Obesity and It’s Mental Effect on Family Members of Obese Patients: A Case Report

Rashmi Jain*
PC2 Scientific Services (P) Ltd, India

*Corresponding author: Rashmi Jain, 41-C, Vyanktesh Nagar Extension, Airport Road, Indore, Madhya Pradesh -452001, India
Submission: April 26, 2018; Published: August 17, 2018

Abstract
Childhood fat could also be a growing concern, and whereas progress has been created to grasp the association between multiple biological factors (i.e., genetics, nutrition, exercise etc.), little or no is known regarding the affiliation between status and childhood fat. Throughout this paper, we offer a review of current proof regarding the association between status and childhood fat. A scientific literature search of peer-reviewed, English-language studies written between Gregorian calendar month 2000 and Gregorian calendar month 2011 was undertaken and resulted in 759 distinctive records, of that 345 full-text articles were retrieved and 131 articles were surrounded. A theoretical model is projected to organize the paper and mirror this state of the literature and includes psychological factors (i.e., depression and anxiety, vanity, body discontent, intake disordered symptoms, and emotional problems); psychosocial mediating variables (i.e., weight-based teasing and concern regarding weight and shape), and health factors (i.e., quality of life and resiliency/protective factors). We’ve a bent to conclude with form of recommendations to support the creation of solutions to the rise in childhood fat rates that do not additional interact overweight and weighty youngsters and youth which can most likely improve the well-being of all youngsters and youth in spite of their weight standing.

Introduction
Obesity, a state of excess body fat, is often assessed victimisation the body mass index (BMI), a magnitude relation of weight (kg) to height (m²), and a BMI of over 30kg/m² is taken into account rotund [1]. In youngsters, the BMI is aforethought on growth charts for interpretation relative to a healthy reference population and percentiles square measure then accustomed outline rotund (>95th percentile) and overweight (>85 percentile) [2]. The prevalence of fat and overweight among youngsters has shown dramatic will increase over the past twenty five years [3]. Whereas recent analyses counsel that rising childhood fat rates could also be levelling off [4], over 1/3 of youngsters below the age of eleven in North American country square measure either overweight or rotund [5-7]. Most efforts to “reverse the epidemic of obesity” [8] have centered on nutrition or food intake and physical activity levels with the live of success being hatted weight or BMI. To date, the speed of effectuality of this hindrance approach is twenty first [9] suggesting the requirement to go looking for extra ways that to intervene. One space that has nevertheless to receive purposeful examination is however mental state might influence or be influenced by efforts at preventing fat. The aim of this paper is to supply an outline of analysis linking mental state indices to fat and to challenge this notion that hindrance ought to focus exclusively on nutrition, weight, and physical activity.

Literature Review
A systematic literature search of peer-reviewed, English-language studies revealed between Gregorian calendar month 2000 and Gregorian calendar month 2011 was undertaken on computerised psychological, science, medical, and education databases as well as science and activity Sciences assortment, Psycl NFO, MEDLINE, additive Index to Nursing and Allied Health Literature (CINAHL), institutional Resources data Centre (ERIC), Cochrane info of Systematic Reviews (DSR), and Cochrane Central Register of Controlled Trials (CCCT). Keyword mixtures square measure listed in Table one. Analysis on the physical health consequences of overweight or fat was excluded; as were analysis articles that took up problems with measure of overweight/obesity. As a result of this paper entered specifically on mental state and health in relevance the hindrance of childhood fat, a number of the discourse (i.e., media, family), economic (i.e., food and diet industries), environmental (i.e., poverty), biological (i.e., metabolism), activity (i.e., sleep), and cultural (i.e., ethnicity) correlates of fat aren’t reviewed.

In total, 759 distinctive records were obtained from the searches, 345 full-text articles were retrieved, and 131 articles were enclosed within the document.
Overview

Obesity isn’t a mental disorder however some researchers and clinicians argue that it ought to be thought of a mental or activity issue [10]. Because it presently stands, fat remains a medical condition, and, maybe for this reason, analysis has entered neither on understanding the psychological impact of living with fat nor the influence of mental state on the event of fat. Though mental state professionals are concerned within the treatment and/or hindrance of fat, it’s implicitly assumed that weight loss or the hindrance of weight gain, severally, can solve the psychological/emotional problems that might accompany excess weight which cannot be the case. It ought to be noted that the treatment of medicine fat might vary with age notably as approaches to childhood fat migrate to a additional integrated shared-responsibility model of service delivery [11]. The main target of this paper is on psychosocial constructs as they relate to influencing the hindrance of childhood fat and in and of itself experiences from clinical settings or proof of flourishing family-based treatment approaches square measure on the far side the scope of this paper.

