

## Relevant research articles

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1. Cohen ML, Tanofsky-Kraff M, Young-Hyman D, Yanovski JA. Weight and its relationship to adolescent perceptions of their providers (WRAP): A qualitative and quantitative assessment of teen weight-related preferences and concerns. *J Adolesc Health*. 2005; 163.e9-163.e16.

**PURPOSE:** To examine the relationship of body weight to satisfaction with care in adolescents, and to obtain qualitative data on preferences for general and weight-related medical care in normal weight and overweight adolescents. **METHODS:** The Weight and its Relationship to Adolescent Perceptions of their Providers survey, a 4-page questionnaire containing previously validated satisfaction scales and open-ended qualitative questions regarding health care preferences, was administered to 62 severely overweight (body mass index [BMI] 38.9 +/- 8.4 kg/m<sup>2</sup>) and 29 normal weight (BMI 22.5 +/- 4.0 kg/m<sup>2</sup>) adolescents (age 13.9 +/- 1.7 years; 57% female; 50% Caucasian, 47% African-American, 3% Hispanic). **RESULTS:** The affective subscale of the medical satisfaction scale was negatively correlated with BMI standard deviation score ( $r = -.22, p < .05$ ). Multiple regression models predicting affective satisfaction with medical care included BMI standard deviation score; however, continuity with provider appeared to be the strongest independent predictor of affective satisfaction. Fifty-five percent of participants identified their mother as the person they felt most comfortable talking with about weight, although 68% believed their provider knew the most about healthy eating. "Overweight" was identified by 47% of participants as the preferred term for heavy teens. Seventy-nine percent of overweight adolescents stated their health care provider discussed their weight with them; however, only 41% of overweight adolescents desired to discuss their weight. Compared to normal-weight adolescents, overweight teens were more likely to report that their provider raised topics of weight ( $p < .001$ ), diet ( $p < .01$ ), and exercise ( $p < .01$ ) at their last physical, and were more likely to report that they would have liked their provider to discuss diet and exercise (both  $p < .05$ ). Ten percent of overweight teens expressed concerns regarding the public location of their provider's office scale. **CONCLUSIONS:** Satisfaction with affective aspects of the provider-patient relationship is negatively correlated with BMI standard deviation score. Length of experience with one's provider is also a strong predictor of teen satisfaction with their medical care. Teens prefer the term "overweight" for those with high body weight. Sensitivity to confidentiality, privacy, and embarrassment regarding physical examination and weight are important for teen satisfaction.

2. Edmunds LD. Parents' perceptions of health professionals' responses when seeking help for their overweight children. *J Fam Pract*. 2005; 22: 287-292.

**BACKGROUND:** Childhood obesity continues to worsen and so more parents of overweight children are likely to seek help from health professionals. Attitudes and practices of primary care personnel have been sought about adult obesity, but rarely about overweight children. Parents' views in this respect have not been explored. This paper addresses that omission. **OBJECTIVES:** The aim was to explore parents' perceptions of help-seeking experiences with

health professionals. **METHODS:** This study was a qualitative investigation with parents, conducted in central and south-west England using semi-structured interviews and body shapes used as prompts. Sampling was purposive to ensure an age range of children (4-15 years). Parents of 40 children with concerns about their child's weight were interviewed in their homes. Analysis was thematic and iterative. **RESULTS:** Parents went through a complex process of monitoring and self-help approaches before seeking professional help. The responses they received from GPs included: being sympathetic, offering tests and further referrals, general advice which parents were already following, mothers were blamed, or dismissed as "making a fuss", and many showed a lack of interest. Health visitors offered practical advice and paediatric dietitians were very supportive. Experiences with community dietitians were less constructive. **CONCLUSION:** Professional responses ranged from positive, but not very helpful, to negative and dismissive. Health professionals may benefit from a better understanding of parents' plight and childhood obesity in general. This in turn may improve their attitudes and practices and encourage parents to seek help at an earlier stage of their child's overweight.

**3. Eisenberg ME, Neumark-Sztainer D, Story M. Associations of weight-based teasing and emotional well-being among adolescents. *Arch Pediatr Adolesc Med.* 2003; 157: 733-8.**

**PURPOSE:** To determine if weight-teasing predicts subsequent low self-esteem, poor body image, and depressive symptoms; and to examine two mechanisms through which early teasing may influence later emotional health. **METHODS:** A racially and socio-economically diverse sample of 2516 adolescents completed surveys for both Wave 1 (1998-99) and Wave 2 (2003-04) of the Project EAT study. Approximately one third of these were early adolescents who transitioned into middle adolescence, and two thirds were middle adolescents who transitioned into young adulthood. Multiple linear regression analysis was conducted in three stages to test Model A: the total effect of Time 1 teasing on Time 2 emotional health; Model B: Model A, mediated by Time 2 teasing and body mass index (BMI); and Model C: Model B, also mediated by Time 1 emotional health. **RESULTS:** Approximately one third of males and slightly under half of females reported that they had been teased about their weight at Time 1. Time 1 teasing predicted lower self-esteem, lower body image, and higher depressive symptoms at Time 2 for males and females in the older and younger age groups. This relationship was fully mediated, however, by Time 2 teasing and BMI, and by Time 1 emotional health. Adjusted R<sup>2</sup> statistics for the final models ranged from .11 to .36. **CONCLUSIONS:** Weight-teasing in adolescence affects emotional well-being at 5-year follow-up, and appears to function through two mechanisms. Reducing early teasing and its concurrent damages to emotional health may prevent longer-term emotional health consequences.

