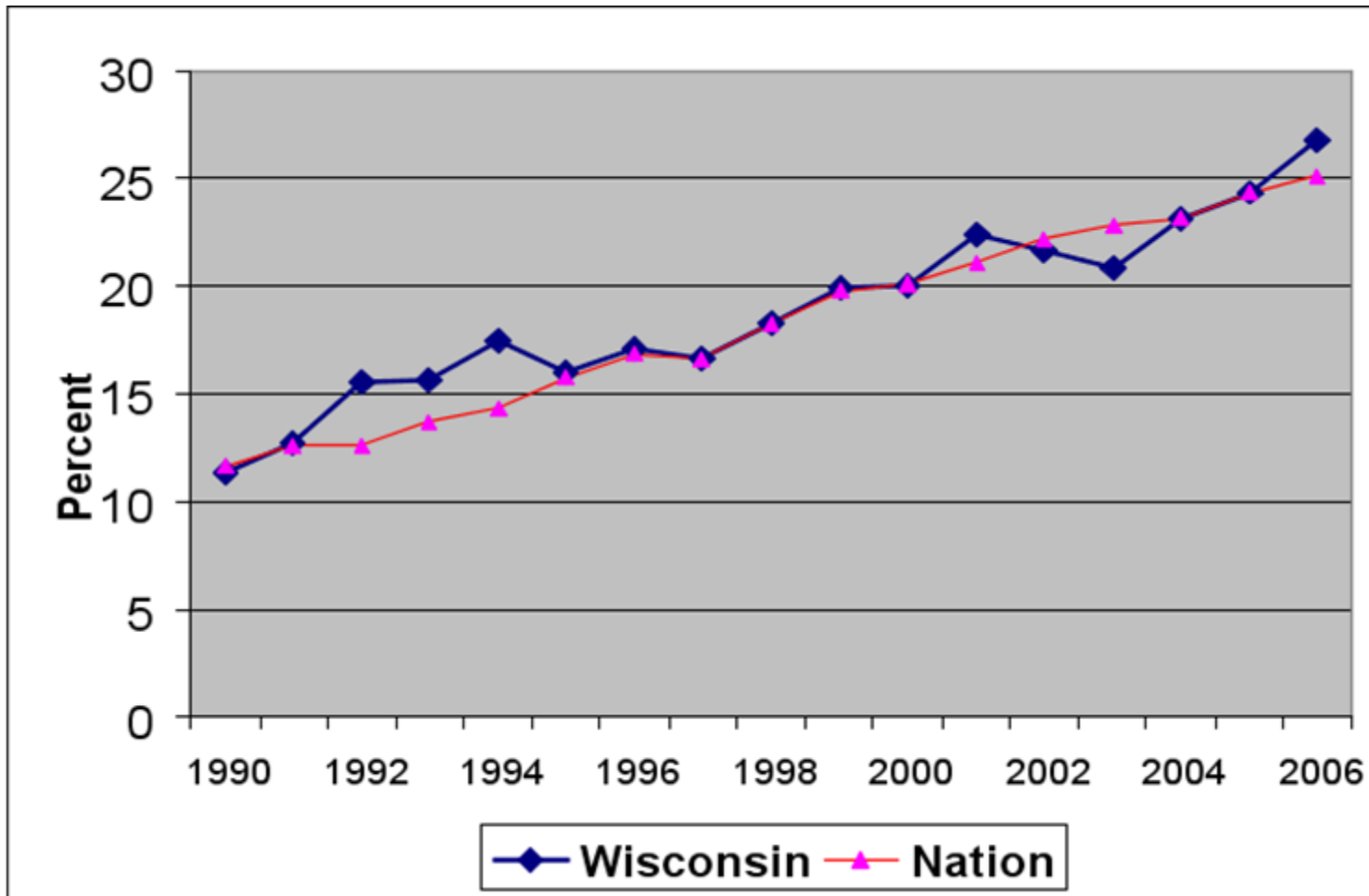


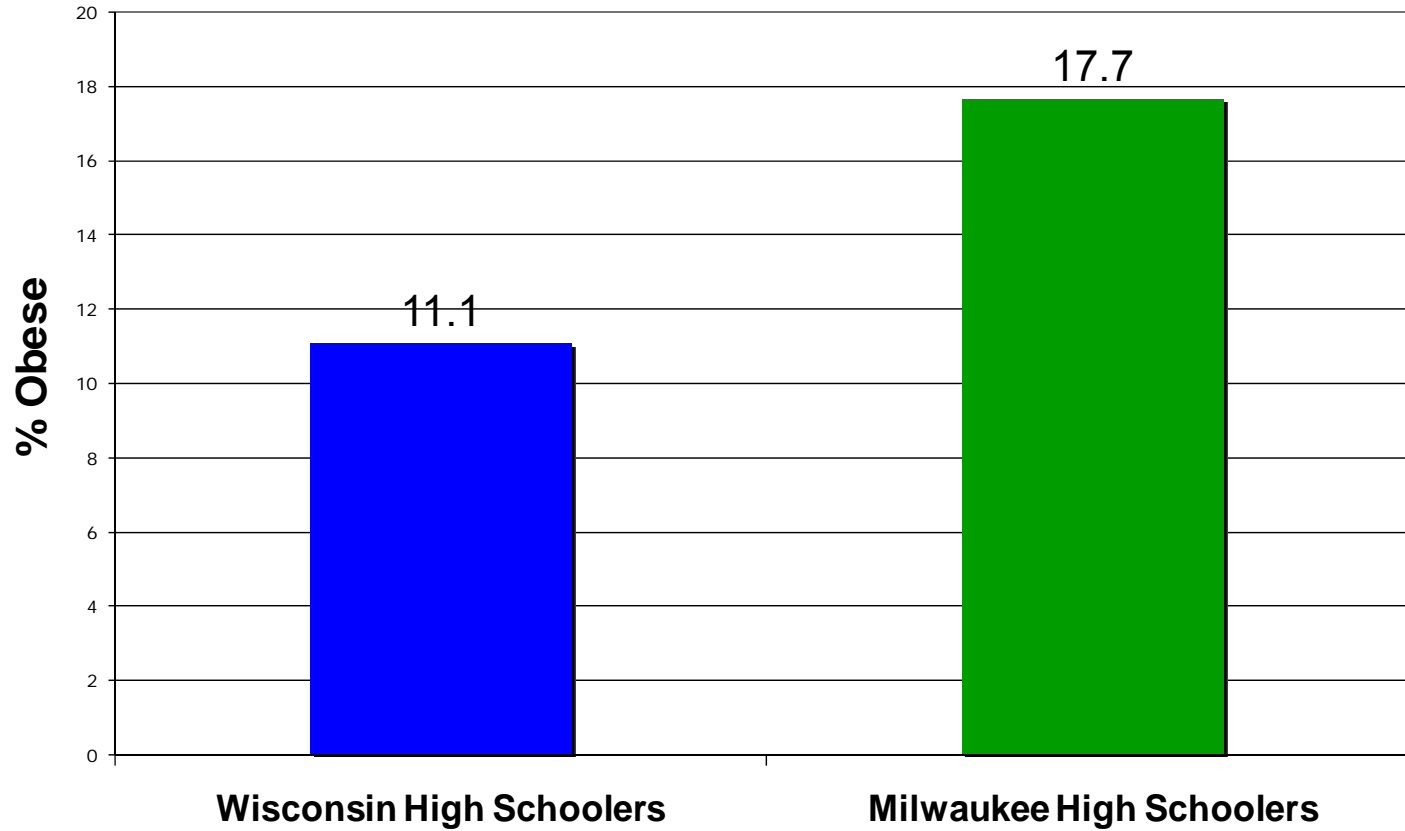
# **CHILDHOOD OBESITY AND PHYSICAL EDUCATION IN SCHOOLS**

