

Childhood Obesity and its Effects on Mental Health

What educators should know



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Table of Contents

What is obesity?	3
What are the causes of childhood obesity?	3
Common Misconceptions	4
Are children who are obese at risk for stigmatization?	5
My student is obese. Is he/she at risk for any mental health problems?	6
Case Example Part I	7
How can physical activity help children who are obese?	7
Childhood Obesity Laws	8
How can schools help in obesity prevention?	8
What can educators do in the classroom to help?	9
Case Example Part II	11
Resources	12
References	15
Glossary	19

Glossary

1. **Sedentary:** characterized by sitting or little activity
2. **Stigmatization:** negative branding
3. **Comorbid:** occurring simultaneously with something else

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*All pictures are royalty free and used with permission. Retrieved at and <http://office.microsoft.com> and <http://www.sxc.hu/home>

What is obesity?

Obesity is defined as an excessive amount of body fat that is quickly becoming a huge problem amongst children and adolescents. Over the past couple of decades, childhood obesity rates have soared. About 15 percent of children (6-11 years of age) and 16 percent of adolescents (12-19 years of age) meet obesity standards in the United States (13).

What are the causes of childhood obesity?

1. *Genes*: Research shows a high genetic component to obesity (10, 13). This means that children of parents who are obese are at greater risk of becoming obese or overweight.
2. *Physical Activity*: In regard to physical activity, a high proportion of sedentary behavior in relation to physical activity is another pathway to obesity (13).
3. *Food*: Preferences for high calorie foods as well as a high consumption of food contributes to obesity (13). Recent research has also shown a relationship between obesity and over-exposure to high calorie food in the media (22).
4. *Socioeconomic Background*: Obesity is correlated with low socio-economic status (SES) background. More specifically, children who come from low SES families have less access to healthy foods due to either economic or physical barriers. As a result, this population tends to eat unhealthy foods because they cost less (13,10).



Common Misconceptions

Many misconceptions exist concerning obesity. These misconceptions can contribute to the stigmatization of children who are obese. Therefore, it is important for educators to be aware of these in order to better understand this problem and to effectively help children struggling with obesity. Common misconceptions include:

MYTH	FACT
Children who are obese always eat a lot.	This is not always the case. The <i>types</i> of food consumed (i.e. high calorie) can also result in obesity (13). Medication and thyroid problems can also lead to obesity (20,6).
Genetics is the main cause for obesity	25-40% of obesity cases are due to genetics (13). Consuming more calories than burned remains the main cause (12).
It is easy for people who are obese to change their eating and exercise habits	Despite what people may think, people who are obese do not want to be obese. ¹ There are many factors that act as barriers to weight loss (e.g. family lifestyles, low SES, etc...) (15,13). It may be especially difficult for young children to change their eating habits because most of what they consume is controlled by their parents.
Children will grow out of their excess weight.	Research has shown that children who are overweight will most likely continue to gain weight (2) and may even become overweight adults (13).
Children who are obese and eat compulsively are lazy.	Children who are obese and eat compulsively are not lazy. Their compulsive eating may be due to binge eating disorder. Children with this disorder are unable to control the amount of food they consume.

¹J, Gallagher, personal communication, October 29

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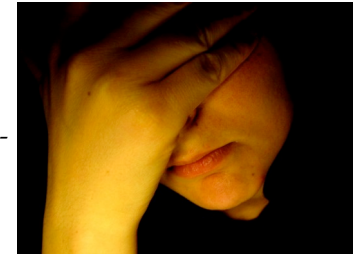
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Are children who are obese at risk for stigmatization?

Stigmatization is a very real and frequent experience amongst children/adolescents who are obese. Weight-based stigmatization can come from a variety of sources such as peers, educators, and parents (16).



- ◆ Peers: Research studies show that elementary school children, as well as children as young as 3 years of age, begin to attribute negative attitudes towards peers that are overweight and obese. Common peer attitudes toward children who are obese include negative labels such as lazy, stupid and ugly (14). Due to peer stigmatization, research shows that children who are obese tend to experience weight-based teasing (15), are rejected by peers (13,8), and are at high risk for being bullied (9).
- ◆ Educators: The literature reveals that educators may also unintentionally display negative attitudes and biases toward children who are overweight and as a result, treat these students differently. Common attitudes amongst teachers tend include beliefs that these students are untidy, less likely to succeed, and lack will-power. With regard to older adolescents, studies show that they were less like to be accepted to college if they were overweight or obese (16).
- ◆ Parents: Parental attitudes also contribute to the weight-based stigmatization. According to current research, parents ascribed negative attributes toward children who are obese. Parents may also display and pass on negative stereotypes in regard to obesity to their children during verbal communication. Finally, these children may also experience weight-based teasing from their parents (16).