Some psychosocial factors are known and studied; but, analysis typically examines every construct severally with very little thought for the connection between excess weight and a broad vary of psychosocial constructs at the same time [12]. Analysis has not nevertheless uncovered a transparent model to elucidate these relationships. It’s unclear to what extent psychosocial problems be in overweight/obese youngsters or whether or not the strength or nature of the association changes with increasing weight [12]. A recent review by Wardle and Cooke [13] enclosed fifty three studies examining the connection between fat and psychosocial factors characteristic clinical and community samples. Proof for a causative or prophetical relationship between fat and mental state is inconclusive at the best. The direction of the connection between mental state and fat actually remains unclear as most of the studies square measure cross-sectional [13,14]. Of the restricted longitudinal knowledge out there, some studies realize proof that mental distress predicts overweight or weight gain [15,16], others realize no associations between weight standing and mental state and, most of the research findings examination overweight/obese youngsters with normal-weight youngsters with reference to vanity are mixed [28]. Some studies realize that rotund youngsters have lower vanity [29] whereas others don’t [21,30]. There’s some accord within the literature that the worldwide approach to vanity measure with youngsters United Nations agency square measure overweight/obese is dishonourable because the physical and social domains of vanity appear to be wherever these youngsters square measure most vulnerable [31].

Body discontentment

Research has systematically found that body satisfaction is higher in males than females in any respect ages [32]. Gender variations might replicate the Westernized cultural ideals of beauty therein thinness is that the solely culturally outlined ideal for females, whereas males square measure inspired to be fine and muscular. Thus, there’s a linear relationship between body discontentment and increasing BMI for girls; whereas for boys a formed relationship suggests that boys with BMIs at the low and high extremes expertise high levels of body discontentment [33,34].

Dieting/Unhealthy weight management practices

A less well-known public health issue that elevates risk for fat is that the proof of multiplied frequencies of unhealthy diet behaviours among teenagers. Restrictive diet is connected to each disordered intake/eating disorders and weight gain/obesity [35,36]. Unhealthy weight management behaviours were according by fifty seven of ladies and thirty third of boys, and very unhealthy behaviours were according by 12-tone system women and five-hitter of boys among four; 476 adolescents publicly colleges in American state [37].

Dietary restraint

Restraint theory [38] suggests that the constant restriction of food intake can eventually break down and lead to disinherited intake, like binge intake and emotional intake. This pattern will result in bated sensitivity of the body’s natural hunger Associate in nursing fullness cues and an overreliance of discourse cues for intake [39]. Dietary restraint is related to fat (cross-sectional data; [40]) and prophetical of future weight gain in youth [35,41].

Upset symptoms

Traits related to intake disorders seem to be common in adolescent rotund populations, notably for ladies [42]. Variety of studies have shown higher prevalence of eating-related pathology relationship between intake disturbances and depression [24]. However, this relationship isn't unidirectional; depression could also be each a cause and a consequence of fat [25]. To boot, in an exceedingly clinical sample of rotund adolescents, the next time period prevalence of tension disorders was according compared to non obese controls [26], though some studies demonstrate no important relationship between multiplied BMI and multiplied anxiety symptoms [27]. Thus, the connection between fat and anxiety might not be uni facial and is on no account conclusive.
(i.e., binge intake episodes, drive for thinness, impulse regulation) in rotund children/youth [43,44].

**Emotional issues**

In one among the few studies to research the psychological impact of being overweight/obese in youngsters, Cornett [45] reviewed ten revealed studies over a 10-year amount (1995-2005) with sample sizes larger than fifty and over that each one participants according some level of psychosocial impact as a results of their weight standing. Being younger, female, associate in Nursing with a multiplied perceived lack of management over intake appeared to heighten the psychosocial consequences.

**Mediating Variables**

Two mediating factors emerged for understanding however overweight/obesity impacts psychosocial health and health and vice versa: (a) weight-based disapproval and teasing and (b) weight and form considerations.

**Weight-based disapproval and teasing**

Weight-based disapproval is outlined as “negative weight-related attitudes and beliefs that square measure manifested through stereotypes, bias, rejection, and prejudice toward youngsters and adolescents as a result of their overweight or obese” [45]. Given the rise within the rate of childhood overweight/obesity, some folks [46] have hypothesized just by virtue of exposure that disapproval or bias would have abated. On the contrary, negative views of rotund youngsters square measure even on top of forty years past [10,47]. The visible nature of fat (i.e., it’s not one thing that you simply will hide) moreover because the assumption that fat may be controlled (i.e., eat less and move more) is very important determinants of weight bias. Fat is taken into account to be one among the “most stigmatizing and least socially acceptable conditions in childhood” [30]. The consequences of this weight bias may be seen even years later. “Childhood fat is said to fewer years of education, lower family financial gain, higher economic condition rates, and lower wedding rates in later young adulthood” [48]. Puhl & Latner [49] completed a comprehensive literature review on childhood weight-based disapproval and located that youngsters demonstrate weight bias by associating fat with variety of undesirable traits and preferring to escort non obese peers. youngsters with additional negative attitudes towards weight additional probably rate Associate in Nursing rotund peer negatively and tease and bully youngsters United Nations agency thought of themselves “far too right” perceived the next quality of life than traditional weight youngsters and youth [49].

