





# Karen Donato, S.M., R.D. Coordinator, NHLBI Obesity Education Initiative

# Overweight and Obesity

Educational Efforts of the NHLBI Obesity Education Initiative



## Alarming Trends in Health of the U.S.



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#### ARTICLE PREVIEW

Aug. 25, 2003

#### Obesity Goes Global

Children around the world are eating more like Americans -- and getting dangerously fat as a result

By J. MADELEINE NASH/HELSINKI

Eight-year-old Hannah McGoey lives in an upstairs apartment on a busy thoroughfare in London. She has no yard to play in, and her school holds physical-education classes just two days a week. Her busy parents tried to be careful about nutrition

the years, Hannah oseptember 8, 2003 no longer fit her. "

mother Julia rememi began to change when a reasonable with the services RELATIONSHIPS

SHOPPING TOWN! OADS MIRELESS

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#### **Weighty Concerns** AHA Says Teenage Obesity on the Rise

Jan. 2 — Thirty years ago, when Dr. Gerald Hass began treating children in Boston, his

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abo NEWS LIVE

Six Million Kids Are Seriously Overweight. amilies Can Do.

ey Cowley & Sharon Begley





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By Ned Potter oboNEWS.com

## Prevalence of Overweight In Adults and Children

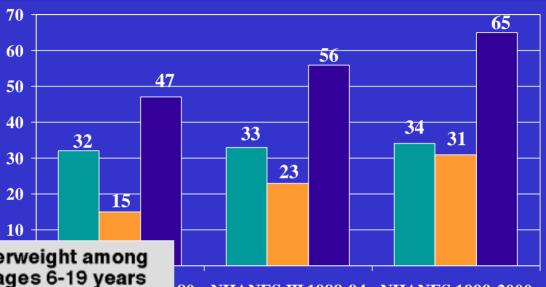
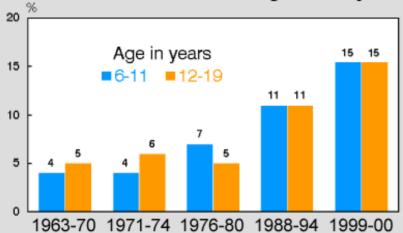


Figure 1. Prevalence of overweight among children and adolescents ages 6-19 years



NOTES: Excludes pregnant women starting with 1971-74. Pregnancy status not available for 1963-85 and 1966-70. Data for 1963-85 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.

