



New Meal Plan

10:00 am: 2 medium slices of whole wheat toast
1 tbsp strawberry jelly
2 scrambled eggs
1 cup of low fat vanilla yogurt
1 cup of fresh strawberries
½ cup of frozen blackberries, unsweetened
2 tbsp low fat granola cereal
16 oz Water



12:00 pm: 1 Fuji apple
3 tbsp smooth peanut butter
8 oz Water

3:30 pm: 8 oz Water
3 cup of fresh spinach
1 oz grated cheddar cheese
2 tbsp of fat free ranch dressing

5:00 8 oz fortified orange juice
1 oz dried walnuts



6:30 pm: 16 oz Water
4 oz yellow fin tuna
1 cup low sodium black beans
1 cup long grain brown rice
1 cup of broccoli
1 cup diced tomatoes
2 flour tortillas



8:00 pm: 3 small chocolate chip cookies
1 cup of 1% milk
8 oz Water



10:00pm: 16 oz Water

Rationale and Recommendations

After reviewing Justice Nepper's twenty-four hour recall I was sure that it wasn't going to meet her nutrient requirements for pregnancy. However, I delightfully surprised to see that many of her vitamin and mineral needs were met and exceeded. She was deficient in only vitamin B6, vitamin D, vitamin E, magnesium, and potassium. The levels for vitamin A, folate, zinc, and iron were just a little low along with her omega-6 fatty acid levels. Her sodium levels were a little high (514%) as well as her kilocalorie levels (153%). It is important for her to not eat too many calories at this point because she has already gained a sufficient amount this far in her pregnancy.

Justice is 5'3" and weighed 115 pounds before her pregnancy. Her pre-pregnancy BMI is 20.4 which is considered to be normal. For her BMI it is recommended that she gain 25-35 during the course of her pregnancy. The appropriate amount of weight that she should have gained at 31 weeks of pregnancy is 17.5 lbs. She currently weighs 150 lbs and has gained 35 lbs so far which means she no longer needs to gain any more weight. So it is important not to overload her on calories but still maintain a healthy diet to meet nutrient requirements.

When writing her new one day meal plan I tried to include foods that she ate during her recall while including a more diverse selection. I also wanted to include a sufficient amount of water. For breakfast she ate toasted white bread with butter and had a cup of milk. My goal was to have her breakfast be as nutritious and filling as possible. At this stage in her pregnancy she needs ample energy to begin her day and having toast with butter is not enough and hardly nutritious. Instead, I'm prescribing whole wheat toast with a couple of teaspoons of strawberry jelly.

Whole wheat bread contains many vitamins and minerals, such as vitamin B6, that are stripped away in the processing of white bread. In fact, she did not fully meet her requirements for B6 in her recall. By switching to whole grains for her improved plan (and including other foods rich in B6) her vitamin B6 intake improved dramatically and is no longer an issue. Eating whole grains also improves her iron. Aside from switching to whole grains I added more fruit to her breakfast which is to be eaten with low fat yogurt and granola. To make the most out of the morning I also added scrambled eggs which helped with vitamin B6, vitamin A, folate, and iron levels. Since her breakfast also contains a good amount of strawberries she is able to get 84.67 mg of vitamin C. This vitamin is actual able to triple iron absorption and is an antioxidant.

For a midmorning snack I chose one Fuji apple, peanut butter, and water. I would hope that eating an apple with peanut butter is a delicious way to obtain more iron. It doesn't contain much but it sure does help. Following her snack is a rather small lunch. Since her first meal contains so much food I figured a light lunch would be refreshing. During her recall she only had one apple, Doritos, and a slice of cheese for lunch. This made is quite easy to improve this meal. It appears that she likes a small, simple lunch so I prescribed a salad containing spinach, shredded cheddar cheese, and light ranch dressing.

This lunch may be small but it is packed with much needed calcium, iron (about 6.60 mg), folate (191 mcg), and vitamin B6. Folate is extremely important especially during the first trimester of pregnancy and is necessary for cell division and growth. Inadequate levels can cause three different types neurotube defects and is also important for the conversion of homocysteine to methionine. This lunch is also high in iron. Iron is essential in preventing iron-deficiency anemia and is important for mother and fetal health. The mother needs to consume enough iron so that the fetus can have adequate iron stores by the time the baby is born.

A couple hours later I added another small snack: walnuts and orange juice fortified with vitamin D and calcium. I chose walnuts because they contain essential fatty acids and 27.79 mcg of folate per ounce and I chose fortified orange juice because it gives her 2.49 mcg of vitamin D, 81.92 mg of vitamin C and 351.08 mg of calcium (which is about 66mg more than a glass of 2% milk). Having enough calcium during pregnancy is very important. Without an adequate supply the mother's body will begin to take calcium out of her bones. This can cause the mother to have increased levels of lead in her blood which is harmful to the fetus. It is especially important for Justine to maintain an adequate intake of calcium during pregnancy because she is under 25 years old and her bones need calcium deposits.

An hour and a half later I scheduled a decent dinner featuring yellow fin tuna, low sodium black beans, brown rice, and diced tomato on a flour tortilla with a side of broccoli. The tuna contains 33.99 grams of protein which is a great source considering pregnant women require 71 grams every day. Protein is essential for maintaining and building new cells and tissue. This meal also contains 120 mg of omega 3 fatty acids. It is recommended that women eat 300 mg per day because it is essential for neurodevelopment, vision, vitamin absorption, and decreases the risk of preterm birth and depression. For dessert I thought that Justice deserved to have some cookies and milk.