Experiences of weight-based teasing are hypothesized as a mediating variable within the development and maintenance of overweight and fat [50]. Not solely do overweight/obese youngsters have multiplied risk of experiencing important victimization, however peer victimization has been connected to negative psychosocial and health outcomes [51] moreover. “Peer victimization refers to the expertise of explicit (e.g., pushing, hitting, kicking) or relative (e.g., gossiping, teasing, ignoring, excluding) varieties of aggression as perpetuated by a personal or cluster of peers” [52]. In one sample, five hundredth of rotund boys and fifty eight of rotund women report experiencing important issues with peers [46]. Rotund youngsters square measure virtually doubly as probably to be the victim of peer victimization, with women additional usually reportage relative problems and boy’s reportage explicit problems as each the victim and also the offender [10,52,53]. Being titillated concerning weight is prophetical of binge intake among adolescents [54] and is cross-sectional related to higher levels of disordered intake [55]. Additionally to triggering body discontentment and disordered intake, weight-based teasing has been connected to suicide makes an attempt [23] involved as a predictor of depressive symptoms [50], absolutely related to anxiety, loneliness, social isolation, and parent reports of internalizing and externalizing behaviour issues [56] and experiences of shame [57] and negatively related to physical activity [56].

**Concern concerning weight and form**

A number of recent studies indicate that perceived overweight or concern concerning weight, instead of actual weight standing, is prophetical of the psychosocial/emotional fall-out of overweight/obesity [58]. Erickson et al. [59] were the primary researchers to look at weight standing and concern concerning weight and form in relevance psychological outcomes. They found that, in an exceedingly sample of 8-year-old women, those with high weight and form concern demonstrated additional depressive symptoms than those with low levels of weight concern, no matter weight standing. Since then variety of different researchers have investigated the role of weight and form considerations. in an exceedingly sample of 7- to 13-year-old boys and women, Allen et al. [20] found that (a) overweight youngsters were additional involved concerning weight and form than were healthy weight youngsters and (b) no matter weight standing, youngsters with high weight and form concern according lower levels of vanity and better levels of body discontentment and depression than youngsters with low weight and form concern. Additional recently, Cornelis et al. [21] explored the thought that “feeling fat” could also be additional necessary than “being fat” in terms of the psychological well-being of twelve and thirteen year olds. in an exceedingly representative German sample of over 17000 youngsters and youth, rotund youngsters United Nations agency thought of their weight “just right” perceived the next quality of life than traditional weight youngsters United Nations agency thought of themselves “far too fat” [60]. Cumulatively, these results counsel that weight and form concern instead of weight itself will account for variations within the psychological consequences of childhood overweight/obesity.

**Summary**

Existing studies may be accustomed speculate concerning relationships and links between factors. for instance, teasing concerning weight in childhood could also be associated with emotional suffering, however at this time the direction of the connection remains untested by trial and error. Thus whereas there’s level of confidence within the psychosocial factors, mediating variables and health factors conferred within the model, the relationships between these variables aren’t clearly articulated.
through Associate in Nursing examination of the literature. Additional analysis through causative modeling or path analyses can facilitate elucidate the relationships between the variables concerned during this paper.

**Fat Impact on Wellness/Wellness Impact on Fat**

In relevance fat, a lot of is understood concerning healthy life-style (i.e., nutrition and physical activity), however very little is understood concerning well-being [13]. In fact, several of the recommendations for the treatment of kid and adolescent overweight and fat specialise in physical outcomes like BMI and body composition with disregard for his or her impact on psychological or social well-being.

**Quality of life**

Given that the psychosocial health of rotund and overweight youngsters and youth has been studied from a mostly psychopathic perspective, measures usually report on specific problems (i.e., depression and activity concerns). However, this approach fails to acknowledge or capture the constraints of well-being which will not meet specific diagnostic criteria. Rising literature on quality of life (QOL) is commencing to fill this gap. "Quality of life may be outlined as a dimensional construct that reflects one’s self-perceptions of enjoyment and satisfaction with life" [61]. Overweight youngsters have according lower QOL than non-overweight peers [51]. Studies counsel that the lower QOL for overweight is said to physical functioning and psychosocial domains [62,63], still rotund youngsters compared to healthy-weight youngsters square measure up to 5 times additional probably to report lower world health-related QOL scores and in one study couldn’t be distinguished in terms of scores from youngsters with cancer receiving therapy [31]. Some studies even indicated that differential QOL perceptions for youngsters for youngsters vary within the degree to that children square measure overweight [61]. Clinical samples show a stronger and additional consistent association between overweight and lower QOL than population-based samples [64].

