

Week 3 Assignment 2 Case Study Teenager with Celiac Disease

Case Overview

Janie Mullen, a 13-year-old, was recently diagnosed with celiac disease. Janie's mother approached a pediatric endocrinologist approximately two months ago because of delayed puberty and osteopenia/osteoporosis. Janie complained of fatigue, but otherwise denied having any other pain or symptom. However, she did report mild constipation: 1 BM every other day.

Medical history showed that she was diagnosed with hypercalciuria approximately one year ago, and has had two bone fractures in the past three years. She has a strong family history of osteoporosis. She is on a high fluid, low sodium diet (2000mg/day) to help control hypercalciuria. Medications include urocit-K and a daily multivitamin. Her height is 63 $\frac{3}{4}$ inches and her weight is 120 lbs. Her UBW (four months ago) was 117 lbs.

Serological testing for gluten intolerance was performed to rule out underlying celiac disease, which may cause osteopenia as the result of nutrient malabsorption (calcium, vitamin D, iron, folate, vitamin B12). She tested positive for celiac disease.

Since then, her mother has been actively seeking nutrition information from all sources, including the internet. They report that they are confused by the information they have read, especially regarding questionable food additives (hidden gluten in foods), label reading, and shopping for "safe foods". Her mother has also reported that Janie's attitude has changed since her celiac diagnosis. She appears resistant, almost angry, about needing to follow the diet restrictions. They ask if there will come a time when Janie can tolerate gluten in her diet. Janie's mother requests a referral for psychological counseling for her daughter.

They are also worried about Janie's maternal aunt who has osteoporosis and may have undiagnosed celiac disease. Janie has an older teenage sister, and the family has been doing their best to avoid cross-contamination of gluten containing foods at home. The nutritionist will cover the importance of obtaining all of the nutrients and protective factors from a healthy diet, even when many grains are restricted.

As Janie's nursing professional, your role is to understand her nutritional risk factors and reinforce her diet teaching. After reading the case study, answer the following questions:

1. Write a nutrition action plan for Janie on coping with celiac disease. What are the things that Janie will need to be careful about as she goes about her regular lifestyle? Determine at least seven points about the gluten-free diet that should be discussed with Janie and her mother.
2. Help Janie and her mother remake Janie's diet. Describe in one or two paragraphs the rationale for including the gluten-free foods that you have selected for Janie.

Below is Janie's 24-hour recall:

Janie's 24-hour recall	Your gluten-free makeover diet
<p><u>Breakfast</u> 1 slice of toast w/1T peanut butter 12 oz 2% milk w/Carnation Instant Breakfast ½ large banana</p>	
<p><u>AM Snack</u> 1 Granola bar</p>	
<p><u>Lunch</u> 1 Cheeseburger 4 oz French fries 12 oz Coke</p>	
<p><u>PM Snack</u> 1 medium apple ¾ trail mix</p>	
<p><u>Supper</u> Spaghetti (¾ cup spaghetti noodles, ½ cup homemade meat sauce) 2 pieces garlic bread 2 cups vegetable salad w/dressing ½ cup steamed broccoli ¾ cup 2% milk</p>	
<p><u>Dessert</u> ½ cup low-fat ice cream</p>	