

times more likely to become obese by 14 years old than normal weight kindergartners ([Cunningham, Kramer, and Narayan, 2014](#)).

Obesity in childhood and adolescence has been related to elevated blood cholesterol, high blood pressure, respiratory disorders, orthopedic conditions, cholelithiasis, some types of adult-onset cancer, nonalcoholic fatty liver disease (NAFLD), and type 2 diabetes mellitus. The incidence of metabolic syndrome was 30% in obese children ([Kiess, Kratzsch, Sergeev, et al, 2014](#)). Common emotional consequences of obesity include low self-esteem, social isolation, anxiety, depression, and an increased risk for the development of eating disorders ([Altman and Wilfley, 2015](#)).

Etiology and Pathophysiology

Obesity results from a caloric intake that consistently exceeds caloric requirements and expenditure and may involve a variety of interrelated influences, including metabolic, hypothalamic, hereditary, social, cultural, and psychological factors ([Fig. 16-2](#)). Because the etiology of obesity is multifactorial, the treatment requires multilevel interventions.