My student is obese. Are they at risk for any mental health problems?

The effects of childhood obesity on physical health (e.g. high blood pressure, cardiovascular disease, diabetes, etc..)

has been well documented in research (13). Equally important, childhood obesity has also been found to lead to many social, emotional, and psychological difficulties. Highlights of current research on childhood obesity and mental health include the following:

- Childhood obesity has been shown to lead to low self-esteem/self-worth, and negative self-perceptions (22,13). Low self esteem can indirectly lead (via weight-based teasing and body dissatisfaction) to feelings of depression (13). Research also reveals that depressive symptoms may lead to major depression (1). Adolescent girls who are obese are at an even higher risk for major depression because of the emotional challenges and the focus on body image that are common among this stage of development (1).
- A recent study showed that adolescents who are obese experienced suicide ideation and tended to have a history of mental health issues (15).
- Research has found that children who are obese have a lower health-related quality of life than children with cancer (18).
- Children who are obese often are socially isolated due to negative perceptions and rejection of peers (13,8) Also, the comorbid behavioral disorder—oppositional defiant disorder—may lead to social isolation (11). This social rejection can indirectly lead to low self esteem, feelings of loneliness and anxiety (16).



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Bullying

How to Intervene to Stop Bullying: Tips for On-the-Spot Intervention at School

http://stopbullyingnow.hrsa.gov/HHS_PSA/pdfs/SBN_Tip_4.pdf

Contains tips on what educators can do when they witness bullying at school.

Substance Abuse and Mental Health Services Administration

<http://store.samhsa.gov/pages/searchResult/about+bullying>

This site contains information on bullying prevention. It also has posters and brochures that educators can access and use at their schools.

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Case Example Part I

A high school teacher, who moved to a first grade classroom, noticed a little boy who was overweight crying every day in class. He did not have any friends and displayed a lack of social interaction. As a result, he had a difficult time adjusting to school.²

How can physical activity improve the mental health of children who are obese?



As mentioned earlier, children who are obese often times experience depression, anxiety, and low self-esteem. One way to help mediate these negative effects is through physical activity. Not only is physical activity good for physical health, but research shows that it also has positive effects on mental health.³

ffects on mental health.³

1. *Depression:* In regard to depression, studies show that exercise may act as an antidepressant by regulating hormones involved in depression (7).
2. *Mood:* Some research reveals a connection between physical activity, positive mood and heightened emotion (4).
3. *Self-Esteem:* Studies show that exercise can help self-esteem by positively changing self-perceptions (4).
4. *Anxiety:* Exercise is shown to be associated with anxiety reduction (3,4).

^{2,3}Dr. Gallagher, personal communication, October 29

Childhood obesity laws

Currently, there are not many laws in regard to childhood obesity. The few that exist center around health and physical activity standards in schools. Although health standards of cafeteria food still remains a problem (12), the sale of junk food and soda in school cafeterias has been banned in some schools (21). Physical activity is becoming a major focus in schools today. Currently, the law requires that schools provide at least 60 minutes of physical activity during the school day (21). Lastly efforts are being made to



How can schools help the obesity epidemic?



amount of junk-food advertisements during children's programming (19).

The role of schools in obesity prevention is a major focus in research today. Recommendations for schools include:

- **Physical Activity.** Schools should provide sufficient time during the day for physical activity. This has been achieved through school-based intervention programs that focus on increasing the amount of time children are in physical education (17). Schools can also provide physical activity opportunities through activity breaks, recess, and extracurricular activities (21).
- **Health Curriculum:** Educating children on health, nutrition (e.g. balance diet-

Suicide Prevention

National Suicide Prevention Lifeline

<http://www.suicidepreventionlifeline.org/>

1-800-273-TALK

A 24 hour national suicide and emotional distress hotline

Guidelines for School-based Suicide Prevention Programs

<http://www.ecs.org/html/offsite.asp?document=htmlp%3A%2F%2Fwww%2Esuicidology%2Eorg%2Fassociations%2F1045%2Ffiles%2FSchool%2520guidelines%2Epdf+>

A report written by the Prevention Division of the American Association of Suicidology that features guidelines for school-based suicide prevention programs

Depression and Anxiety

<http://www.a-better-child.org/page/811341>

Helping Students Overcome Depression and Anxiety: A Practical Guide. Merrel, Kenneth, W. (2001). New York: The Guilford Press.

