

Negative effects of childhood obesity

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Abstract

The purpose of this research paper is to inform about negative effects of childhood obesity. Children's choices in foods are largely influenced by media and commercial advertising. Obesity has become a growing health concern at a very young age. Cultural differences including national history showed to have an effect on weight in children. Overweight children not only suffer from serious physical health issues but also with psychological problems brought on by teasing in school. Other factors like race, family background and age showed to make a difference in body weight. Parental supervision is important to prevent this growing disease, including television monitoring and consumption of foods high in sugar and fats.

Childhood obesity has been one of the most serious medical health conditions for both children and adolescents. It occurs when a BMI or body mass index is 20 percent greater than normal which is when a child is above the normal weight to height ratio. In the past several decades a spike in overweight and obese children occurred in Western nations. Countries like Canada, Germany, Israel, Greece, Ireland and New Zealand have all become victims to this disease. With U. S. leading the way at 32 percent of overweight children and 17 percent of whom are obese (Berk, 2012, p. 417). In 1995, health-care costs associated with excess weight were \$51. 6 billion or 5. 7 % of the total U. S. health care expenses. Also, excess weight decreases productivity and leads to loss of work time (Peralta-Alva, et al., 2005). Childhood obesity has even spread to China, where 20 percent of

children are overweight and 7 percent are obese, a percentage that was almost none existent one generation prior to this generation. In high populated cities obesity in children rose to 10 percent. Additionally, a Chinese culture belief that extra body weight shows prosperity and health has contributed to an alarming number of growth in obesity. It was carried over from centuries ago when famine caused numerous amounts of deaths. Childhood obesity also paves the way for future health problems as adults such as diabetes, high blood pressure and high cholesterol, not to mention emotional and social difficulties. Obesity can also lead to poor self-esteem and depression; as well as a leading factor to severe complications including stroke, kidney failure, and circulatory problems that heighten the risk of blindness and amputations.

Many psychologists also believe that weight bias can be contributing to obesity. Children who are overweight or obese tend to be vulnerable to negative comments and more prone to being victims of bullying. Classmates are common critics of obese children, and school is usually the setting where weight-based teasing and victimization happens. Psychologists also have done studies which showed that negative opinions about overweight children begin as early as age 3 to 5 in the preschool age. Preschoolers consider their overweight peers are mean and less wanted playmates compared to non-overweight children. When polled for their opinion, many children viewed over weight kids as stupid, ugly, lazy and have little to no friends. The children are then polled again at elementary school age and their opinions only get worse with reports that obese peers are selfish, dishonest, socially isolated, and are prone to teasing. The issue has become so common that

research now informs us that based on a child's weight we can predict if they will be victims of bullying due to their weight. (Griffiths, Wolke, Page, & Horwood, 2006).

Preconception of overweight children can damage the psychological state and increase exposure to depression, anxiety, low self-esteem and poor body image. Consequently, obese youth that are being victimized by their classmates are more likely to have suicidal thoughts than those overweight students who are not bullied. Also, having to deal with humiliation about weight only increases the possibility of participating in unhealthy eating habits as well as lower levels of physical activity. Recent research has found that guilt of being overweight is associated with greater calorie intake, lower energy outflow, and over all less weight loss in adults seeking weight loss treatment (Carels et al., 2009).

Obesity has been influenced by many factors, especially those in demographic and social-economic nature. Agricultural efficiency improvements have taken place due to decrease in trade barriers which has led to lower service prices. Fast-food chains are all offering fries, burgers and soft drinks at low costs. U. S. has spent \$7. 3 billion in advertisement for food in 1999, \$765 million of that was spent on advertising gum and candy. Advertisement for soft drinks were at \$549 million and snacks were at a somewhat low of \$330 million (Story et al., 2004). High fructose corn syrup has been linked to childhood obesity in many studies. The fact that soft drinks are pumped full of high fructose corn syrup only adds to the problem. Innovations in technology have been a blessing and a curse, on one hand