**Resilience**

Young people United Nations agency show resilience are found to own access to protecting factors in 3 broad areas: (a) at intervals themselves, (b) in their families, and (c) at intervals the communities during which they live [65]. Resilience is outlined as “the method of dealing with adversity, change, or chance in an exceedingly manner that leads to the identification, fortification, and enrichment of resilient qualities or protecting factors” [66] it’s a posh development that focuses on protecting factors that contribute to positive outcomes despite the presence of risk [67,68]. Actually within the context of our obesogenic and fat-phobic culture, rotund and overweight youngsters that square measure ready to thrive and stand out in spite of their current context would facilitate USA perceive the conception of resiliency. Sadly, these queries haven’t been concerned within the literature to this point. Additional analysis is required to work out the explanations for resilience in youngsters that square measure overweight or rotund [69].

While ancient strategies to reinforce the health and well-being of teenagers have utilised a problem-focused paradigm, attention on QOL and resilience provides chance to look at childhood fat and resilience provides chance to look at childhood fat and overweight through a lens of positive mental state and development. “In the absence of accord concerning the causative pathways resulting in the fat epidemic, it’s arduous to plot a public health response which will have an effect on its course” [70]. Public health will support the creation of solutions that don’t additional interact overweight and rotund youngsters and youth [69] which will probably improve the lives of all youngsters and youth no matter weight standing.

**Stop the Main Target on Weight**

Healthy life-style behaviours square measure necessary for the complete population no matter weight status; weight isn’t behaviour and thus shouldn’t be associate in nursing object of behaviour modification [71]. The discourse engendered by attention on weight may increase psychological discontent for children/youth United Nations agency struggle with body problems or intake issues by encouraging unhealthy self-monitoring [72] or unhealthy weight management practices. QOL shows potential as Associate in Nursing in Nursing outcome live to quantify the impact of overweight/obesity on overall functioning and as a tool for coming up with acceptable interventions and protocols [51] that considers the “whole” kid, moreover because the health and health of all youngsters, no matter weight standing. Instead of viewing overweight/obesity as a medical issue, reducing the incidence of overweight/obesity should be seen as a public health matter that’s the shared responsibility of public, government, and company entities [73]. The main target on weight may be a well-travelled however ineffective and unproductive path involved in excess specialise in personal responsibility. A shift to weight-neutral outcomes has shown proof of success in irregular management trials (see Bacon and Aphramor [74] for a review). Important enhancements in physiological measures, health behaviours, and psychosocial outcomes (like vanity and body image) are found to result from approaches that specialise in weight-neutral instead of weight-loss goals [74].

**Intervene with Weight Bias**

Weight bias is current and being stigmatized triggers a dysfunctional cycle of poor mental and physical health, that compromise uptake of the health behaviours necessary for the hindrance of fat and overweight. Recommendations to incorporate weight bias awareness within the field of fat, notably fat hindrance and overweight. Recommendations to incorporate weight bias awareness within the field of fat, notably fat hindrance efforts are mostly neglected [75]. Health promotion specialists have a novel chance to make psychosocial resilience among people and communities in an attempt to cut back or forestall weight-related disorders. Individual factors square measure usually the main target in childhood fat literature, thus focusing on healthy relationships (e.g., healthy communication, problem-solving) shifts the main target one step outside the only responsibility of the one who might virtually and figuratively carry further weight. In some ways, fat may be a social justice issue [76] and that specialize in the connection and discourse factors offers opportunities for intervention outside
of the individual. Inconsiderately of weight-related problems as socially made and maintained, intervention efforts can probably let down as a result of it seeks to foster modification from within the system instead of reworking the system that created the issues within the initial place [77].

**Promote Healthy Body Image**

It is attainable that the terribly public health methods designed to combat the fat epidemic might if truth be told engender the kind of dialogue and atmosphere that contribute to its development. Overweight youngster’s square measure even additional involved concerning weight than their normal-weight counterparts and even normal-weight youngsters with high weight and form concern report higher body discontentment and depressive symptoms [20]. “It is vital that the attainable induced impacts of health promotion messages square measure thought of so interventions don’t trigger body image issues among target populations” [78]. Attention on early identification of weight and form concern may cut back negative psychological outcomes for kids of all weight statuses [20].