80 NHANES III 1988-94 NHANES 1999-2000

JAMA, October 9,2002; vol 288, no.14

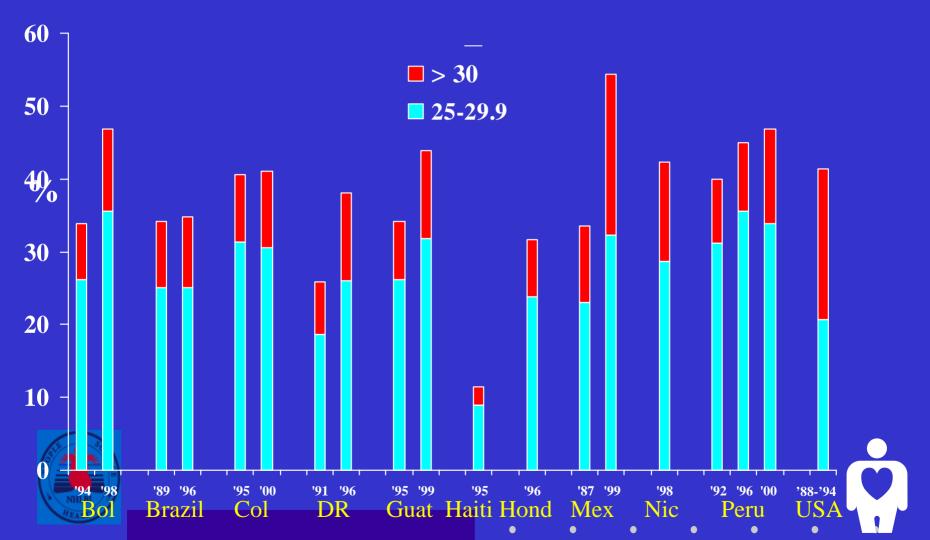


**■** Overweight

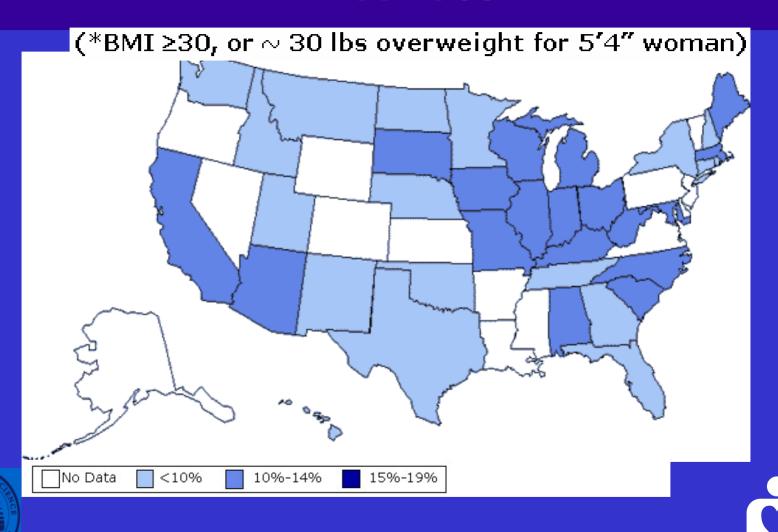
**■ Obesity** 

**■** Both

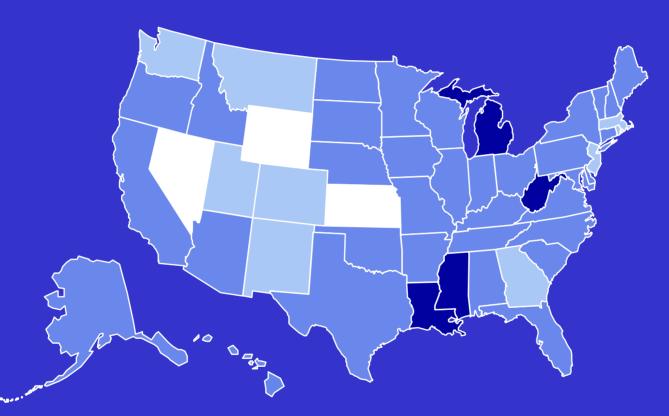
# Percent overweight (25-29.9) and obese (≥ 30 BMI) in Latin American women, 15-49 years



Source: Martorell, et al, European Journal of Clinical Nutrition, 2000



(\*BMI ≥30, or ~ 30 lbs overweight for 5′ 4″ woman)

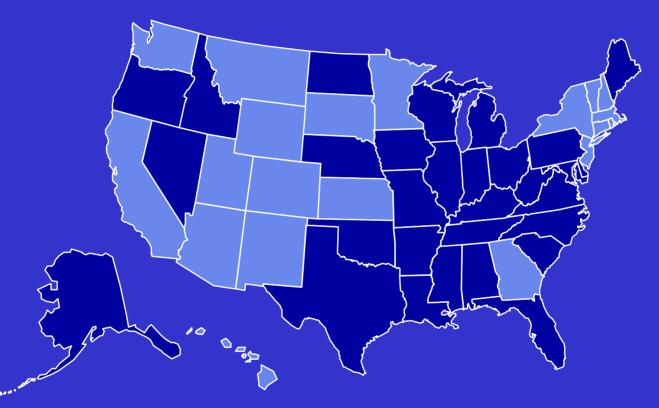








(\*BMI ≥30, or ~ 30 lbs overweight for 5′ 4″ woman)