A practice guide that contains discussions on techniques that teachers can use with students to help reduce anxiety and depression in children

Center for Mental Health Services (CMHS)

<http://www.mentalhealth.org/cmhs/>

1-800-789-2647

"The mission of the center is to provide treatment and support services needed by adults and children with mental disorders and serious emotional problems."

Resources

Obesity information and prevention

Walk Our Children to School

<http://www.walktoschool-usa.org/why/physical-activity.cfm>

This site includes information on the importance of physical activity for children as well as tips

Binge Eating Disorder

<http://win.niddk.nih.gov/publications/binge.htm>

This publication gives useful information on the diagnosis of Binge Eating Disorder (BED)

Body Mass Index (BMI)

<http://www.cdc.gov/healthyweight/assessing/bmi/index.html>

Features helpful information on Body Mass Index (BMI) as well as a BMI calculator. Also contains additional helpful, related resources.

School Health Programs: Key Strategies to Prevent Obesity

<http://www.cdc.gov/HealthyYouth/keystrategies/index.htm>


The National Center for Chronic Disease Prevention and Health presents helpful strategies for schools in obesity prevention

Centers for Disease Control and Prevention

www.cdc.gov/nccdphp/dnpa/obesity/faq.htm

Centers for Disease control and Prevention obesity fact sheet.

- **Food Regulation in School:** Many schools have set nutrition standards for the foods they offer children and adolescents. As a result, schools have been buying and selling healthier foods to their students (21).

 **By focusing on obesity prevention and intervention, schools can indirectly impact their students' mental health well-being.**

Now that I've learned about childhood obesity, what can I as an educator do in the classroom to help this at-risk population?

1. Children who are obese experience many mental health consequences as a result of their weight status. It is important for these children to feel secure and valued. Therefore, it is crucial that educators **display genuine concern** and empathy toward these students.
2. Because **bullying** is revealed to be a consequence of having an obese status, this suggests that teachers should **educate** their students on this topic in order to promote acceptance as well as equip them with healthier, more positive social interaction tools.
3. Since research shows that teachers also contribute to weight-based stigmatization, it is important for educators to **check their biases** before interacting with this population. Research shows that faulty knowledge regarding the cause of obesity also contributes to negative teacher attitudes (4,14). Being aware of misconceptions as well as negative biases will help educators develop a caring, healthy, beneficial relationship with their students. In fact, web-based interventions for changing educator attitudes of obesity have been investigated and shown to be effective (5).

4.. As mentioned previously, it is well documented that physical activity is related to better mental health. The use of **activity breaks** in the classroom is a great way for students to become **physically active**.⁴ Here are a few ideas:



- ⇒ **Silent ball:** Turn out all the lights and have students sit on their desk. They will each take turns throwing a ball back and forth to their classmates. Whoever has the ball in their hands when the lights come on is out.
- ⇒ **Basketball:** Have the students take turns throwing socks or a small ball into waste cans in the classroom.
- ⇒ **Yoga:** Yoga is a great way to get our bodies physically active. The teacher can present a yoga pose of the week to their students. Not only can this provide exercise, it can also serve as a great stress reliever.
- ⇒ **Vocabulary game:** Provide half the students with index cards with vocabulary words and the other half with the definitions. The students will then be required to walk around and find their matches. This is a great way to get the students moving around and it can promote positive social interactions.

★ **There are a number of other activity break ideas out there for educators. While these activities may not lead to a significant amount of weight loss, they can provide great opportunities for physical activities which, in turn, can positively impact their mental health.**

⁴Dr. Gallagher, personal communication, October 29

Case Example Part II

The first grade teacher in case example part I decided to use physical activity as a basis for her intervention strategy. More specifically, during recess, the teacher used modeling as an attempt to encourage peer interaction via a racing game. Eventually other children began participating in the racing game. This continued for some time and eventually, he lost 30lbs . He also became more socially active (i.e., developed friendships) and began adjusting better to school.⁵

⁵Dr. Gallagher, personal communication, October 29