

Weight consciousness and practices used for weight management in adolescent and young adult females

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ABSTRACT

Moving in the 21st century where many changes and technological advancements have occurred, along with this focussing on one's health, shape and appearance has also assumed a prominent place amongst all individuals. Consciousness towards one's body weight, shape and appearance is constantly rising in both males and females. But actually researching over this issue leads to the conclusion that males may also be conscious for their body physique but females tend to be more conscious than men. Where men aim to achieve muscularity, women want to acquire lean and thin shapes. Moving deep into this issue, peers, media seem to be the greatest factors motivating a female to acquire a lean and thin physique. Moreover cultures especially the western cultures express a thin physique to be more desirable and better acceptable rather than overweight or obese, and India also is making a move towards this western culture. Many of the studies reflect low self-esteem in overweight and obese females, where they feel rejected, unaccepted, and worthless due to their weight and shape which is portrayed to be undesirable. Scientific tools like the Figure Rating Scale, Body Shape Questionnaire, have been designed for this purpose. It has been proven that consciousness towards weight and appearance initiates in females right from Adolescence and continues in Adulthood also. Adolescents have also been found to practise weight control. Studies also show that females obsessed with body shape and weight and following dieting practices are likely to suffer from eating disorders in their subsequent life. Tools like Eating Attitudes Test (EAT), Eating Disorders Inventory further help to screen the risks of such disorders in the subject. To maintain body weight and shape various practices have been used by females, some of which may be healthy, unhealthy or mixed (Healthy and Unhealthy). Exercising, Eating or Drinking Low Fat or fat free versions of foods/drinks, consciously limiting food intake, Eating or drinking sugar free versions of foods and drinks and Counting Calories are some of the practices used. These are moderate behaviours for weight management, and may be followed for longer duration, with better consistency. Generally these are the methods used by most people; however some extreme methods for weight control may also be followed like deliberately vomiting after meals, Skipping Meals, Fasting, taking Laxatives and Diuretics, which are completely unhealthy. Some people also consume Meal replacements, Substitutes, Shakes, Drinks, Special Powders, which are low in Calories, high in Fiber, Protein and negligible in Fat content. These practices are also unhealthy and may contribute to deficiencies. Studies also reflect that using healthy methods for weight

Cite this Article: Mathur, Swati and Jain, Bharti (2017). Weight consciousness and practices used for weight management in adolescent and young adult females. *Internat. J. Appl. Home Sci.*, **4** (9 & 10) : 829-838.

control may help a person maintain weight and such people have also been found to have nutrient intake close to RDA. Thus it can be said that weight does need to be managed, but first an evaluation of one's Body Mass Index (BMI), needs to be done. Underweight girls should focus on moving towards a healthy Body Mass Index, and not follow weight maintenance practices. After this the practices used for weight control must be healthy, and weight management needs the guidance of a qualified professional otherwise it may lead to low nutrient intakes and thereby Under nutrition. Inadequate nutrition may also lead to poor cognitive performances. Balancing energy intake with energy expenditure is the best method for keeping ones weight at a steady point.

Key Words : Weight, Consciousness, Weight control, Practices

INTRODUCTION

Females, at a very young age, are concerned about body weight and place a high importance on appearance, which is dramatically influenced by the media (Labre *et al.*, 2003). The media constantly portrays ideal images for men and women, thin and slender for women, broad and muscular for men. Men tend to have a more positive body image than women (Badero, 2011). Television, Advertisements the Print Media and the Internet, often are the driving force in creating an idealized perception of male and female body image and shapes and sizes (Mc Cabe and Watt, 2007). Slenderness is seen as the normal body shape to aspire towards, and it is associated with happiness, success, youthfulness and social acceptability. Being overweight is linked to laziness, lack of will power and being out of control. Most women experience body dissatisfaction and this has an impact on their behaviour and therefore most women try to change their shape and weight (Grogan, 1998). Body dissatisfaction and negative self-esteem about one's body leads to a range of physical and mental health problems including disordered eating, obesity, Body Dysmorphic Disorder, depression or low self esteem. It leads to unhealthy consequences such as cosmetic surgery, unbalanced dieting habits or steroid abuse (Dittmar, 2009). Research with undergraduates and other adult populations has indicated that women typically report high disordered eating, objectified body consciousness than men (Dakanalis *et al.*, 2015). Eating pathology typically emerges during Adolescence (Allen *et al.*, 2013, Stice *et al.*, 2009, Striegel Moore and Bulik, 2007). During this developmental period, there is self-consciousness, perception that one's physical appearance is the focus of others attention and increased importance of appearance and social conformity (Dakanalis *et al.*, 2015). Interviews conducted by Mooney *et al.*, 2004 with teen focus groups in Ireland found that adolescent females are very conscious of their body image. Emergence of dieting among girls is more prevalent at 13 and 14 years and remains prevalent throughout adulthood (Huon and Lim, 2000). Dieting has been reported in Normal, Overweight and Obese individuals (Storze and Greene, 1983). Despite the finding that dieting to control weight is often ineffective, it remains popular among females (Field *et al.*, 2003). When compared to college males, college females are more likely to actively diet, place high importance on appearance and the benefits of maintaining an ideal weight, and engage in unsafe dieting (Klesges *et al.*, 1987). But dieting behaviours may be associated with low Calcium and Iron intake (Bull, 1988 and Woodward, 1985) higher levels of fatigue and depression (Nylander, 1971), increased Binge Eating (Sztainer *et al.*, 1995) and

