg	129 mg	OK
Vitamin D	15 μ g	9 μ g	Under
Vitamin E	15 mg AT	9 mg AT	Under
Vitamin K	90 μ g	89 μ g	Under
Folate	600 μ g DFE	1191 μ g DFE	Over
Thiamin	1.4 mg	2.3 mg	OK
Riboflavin	1.4 mg	3.6 mg	OK
Niacin	18 mg	37 mg	OK
Choline	450 mg	248 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.

Meals from 03/05/13 - 03/05/13

Katelyn's Meals

Your plan is based on a **2400 Calorie** allowance during your 3rd trimester of pregnancy.

Date	Breakfast	Lunch	Dinner	Snacks
03/05/13	<ul style="list-style-type: none"> ▪ 1 cup Kellogg's Raisin Bran Cereal ▪ 1 cup Milk, low fat (1%) 	<ul style="list-style-type: none"> ▪ 1 large slice Bread, French or Vienna ▪ 1½ slice (1 oz) Cheese, Cheddar ▪ 4 slice (1-3/8" across x 1/8" thick) Pepperoni ▪ 1 cup Spaghetti sauce (marinara), meatless 	<ul style="list-style-type: none"> ▪ ½ large (3-1/16" across) Orange, raw ▪ 1 salad Taco or tostada salad with beef, beans and cheese, fried flour tortilla 	<ul style="list-style-type: none"> ▪ 2 medium (2-5/8" across) Cookies, oatmeal ▪ 2 cup Fruit flavored drink, from powdered mix (Kool-Aid, Lemonade from mix) ▪ 1 Quaker Oats or Nature Valley bar Granola bar, oats, fruit and nuts, lowfat ▪ 1 cup Honey Nut Cheerios Cereal ▪ 1 cup Milk, low fat (1%)

A.

Katelyn's total grain intake was low, consuming less whole grains and more refined grains. Fruit and protein intake was low. Vegetable intake was acceptable. Red & orange consisted of the majority of vegetable consumption. Total caloric intake of 2175 kcal acceptable compared to total allowance of 2400 calories, with high intake of empty calories (776 kcal > 330 kcal). Linoleic acid, linolenic acid, potassium, iron, vit D, E, K, choline nutrient intake was low.

Some recommendations made were to eat more nutrient dense foods. Recommend eat more whole grains, fruits and dark leafy green vegetables. Recommend eat less processed meats e.g. pepperoni, and eat more lean meats e.g. chicken, poultry. This will increase protein intake and decrease empty caloric consumption. Recommend eating <12 oz/week of fish and <6 oz/week of canned "white" albacore" tuna. Canned light tuna is okay to consume <12 oz/week. This will increase intake of essential fatty acids linoleic acid and linolenic acid. Recommend continue to take approved prenatal vitamin to meet additional nutrient needs of baby.

Lastly, it was explained that her weight gain was inadequate according to the pregnancy weight gain chart in pounds. It was recommended to eat larger portions at meals and more snacks throughout the day to make up additional 300 calories needed per day during pregnancy related to 2175 kcal intake < 2400 kcal allowance.

B.

During the 1-week follow up, Katelyn explained that it was difficult to remember to do all the things I had mentioned the last time I met with her. Her and her husband were comfortable in their lifestyle and making conscience decisions to change habits is a long process. Adding fish to their diet, for instance, was more difficult to incorporate. Katelyn was trying to eat larger portions and more snacks throughout the day so that she could have a healthy weight gain. This was difficult at times because she doesn't eat too much to begin with. I believe she better understands the importance of eating healthier, especially since she is pregnant and has to take care of two. If I were to redo part 2, I would better explain how to increase whole grain, fruit and dark leafy green vegetable intake by using myplate to show examples and portions sizes.