



Children's Hospital

Cleveland Clinic

From Babyhood to Bariatric Surgery: Prevention and Treatment of Childhood Obesity

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Why We Care

Obesity is currently the single most prevalent chronic disease in childhood.





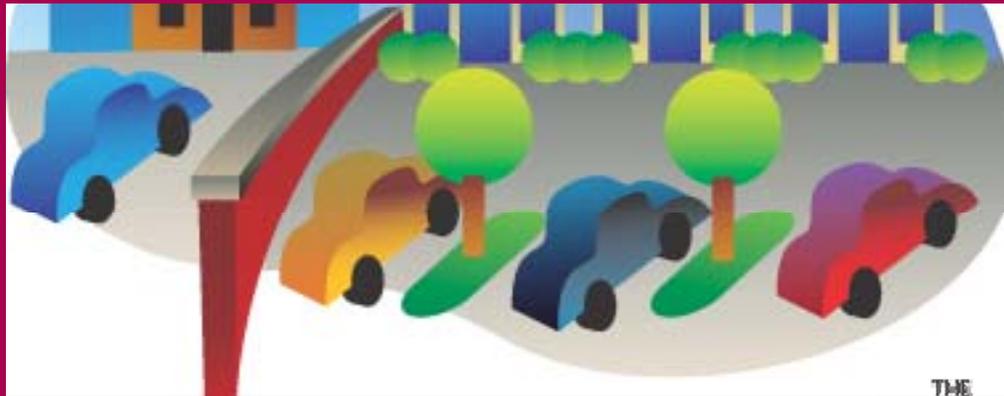
"Remember when we used to have to fatten the kids up first?"

Risk of Adult Obesity

- 14% chance if obese as infant
- 25% chance if obese at preschool
- 41% chance in obese at age 7
- 75% chance if obese at age 12
- 90% chance if obese in adolescence

A 2002 study of more than 200 neighborhoods found that there are **three times as many supermarkets in wealthy neighborhoods** as in poor neighborhoods, and four times as many supermarkets in predominantly white neighborhoods as in predominantly African-American ones.

(Morland K, Wing S, Diez Roux A, Poole C. Neighborhood characteristic associated with the location of food stores and food service places. Am J Prev Med 2002;22[1]:23-9)



From the statistical sourcebook "A Nation at Risk: Obesity in the United States." To order, call 1-800-AHA-USA1 or email inquiries@heart.org

In 1970, about 25 percent of total food spending occurred in restaurants. By 1995, 40 percent of food dollars were spent away from home.

(Paeratakul S, Ferdinand D, Champagne C, Ryan D, Bray G. Fast-food consumption among US adults and children. J Am Diet Assoc 2003;103:1332-8)



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Communities with higher percentages of African-American residents tend to have fewer available parks and green spaces, places to play sports, and public pools and beaches.

(Powell LM, Slater S, Chaloupka FJ. The relationship between physical activity settings and race, ethnicity, and socioeconomic status. Evidence-Based Preventive Medicine 2004;1[2]:135-44)



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Belly shirts.
Because
we just love
to torment
pudgy
teenaged
girls.



dribbleglass.com

The Role of Media

- Primetime TV shows oriented to black audiences had significantly more food commercials, most with high-calorie, low nutrient foods
- African American characters more often overweight, reflecting/reinforcing message that it is more acceptable to be overweight in minority populations (Tirodkar, Am J Public Health 2003; Fitzgibbon & Stolley, Pediatric Annals 2003)

The Role of the Media

- Younger and older kids equally persuaded by food advertising
- Even if kids know that a commercial is trying to get them to buy a product, it does not make them less likely to want it!
- Brand licensing- high cal, low nutrient foods associated with a favorite character
- Cell phones- direct marketing to kids often without parents' knowledge or consent
- Product placement still allowed in videogames, online games, movies, primetime TV
- Exclusive rights- “pouring rights contracts”- giving beverage companies right to sell their products at school



The Role of Physical Activity in Weight Control

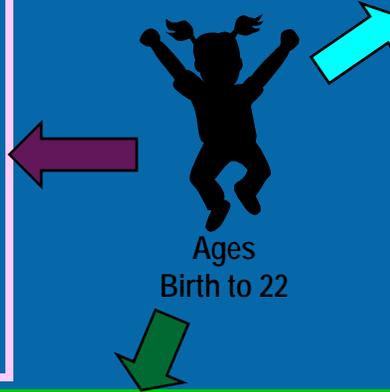
- Dose to prevent obesity is unknown
- Dose to maintain weight after loss around 1 hr/day
- Relatively modest impact on weight loss
- Reduces obesity associated comorbidities

Components of Successful Programs

- Successful models DO exist!
- Strongly based in theories of behavior change
 - Motivation: think of what will motivate KID/FAMILY, not what would motivate you
 - Think small, manageable changes with LOTS of follow up

School-Based Reforms

- Food is Knowledge (K)
- Healthy Futures (grades 4-6)
- Health Corps (grades 9-12)
- 30-minute fitness activity/day
- Nutritional assessments
- Parent/Teacher Campaign
- Bully-proofing



Clinical Care

Fit Youth Programs

- 8-12 yo's, 13-18yo's
- BMI > 30 may initiate
- Weekly for 10 weeks
- Parental involvement
- Psychology, MD, Dietitian, Exercise Physiologist

One on One in the Office

- Protein Sparing Modified Fast
- Working with You and Your Child individually from preconception on

Bariatric Surgery- Peds

Community Initiatives

Access to Health Foods & Affordable Shopping

- Partner with Heinen's, Cooking demonstrations, promote family dinners, Farmer's Market

Community Coalitions

- BMI Study
- Active Living Communities
- Walking school bus

Built Environment

- Playgrounds, Green spaces, Bike paths
- Mill Creek Initiative

Shaping America's Youth (SAY):

Fit Youth at Independence

- N = 72 children completed 10 week program:
- Cumulative weight loss of group = 297 lbs
- Average weight loss during group = 4.4 lbs
- Greatest loss = 25.3 lbs
- Greatest gain = 4.62 lbs
- Percent who lost wt = 73.1%
- Percent who gained wt = 25.4%
- Percent who maintained = 1.5%







Bringing It All Together

- In growing children, weight maintenance alone may be a good goal
- Add time for family exercise, and family dinners
- Know what resources exist in your community – and expand them!
- Place risk reduction into a lifelong perspective, with easy, small changes
- Create a bully-proof environment with NO weight-related teasing!
- Solving the problem requires both policy and environmental changes to enable behavior change