**Target Adult Role Models**

A number of recent documents counsel that a public health response to childhood fat ought to embody intervention across multiple sectors [78, 79]. Oldsters and lecturers square measure necessary role models for influencing children’s attitudes and behaviours towards their bodies. Sadly, parental anti fat bias [80] and specialise in the importance of physical look [81] contribute to multiplied weight-bias attitudes in youngsters. Similarly, teachers, attitudes towards weight, notably towards fat, might have harmful effects on children’s rising body image [54]. Common school-based practices like discussing “healthy” weights inconsiderately of diversity, consideration students, displaying children’s weights, discussing “healthy” intake [82], and reading literature with negative weight-bias and thin-ideal messages [83] have the usually unrecognized potential for tributary to body discontentment, weight bias, disordered eating, harmful peer comparisons relating to body size, and weight-related teasing. Thus, shifting focus from weight and form to models of health, wellness, and resilience is vital to reinforce the well-being of youngsters and adolescents, no matter weight standing [84].

**Expand the Main Target of Analysis**

Perhaps rather than comparative studies that examine rotund versus non obese populations, researchers ought to ask for Associate in Nursing understanding of what factors place some rotund folks in danger or, even higher; what protecting factors make a case for why some overweight/obese folks square measure psychologically healthy in Associate in Nursing obesogenic atmosphere [85]. There Associate in Nursing understanding of any systematic analysis on psychosocially and physically healthy overweight/obese people [69], partly as a result of the thought that overweight/obese might also be that a rational, freely chosen, or appreciated personal attribute is simply not thought of [86] and also the assumption continues that overweight/obese folks square measure by definition unhealthy. The main target on resiliency and health in analysis on childhood fat is in its infancy. In one among the sole studies to approach childhood fat from Associate in Nursing quality model, Fenton et al. [78] found positive associations between healthy body image in adolescence and 3 variables, (a) simple communication with oldsters, (b) teacher curious about students as folks, and (c) feeling intelligent, and 2 demographic indicators (a) perceived family wealth and (b) ménage composition (presence of father figure in home). So distinguishing the mechanisms that shield psychological well-being moreover as targeting potential mediators to assess importance and relationships between mechanisms [13] is a very important decision to action for the analysis community.

**Conclusion**

“Systematic action and shared responsibility square measure necessary foundations on that to develop effective policies that support best kid health and well-being” [87]. The emergence of social ecological models for understanding fat is helpful for considering the vary of influences that contribute to fat [88]. This paper entered totally on one aspect of influence, namely, mental state and health, which is arguably one among the foremost neglected areas of study in our understanding of childhood overweight/obesity. However, it should be noted that the complexity isn’t adequately accounted for during this paper. However, intervening for the psychosocial emotional health of overweight/obese youngsters ought to be attention in Associate in Nursing quality model, Fenton et al. [78] found positive associations between healthy body image and weight-related teasing. Thus, shifting focus from weight and form to models of health, wellness, and resilience is vital to reinforce the well-being of youngsters and adolescents, no matter weight standing [84].

**References**

1. (2000) World Health Organization. Health topics: Obesity.
2. (2000) Statistics Canada. Body mass index (BMI) for children and youth 2007 to 2009.
3. Shields M (2005) Measured obesity: Overweight Canadian children and adolescents. Nutrition: Findings from the Canadian Community Health Survey.
4. Strauss RS (2000) Childhood obesity and self-esteem. Pediatrics 105(1): 15.
5. Canning PM, Courage ML, Frizzell LM (2004) Prevalence of overweight and obesity in a provincial population of Canadian preschool children. Canadian Medical Association Journal 171(3): 240-242.
6. Tremblay MS, Willms JD (2000) Secular trends in the body mass index of Canadian children. Canadian Medical Association Journal 163(11): 1429-1433.
7. Willms D, Tremblay MS, Katzmarzyk PT (2003) Geographic and demographic variation in the prevalence of overweight Canadian children. Obesity Research 11(5): 668-673.
8. Friedman RR, Schwartz MB (2008) Public policy to prevent childhood obesity, and the role of pediatric endocrinologists. Journal of Pediatric Endocrinology and Metabolism 21(8): 717-725.

9. Stice E, Presnell K, Lowe MR, Burton E (2006) Validity of dietary restraint scales: reply to van Strien et al. Psychological Assessment 18(1): 95-99.

10. Corneille RE (2011) The emotional impact of obesity on children. In: Bagchi D (Ed.), Global Perspectives on Childhood Obesity: Current Status, Consequences and Prevention. New York, NY, USA, pp. 257-264.

11. Vor M, Barlow SE (2011) Update in childhood and adolescent obesity. Pediatric Clinics of North America 58(6): 15-17.

12. Gibson LY (2011) An overview of psychosocial symptoms in obese children. In: Bagchi D (Ed.), Global Perspectives on Childhood Obesity: Current Status, Consequences and Prevention. New York, NY, USA: Elsevier, pp. 233-244.