development of eating disorders (Patton, 1992).

Dieting may contribute to poor physical and mental health (French and Jeffery, 1994) and a BMI less than 17.5 Kg/m² poses individuals to higher risks of nutrient deficiencies and a lower fertility (Grodstein *et al.*, 1994). Alternatively weight control behaviours may hold in them healthy behaviours like low fat consumption and increased physical activity (French *et al.*, 1994 and French *et al.*, 1995). Thus the assessment of potential health benefits and/or the risks of engaging in weight control behaviours requires consideration of the following factors 1) type of behaviour healthy or unhealthy, 2) duration or consistency with which the behaviour is being carried out, 3) objective need for weight control (Sztainer *et al.*, 1997).

Certain specific weight control practices are used by subjects practising weight control. Some of these practices may be healthy and others can be classified as unhealthy. Practices like exercising, decreasing fat intake, decreasing the amount of food, increasing fruit and vegetable consumption, changing the type of food, cutting out on sweets, cutting out on snacking, skipping meals, eating less bread or potatoes, fasting, taking appetite suppressants, diet supplements, diet pills, taking laxatives, diuretics, and deliberately vomiting after eating are some of the practices used by subjects practising weight control. A particular subject may follow healthy, unhealthy or mixed practices.

It is to be mentioned that using moderate methods of weight control such as decreasing calorie intake, increasing fruit and vegetable consumption, decreasing fat intake and decreasing junk food consumption tend to make the nutrient intakes closer to health objectives and dietary guidelines. The promotion of these types of behaviours for weight control and overall health promotion are to be encouraged. However using practices like fasting, skipping meals, using supplements, appetite suppressants may be associated with poor nutritional intake and may have a negative impact on ones physical and psychological health. Furthermore their effectiveness on weight control is questionable

METHODOLOGY

To conduct researches on body image, weight consciousness, weight managing practices, eating disorders, groups of Adolescents and young adults have been chosen. The tools for research have been questionnaires designed by registered Dietitians, or researchers themselves. Pre designed tools like eating inventories have also been used to study eating behaviours. The results have been calculated in form of percentages as to know what proportion of the subjects follow healthy practices, what percentage follows unhealthy practices, who are at risk of eating disorders. This gives an idea of dietary counselling that needs to be given to subjects for proper weight management practices.

RESULTS AND DISCUSSION

Adolescents becoming over conscious of their body image and exhibiting strange eating behaviours is no longer a myth but a harsh reality. False preoccupation about the body has become a major concern since it has led to several unhealthy dietary practices (Augustine and Poojara, 2003). Results of their study, "Prevalence of Obesity, Weight Perceptions and Weight Control Practices among Urban College Going Girls", over 17-19 year old girls 200 in number revealed that as many as half the subjects had a perceived body image as "Fat"

and desired changes in the perceived body image. Surprisingly even underweight subjects had tried to lose weight, and 15% of underweight subjects were dieting. Overall 71% of subjects had tried to lose weight at least once. The weight loss plans among subjects included exercise (21%), meal skipping (20%), starvation (16%), binge eating (6%) and diet pills (2%). Breakfast was the most commonly skipped meal among the respondents (41%). Of these subjects 24% skipped breakfast with an intention of weight loss, which in turn may result in impaired cognitive ability during college hours. Daily weighing of body weight, intensive exercise and treatment at weight loss centres fascinated many of the subjects. Even underweight girls perceived themselves as fat (31%). It was found that only 24% of girls were satisfied with their current weight. More than half (65%) of the girls belonging to various weight categories desired weight loss.