**Nga Dinh, MD  
Matt Gray, MD  
Laura Norton, MD  
Tientien Wang, MD**

# TRENDS IN OBESITY PREVALENCE: WISCONSIN AND U.S. (SOURCE: 1990-2006 BRFSS)



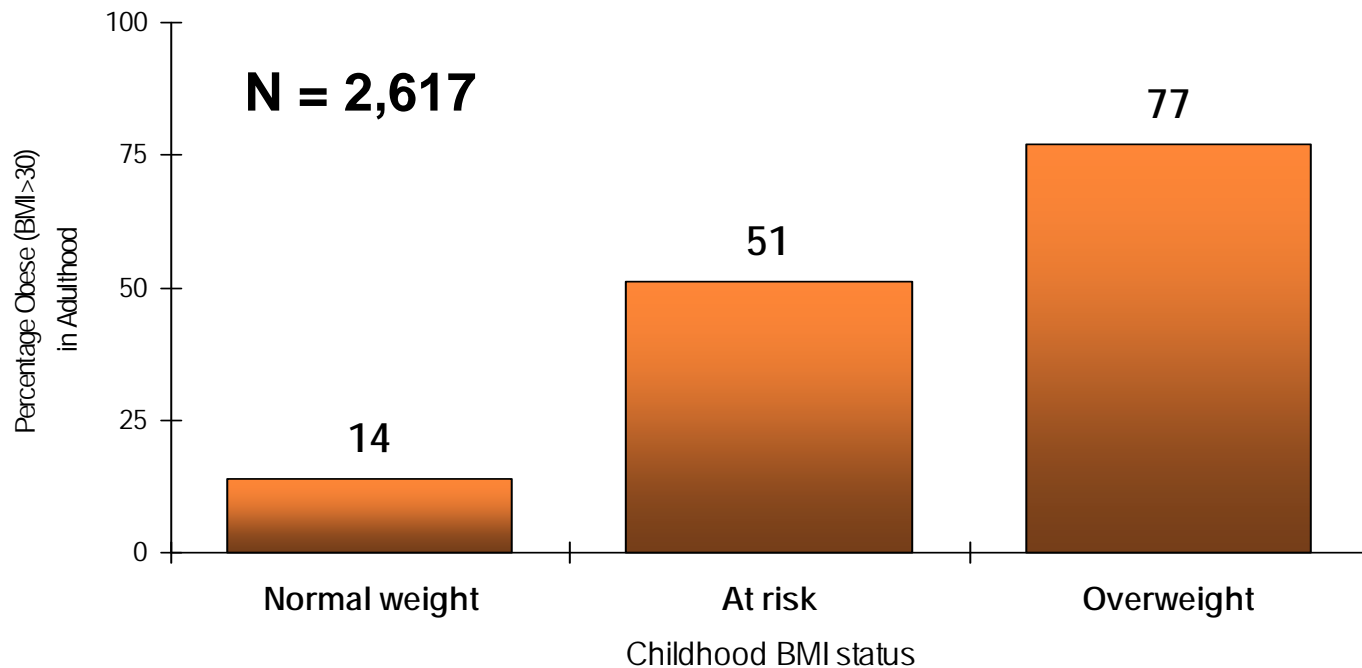
# WISCONSIN'S OBESITY STATISTICS



Obesity In High School Students <sup>1,2</sup>



# ASSOCIATION BETWEEN BMI IN CHILDHOOD AND ADULT OBESITY



Source: Freedman DS, et al., *Pediatrics*. 2001; 108:712-718.

