



Childhood Obesity

The Problem, The Causes and What
AMA-MSS Chapters Can Do



What is Childhood Obesity?

According to the CDC:

- A child age 2-18 is considered “At risk of overweight” if s/he has a BMI-for-age in the 85th through 94th percentile.
- A child is considered “overweight” if s/he has a BMI-for-age \geq 95th percentile.
- Age-for-BMI charts available at:

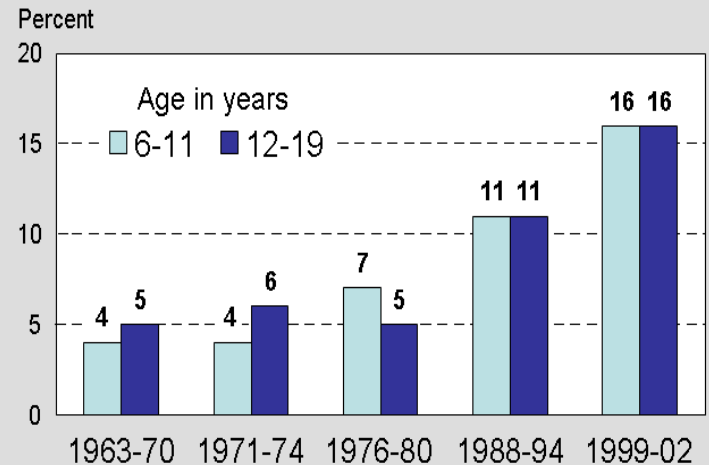
<http://www.cdc.gov/nchs/data/nhanes/growthcharts/set1clinical/cj41c025.pdf>
and <http://www.cdc.gov/nchs/data/nhanes/growthcharts/set1clinical/cj41i026.pdf>.

Trends in Childhood Obesity

The Institute of Medicine reports that over the past 30 years, prevalence of obesity has:

- doubled for children age 2-5 and 12-19
- tripled for children aged 6-11

Figure 1. Prevalence of overweight among children and adolescents ages 6-19 years



NOTE: Excludes pregnant women starting with 1971-74. Pregnancy status not available for 1963-65 and 1966-70. Data for 1963-65 are for children 6-11 years of age; data for 1966-70 are for adolescents 12-17 years of age, not 12-19 years.
SOURCE: CDC/NCHS, NHES and NHANES

<http://www.iom.edu/Object.File/Master/22/606/0.pdf>

<http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overwght99.htm>



Fundamentals of Primary Obesity

- Primary obesity (obesity not caused by underlying endocrine or genetic disorder) is a matter of Energy Balance.
- Calories taken in v. Physical Activity





Causes of the Rise in Primary Obesity--Intake

- Increase of 7-9% in overall calorie consumption in adolescents from 1977-1994.
- Portion sizes have increased:
 - Soft drinks from 144 to 193 calories per serving.
- Decreased consumption of vegetables and milk
- Increased dietary fat and added sugars.
- Increased dining at fast food restaurants
 - Associated with higher calorie intake, higher fat intake, lower fiber and calcium intake compared with a home-prepared meal

Causes of the Rise in Primary Obesity-Expenditure

- Decrease in physical activity
 - Walking trips have decreased by 40% 1977-1995;
- Lack of physical activity in and after school
 - 6/10 kids aged 9-13 don't participate in organized physical activity outside of school
- Increase in sedentary activities (computers, video games, television)
 - On average 6.5 hours a day watching tv, using the computer, playing video games, and reading

Consequences of Childhood Obesity

- Diabetes and Impaired Glucose Tolerance
 - Increase in Type II DM in children is associated with increasing childhood obesity
- Hyperandrogenism; Early onset PCOS
- Heart Disease and Cardiac Remodeling
- Hypertension
- Sleep apnea
- Liver Disease (Nonalcoholic Fatty Liver)
- Bony deformities
- Increased risk of adult obesity

Financial Costs of Childhood Obesity

- 1997-1999 obesity-associated annual hospital costs for children and youth totaled \$127 million (IOM).
- Obesity-associated annual hospital costs for children more than tripled between 1979 and 1999 (Wang, 2002).

Current AMA Policies

- Our AMA shall: (1) seek legislation that would require the development and implementation of evidence-based nutrition standards for all food served in K-12 schools irrespective of food vendor or provider;
- and (2) work with the US Public Health Service and other federal agencies, the Federation, and others in a coordinated campaign to educate the public on the epidemic of **childhood obesity** and enhance the K-12 curriculum by addressing the benefits of exercise, physical fitness, and healthful diets for children.



http://www.ama-assn.org/apps/pf_new/pf_online

Other new AMA policies:

- Encourage physicians to incorporate body mass index (BMI) ...percentiles in children;
- Collaborate with the Centers for Disease Control and Prevention and other agencies to review existing frameworks for school health;
- Identify tenets for promoting school nutrition and exercise and create a recognition program to honor schools that meet the tenets;
- Encourage health industries to make appropriate care available for the prevention and treatment of obese patients.