13. Wardle J, Cooke L (2005) The impact obesity on psychological well-being. Clinical Endocrinology and Metabolism 19(3): 421-440.

14. French SA, Story M, Perry CL (1995) Self-esteem and obesity in children and adolescents: a literature review. Obesity 3(5): 479-490.

15. Anderson SE, Cohen P, Naumova EN, Must A (2006) Association of depression and anxiety disorders with weight change in a prospective community-based study of children followed up into adulthood. Archives of Pediatrics & Adolescent Medicine 160(3): 285-291.

16. Goodman E, Whitaker RC (2002) A prospective study of the role of depression in the development and persistence of adolescent obesity. Pediatrics 110(3): 497-504.

17. Stice E, Presnell K, Shaw H, Rhode P (2005) Psychological and behavioral risk factors for obesity onset in adolescent girls: a prospective study. Journal of Consulting and Clinical Psychology 73(2): 195-202.

18. Tanofsky KM, Cohen MI, Yanovski SZ, Christopher C, Kelly RT, et al. (2006) A prospective study of psychosocial predictors of body fat gain among at high risk for adult obesity. Pediatrics 117(4): 1203-1209.

19. Lumeng JC, Gannon K, Cabral HJ, Frank DA, Zuckerman B (2003) Association between clinically meaningful behavior problems and overweight in children. Pediatrics 112(5): 1130-1145.

20. Allen KL, Byrne SM, Blair EM, Davis EA (2006) Why do some overweight children experience psychological problems? The role of weight and shape concern. International Journal of Pediatric Obesity 1(4): 239-247.

21. Jansen W, Looij JPM, Wilde EJ, Brug J (2008) Feeling fat rather than being fat may be associated with psychological well-being in young Dutch adolescents. Journal of Adolescent Health 42(2): 128-136.

22. Vanden BP, Neumark SD (2007) Fat n’ happy 5 years later: is it bad for overweight girls to like their bodies? Journal of Adolescent Health 41(4): 415-417.

23. Eisenberg ME, Neumark SD, Story M (2003) Associations of weight-based teasing and emotional well-being among adolescents. Archives of Pediatric & Adolescent Medicine 157(8): 733-738.

24. Rawana JS, Morgan AS, Nguyen H, Craig SG (2010) The relation between eating- and weight-related disturbances and depression in adolescence: a review. Clinical Child & Family Psychology Review 13(3): 213-230.

25. Goldfield GS, Moore C, Henderson K, Buchholz A, Obeid N, et al. (2010) Body dissatisfaction, dietary restraint, depression, and weight status in adolescents. The Journal of School Health 80(4): 186-192.

26. Britz B, Siegfried W, Ziegler A, Lamertz C, Herbertz DBM, et al. (2000) Rates of psychiatric disorders in a clinical study group of adolescents with extreme obesity and in obese adolescents ascertained via a population based study. International Journal of Obesity and Related Metabolic Disorders 24(12): 1707-1714.

27. Tanofsky KM, Yanovski SZ, Wilfley DE, Marmarosh C, Morgan CM, et al. (2004) Eating-disordered behaviors, body fat, and psychopathology in overweight and normal-weight children. Journal of Consulting and Clinical Psychology 72(1): 53-61.

28. Zaman JI, Zoon CK, Klein HW, Munson S (2004) Psychiatric aspects of child and adolescent obesity: a review of the past 10 years. Journal of the American Academy of Child and Adolescent Psychiatry 43(2): 134-150.

29. Ackard DM, Neumark SD, Story M, Perry C (2003) Overeating among adolescents: prevalence and associations with weight-related characteristics and psychological health. Pediatrics 111(1): 67-74.

30. Reman C, Engstrom I, Silfverdal SA, Aman J (1999) Mental health and psychosocial characteristics in adolescent obesity: a population-based case-control study. Acta Paediatrica 88(9): 998-1003.

31. Schwimmer J, Burwinkle T, Varni J (2003) Health-related quality of life of severely obese children and adolescents. Journal of the American Medical Association 289(14): 1813-1819.

32. O’Dea JA (2005) School-based health education strategies for the improvement of body image and prevention of eating problems: an overview of safe and successful interventions. Health Education 105(1): 11-33.

33. Austin SB, Haines J, Veugelers PJ (2009) Body satisfaction and body weight: gender differences and sociodemographic determinants. BMC Public Health 9: 313.

34. Kostanski M, Fisher A, Gullone E (2004) Current conceptualisation of body image dissatisfaction: have we got it wrong? The Journal of Child Psychology and Psychiatry 45(7): 1317-1325.

