

HESC 470

Chapter 1

Introduction: An Epidemic
of Childhood Obesity

An Epidemic of Childhood Obesity

- Children's health in the United States has improved dramatically over the past century.
- Infant mortality has been lowered by over 90 percent, contributing to the substantial increase in life expectancy—of more than 30 years—since 1900.
- However, we begin the 21st century with a startling setback—an epidemic.

An Epidemic: Childhood Obesity

- Occurring:
 - Among both Boys and Girls
 - Children and adolescents
 - Across all socioeconomic strata
 - Among all ethnic groups
 - Though Afr. Amer., Hispanics, and Amer. Indian are disproportionately affected

An Epidemic: Childhood Obesity

- Ranked as a “critical public health threat for the 21st century”
- Since the 1970’s the prevalence of childhood obesity has more than doubled for preschoolers aged 2-5 years and adolescents aged 12-19 years.*
- It has tripled for children aged 6-11 years.*
- Approximately 9 million American children over 6 years of age are already considered obese.

*Data collected through the year 2000

Implications for Children & Society

- Significant health implications – both short term and long term.
- In a pop-based sample, approximately 60% of obese children had at least one physiological CVD risk factor
 - ↑cholesterol,
 - ↑triglycerides,
 - ↑insulin,
 - ↑blood pressure

Implications for Children & Society

- Diabetes: Startling increasing incidence of Type 2 diabetes in young children. For those born in 2000, the lifetime risk of being diagnosed with diabetes is estimated to be 30% for boys and 40% for girls (if obesity rates level off).
- Psychosocial: shame, self-blame, and low self-esteem that may impair academic and social functioning and carry into adulthood.

Implications for Children & Society

- Financial Implications: substantial direct and indirect costs to our nation's economy.
 - Discrimination
 - Economic disenfranchisement
 - Lost productivity
 - Disability
 - Morbidity
 - Premature death

Contexts for Action

- The 19-member IOM committee was charged with developing a prevention-focused action plan to decrease the prevalence of obesity in children and youth in the United States.
- The primary emphasis of the committee's task was on examining the **behavioral and cultural factors, social constructs, and other broad environmental factors** involved in childhood obesity and identifying promising approaches for prevention efforts.

Contexts for Action

- Addressing variables that influence both eating and physical activity,
- These variables result from complex interactions across a number of relevant social, economic, cultural, environmental, and policy contexts.
- The interrelated areas of family life, ethnic diversity, eating patterns, physical activity, and media use—are all aspects of societal change that must be considered.

Lifestyle & Demographic Trends

- Shifting role of women in society
- Delayed marriage
- Childbearing outside of marriage
- Higher divorce rates
- Single parenthood
- Work patterns of parents

Ethnic Diversity

- The racial and ethnic composition of children in the United States is becoming more diverse.
- Differences among ethnic groups include variations in household composition and size and variations in other aspects of family life such as media use and exposure, consumer behavior, eating, and physical activity patterns.

Eating Patterns

- Rapid pace of daily life contributes to food trends marked by:
 - Convenience, shelf-life, portability, and greater accessibility
- Consumption of away-from-home foods comprised 20 percent of children's total calorie intake in 1977-1978 and rose to 32 percent in 1994-1996.
- Portion sizes