<http://www.ama-assn.org/ama/pub/category/15257.html>

AMA Resources

- Proceedings: AMA Educational Forum on Adolescent Health- Adolescent Obesity, Nutrition, and Physical Activity
 - <http://www.ama-assn.org/ama1/pub/upload/mm/39/proceedingsobesity.pdf>
- A Model Community Intervention: Consortium to Lower Obesity in Chicago Children (CLOCC)-- Matt Longjohn, MD, MPH; Katherine Kaufer Christoffel, MD, MPH
 - Presented at AMA National Summit on Obesity 2004
 - http://www.ama-assn.org/ama1/pub/upload/mm/433/a_model_community.pdf
- Enabling the Nation's Schools to Help Prevent Obesity—Lloyd Kolbe, PhD
 - Presented at AMA National Summit on Obesity 2004
 - http://www.ama-assn.org/ama1/pub/upload/mm/433/enabling_schools.pdf





More AMA Resources



AMA Policy Promotion Grants - Supporting education and community service

<http://www.ama-assn.org/ama/pub/category/112.html>



AMA National Service Project - Obesity Prevention is the 2004-2006 Focus

<http://www.ama-assn.org/ama/pub/category/12755.html>



Fitness Forward – Originated at Duke Univ School of Medicine

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





What's Being Done Nationally:

- NIH National Heart Lung and Blood Inst.
 - Hearts N' Parks—helps park and recreation agencies encourage heart-healthy behaviors
 - Obesity Education Initiative
- 2001—Surgeon General Call to Action to Prevent and Decrease Overweight and Obesity
 - Focus on interventions in Families and Communities, Schools, Health care, Media/Communications and Worksites.



What's Being Done State-Level:

- Voluntary Guidelines in Television advertising of fruits, vegetables and activity (CA)
- Ensuring availability of nutritious food choices in urban and underserved supermarkets (PA)
- BMI and Diabetes Screening
- Insurance Coverage for Obesity Prevention/Treatment (proposed in HI and MD)
- Nutrition education by schools and health depts
- Nutritional standards and restrictions on food sales in schools
- Physical Education and Obesity Prevention Programs

What your Chapter Can Do: Education and Research

- USD-Rapid City Anti-Obesity Campaign
 - Conducted a survey to determine a correlation between the student's BMI and at-school snacking habits through coordinated efforts with the local Wellness Advisory Committee.
- UM Kansas City—Childhood Obesity Lecture Series
 - Lectures on obesity bias, medical student perceptions on obesity, and childhood obesity education.
 - Students worked with the local children's hospital education program on childhood obesity.

Example Project: Albert Einstein College of Medicine Conference on Obesity

- Keynote speaker: Assistant commissioner of health from the NYC Dept of Health and Mental Hygiene
- Breakout sessions
 - Pediatric obesity—led by a pediatrician who runs a obesity program at an affiliated hospital
 - Patient education—led by a health educator and nutritionist who incorporated role play into the presentation
 - Weight loss and exercise program run by a faculty member.
- Healthy Dinner and discussion about breakout sessions
- Recruiting for Community Service Projects.
- Folders
 - NYC statistics
 - recommendations for health professionals
 - The "small steps" campaign from the federal government,
 - Related activities/programs in NYC.





What Your Chapter Can Do: Health Fairs

- University of Illinois—Rockford
 - United for Your Health, Hispanic Health Fair: provided healthy recipes and information on the importance of eating a balanced diet
- UNTHSC: Obesity Awareness
 - Distributed literature and bike helmets at the university's annual "D.O. Dash".

What Your Chapter Can Do: Other Events


- Pennsylvania State College of Medicine
Obesity: A Public Outreach Program.
 - Informational booth at local mall to educate the public about the risks associated with obesity.
 - Students calculated the BMI, Framingham risk, and blood pressure of people who stopped by the booth.
- PCOM: Healthy Lifestyles to Reduce Obesity
 - The chapter created fun activities for children to educate at-risk children about obesity, proper nutrition and the importance of physical activity.
- University of Texas Southwestern: 5K Run
 - 5K run for children and interactions with the parents of the involved children to encourage healthy lifestyles.

More Resources/Ideas

- Nutrition Education for Young People
 - **The Power of Choice:**
http://www.fns.usda.gov/tn/resources/power_of_choice.html
 - **Supersize me (with Educational Enhancements)**
<http://supersizemestore.com/info/maininfo.html>
- Nutrition Education for Parents
 - **National Institute of Diabetes and Digestive and Kidney Diseases (NIDDKD)** <http://win.niddk.nih.gov/publications/>
- Exercise Events
 - CATCH—for activity ideas
<http://www.flaghouse.com/activityGuides.asp>
- AMA's Obesity Resources
 - <http://www.ama-assn.org/ama/pub/category/11759.html>
- See “Childhood Obesity Toolkit, Supporting Documents” for more resources.


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