**4. Griffiths LJ, Wolke D, Page AS, Horwood JP. Obesity and bullying: different effects for boys and girls. *Arch Dis Child.* 2006; 91: 121-125.**

**AIMS:** To investigate whether weight category (underweight, average weight, overweight, and obese) at age 7.5 predicts bullying involvement at 8.5 years. Models were tested separately for boys and girls to investigate gender differences in association patterns. **METHODS:** Prospective cohort study in southwest England. Height and weight were measured in children at age 7.5 (n = 8210). BMI (kg/m<sup>2</sup>) was used to define underweight, average weight, overweight, and obese children, according to British age and gender specific growth reference data. Overt (n = 7083)

and relational ( $n = 6932$ ) bullying behaviour was assessed in children at age 8.5. RESULTS: After adjustment for parental social class, compared to average weight boys, obese boys were 1.66 (95% CI 1.04 to 2.66) times more likely to be overt bullies and 1.54 (1.12 to 2.13) times more likely to be overt victims. Obese girls were 1.53 (1.09 to 2.15) times more likely to be overt victims compared to average weight girls. CONCLUSIONS: Obesity is predictive of bullying involvement for both boys and girls. Preadolescent obese boys and girls are more likely to be victims of bullying because they deviate from appearance ideals. Other obese boys are likely to be bullies, presumably because of their physical dominance in the peer group.

5. Hayden-Wade HA, Stein RI, Ghaderi A, Saelens BE, Zabinski MF, Wilfley DE. prevalence, characteristics, and correlates of teasing experiences among overweight children vs. non-overweight peers. *Obes Res.* 2005; 13: 1381-92.

OBJECTIVE: Information regarding the prevalence, nature, sources, and psychosocial correlates of teasing was obtained for overweight (OV) children (10 to 14 years of age) vs. non-overweight (non-OV) peers. It was hypothesized that weight-related teasing would be negatively correlated with self-esteem in specific domains and with enjoyment of physical/social activities and positively correlated with loneliness, bulimic behaviors, body dissatisfaction, and enjoyment of sedentary/isolative activities. RESEARCH METHODS AND PROCEDURES: Teasing experiences and psychosocial correlates were assessed among OV children from a fitness camp and a demographically similar school sample of non-OV children. RESULTS: Among the OV children, appearance-related teasing was more prevalent, frequent, and upsetting, involved disparaging nicknames focusing more on weight rather than less stigmatized aspects of appearance, and more often perpetrated by peers in general rather than a specific peer. Degree of teasing within the full sample was significantly associated with higher weight concerns, more loneliness, poorer self-perception of one's physical appearance, higher preference for sedentary/isolative activities, and lower preference for active/social activities, all but the latter association holding up above and beyond actual weight status and demographics. Among OV children, teasing was associated with bulimic behaviors. Associations with type of teasing showed specificity, with weight-related teasing predicting weight and appearance variables and competency-related teasing related to social domain factors. DISCUSSION: When frequency, intensity, emotional impact, and stigmatized content are examined, findings indicate that teasing is more severe for OV children. Effective interventions are needed to help victims cope with and prevent further weight-related teasing, which may improve peer functioning, enhance weight control efforts, and reduce risk for future eating disturbance.

6. Puhl R, & Latner J. (in press). Obesity, Stigma, and the Health of the Nation's Children. *Psychological Bulletin*.

Preventing childhood obesity has become a top priority in efforts to improve our nation's public health. While much research is needed to address this health crisis, it is important to approach childhood obesity with an understanding of the social stigma that obese youth face, which is pervasive and can have serious consequences for emotional and physical health. This report reviews existing research on weight stigma in children and adolescents, with attention to the nature and extent of weight bias toward obese youth and the primary sources of stigma in their lives, including peers, educators, and parents. We also examine the literature on psy-

chosocial and physical health consequences of childhood obesity to illustrate the role that weight stigma may play in mediating negative health outcomes. We then review stigma-reduction efforts that have been tested to improve attitudes toward obese children, and highlight complex questions about the role of weight bias in childhood obesity prevention. With these literatures assembled, areas of research are outlined to guide efforts on weight stigma in youth, with an emphasis on the importance of studying the effect of weight stigma on physical health outcomes and identifying effective interventions to improve attitudes.