Studies by other researchers also reflect similar results. “Dieting Practices, Weight Perceptions, and Body Composition: A comparison of Normal Weight, Overweight and Obese College Females”, a study by Malinauskas *et al.* (2006), on a group of 185 college girls age 18-24 years made the following assessments and reflected the proceeding results. Height, Weight, Waist and Hip circumference along with Skinfold Thickness were measured to assess body composition. The practices were assessed using Dieting Practices Questionnaire, and the physical activity was assessed using a 30 day physical activity recall. The results revealed that majority of the participants did report using physical activity to control their weight, but only 19% of the participants, reported spending over 3 hours per week in vigorous aerobic activity. Even normal weight participants reported consciously trying to loose weight. In reference to the dieting behaviours the five most common behaviours were exercising (80%), eating or drinking low fat or fat free versions of foods/drinks (59%), consciously eating less than wanting (51%), eating or drinking sugar free versions of foods and drinks (43%) and counting calories (40%). The other behaviours assessed which had low frequency of use reported, included not eating foods with high Glycaemic Index, smoking cigarettes, using laxatives after eating, vomiting after eating, skipping meals. Over the counter meal replacement drinks were used by 35% of participants, supplements by 26%, meal replacement bars by 18%, physician prescribed weight loss pills were used by 3% of the participants. In examining commercial diets, the most popular ones were Atkins (20%) and weight watchers (11%).

Another study conducted by Gates and Chongwatpol (2016) “Differences in body dissatisfaction, weight management practices and food choices of high school students in the Bangkok metropolitan region by gender and school type”, on body dissatisfaction, weight management practices, in males and females two thousand and eighty two in number age 15-18 years reflected that 74% of the subjects had normal Body mass Index but only 18% of the females did not indicate body dissatisfaction. Females were more likely to have a discrepancy between current and ideal figures compared with males. Weight management practices were assessed using a modified version of a of the *National Nutrition Examination survey*. This scale asks about weight management practices used by the participants to loose weight/ body fat/or build or increase muscle. An assessment of the answers to the various questions in the scale revealed that 56.4% of the participants exercised to loose fat. Around 64.85% of the participants ate more fruits and vegetables to loose fat. Increasing the consumption of

water was reported by 61.5% of the participants. About 27.7 % of the participants reported eating more protein to decrease fat. A practice of eating less sugar, candy and sweets to decrease body fat was reported by 57.6 % of the subjects. To decrease body fat 47.2% of the participants decreased the consumption of junk foods. Around half of the subjects (53.2%) of the subjects reported eating less carbohydrate to loose body fat. Skipping meals was followed by 37.2 % of the participants. Some of the subjects (15.3%) also used liquid diet formulas. Diet pills were used by 10.3 % of the subjects.

A cross sectional study by Fayet *et al.* (2012), “Prevalence and correlates of dieting in college women: a cross sectional study”, on females, aged 18-35 years showed that a high percentage of college females, consider themselves overweight or obese despite having Body Mass Index in the normal range. Out of 308 participants while 10.6% were underweight, only 4.6 % classified themselves as very underweight or slightly underweight. Around 78 % were normal weight, while 65 % classified themselves “as about the right weight”. A percentage of 11.4% were overweight or obese while 27.3% classified themselves as slightly overweight or very overweight. A large proportion of the participants were actively trying to loose weight (43.3%) or avoid weight gain (32.3%). But the astonishing fact was, from the women trying to loose weight, most (81.5%) were within the healthy normal range. The study also made an assessment of eating behaviour using *Eating Inventory or the three factor eating questionnaire*. This is a 51 item questionnaire that assesses three dimensions of eating behaviour Restraint, Disinhibition, and Perceived Hunger. The restraint subscale is often used to identify dieters. The results of statistical analysis reflected that restraint scores were highest in subjects who lost weight.

