

Childhood Obesity and Physical Activity

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Abstract

The purpose of this paper was to cast a light on the importance of physical activity in regards to childhood obesity. Childhood obesity is on the rise across the world, and many organizations have looked at ways to reduce this growing epidemic. This paper is also being written to satisfy a requirement for my completion of my bachelor's degree at Ferris State University.

Childhood Obesity and Physical Activity

Childhood obesity is an epidemic in the United States and the world. The percent of children aged 6 -11 who are overweight has increased from 6.5% in 1976-1980 to 18.8% in 2003-2004 (Franzin, Elliott, Cuccaro, Schuster, Gilliland, Grunbaum, Tortolero, 2009). “The World Health Organization (WHO) has estimated that every year 1.9 million people die as a result of physical inactivity while 2.6 million people die as the result of being overweight or obese There are multiple factors that have contributed to the rise in obesity” (Katzmarzyk, Baur, Blair, Lambert, Oppert, & Riddoch, 2008, p. 371). One of these factors is the level of moderate to vigorous physical activity that a child has in a day.

Information

The effects of obesity in childhood can lead to lifelong health and social problems. Many recent studies have suggested that “today’s generation of children will be the first for over a century for whom life expectancy falls” (Hills, King, & Armstrong, 2007, p. 533). The increase in childhood obesity has also lead to an increase of several diseases among children. The incidence of: type 2 diabetes mellitus, nonalcoholic fatty liver disease, metabolic syndrome, and cardiovascular disease have all risen (Kim & Lee, 2009). A child in the lowest tier of vigorous activity has a 4 fold increase in their risk for obesity. These children are also, two times more likely to have a high waist circumference.

Kim and Lee (2009) showed that only vigorous activity was correlated with lower waist circumference. Their report suggests that children should be engaged in vigorous activity on a daily basis. The decrease in physical activity can be seen in several ways. The percent of children walking to school has decreased from 20.2% in 1977 to 12.5% in 2001 (Katzmarzyk et al., 2008). The increasing amount of time that children spend in front of a computer or television

also increases the risk of obesity (Hoelscher, Barroso, Springer, Castrucci, & Keider, 2009). The American Academy of Pediatrics recommends that children have only 1 to 2 hours a day in front of a computer or television (Hoelscher, Barroso, Springer, Castrucci, & Keider, 2009). The amount of time a student spends in formal physical education class also declines as they get older. Hoelscher, Barroso, Springer, Castrucci, and Keider (2009) found that; “self-reported enrollment in physical education classes declined significantly by 20% between 4th and 8th grade and by more than 30% between 8th and 11th grade” (p. 536).

Discussion

There are always two sides to every debate. The main view point, and the most supported, is that lack of physical activity increases childhood obesity. The evidence to support a theory that is counter to this point is almost non-existent. Kim and Lee (2009) discussed that having a high level of sedentary activity does not correlate with having a high waist circumference. They did; however, find that waist circumference was more dependent on amount of vigorous activity. Based on this, a person could spend a high amount of time doing sedentary activities, and still have low waist circumference as long as they had adequate vigorous activity (Katzmarzyk et al., 2008).

Assumptions

There are several assumptions that a person might have with regards to this topic. The first is that obesity in a child is the fault of poor diet and lack of exercise only. This is not always true, because factors such as genetics, environment, culture, and socio-economic status also contribute to a child's risk of obesity (Katzmarzyk et al., 2008). A second assumption is that children, who spend a high amount of time watching television or playing video games, will

be overweight. This assumption was also shown to be incorrect, because studies have shown that level of sedentary activity does not predict waist circumference (Katzmarzyk et al., 2008).

Another assumption a person might have is that obesity in children is well defined. This is not the case. There are several methods that can be used to establish obesity limits. These range from; a child's body mass index based on centile curves, height and weight percentiles, or World Health Organization Child Growth Standards (Katzmarzyk et al., 2008). There is not a set standard, and because of this, a child could be considered overweight or obese using one method and normal using another.

Purpose

Why is prevention of childhood obesity so important? Childhood obesity is a leading public health concern because of the numerous other health conditions it is linked to (Kim & Lee, 2009). The American Academy of Child and Adolescent Psychiatry [AACAP] (2006) stated,

Obesity is among the easiest medical conditions to recognize but most difficult to treat. Unhealthy weight gain due to poor diet and lack of exercise is responsible for over 300,000 deaths each year. The annual cost to society for obesity is estimated at nearly \$100 billion. Overweight children are much more likely to become overweight adults unless they adopt and maintain healthier patterns of eating and exercise (para. 1.)

Beyond the physical health problems that obesity causes are the psychological disorders it can cause. A child with obesity is more likely to have; low self-esteem, be less popular with peers, high rates depression, anxiety, and obsessive compulsive disorder (AACAP, 2006).

Implications and Consequences

If as a society, we do nothing to address childhood obesity; we are condemning our children to a future of severe health problems and shorter lives. The society we live in will have to make several fundamental changes in order to reduce childhood obesity. Society will have to place greater emphasis on physical education and informal physical activity. We will have to go away from the quick-fix, fast food meals we have all become accustomed to. Parents will have to be the bad guys and limit screen time, while encouraging physical activity. The medical community needs to take a more proactive approach and address a child's weight at younger ages. Parents will also have to be more receptive to medical workers and their concerns over a child's weight.

Conclusion

As a parent of three children, childhood obesity is of great concern to me. The prospect of one of my children being obese and developing a health problem because of it is frightening. The society we live in is becoming more obese every day. Obesity is no longer something that makes people look down on you but rather it has become main stream. Obesity does need to be acknowledged for what it is, a serious health problem. Obesity is killing our children, and the line "today's generation of children will be the first for over a century for whom life expectancy falls" (Hills, King, & Armstrong, 2007, p. 533) sums up our future, if obesity is not controlled now.

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