LEARNING OBJECTIVES

On completion of the chapter, the reader will be able to:

1. Compare and contrast marasmus and kwashiorkor.
2. Discuss the characteristics of an effective nutrition screening program.
3. Evaluate a patient’s nutritional status using the Subjective Global Assessment (SGA).
4. Evaluate a patient’s actual body weight using patient specific data, such as ideal body weight and usual body weight.
5. Determine if a child’s growth is appropriate.
6. Calculate body mass index given patient specific data and use it and waist circumference to assess nutrition status and nutrition-related risk.
7. Explain the basis for and the role of bioelectrical impedance in nutrition assessment.
8. Differentiate the role of visceral proteins (albumin, transferrin, prealbumin, and C-reactive protein) in nutrition assessment based on their half-lives, body stores, and the factors that affect their serum concentrations.
9. Discuss the risk factors for and signs and symptoms of either the deficiency or toxicity state of each of the essential trace minerals: zinc, copper, chromium, manganese, selenium, molybdenum, iodine, and iron.
10. Identify risk factors and signs and symptoms of vitamin deficiencies given patient specific information.
11. Explain the importance of essential fatty acids and carnitine in human nutrition.
12. Estimate energy requirements given patient-specific information.
13. Recommend changes to an individual’s nutrition care plan based on results from indirect calorimetry.
14. Evaluate the adequacy of an individual’s protein intake relative to usual requirements.
15. Determine the appropriate amount of fat and fiber in an individual’s diet.
17. Recommend appropriate alterations to an individual’s nutrition care plan based on expected vitamin, trace element, and electrolyte needs.
18. Identify clinically significant drug–nutrient interactions.