35. Field AE, Austin SB, Taylor CB, Malpeis S, Rosner B, et al. (2003) Relation between dieting and weight change among preadolescents and adolescents. Pediatrics 112(4): 900-906.

36. Tanofsky KM, Yanovski SZ, Schvey NA, Olsen CH, Gustafson J, et al. (2009) A prospective study of loss of control eating for body weight gain in children at high risk for adult obesity. International Journal of Eating Disorders 42(1): 26-30.

37. Neumark SD, Story M, Hannan PJ, Perry CL, Irving LM (2002) Weight-related concerns and behaviors among overweight and nonoverweight adolescents: implications for preventing weight-related disorders. Archives of Pediatrics and Adolescent Medicine 156(2): 171-178.

38. Stice E, Presnell K, Groesz L, Shaw H (2005) Effects of a weight maintenance diet on bulimic symptoms in adolescent girls: an experimental test of the dietary restraint theory. Health Psychology 24(4): 402-412.

39. Johnson E, Wardle J (2005) Dietary restraint, body dissatisfaction, and psychological distress: a prospective analysis. Journal of Abnormal Psychology 114(1): 119-125.

40. Claus I, Braet C, Decaluwé V (2006) Dieting history in obese youngsters with and without disordered eating. International Journal of Eating Disorders 39(8): 721-728.

41. Stice E, Shaw HA (2002) Role of body dissatisfaction in the onset and maintenance of eating pathology: a synthesis of research findings. J Psychosom Res 53(5): 985-993.

42. Lundstedt G, Edlund B, Engström I, Thurfjell B, Marcus C (2006) Eating disorder traits in obese children and adolescents. Eating and Weight Disorders 11(1): 45-50.

43. Decaluwé V, Braet C (2003) Prevalence of binge-eating disorder in obese children and adolescents seeking weight-loss treatment. International Journal of Obesity 27(3): 404-409.

44. Decaluwé V, Braet C, Fairburn CG (2003) Binge eating in obese children and adolescents. International Journal of Eating Disorders 33(1): 78-84.
45. Cornette R (2008) The emotional impact of obesity on children. Worldviews on Evidence-Based Nursing 5(3): 136-141.

46. Warschburger P (2005) The unhappy obese child. International Journal of Obesity 29(2): S127-S129.

47. Latner JD, Stunkard AJ (2003) Getting worse: the stigmatization of obese children. Obesity Research 11(3): 452-456.

48. Hwang JW, Igoo IK, Kim BN, Shin MS, Kim SJ, et al. (2006) The relationships between temperament and character and psychopathology in community children with overweight. Journal of Developmental & Behavioral Pediatrics 27(1): 18-24.

49. Puhl RM, Latner JD (2007) Stigma, obesity, and the health of the nation's children. Psychol Bull 133(4): 557-580.

50. Adams RE, Bukowski WM (2008) Peer victimization as a predictor of depression and body mass index in obese and non-obese adolescents. Journal of Child Psychology & Psychiatry 49(8): 850-866.

51. Janicke DM, Marciel KK, Ingerski LM, Novoa W, Lowry KW, et al. (2007) Impact of psychosocial factors on quality of life in overweight youth. Obesity 15(7): 1799-1807.

52. Gray WN, Kahhan NA, Janicke DM (2009) Peer victimization and pediatric obesity: a review of the literature. Psychology in the schools 46(8): 720-727.

53. Robinson S (2006) Victimization of obese adolescents. The Journal of School Nursing 22(4): 201-206.

54. Haines J, Neumark-Sztainer D (2006) Prevention of obesity and eating disorders: a consideration of shared risk factors. Health Educ Res 21(6): 770-782.

55. Neumark ZD, Falkner N, Story M, Perry C, Hannan PJ, et al. (2002) Weight-teasing among adolescents: weight status with disordered eating behaviors. International Journal of Obesity 26(1): 123-131.

56. Storch EA, Milsom VA, DeBraganza N, Lewin AB, Geffken GR, et al. (2007) Peer victimization, psychosocial adjustment, and physical activity in at-risk-for-overweight youth. J Pediatr Psychol 32(1): 80-89.

57. Sjöberg RL, Nilsson KW, Leppert J (2005) Obesity, shame, and depression in school-aged children: a population-based study. Pediatrics 16(3): e389-e392.

58. Perrin EM, Boone HJ, Field AE, Coyne BT, Gordon LP (2010) Perception of overweight and self-esteem during adolescence. International Journal of Eating Disorder 43(5): 447-454.

59. Erickson SJ, Robinson TN, Haydel KE, Killen JD (2000) Are overweight children unhappy? Body mass index, depressive symptoms, and overweight concerns in elementary school children. Arch Pediatr Adolesc Med 154(9): 931-935.