Longitudinal studies by Sztainer *et al.* (1999), “weight control behaviours among adult men and women: cause for concern? on a group of 714 women and 229 men participating in a community based weight gain prevention programme who completed surveys about their weight control behaviours annually for 3 years reflected that weight control behaviours were more prevalent among women than men. Gender differences were found for use of organised weight control programmes, which were rarely reported by men. This reflects stronger interest in weight control among women that drives them to seek professional help. In the study weight control behaviours were assessed with general questions on dieting behaviours, the measurement of dietary restraint was done through restrained eating subscale and detailed questions about specific weight control practices were also included. In general healthy practices were more prevalent than unhealthy ones. Exercise was the most frequently reported behaviour (reported by 66% of the females), followed by decreasing fat intake. Decreasing the amount of food or Calories consumed and changing the type of food consumed were also frequently reported. The high percentages of adults using healthy methods of weight control were encouraging. Women were about nine times more likely to attend an organised weight control program than men. About 15 to 16% of both men and women reported skipping meals and 4 to 5% reported using liquid supplements and fasting for weight control purposes. Other unhealthy weight control behaviours such as use of appetite suppressants, diet pills, laxatives and diuretics and self induced vomiting were reported by 1% to 4% of the women and were rare or nonexistent among men. In general more moderate methods were used for longer periods of time than the more extreme methods.

Studies by Hasmukh *et al.* (2012) “are Indian adolescent girl students more conscious about their body image than their colleague boys?” stated that in urban areas, Adolescents are involved in various dietary activities to reduce body weight and they are more conscious for their body image than their rural counterparts. In the study on 96 students only 8% girls were overweight while 63.2% were normal weight and 28.5% were underweight. More than 90% girls were able to keep their body weight either normal or less than normal. Almost all girls had knowledge of ideal weight for good health in comparison to boys. Though the girls had proper knowledge of diet and weight, they were not doing exercise to keep their body weight perfect but they were skipping their meals. Though the resting metabolism and visceral fats were less in girls, they were not happy with their body shape but they were dissatisfied with their body image than their colleague boys. Though 63% girls were normal weight but only 46% girls were satisfied with their body image. All the girls that is 100% knew their body weight. A large percentage of 98% knew about ideal weight for good health. Around 72% had a proper knowledge of balanced diet. More than half 54% were skipping meals to achieve the desired ideal weight, but only 10% did physical exercise for weight loss.

Mishra and Mukhopadhyay (2014) in another study “Body Weight Concerns among Adolescent Girls: A Microlevel Study” on 577 girls 15-19 years commented that growing concern about ideal body image leads them to follow dietary modifications. Ideal body image is perceived as a thin body and now tagged with the concept of being physically fit. An astonishing finding that the study put up was that 84% of the participants who expressed their dissatisfaction over body weight had a normal Body mass Index. Almost 81% of the participants who reported an urge for dieting were categorised as having a normal Body Mass Index. An assessment of selection and consumption patterns revealed the girls intention to change their body shape and size, but by using potentially unhealthy measures. Instead of staple food, their regular meals included only fruits and they tended to prefer snacking between meals and reducing the quantity and variety of foods taken during main meals. The urban girls showed a perceived need to diet but at the same time they consumed more than three meals per day and were more likely to have meals outside home.

In another study by Olaoye and Oyetunde, (2012) “perception of weight and weight management practices among students of a tertiary institution in south west Nigeria”, an assessment of weight perception and self management of perceived problems was done on 200 (n=200) male and female students in the age group of 16-35 years. Drug use in management of weight problems was not rampant in the population. Around 8% females used drugs or herbal products to manage their weight. The females used drugs such as Xenical, which contains Orlistat (a lipase inhibitor); Lipo 6 fat burner pills, which contains six different ingredients that increase body metabolism; Green world capsules, which contains Chitosan and Green tea and Xenadrine which contains Caffeine, Capsaicin and Green tea and also increases rate of metabolism and thermogenesis. This study shows that females were more interested in losing extra body fat than the male students; females had a higher prevalence of weight problems than males. Also more females were involved in weight management than males.

Studies by Sztainer *et al.* (2012) “Dieting and Unhealthy Weight Control Behaviours

during Adolescence, Associations with 10 year changes in Body Mass Index.” on 1,902 young adults (819 males and 1,083) females suggest that Dieting and unhealthy weight control behaviours were prevalent, particularly in females. Among females, 37.8% reported persistent dieting and 43.7% reported persistent use of unhealthy weight control behaviours. Findings from the current study raise concerns about the high prevalence of dieting and unhealthy weight control behaviours in adolescents, particularly females, and the implications of these behaviours for weight gain over time. Persistent use of dieting and unhealthy weight control behaviours longitudinally predicted greater increases in BMI from adolescence to young adulthood in both overweight and non-overweight respondents. Specific weight control behaviours used during adolescence that predicted large increases in BMI at ten-year follow-up included skipping meals and reporting eating very little (females and males), use of food substitutes (males), and diet pill use (females). It is crucial to find ways to steer young people away from these ineffective and potentially harmful weight control behaviours, and provide support for the adoption of healthful eating and physical activity behaviours that can be implemented on a long-term basis.