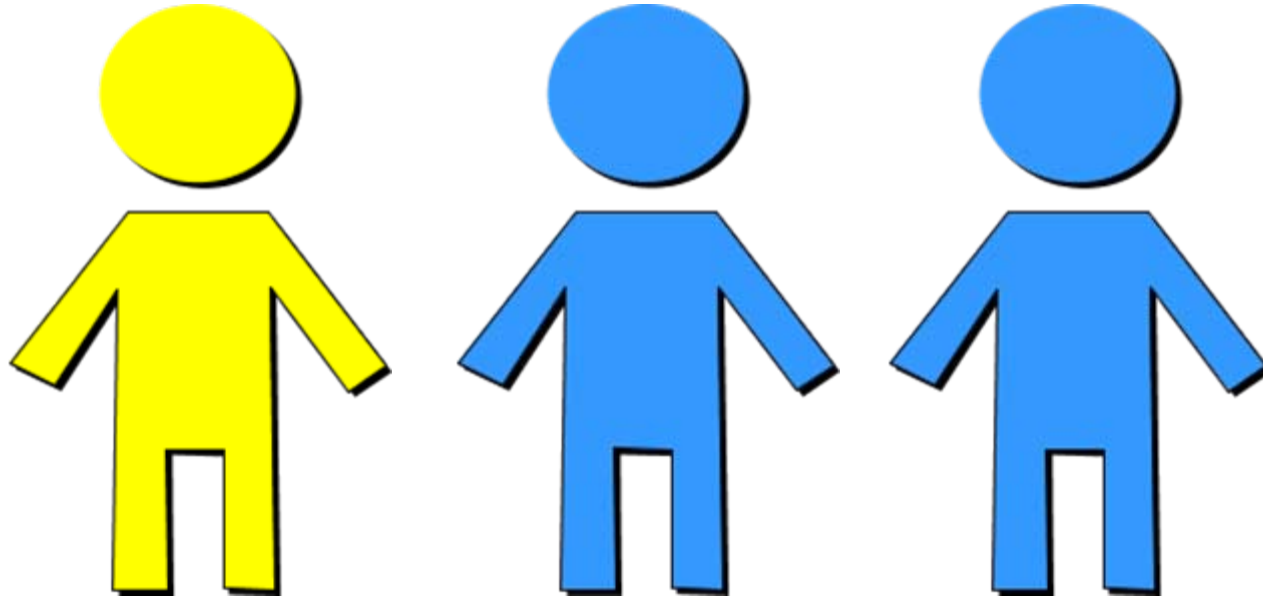


# HEALTH RELATED CONSEQUENCES OF OBESITY

- Type 2 Diabetes
- High blood pressure
- Increased risk for heart disease
- Psychosocial
- Sleep apnea
- Arthritis



# U. S. CHILDREN BORN IN 2000



1 in 3

will develop diabetes during lifetime<sup>3</sup>



# ECONOMIC IMPACT OF OBESITY

- Annual obesity-related healthcare spending in the U.S. is estimated to cost \$75 billion<sup>4</sup>
- **\$1.5 billion of these costs occur in Wisconsin<sup>4</sup>**
- Medical care costs for obese adults are nearly 38% higher compared to normal weight adults<sup>5</sup>



