

Obesity

An introduction to obesity and our concept to decrease obesity among adolescents

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What is obesity?

- A condition resulting from excessive storage of fat in the body. (Best measured by BMI)

Prevalence of Obese Adolescents at the 95th percentile of Body Mass Index (BMI)	
2006-2007	15.5%
1999-2000	11%
1976-1980	5%

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What is BMI?

- BMI (Body Mass Index) is the ratio of weight in kilograms to square of height in meters. BMI correlates with more accurate measures of body fatness
- Pediatrics;
 - At risk: BMI between 85th -95th percentile for age and sex
 - Overweight/obese: BMI at or above the 95th percentile for age and sex

Example Calculation

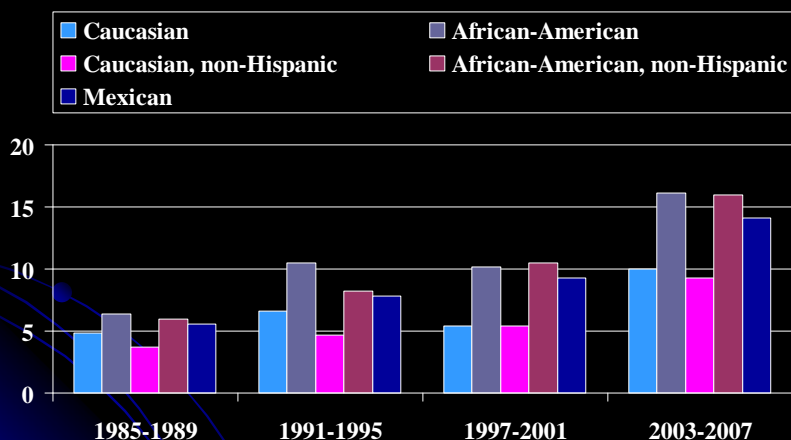
- $\text{Weight} \div \text{Height} \div \text{Height} \times 703 = \text{BMI}$
- - 13 year old boy
 - 146 pounds
 - 64 inch
- $146 \div 64 \div 64 \times 703 = 25$
- BMI of 25 per growth chart = 95%
- This young man is overweight/obese

Overweight & Obesity

- The prevalence of childhood overweight and obesity has doubled in the past 20 years
- American children are less physically active as a group than were previous generations
- In 1999 16% of high school students were overweight and nearly 10% were obese
- More black and Hispanic female students (23% and 18%, respectively) were overweight than white female students (12%)

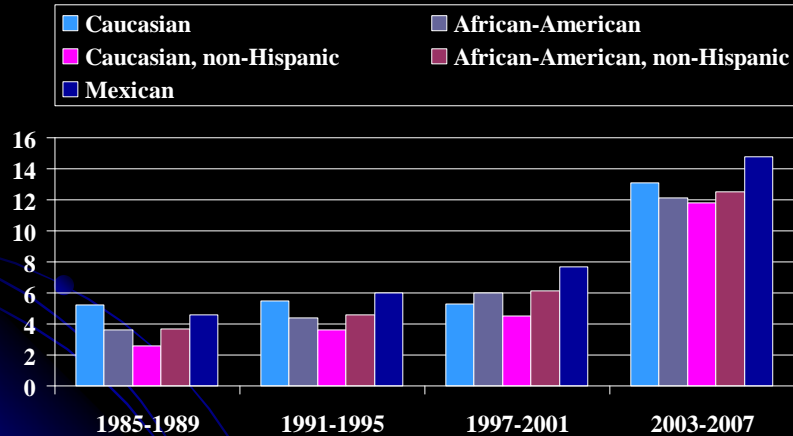
US Girls 12-17 years old

*BMI at or above sex- and age-specific 95th percentile



US Boys 12-17 years old

*BMI at or above sex- and age-specific 95th percentile



What are the factors?

- Lack of physical activity is considered the single biggest factor in the rising rates of obesity among children and teens
- 50% of US young people 12-21 years old do not participate in vigorous physical activity on a regular basis. The time US students spend being active in physical education classes is also decreasing
- Only about 50% of schools in the US require physical education in grades 1-5; 25% of in grad 8; and 5% in grade 12
- Women generally are less active than men at all ages
- People with lower incomes and less education are typically not as physically active as those with higher incomes and education
- African Americans and Hispanics are generally less physically active than whites
- Diabetes Prevention Program show lifestyle changes – physical activity – are more effective than oral diabetes medications at preventing or delaying the onset of diabetes (58% vs 31% reduction in risk)

