You Are What You Eat! Reducing Obesity in Teens

The Issue

- > Obesity rates have doubled on average in the last 30 years¹
- "1 in 5 school age children and young people ages 6 to 19 years in the United States has obesity"²
- The frequency of obesity in children and young adults ages 2-19 years old averaged 18.5%, while affecting 13.7 million young children and teenagers²
- Physical activity can help reduce blood pressure in obese children³
- 137,593 adolescents aged 10-16 years living in 22 European and North American countries were considered obese due to excess television watching⁴

Causes

Overeating

- Limited Physical Activity
- Too much television, computer, and video games
- Eating out at restaurants
- Limited sleep
- Sugar beverages/Fast food
- Environmental Factors
- Genetics

Risks

- Type 2 Diabetes
- Heart Disease
- High Blood Pressure
- Certain Cancers
- Depression
- Insecurity
- Low Self-Esteem
- Psychological Complications

Healthy Tips

- Incorporate 60 minutes of physical activity each day
- Limit television and computer time
- Make half of your plate fruits and vegetables
- Offering rewards encourages healthy consumption
- Portion size
- Eat small snacks between each meal (yogurt, cheese stick, apple)
- Avoid fast food and eating out at restaurants

Additional Resources

If you suspect that your child or someone in your family may have increased risks for weight complications, discuss options and alternatives with your Pediatrician. They may refer you to a local dietitian or local nutrition program.

You can also visit The Centers for Disease Control and Prevention or The United States Department of Agriculture websites for additional resources and information about federal funds, grants, and nutrition programs that can make positive changes in your child's health.

Healthy eating is defined as "eating practices and behaviours that are consistent with improving and maintaining and/or enhancing health"⁵

Eat More







Eat Less



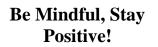














Photos courtesy of Pixabay.com

Annotated Bibliography

Baranowski T, Bouchard C, Bar-or O et al. Assessment, prevalence, and cardiovascular benefits of physical activity and fitness in youth. *J of the American College of Sports and Medicine*. 24(6); 237-247. https://www.researchgate.net/profile/Gregory_Heath/publication/21529282_Assessment_prevale_nce_and_cardiovascular_benefits_of_physical_activity_and_fitness_in_youth/links/5a26c62fa6f_dcc8e866e3a82/Assessment-prevalence-and-cardiovascular-benefits-of-physical-activity-and-fitness-in-youth.pdf. Accessed November 27, 2018.

The purpose of this article was to discuss the benefits that physical activity can have on an individual person's health. More importantly, the article focuses on risk factors in children developing cardiovascular disease and how physical activity could potentially decrease these risks. The article discusses how many children show signs of heart disease early on and obesity being one of these risk factors. The author explains that physical activity can have positive effects on cholesterol, blood pressure, body composition, and insulin levels. Future recommendations the author incorporated included focusing on measuring energy exerted over extended periods, effects physical activity has on children with increased risks of disease in adulthood, and tracking physical activity effects through childhood, puberty, adolescence, and adulthood.

Taylor PJJ, Evers S, McKenna M. Determinants of healthy eating in children and youth. *Canadian Journal of Public Health*. 2005; 96(3); 20-26. <u>http://journal.cpha.ca/index.php/cjph/article/viewFile/1501/1690</u>. Accessed November 27, 2018.

This article focuses on specific factors that influence a child's eating patterns. Parental, environmental and food availability were all considered substantial factors that influence a child's dietary habits. The article also discusses the prevalence of low socio-economic status as well as lower educational status. The author explains the increased chances of purchasing processed foods when parents have less educational knowledge, while reduced prices attract more families on lower incomes. Parental modeling is important because the allowing of unhealthy food consumption increases risks of obesity. The author touches on the importance of understanding food, physical activity, and overall health in youth years as unhealthy lifestyles can lead to unhealthy adulthood. Future recommendations for research focuses on teaching children to choose foods that are healthy as well as appealing to their preferred tastes. The author finally discusses the importance of children being able to make healthy choices for themselves, rather than choosing foods that they prefer, healthy or not.

