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Shared Risk Factors for Youth Obesity and Disordered Eating

In the last quarter century, the prevalence of obesity in children and adolescents has increased more than threefold (Ogden et al., 2006). Recent evidence suggests that prevalence rates remain high, affecting between 11% and 27% of children and adolescents depending on age and ethnicity (Ogden, Carroll, & Flegal, 2008). In addition, it is currently estimated that 30% of girls and 16% of boys in U.S. high schools suffer from disordered eating (Austin, Ziyadeh, Leliher, Zachary, & Forman, 2001). Because obesity and disordered eating and their associated morbidities often co-occur over time and share both risk and protective factors, joint prevention efforts are recommended to address the physical and mental health complications associated with these problems (Neumark-Sztainer et al., 2006; Neumark-Sztainer, Wall, Haines, Story, & Eisenberg, 2007).

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- **Poor Nutrition and Physical Inactivity.** In general, children in the U.S. do not consume the recommended daily servings of fruits, vegetables, and calcium nor do they get the recommended level of physical activity per day (Weber Cullen & Zakeri, 2004). Studies indicate that only 8% of elementary schools, 6.4% of middle or junior high schools, and 5.8% of senior high schools provide daily physical education to students (National Association for Sport and Physical Education, 2001). A recent report suggests that physical activity declines between ages 9 and 15 years to well below the recommended 60 minutes of moderate physical activity per day (Nader, Bradley, Houts, McRitchie, & O'Brien, 2008). In addition, the affordability of processed, energy-dense food may play a role in increased levels of overweight and obesity among individuals from low- and moderate-income households (Alaimo, Olson, & Frongillo, 2001; Hofferth & Curtin, 2005).

- **Body Dissatisfaction.** High percentages of adolescents have body image concerns; 46% of female adolescents and 26% of male adolescents expressed body dissatisfaction in a large population-based study (Neumark-Sztainer, Story, Hannan, Perry, & Irving, 2002). Body dissatisfaction may lead to the development of obesity due to its correlation with binge eating and lower levels of physical activity. Body dissatisfaction is also a risk factor in the development of eating disorders (Stice, 2002). In addition, dieting is often associated with body dissatisfaction and can increase the risk for binge eating and weight gain over time (Neumark-Sztainer, Story, Hannan, Perry, & Irving, 2002; Neumark-Sztainer et al., 2007; Stice, Presnell, Shaw, & Rohde, 2005).

- **Teasing and Weight Stigmatization.** Children and youth who are overweight or obese are at increased risk for teasing by peers, diminished body image, and disordered eating behaviors (Neumark-Sztainer et al., 2002). Research indicates that the degree to which a child is teased is positively related to weight concerns, loneliness, lower confidence in physical appearance, and higher preference for isolative activities which is associated with decreased levels of physical activity among overweight youth (Puhl & Latner, 2007; Storch et al., 2006). Furthermore, weight-based teasing is associated with high depressive symptoms, thinking about and attempting suicide, and the development of frequent binge eating and bulimia nervosa later in life (Eisenberg, Neumark-Sztainer, & Story, 2003; Fairburn, Welch, Doll, Davies, & O'Connor, 1997; Jackson, Grilo, & Masheb, 2000; Striegel-Moore, Dohn, Pike, Wilfley, & Fairburn, 2002).

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- **Marketing to Young Children.** Young children under the age of 8 lack the cognitive ability to comprehend commercial messages in the same way as older children and adults and are therefore especially influenced by targeted marketing and advertising (Kunkel et al., 2004). Associations have been made between the increased prevalence of childhood obesity and the emergence of targeted food advertisements directed toward children (Dietz, 1990; Horgen, Choate, & Brownell, 2001; Kunkel et al., 2004; Troiano & Flegal, 1998). Commercials for unhealthy foods and beverages are often specifically targeted toward youth, and such ads have been shown to persuade the food preference of children (Borzekowski & Robinson, 2001; Galst & White, 1967; Goldberg, Gorn, & Gibson, 1978; Kunkel et al., 2004; Taras, Sallis, Patterson, Nader, & Nelson, 1989). In addition, research suggests that marketing that objectifies girls and women may contribute to body dissatisfaction, eating disorders, low self-esteem, and depressive affect (Zurbriggen et al., 2007).

- **Home Environment.** Home environment may be influential in the prevention of obesity and disordered eating. Recent research suggests that how the family conducts its mealtimes, the regularity of family mealtimes, and the value that the family places on regular family mealtimes may be associated with improved nutrition habits and healthy weight in children and youth (Eisenberg, Olson, Neumark-Sztainer, Story, & Bearinger, 2004; Jacobs & Fiese, 2007; Kremers, Brug, deVries, & Engels, 2003). Additionally, studies indicate that regular family meals are significantly associated with lower prevalence of disordered eating behaviors among girls (Neumark-Sztainer, Eisenberg, Fulkerson, Story, & Larson, 2008). Furthermore, parental encouragement to diet has been linked to long-term increased weight and disordered eating in adolescents (Neumark-Sztainer, Wall, Story, & van den Berg, 2008).

- **Cultural and Socioeconomic Factors.** As obesity disproportionately affects low income and minority youth and their families and disordered eating behaviors are prevalent in adolescents across ethnic and racial backgrounds, research indicates that behaviors that influence weight may be embedded in the daily practices of culture and the larger socioeconomic context (Kumanyika et al., 2007; Neumark-Sztainer et al., 2002). The symbolic meaning of food and its role in celebrations provides one way for families and communities to maintain positive relationships (Fiese et al., 2002). Thus, it is essential to recognize that eating patterns, access to affordable healthy food, availability of safe environments for physical exercise, and experiences of body satisfaction are embedded in a larger socio-cultural context (Baker, Schootman, Barnidge, & Kelly, 2006; Neumark-Sztainer et al., 2002; Schwartz & Brownell, 2007).

APA acknowledges that to promote active family lifestyles, families need access to opportunities for all individuals, regardless of physical ability, to be physically active, to live in communities that provide safe spaces for physical activities, and to have access to a variety of affordable healthy foods (Sallis & Glanz, 2006). The consideration of issues related to socioeconomic status is of paramount importance when developing policies and initiatives to address weight-related concerns.

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