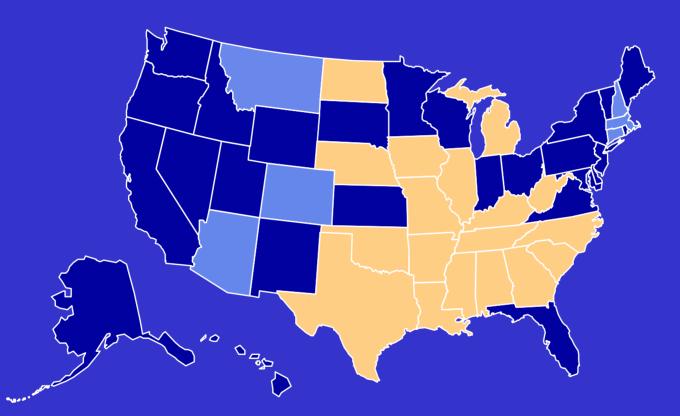


No Data < 10% 10%-14% 15%-19%

Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282:16,2001; 286:10.



(\*BMI ≥30, or ~ 30 lbs overweight for 5′ 4″ woman)

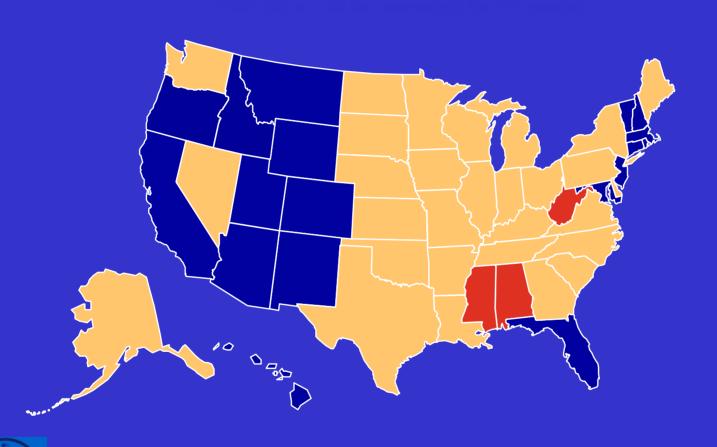






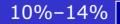


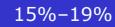
(\*BMI ≥30, or ~ 30 lbs overweight for 5′ 4″ woman)

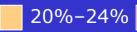








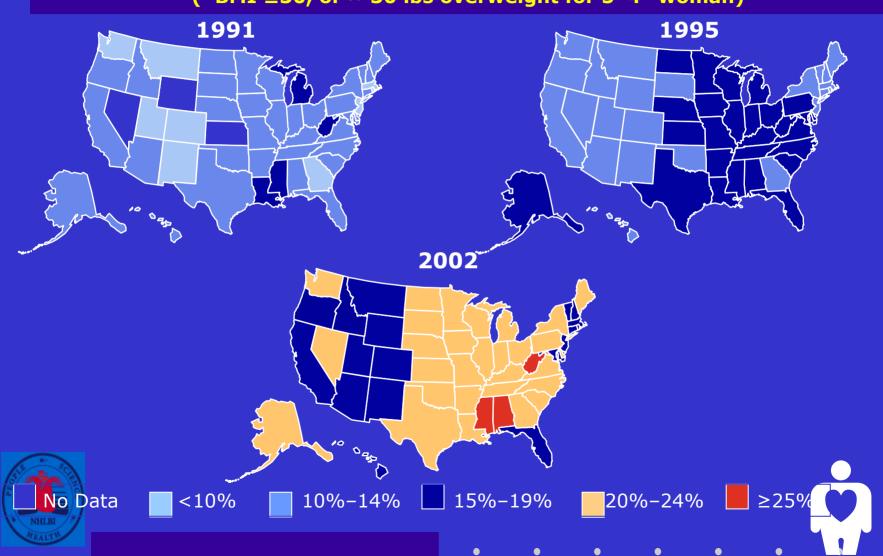






≥25%

(\*BMI ≥30, or ~ 30 lbs overweight for 5′ 4″ woman)