efficiency and productivity has increased in jobs that require labor, however those same labor saving gadgets decrease the amount of effort put into the job, therefore decreasing the amount of calorie burn per activity. Technology such as television, computers and dishwashers have all been created to save time and provide entertainment, but overuse of these tools has led to a much more serious issue. Biking and walking among Americans has decreased drastically, on the other hand, driving has increased as a source for transportation. Even short trips to the store or park have been largely dominated by vehicle transportation. Children have started losing a large amount of exercise time due to increased time spent playing video games and watching television. Cooking and preparing food has become substantially easier, this has led to more meal consumption among Americans, which is another major reason for increased weight in both children and adults. The average American home had 0% microwave ovens in the 1960's, today over 80% of households owns one (US DOE, 2006). Patterns of food consumption have changed all together, people are now consuming more carbohydrates and fats than ever before. Ownership of television sets have also increased from as low as 10% in the 1950's to nearly 100% today (Nielson Media Research, 1995). Which of course led to increase in time spent watching T. V.

Many studies in the past have calculated endless data on changes of eating habits, level of activity and income changes in U. S. However a study by Tangel Chang, James M. Barrett and Stephen A. Vosti tests the importance of each factor in the rise of body weight. Although the study is not limited to only children, the results are certainly eye opening to future consequences.

Factors such as gender, ethnic background and family income are all associated with weight. Studies show that some groups are at a greater risk of becoming overweight than others. Those include women, children, non-whites, those who are not college graduates and the lower class (Chang, Barrett, & Vosti, 2006, p. 14). In addition, being born in the U. S. did not have the same effect on weight and waist size as it did on body mass index (BMI). This shows that those born in the U. S. have a higher BMI but not physical height. There are a number of areas that need to be emphasized to reverse the problem. Watching television and engaging in other seated activities, such as playing video games, have proven to be an issue. There has also been a correlation between abdominal obesity, like waist circumference, waist to hip ratio, waist to height ratio, and serious risk factors among children like type 2 diabetes and cardiovascular disease develop as they reach adulthood (Freedman et al., 0, p. 38).

Another detailed study held from 2011 to 2012 had similar results.

Participating in the National Health and Nutrition Examination Survey study were 9120 people who were measured in weight and height. About half of the group, 5181 people, were adults age 20 or above, 584 were infants and toddlers. The result revealed that 31. 8 percent of children were overweight, of which 16. 9 percent were obese. There was no difference in obesity occurrence between boys and girls in 2011 to 2012. However there were race and age differences. Non- Hispanic white, non-Hispanic black and Hispanic youth all had a higher probability of obesity than non-Hispanic Asian youth. Also non-Hispanic white youth had lower obesity frequency than non-Hispanic black and Hispanic youth. Over 8 percent of 2 to 5 year olds were

obese as compared to 17.7 percent of 6 to 11 year olds and 20.5 percent of 12 to 19 year old youth. Additionally, there were 13.9 percent of teenagers age 12 to 19 with a BMI of greater than or equal to 30, which meets the definition of obesity in adults (Ogden, PhD, Carroll, MSPH, Kit, MD, & Flegal, PhD, 2014, p. 3-4).

Food choices that children make have largely been influenced by the media, with television advertising targeting infants and toddlers. Many studies have focused on explaining how advertisement of fast foods, sugary snacks and many other foods with high amounts of fat, sodium and sugar are contributing to childhood obesity. Due to the high amount of hours children spend watching television, children are highly exposed to the growing number of food advertisements, which lead to unhealthy food choices. To add to the issue there is less physical activity as most of their free time is spent watching television. Extensive research has proven that time spent watching television and obesity have a direct correlation. Obesity is increased by 2 percent for every extra hour spent watching television, children that spend more than four to five hours watching television are at a higher rate of obesity than those who only watch two or less hours. (Arnas, 2006). As the appeal to children grow in food advertising, so do the requests by children for those advertised foods, as do the actual purchases of those foods by the parents.