Eating Patterns

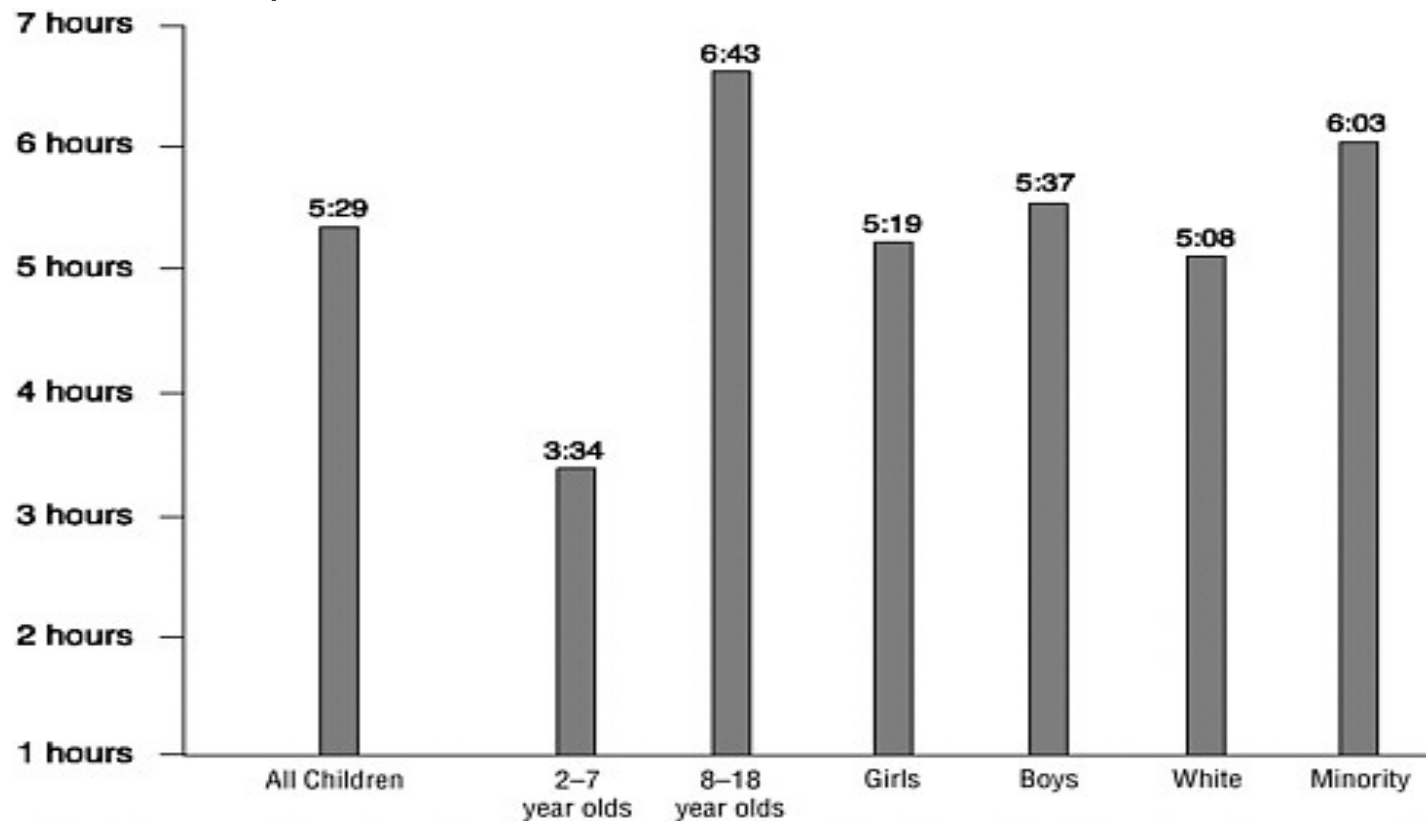
- Eating out not only for convenience, but also in response to needs such as:
 - Stress management, relief of fatigue, entertainment and socialization.
- Other trends:
 - Frequent snacking: Today a large portion of children's total daily calories come from energy-dense snacks
 - Decline in breakfast consumption (generally among adolescents)
 - Not meeting recommended servings of fruits and veggies.

Physical Activity

- Limited data of PA especially among children and youth.
- Decline in PE classes
- Decline in children walking to school
- Decline in children's free time
- Increase in organized sports and outdoor activities
- Influence of the built environment

Media

- **FIGURE 1-4** Daily media use among children by age. Media use includes television, video games, radios, cassette tape players, VCRs, compact disc players, and computers (Rideout et al., 1999).





Consumer Attitudes & Public Awareness



Emerging Programs & Policies

Public Health Precedents

Ten Great Public Health Achievements United States, 1900-1999

- Vaccination
- Motor vehicle safety
- Safer workplaces
- Control of infectious disease
- Decline in deaths from coronary heart disease and stroke
- Safer and healthier foods
- Healthier mothers and babies
- Family planning
- Fluoridation of drinking water
- Recognition of tobacco use as a health hazard

SOURCE: CDC, 1999.

Public Health Precedents

Recommended Public Health Interventions Common to Multiple Health Behaviors and Conditions

Type of Intervention	Health Behavior or Condition
Community-wide campaigns	Physical activity** Motor vehicle occupant injuries* Oral health (water fluoridation)**
School-based interventions	Physical activity** Oral health (sealants)** Vaccine preventable diseases (requirement for school admission)* Skin cancer*
Mass media strategies	Tobacco initiation and cessation** Motor vehicle occupant injuries**
Laws and regulations	Reducing exposure to secondhand smoke** Motor vehicle occupant injuries**
Provider reminder systems	Vaccine preventable diseases** Tobacco cessation*
Reducing costs to patients	Tobacco cessation* Vaccine preventable diseases**
Home visits	Vaccine preventable diseases* Violence prevention**

* Sufficient Evidence.

** Strong Evidence.

SOURCE: Task Force on Community Preventive Services, 2004.

Summary