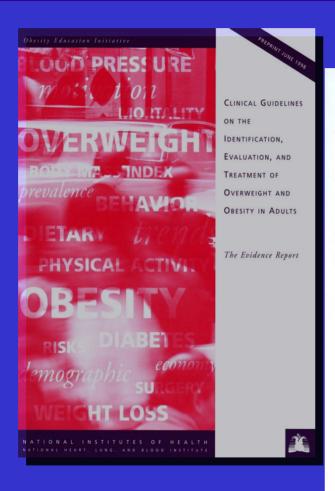
## NHLBI Obesity Education Initiative

- Two pronged strategy:
  - High-risk strategy: targets individuals experiencing or at high risk for adverse health effects and medical complications with overweight/obesity
  - Population-based strategy: focuses on the prevention of overweight/obesity and physical inactivity





## The Clinical Guidelines



Journal o

Bio-Behavioral
Biochemical
Clinical
Eating Disorders
Epidemiological
Exercise
Genetic
Metabolic
Molecular
Neurobiological

Nutritional Physiological Psychological Surgical

> Studies in Obesity

OBESITY Research

> Volume 6 Supplement September 1998

Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults—The Evidence Report

> National Institutes of Health National Heart, Lung, and Blood Institute

> > SSN 1071-7323





## **Assessment of Overweight and Obesity**

Body Mass Index (BMI):

```
weight (lbs) X 703 height (inches²)
```

- Overweight =  $25 29.9 \text{ kg/m}^2$
- Obesity =  $\geq$  30 kg/m<sup>2</sup>
- Waist Circumference
  - High risk:
    - Men >102 cm (40 in)
    - Women >88 cm (35 in)
  - Other risk factors





## **Obesity-associated Morbidities**

- Type 2 diabetes
- Heart disease
- Hypertension
- Stroke
- Cancer
- Sleep apnea

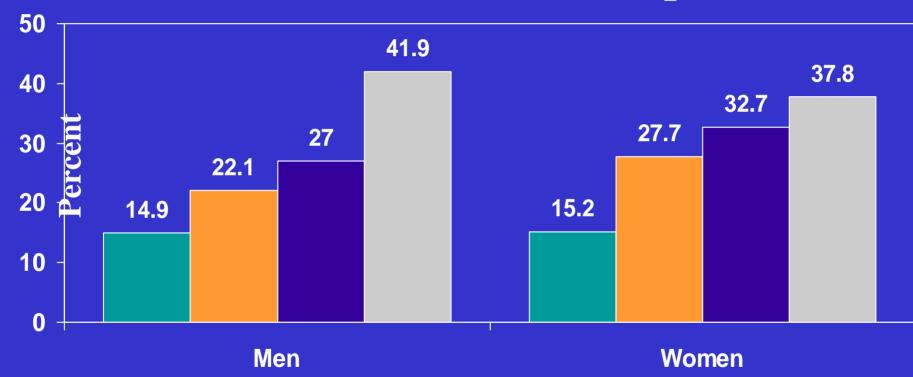
- Asthma
- Urinary incontinence
- Gallbladder disease
- Nonalcoholic FLD
- Osteoarthritis
- Psychological disorders





# NHANES III Age-Adjusted Prevalence of Hypertension\* According to BMI

■ BMI <25 ■ BMI 25-26 ■ BMI 27-29 ■ BMI ≥30</p>





\*Defined as mean systolic blood pressure≥140 mm Hg, as mean diastolic ≥90 mm Hg, or currently taking antihypertensive medication.



Brown C, et al. Body Mass Index and the Prevalence of Risk Factors for Cardiovascular Disease. *Ob Res.* 2000.

## Therapeutic Approaches

- Behavioral
  - dietary changes
  - increase activity
  - decrease inactivity
- Pharmacologic
- Surgical





## Weight Loss Diet

- Individually planned caloric deficit diet
- Generally 500-1000 Kcal/day deficit
  - -<30% calories from fat
  - <10% saturated fat
- Must reduce calories—not just fat—to promote weight loss.





# **Physical Activity**

- Modestly contributes to weight loss.
- May decrease abdominal fat.
- Increases cardiorespiratory fitness.
- Improves sense of well being and self efficacy.