60. Kurth BM, Ellert U (2008) Perceived or true obesity: which causes more suffering in adolescents? findings of the German health interview and examination survey for children and adolescents (KiGGS) Deutsches Arzteblatt International 105(23): 406-412.

61. Shoup JA, Gattshall M, Dandamudi P, Estabrooks P (2008) Physical activity, quality of life, and weight status in overweight children. Qual Life Res 17(3): 407-412.

62. Friedlander SL, Larkin EK, Rosen CL, Palermo TM, Redline S (2003) Decreased quality of life associated with obesity in school-aged children. Archives of Pediatrics and Adolescent Medicine 157(12): 1206-1211.

63. Pinhas HO, Singer S, Pilpel N, Fradkin A, Modan D, et al. (2006) Health-related quality of life among children and adolescents: associations with obesity. International Journal of Obesity 30(2): 267-272.

64. Swallen KC, Reithen EN, Haas SA, Meier AM (2005) Overweight, obesity, and health-related quality of life among adolescents: the national longitudinal study of adolescent health. Pediatrics 115(2): 340-347.

65. Place M, Reynolds J, Cousins A, O'Neill S (2002) Developing a resilience package for vulnerable children. Child Adolescent Mental Health 7(4): 162-167.

66. Richardson GE (2002) The meta theory of resilience and resiliency. J Cln Psychol 58(3): 307-321.

67. Dent RJ, Cameron RJS (2003) Developing resilience in children who are in public care: the educational psychology perspective. Educational Psychology in Practice 19(1): 3-19.

68. Mancini AD, Bonanno GA (2006) Resilience in the face of potential trauma: clinical practices and illustrations. J Cln Psychol 62(8): 971-985.

69. Bromfield PV (2009) Childhood obesity: psychosocial outcomes and the role of weight bias and stigma. Educational Psychology in Practice 25(3): 193-209.

70. Maziak W, Ward KD, Stockton MB (2008) Childhood obesity: are we missing the big picture? Obes Rev 9(1): 35-42.

71. Danielsdottir S, Burgard D, Oliver PW. AED Guidelines for Childhood Obesity Prevention Programs.

72. Larkin J, Rice C (2005) Beyond “healthy eating” and “healthy weights”: harassment and the health curriculum in middle schools. Body Image 2(3): 219-232.

73. Brownell KD, Schwartz MB, Puhl RM, Henderson KE, Harris JL (2009) The need for bold action to prevent adolescent obesity. Journal of Adolescent Health 45(3, supplement): 58-517.

74. Bacon L, Aphramor L (2011) Weight science: evaluating the evidence for a paradigm shift. Nutrition Journal 10, article 9

75. Puhl RM, Heuer CA (2010) Obesity stigma: important considerations for public health. American Journal of Public Health 100(6): 1019-1028.

76. Russell-Mayhew S (2007) Eating disorders and obesity as social justice issues: implications for research and practice. Journal for Social Action in Counseling and Psychology 11(1): 1-13.

77. Speight SL, Vera EM (2004) A social justice agenda: ready, or not? The Counseling Psychologist 32(1): 109-118.

78. Fenton C, Brooks P, Spencer NH, Morgan A (2010) Sustaining a positive body image in adolescence: an assets-based analysis. Health & Soial Care in the Community 18(2): 189-198.

79. Public Health Agency of Canada. Curbing childhood obesity: A federal, provincial and territorial framework for action to promote healthy weights.

80. Davison KK, Birch LL (2004) Predictors of fat stereotypes among 9 year old girls and their parents. Obesity Research 12(1): 86-94.

81. Davis C, Shuster B, Blackmore E, Fox J (2004) Looking good: family focus issues: implications for research and practice. Journal of Counseling and Psychology 19(1): 1-13.

82. Glessner MM, Hoover JH, Hazlett LA (2006) The portrayal of overweight in adolescent fiction. Reclaiming children and youth. The Journal of Psychotherapy Practice and Research 15(2): 116-123.

83. Fuller et al (2007) Correlates of psychosocial well-being among overweight adolescents: the role of the family. Journal of Consulting and Clinical Psychology 75 (1): 181-186.

84. Walker L, Hill AJ (2009) Obesity: the role of child mental health services. Child & Adolescent Mental Health 14(3): 114-120.
86. Evans J, Evans R, Evans C, Evans JE (2002) Fat free schooling: the discursive production of ill-health. International Studies in the sociology of education 12(2): 191-212.

87. Reynolds N (2009) Commentary on child health and well-being the policy-research interface. Canadian Journal of Occupational Therapy 76: 199-205.

88. Lytle LA (2009) Examining the etiology of childhood obesity: the idea study. Am J Community Psychol 44(3-4): 338-349.