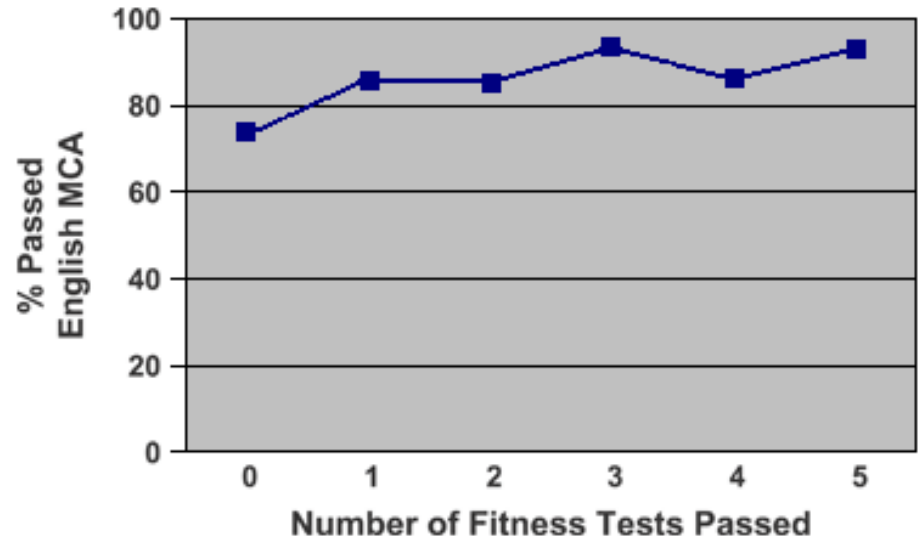
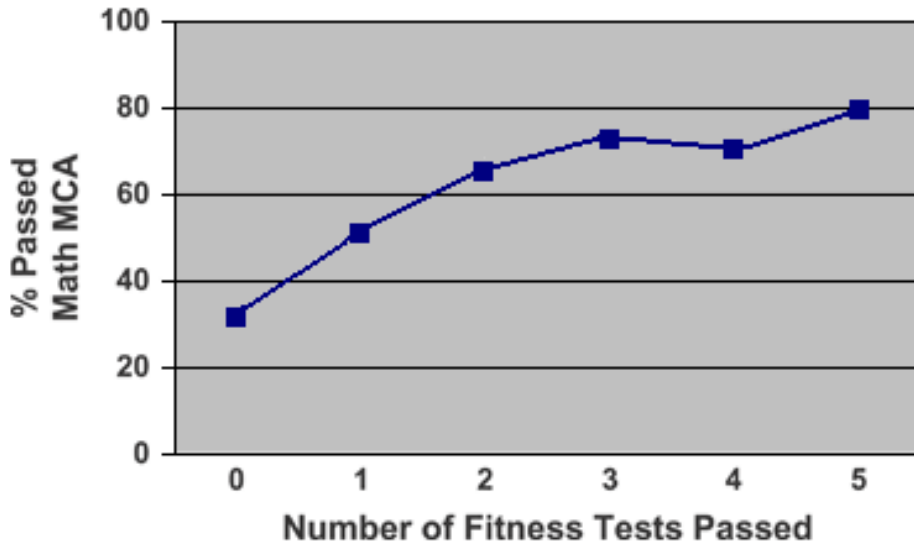
# PHYSICAL ACTIVITY GUIDELINES

- All children age six years and older **need 60 minutes** or more of moderate to vigorous aerobic activity daily<sup>6</sup>
- Students who meet these guidelines have significantly higher grades than students who perform no vigorous physical activity<sup>7</sup>



# INCREASED PHYSICAL FITNESS CORRELATES WITH INCREASED TEST SCORES

A cross-sectional study of public school students in the Northeastern U.S  
from 2004 to 2005



Source: Chomitz et al., *Journal of School Health*. 2009; 79(1):30-37.

# ACTIVITY FOR MILWAUKEE STUDENTS

- Less than 30% of Milwaukee high school students attend daily physical education classes<sup>2</sup>
- Nearly half of Milwaukee high school students watch 3 hours or more of television daily<sup>2</sup>
- Many students do not have safe places to exercise outside of school



# WHAT CAN YOU DO?

- Adopt attitude of healthy living
- Promote increased physical activity and physical education
- Encourage good nutrition and food choices



# CREATE AN ATTITUDE OF HEALTHY LIVING

- Make healthy living the culture within your school
  - Be positive role models
  - Facilitate staff participation
- Make physical activity and healthy eating a priority for everyone
- Use physical activity to create a learning environment
  - Use action words (run, jump, skip, etc)
  - Do math with pedometers
  - Brain breaks



# PROMOTE PHYSICAL ACTIVITY

- Hire certified physical education teachers
- Walking clubs
- Organized recess
- Physical activity related field trips
  - Ropes course
  - Walks for causes
- Walking Bus Program



# PROMOTE GOOD NUTRITION

- Do not allow food/candy as incentives
- Healthy snacks and birthday treats
- Create cookbooks with healthy recipes
- Encourage staff to eat with the students



# UTILIZE EXISTING RESOURCES WITHIN MPS

- Successful schools in MPS with motivated PE teachers and staff
- Teacher In-Services
  - Share ideas on grant writing and getting staff participation
- Family Education
  - Healthy snacks and meals
  - Increase physical activity at home



# FUNDING

## GRANT WRITING

- NASPE
- Target Corporation
  - 97 Wisconsin schools received grants this year up to \$800
- DPI Grants
  - Fresh Fruit and Vegetable Program Grant

## DONATIONS

- Donorschoose.org
- Community Organizations

## FUNDRAISING

- PTO fundraisers
- Sell student made cook books

## ADVOCACY

- Contact your legislators



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