A fact that also seems to be overlooked is that children now have televisions in their rooms, as high as thirty percent of children age 0 to 3 and 43 percent of children 4 to 6 years of age (Connor, 2005). It is a significant factor in the

likelihood of overweight children. The nutritional value of major advertised foods for children are nowhere near the recommended dietary guidelines. Parents and pediatricians seem to overlook the advertising message children are exposed to on a daily basis. The market teams behind these advertisements design them to intentionally influence children's preference and consumption in foods. Dr. Susan Connor conducted an eye opening study on the most popular channels watched by children. In her research results, Disney Chanel had the least amount of advertisements, totaling 26 for the 5 hours that it was recorded. Of those, 17 were Disney products and 9 were of McDonald's. PBS led second with a total of 65 advertisements, of which 39 were focused on fast food. The highest of the three was Nickelodeon, having 283 advertisements in the 5 hours, of which 41% were of fast foods such as McDonald's, Wendy's and Chuck E. Cheese. Additionally, 41 percent was used to advertise sugary cereal, 14 percent went for snacks and 4 percent to frozen treats (Connors, 2005). A large amount of fun, excitement, bright colors and actions are incorporated into children's advertisements. Snack food advertisements are promoted as cool, uniquely shaped, brightly colored and yummy tasting. Fast food advertisements use the appeal of the latest toys as a selling point. Overall, the actions and the energy of children featured in the commercials are laughing, giggling, playing, high energy, excitement and activity.

Based on the social cognitive theory, children learn to model their behaviors on what is shown by the media, including the models in their present social environment (Dixon et al, 2007). As presented by the social cognitive theory, it is expected for children that are exposed to certain patterns of eating

habits modeled on television are to adopt them as their own. Positive association towards junk food as advertised on television, such as the perception that those foods are consumed by other children their age, reported to have increased the consumption of such junk food (Dixon et al., 2007). Same concept applies to advertisements of nutritious foods, positive association to healthy, nutritious alternatives can increase appeal to children. Increasing the frequency of healthy food advertisements versus fast food commercial can also promote a healthier option when faced with opposite choices.

Encouraging an active lifestyle has shown to improve weight numbers. Tendency of obesity seems to lean towards women and children, so programs that encourage movement and exercise instead of television and video games are especially valuable. Those who struggle with being overweight can take on activities that emphasize muscle building, which showed to be very beneficial towards weight loss. Previous diet results showed that based on total caloric intake, it is more important to watch how much each type of food is being eaten rather than focus on the whole level of intake. Areas to focus on would be sugar and fat. A variety filled diet of fruits, vegetables, healthy carbohydrates and proteins is a good habit to develop. Children and women are especially prone to obesity, so encouragement in eating healthier foods are especially beneficial to preventing the development of the disease. It was also found that it becomes increasingly difficult to lose weight as we age, so starting healthy eating habits at an early age can help continue the healthy lifestyle into adulthood, therefore preventing the development of obesity.

Best treatment for obesity currently available are multi-layered lifestyle changes that focus on dietary interventions and promotions of physical activity. Furthermore, involvement of family members is a key feature of effective interventions, especially in cases of multifaceted interventions where trained experts in disciplinary teams are needed. The intensity of such an intervention should depend on the degree of obesity as well as the child's age. In addition, parents should be sure to take their children to routine pediatric visits, during every visit a health care professional measures the weight and height of the child and assess for any unnecessary weight gain based on height. The doctor should also take into account any factors, like the child's rate of weight gain and parents' weight status. Health care professionals such as pediatricians and primary care doctors are viewed by parents as authorities of their child's health. Therefore it is their professional duty to make parents aware of their child's excess weight early to allow time for prevention and intervention.

Children who consume a variety of high nutrient rich foods such as fruits, vegetables, low-fat or nonfat dairy products, and whole grains are less likely to be overweight and obese. Child care facilities should provide meals that are high in nutrient content so as to be consistent with the healthy diet the parents have set at home, as well as ensuring that children have access to healthy foods and portions appropriate for their age. Government agencies should put high efforts into affordable nutritional meals for families in local communities, by making the most of their participation in the federal nutrition assistance programs. The federal government should also set up nutritional guidelines for children under two years of age, as it is important

to start good habits at a very young age. Parents should monitor how much time a child spends per day watching television, versus how many hours they spend doing outdoor physical activities. Parents and childcare providers should also focus on promoting healthy sleep schedules, evidence suggests that short duration of sleep is a risk factor for obesity. Yet another reason why parents need to limit television and video games, especially at night.

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