behavioral modifications with pharmacologic therapy in children 12 years old and older have produced mixed results referent to total weight loss maintained over a significant period of time (Barton and US Preventive Services Task Force, 2010). Programs including family-based behavioral modification, dietary modification, and exercise have been shown to be successful in reducing obesity in some children (Altman and Wilfley, 2015). Behavior modification is an important part of multidisciplinary intervention programs.

**Surgical techniques** (bariatric surgery) that bypass portions of the intestine or occlude a segment of the stomach to produce a marked diet restriction and weight loss are hazardous and cause many metabolic complications. These complications include severe water and electrolyte depletion, persistent diarrhea, vitamin deficiency, internal herniation, and fatty infiltration and degeneration of the liver. Bariatric surgery may be the only practical alternative for increasing numbers of severely overweight adolescents who have failed organized attempts to lose or maintain weight loss through conventional nonoperative approaches and who have serious life-threatening conditions. Physicians must define clear, realistic, and restrictive guidelines to apply with younger patients when surgery is considered. Candidates for surgery should be referred to centers that offer a multidisciplinary team experienced in the management of childhood and adolescent obesity. The surgery should be performed by surgeons who have participated in subspecialty training in bariatric medical and surgical care as detailed by the American College of Surgeons and the American Society for Metabolic and Bariatric Surgery.

## **Nursing Care Management**

Nurses play a key role in the adherence and maintenance phases of many weight reduction programs. Nurses assess, manage, and evaluate the progress of many overweight adolescents. They also play an important role in recognizing potential weight problems and assisting parents and adolescents in preventing obesity.

The presence of obesity may not be obvious from appearance alone. Regular assessment of height and weight and computation of the BMI facilitate early recognition of risk. Evaluation includes a height and weight history of the adolescent and family members, eating habits, appetite and hunger patterns, and physical activities.