# **Physical Activity**

- Most important in preventing weight regain
- Start slowly and increase gradually
  - Can be single session or intermittent
  - Start with walking 30 minutes 3 days/week
  - Increase to 45 minutes 5 or more days/week
  - Encourage increased "lifestyle" activities don't have to join a gym
  - Get pedometer –increase steps by 2,000/day



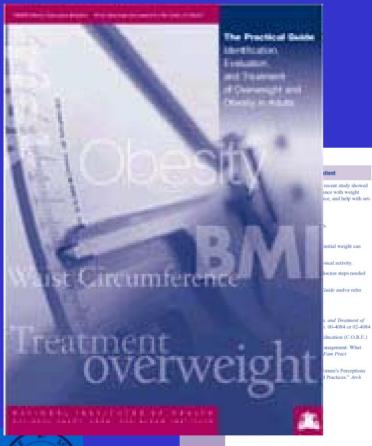


## Goals of Weight Management/Treatment

- Prevent further weight gain
- Reduce body weight
  - Initial goal: ↓ body weight by 10 percent
  - If goal achieved, further weight loss can be attempted
  - Reasonable timeline: 6 months of therapy
    - Moderate caloric deficits
    - Weight loss 1 to 2 lbs/week
  - Maintain a lower body weight over long term



## **Professional Education Materials**



steps

TO INITIATE DISCUSSION about weight management WITH YOUR PATIENTS

Make the Most of the Patient Visit

Patients who are overweight or obese generally have a history of dealing y frustrating and visible problem. They often experience discrimination from strangers, and even hurtful comments from health professionals. Many pati however, are comfortable discussing weight with their physician'. So setting effective tone for communication is critical. Providers need to establish rap with patients, solicit permission to discuss weight issues, and use preferred terms such as "weight," "excess weight," and "BMI" when describing ob-

- Ask the patient if he/she would be comfortable with discussing gene
- Ask about the patient's weight history and how excess weight has affected
- Be careful to communicate a nonjudgmental attitude that distinguishes between the weight problem and the patient with the problem.
- Express your concerns about the health risks associated with excess weight and how this is affecting the patient (review patient's BMI, waist circumf ence, and health risks).

Effective treatment for obesity is based on skillful and empathetic communication between practitioners and patients.



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES National Institutes of Health National Heart, Lung, and Blood Institute

Aim for a Healthy Weight



## Aim for a **Healthy Weight**

The National Heart, Lung, and Blood Institute Do you note your patient's body mass index (BMI) and waist circumference? (NHLBI) Obesity Education Initiative provides the answers to these questions

- Do you know your patient's obesity-related
- Do you know how to start a conversation with your patients about weight loss?



with practical tools for the busy practitioner









## Palm OS Devices









## Slides and CME Modules



National Heart, Lung, and Blood Institute
Online Slide Show

NHI BI HOME PAGE

NIH HOME PAGE

OEI HOME PAG



[ Viewing and Download Tips ]

PROFESSIONAL EDUCATION

### Evaluation and Treatment of Overweit Obesity in Adults Slide Show

The National Heart, Lung, and Blood Institute, in coopers National Institute of Diabetes and Digestive and Kidney I in June 1998 the first Federal guidelines on the identifica and treatment of overweight and obesity in adults. About in the United States are overweight or obese. Obesity are substantially increase the risk of morbidity from hyperter dyslipidemia; type 2 diabetes; coronary heart disease; s disease; osteoarthritis; sleep apnea and respiratory probendometrial, breast, prostate, and colon cancers. Higher also associated with increases in all-cause mortality.

The Clinical Guidelines Evidence Report has been made This slide show consists of six sections: Clinical Guideli Evidence-Based Methodology, Background Data, Practic Considerations, and Future Research. Presenters will be presentation accordingly.

NHLBI is pleased to be able to offer this slide set for public use. The slides can be downloaded for use in computer slide shows, conventional slide presentations, or for online viewing via the website.

