**Questions for *Medical Nutrition Therapy: A Case Study Approach* 5th ed.**

**Case 1 – Pediatric Weight Management**

**Instructions: Answer the questions below. You may print your answers or e-mail them to your instructor.**

1. Current research indicates that the cause of childhood obesity is multifactorial. Briefly outline how genetics, environment, and nutritional intake might contribute to the development of obesity in children.
2. Describe one health consequence for obese children affecting each of the following physiological systems: cardiovascular, orthopedic, pulmonary, gastrointestinal, and endocrine.
3. How does Jamey's current weight status affect her risk of developing adulthood obesity?
4. Jamey has been diagnosed with obstructive sleep apnea. What is obstructive sleep apnea? Explain the relationship between sleep apnea and obesity.
5. In general, what are the goals for weight loss in the pediatric population? Are there concerns to consider when developing recommendations for an overweight child who is still growing?
6. List four recommendations that might serve as goals for the nutritional treatment of Jamey’s obesity?
7. Assess Jamey’s weight using the CDC growth charts provided (p. 8): What is Jamey’s BMI percentile? How is her weight status classified? Use the growth chart to determine Jamey’s optimal weight for her height and age.
8. Identify two methods for determining Jamey’s energy requirements other than indirect calorimetry, and then use them to calculate Jamey’s energy requirements. What calorie goals would you use to facilitate weight loss?
9. Dietary factors associated with increased risk of overweight are increased dietary fat intake and increased calorie-dense beverages. Identify foods from Jamey’s diet recall that fit these criteria.
10. Calculate the percent of kcal from each macronutrient and the percent of kcal provided by fluids for Jamey’s 24-hour recall.
11. Increased fruit and vegetable intake is associated with decreased risk of overweight. What foods in Jamey’s diet fall into these categories?
12. Use the ChooseMyPlate online tool (available from www.choosemyplate.gov; click on “Daily Food Plans” under “SuperTracker and Other Tools”) to generate a customized daily food plan. Using this eating pattern, plan a 1-day menu for Jamey.
13. Now enter and assess the 1-day menu you planned for Jamey using the MyPlate SuperTracker online tool (http://www.choosemyplate.gov/supertracker-tools/supertracker.html). Does your menu meet macro- and micronutrient recommendations for Jamey?
14. Why did Dr. Lambert order a lipid profile and blood glucose tests? What lipid and glucose levels are considered altered (i.e., outside of normal limits) for the pediatric population? Evaluate Jamey’s lab results.
15. Select two nutrition problems and complete PES statements for each.
16. What behaviors associated with increased risk of overweight would you look for when assessing Jamey’s and her family’s diets? What aspects of Jamey’s lifestyle place her at increased risk for overweight?
17. You talk with Jamey and her parents, who are friendly and cooperative. Jamey’s mother asks if it would help for them to not let Jamey snack between meals and to reward her with dessert when she exercises. What would you tell the family regarding snacks between meals and rewards with dessert after exercise?
18. Identify one specific physical activity recommendation for Jamey.
19. For each PES statement written, establish an ideal goal (based on signs and symptoms) and an appropriate intervention (based on etiology).
20. Mr. and Mrs. Whitmer ask about gastric bypass surgery for Jamey. Based on the Evidence Analysis Library from the Academy of Nutrition and Dietetics, what are the recommendations regarding gastric bypass surgery for the pediatric population?
21. What is the optimal length of weight management therapy for Jamey?
22. Should her parents be included? Why or why not?
23. What would you assess during a follow-up counseling session? When should this occur?