Just RD, Price J. Using incentives to encourage healthy eating in children. *J of Human Resources*. 2014; 48(4); 855-872.

https://www.researchgate.net/profile/David_Just/publication/265929510_Using_Incentives_to_E ncourage_Healthy_Eating_in_Children/links/545a429f0cf2c46f66424dd0.pdf. Accessed November 27, 2018.

The purpose of this article was to discuss the effects of incentives on children choosing healthier food options. One study is conducted examining 15 elementary schools in Utah observing different environmental factors. The author discusses the increase in vegetable and fruit consumption when rewards are offered, while also reducing waste of these food products as extensive amounts of waste had been seen before the rewards had been offered. The author discusses how schools with bigger bodies of low income students have increased chances of intake of fruits and vegetables due to rewards not being offered at home. For future recommendations, the author suggests that if schools purchased higher quality produce, the chances of decreased waste and increased consumption are greater.

Katzmarzyk TP, Barreira VT, Broyles TS et al. Relationship between lifestyle behaviors and obesity in children ages 9-11: results from a 12-country study. *Obesity*. 2015; 23(8); 1696-1702. doi:10.1002/oby.21152.

This article discusses how certain lifestyle behaviors can have positive and negative effects on childhood obesity. Factors that were observed included nightly sleeping patterns, moderate to vigorous (MVPA) physical activity patterns, watching television, and healthy and unhealthy dietary patterns. Lifestyle habits and body mass index were recorded in this study conducted by the International Study of Childhood Obesity, Lifestyle and the Environment. The author discussed how television and inactive lifestyles increase chances of childhood obesity, while physical activity decreases the likelihood of disease across low, middle, and high income countries. Th author also discussed how television can increase snacking and exposure to food commercials, while not getting the recommended hours of sleep is correlated with increased

obesity rates. The author recommended that more data is collected for dietary intake in children for future studies.

Reference List:

- 1. Obesity facts and figures. European Association for the Study of Obesity Web site. <u>http://easo.org/education-portal/obesity-facts-figures/</u>. Accessed November 27, 2018.
- 2. Centers For Disease Control and Prevention. Childhood obesity facts. https://www.cdc.gov/obesity/data/childhood.html. Accessed November 27, 2018.
- Baranowski T, Bouchard C, Bar-or O et al. Assessment, prevalence, and cardiovascular benefits of physical activity and fitness in youth. *J of the American College of Sports and Medicine*. 24(6); 237-247. https://www.researchgate.net/profile/Gregory_Heath/publication/21529282_Assessment_prevalence_and_cardiovascular_benefits_of_physical_activity_and_fitness_in_youth/links/5a26 c62fa6fdcc8e866e3a82/Assessment-prevalence-and-cardiovascular-benefits-of-physical-
- <u>activity-and-fitness-in-youth.pdf</u>. Accessed November 27, 2018.
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obesity in children ages 9-11: results from a 12-country study. Obesity. 2015; 23(8); 1696-

1702. doi:10.1002/oby.21152.

- Taylor PJJ, Evers S, McKenna M. Determinants of healthy eating in children and youth. *Canadian Journal of Public Health*. 2005; 96(3); 20-26. <u>http://journal.cpha.ca/index.php/cjph/article/viewFile/1501/1690</u>. Accessed November 27, 2018.
- 6. Just RD, Price J. Using incentives to encourage healthy eating in children. *J of Human Resources*. 2014; 48(4); 855-872.

https://www.researchgate.net/profile/David_Just/publication/265929510_Using_Incentives_t o_Encourage_Healthy_Eating_in_Children/links/545a429f0cf2c46f66424dd0.pdf. Accessed November 27, 2018.

- Centers for Disease Control and Prevention. Adult obesity causes and consequences. <u>https://www.cdc.gov/obesity/adult/causes.html</u>. Accessed December 2, 2018.
- 8. United States Department of Agriculture. ChooseMyPlate.gov Web site. https://www.choosemyplate.gov/MyPlate. Accessed December 2, 2018.
- National Institute of Diabetes and Digestive and Kidney Diseases. Health risks of being overweight. <u>https://www.niddk.nih.gov/health-information/weight-management/health-risksoverweight</u>. Accessed December 2, 2018.