The slide set consists of six parts including:

- · Clinical Guidelines Core Set
- Evidence-Based Methodology
- Background Data
- Practical Tips
- Special Considerations
- Future Research



Assessment and Management Overweight and Obese Adult Patien

CME Evaluators, use this link to open a course evaluation form in a new window.

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THE NORTH AMERICAN ASSOCIATION



http://www.nhlbi.nih.gov/obesitycme/

## **Public Education Materials**

#### Your Weight and Health Profile Your Rody Mass Index (RMI) Your Waist Circumference Your BMI Classification High Risk Waist Circumference ☐ Underweight (BMI less than18.5) Men: greater than 40 in. (greater than 102 cm) □ Normal weight (BMI 18.5–24.9) ☐ Women: greater than 35 in. (greater than 88 cm) Overweight (RMI 25\_29.9) □ Obesity I (BMI 30–34.9) □ Obesity II (BMI 35–39.9) Extreme Obesity (greater than or equal to 40) Your Current Health Conditions that place you at very high risk: (check all that apply) Coronary heart disease (CHD) Other atherosclerotic diseases (peripheral vascular disease, abdominal aortic aneurysm, or symptomatic carotid artery disease ☐ Type 2 diabetes Note: Other conditions such as osteoarthritis, gallstones, and gynecological abnormalities also increase health risk. Your Risk Factors associated with overweight or obesity: (check all that apply) ☐ High blood pressure (hypertension) ☐ High LDL cholesterol High triglycerides ☐ Low HDL cholesterol Physical inactivity ☐ High blood sugar □ Family history of premature CHD Age greater than 45 years for men; greater than 55 years for women Based on your BMI, waist circumference, current disease, and risk factors, your risk for premature death or developing heart disease, diabetes, or other conditions is: ☐ Low ☐ Increased ☐ High ☐ Very High ☐ Extremely High Your Level of Readiness for weight loss: □ Not ready □ Ambivalent □ Ready to take action ■ Weight loss (needed if you're obese; or overweight with a high waist circumference and have two or more risk factors). Only for people who are ready to take action ☐ Weight maintenance/Prevent further weight gain (recommended if you're overweight, don't have a high waist circumference, and have less than 2 risk factors)

Goal Weight: \_\_\_\_\_ (a weight loss of 5-10 percent of initial weight is recommended)

Lifestyle Therapy (diet, physical activity, and behavior therapy recommended for 6 months)

drugs have failed)

(a weight loss of 1-2 pounds per week is recommended)

Weight Loss Drugs (an option if weight loss of 1 lb./week is not achieved after 6 months of lifestyle therapy)

Surgery (an option with severe obesity and medical comorbidities when lifestyle therapy and/or weight loss



## to Weight Loss Success

#### Be a SMART planner!

SMART means being Specific, Measured, Appropriate, Realistic, and Time-bound about what you plan to achieve. For example, if your goal is to increase your physical activity, then write down the type of activity you plan to do, how many times you can realistically do it each week, and for how long each time. Start with small, short, and easier goals, and work your way up.



#### Keep an eve on the size!

Did you know that we eat most of what is on our plate, no matter what the size of the plate? When at home, try using smaller plates; they will help you take smaller portions. When eating out, share an entrée! Studies show that portions today are often super-sized-enough for two or more people to share.

#### Make yourself an offer you can't refuse.

Before starting to reach your next goal, offer yourself a promise like this, "If I reach my goal this (day, week, month), I will treat myself to a well-deserved (Fill in a reward here, but not a food reward.)." Think of something you want, such as an afternoon off, a massage, a movie, or even a deposit toward a larger reward. Be creative, set up rewards for yourself frequently, and make sure you give them to yourself when you reach your goal.

#### How much is enough activity?

You need to get at least 30 minutes of moderate physical activity per day, most days of the week to help burn up extra calories. But give yourself credit for the activities that you're already doing. Common activities such as climbing stairs, pushing a stroller, gardening, and walking all count as physical activity. Just make sure you do enough of them.



#### Balance your (food) checkbook.

Keep a diary of what you eat and how much physical activity you get each day. Then, at the end of each week, record your weight in the same diary. You and your health provider can use this information to adjust your eating and physical activity plan to find the best way to reach your goal.