Wharton *et al.* (2008) in their study “Weight Loss Practices and Body Weight Perceptions Among US College Students,” assessed associations between a group of male and female college students ($N = 38,204$). A secondary data analysis of the rates of weight loss strategies and body weight perception among students was done. Half of respondents (50%) were trying to lose weight, although only 28% of students were overweight or obese. Women were significantly more likely to be attempting to lose or maintain weight and women also were more likely to suffer from inaccurate body weight perception and to be involved in exercise, diet, vomiting, use of laxatives, or use of diet pills for weight loss. Last, women were more likely than were men to use the combined strategy of diet and exercise for weight loss.

“Dieting practices and body image perception among Lebanese university students”, was a cross-sectional survey study conducted by Yahia *et al.* (2011) on a sample of 252 students male and female aged 20 ± 1.9 years. In the study Female students reported higher Body shape Questionnaire (BSQ) scores compared to male students in all BSQ categories. Results of student’s dieting practices indicated that unhealthy dieting practices were not common among students. Only 8% of students reported taking laxatives and 4% reported taking diet pills. Smoking was not common among students as only 26% of students reported smoking regularly. Fifty percent of the students reported that they exercise regularly and 19% reported taking multivitamin supplements. Half of the students reported practicing regular physical activity.

“Unhealthy Weight-control Behaviours, Dieting and Weight Status: A Cross-cultural Comparison between North American and Spanish Adolescents.” by Guimerà *et al.* (2013) to examine and compare dieting and unhealthy weight-control behaviours (UWCB) in population-based samples in two large urban areas in Spain (Barcelona) and in the USA revealed that in general, high prevalence of these behaviours were found in both samples, particularly among girls. In general, youth from both countries at higher levels of weight status were at greater risk for the use of UWCB. These findings point to a need for interventions aimed at the prevention of UWCB for youth from both cultures.

Bhurtun and Jeewon (2013) in their study “Body Weight Perception and Weight Control Practices among Teenagers” expressed that weight-loss behaviours are highly prevalent among adolescents, and body weight perception motivates weight control practices. The aim of this study is to investigate the relationships between actual body weight, body weight perception, and weight control practices among teenagers. A questionnaire-based survey was used to collect data on anthropometric measurements, weight perception and weight control practices from a sample of 180 male and female students (90 boys and 90 girls) aged between 13 and 18 years old. Overall, 43.3% of respondents reported trying to lose weight (61.1% girls and 25.6% boys). Weight-loss behaviours were more prevalent among girls. Among the weight-loss teens, 88.5% students perceived themselves as overweight even though only 19.2% were overweight. Reducing fat intake (84.6%), exercising (80.8%), and increasing intake of fruits and vegetables (73.1%) and decreasing intake of sugar (66.7%) were the most commonly reported methods to lose weight. The conclusion of the study was, body weight perception was poorly associated with actual weight status. Gender difference was observed in body weight perception.

Evaluating the results of all the studies it is clear that females tend to be more conscious towards their weight and majority generally have a discrepancy between their actual body weight and perceived weight. In an attempt to loose weight exercise is one of the most common methods used by subjects, as revealed by the results of most of the studies. Other practices used by majority of the participants to loose weight were eating fruits and vegetables, consuming low fat or fat free versions of food items and eating less sugar, candies and sweets. However some studies also report that many of the subjects consciously limit the food intake, count Calories and increase the consumption of water to decrease food intake. Skipping meals, using liquid diet formulas, meal replacement snacks and bars by commercial companies are also the methods used by participants but fortunately by less numbers as these form the unhealthy methods for weight control.

Conclusion:

Different methods of weight control are practised by different individuals. Some of these practices are healthy while others are not. Unhealthy practices may affect the Nutritional Status of an individual adversely and make a person the victim of eating disorders which may continue in adulthood also. Thus the suggestion would be that each individual first needs to perceive his or her body weight correctly and then should be given appropriate guidance for managing weight. A specialist should always guide an individual to manage weight keeping the nutritional status and so the complete health status appropriate and optimum.

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