Location/Type of Activity	Effect of Modernization	Impact on Obesity Development
Transportation	Rise in car ownership increase in short-distance driving	Decrease in walking or bicycling
At Home	-Increase in use of modern appliances -Increase in TV viewing and computer and video game use	- Decrease in manual labor - Decrease in time spent in active recreational pursuits - Over-consumption of high-calorie foods. Eating when not hungry, eating while watching TV or doing homework
Work Place	Increase in computerization	Decrease in physically active and manual labor
Public Places	Increase in the use of elevators, escalators, and automatic doors	Decrease in daily physical activity patterns
Urban Residency	Increase in crime in some areas	Prevents women, children, elderly from going out for exercise and leisure activity
Suburban and Rural Residency	While there is more opportunity for outdoor activity, schools and commercial business may be too distant to walk to	Dependency on cars discourages walking
Genetics	Greater risk of obesity has been found in children of obese and overweight parents	

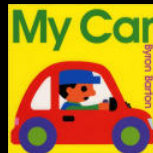
Over Consumption of High-calorie Foods

- Nutritional content
- Portion size



Decreased physical activity

- Not as much participation in physical activities; Walking, Active play, Recess



Effects of Overweight

- Hypertension
- Dyslipidemia (for example, high total cholesterol or high levels of triglycerides)
- Type 2 diabetes
- Coronary heart disease
- Stroke
- Gallbladder disease
- Osteoarthritis
- Sleep apnea and respiratory problems
- Some cancers (Endometrial, breast, and colon)

- Today's children could be the first generation of Americans with a life expectancy less than their parents!!!



Methods of Weight loss

- Exercise Regularly
- Control Portion Sizes
- Eat Slower
- Eat More Healthy
- Limit Amount of Sweets Eaten Per Day

How to lose Weight *Successfully* if you are a Teenager

Unless you are seriously overweight, the most effective way to reduce weight is to eat healthily and exercise regularly. Amazingly, many teenagers don't choose this tried-and-tested method. Instead, they prefer 'instant solutions' to their weight concerns – solutions which typically cause bad health and weight gain.

Behavior Change Strategies

- Increase awareness of food choices:
 - Moderate food portions
 - '5 a day' Vegetables and Fruits
- Limit activity
 - American Academy of Pediatrics recommends limiting TV viewing to 1-2 hours a day

Behavior Change Strategies

- Increase Physical Activity:
 - Provide exercise choices to children
 - Encourage age appropriate and creative exercise
 - Make it FUN!

Children Then....



Children Now.....



Best Practices

- Activ8kids-Launched in 2005 to fight childhood obesity and promote healthy lifestyles among children.
- The goal of Activ8Kids! Is to instill in children before the age of eight a daily regimen that includes:
 - consuming at least 5 fruits and vegetables
 - engaging in at least 1 hour of physical activity
 - reducing screen time (TV and Video Games)

We hope everyone agrees we have to do something..

This is our plan:

1. We want children and their parents to realize that Child Obesity *IS* a major issue. We want to show that physical activity and good nutrition is important for everybody
 2. We also want to stop the incline of obesity among children in the United States.
- **We want to work from two locations; LA Fitness clubs and High Schools**

High Schools

- We want to inform adolescent children how important it is to be physically active and to eat healthy. We also want to achieve this with organizing special 'Get Active' Information Days. We will go to local high schools in Los Angeles and talk about child obesity, and show them the same PowerPoint presentation we just showed you. To give our 'mission' a little more value we will invite a professional athlete (think about the Lakers, Dodgers, Kings, Avengers, Sparks, Lady Killers) to talk about these topics with us. They will also talk about how important physical activity and good nutrition is for their careers. Our goal is to visit the different high schools on a yearly basis.
- To make physical education classes more 'attractive' for the students, the professional athlete will participate in a weekly two hour P.E. class.

What we want High Schools to do

Provide:

- Psychosocial education/intervention
- School nutrition policy
- Quality daily P.E. classes

Costs for our Program

- High schools pay \$1000 a year
- LA Fitness develops a special 'family price' which makes it attractive for parents to take their children to the gym.
- The 'Family Price' is an additional price of \$10 a child, per month. - \$5 will go to LA Fitness and \$5 will go to our organization.
- With this money we will cover our expenditures for campaigns/ employees/ office rent etc.
- The professional athletes will be paid by their professional team- so basically they are our sponsors.

Why target high schools?

- Prevention is more cost effective than cure
- Children can be reached through schools
- Effects of chronic disease accumulate over time; so need long term changes
- We need to begin awareness at an early age

Why target LA Fitness

- We need to incorporate parents in providing strategies and ideas
- We want parents to 'push' their children to be healthy and active, but in the same time not focus on weight
- We want them to care about their children's health

What is our goal?

- We hope adolescents and their parents will see how important it is to live healthy and to be physically active.
- We hope more adolescents will be physically active; not only go to the gym, or attend physical education classes. We want them to ride the bike more often, or go play basketball instead of playing video games or watching TV.
- And in the end we hope child obesity will decrease.

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