#### Am I full yet?

The question may take longer to answer than SLOW you think. It takes 1. minutes or more for you think. It takes 15 the message that we're full to get from our stomachs to our brains. So take a few minutes before digging in for that next helping. Having trouble feeling full? Eight glasses (8 ounces each) or more of water or other noncaloric beverages daily fills you up and keeps you refreshed. Also, vegetables and fruits can

help you feel fuller, especially

when eaten raw.

WEIGHT





U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES National Heart, Lung, and Blood Institute

www.nhlbi.nih.gov/health/public/heart/obesity/lose\_wt/index.htm

Get more tips at NHLBI's "Aim for a Healthy Weight" Web page at or call the NHLBI Health Information Center at (301) 592-8573.



# **Portion Distortion:**

Do You Know How Food Portions Have Changed in 20 Years?





## **French Fries**

20 Years Ago





210 Calories2.4 ounces



610 calories6.9 ounces

Calorie Difference: 400 calories



How to burn\* 400 calories:

Walk leisurely for 1 hr 10

Minutes





## Soda

### 20 Years Ago



85 Calories 6 ½ ounces

### Calorie Difference: 165 calories

How to burn\* 165 calories:

Garden for 35 Minutes





250 calories









## **Turkey Sandwich**

20 Years Ago



320 calories

**Today** 



820 calories

Calorie Difference: 500 calories



How to burn 500 calories: Bike for 1 hour and 25 minutes





# The Obesity Environment

- Consumption of energy encouraged!
  - Wide variety, low cost, good taste, high fat/energy dense foods available everywhere
  - Large portions
- Expenditure of energy discouraged!
  - Reduction of jobs requiring physical labor
  - Reduction of PE at schools
  - Increased time spent watching TV, web, video games



- Urban sprawl



# Extra Value Meals Includes Large Fries & Medium Soft Drink











Super-Size\* Your Meal!





Courtesy of Dr. Kelly Brownell



# But the obesity epidemic is NOT just an individual problem...





We have to reach the

# WHOLE POPULATION





## **Population Strategy**







## Parks and recreation:

 Provide a unique venue for children, adults, and seniors to learn about heart healthy lifestyles.

Adopt programs to meet the needs of the community.

Mobilize community partners and bring people together





Report progress annually.

Serve as ambassadors for other sites.

• Evaluate the program's sustainability and growth annually.

## **Media Activities**





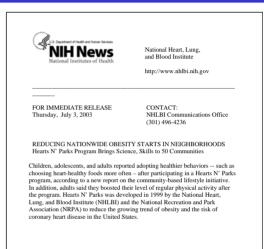


Highlights

Town Hall Mooting

Mayor Promotes Hearts N' Parks For Fitness

Las Vares Mauer Ocear P. Coodman, who is laurahing his own







# HEALTHY WEIGHT COMMUNITY OUTREACH INITIATIVE



National Heart, Lung, and Blood Institute

# Healthy Weight Community Outreach Initiative

## Objectives

- Engage communities to take an active role in creating healthier environments that promote a healthy weight.
- Engage the public in recognizing individual and environmental factors that influence attempts to achieve and maintain a healthy weight
- Motivate health professionals to provide patients with clear messages about prevention of weight gain without the stigma that overweight and obese patients often feel.





# Healthy Weight Community Outreach Initiative

### Program Elements

- National Media and Messaging
- Community Outreach
- Partnership Development

### Audiences

- Primary:
  - Youth
  - Parents (primary custodians)
- Secondary:
  - Influencers (physicians, peers, teachers, coaches, others)





# OEI Web Page... www.nhlbi.nih.gov

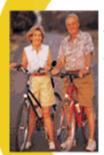
#### NATIONAL INSTITUTES OF HEALTH





OEI Home Page

# Aim For A Healthy Weight



Informa<mark>tio</mark>n for Patients <mark>an</mark>d the Public



Information for Health Professionals



Information for Patients | Information for Professionals
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