Obesity in Adolescence

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Section A

Obesity Trends
Obesity Trends* among U.S. Adults: BRFSS, 1985

* BMI ≥ 30, or ~ 30 pounds for 5’4” woman

Obesity Trends* among U.S. Adults: BRFSS, 1986

* BMI ≥ 30, or ~ 30 pounds for 5’4” woman

Obesity Trends* among U.S. Adults: BRFSS, 1987

1987

No data

< 10%

10%–14%

* BMI ≥ 30, or ~ 30 pounds for 5’4” woman

Obesity Trends* among U.S. Adults: BRFSS, 1988

* BMI ≥ 30, or ~ 30 pounds for 5’4” woman

Obesity Trends* among U.S. Adults: BRFSS, 1989

* BMI ≥ 30, or ~ 30 pounds for 5’4” woman

Obesity Trends* among U.S. Adults: BRFSS, 1990

1990


* BMI ≥ 30, or ~ 30 pounds for 5’4” woman
Obesity Trends* among U.S. Adults: BRFSS, 1991

* BMI ≥ 30, or ~ 30 pounds for 5’4” woman

Obesity Trends* among U.S. Adults: BRFSS, 1992

1992

No data < 10% 10%–14% 15%–19%

* BMI ≥ 30, or ~ 30 pounds for 5’4” woman

Obesity Trends* among U.S. Adults: BRFSS, 1993

1993

No data  < 10%  10%–14%  15%–19%

* BMI ≥ 30, or ~ 30 pounds for 5’4” woman

Obesity Trends* among U.S. Adults: BRFSS, 1994

* BMI ≥ 30, or ~ 30 pounds for 5’4” woman

Obesity Trends* among U.S. Adults: BRFSS, 1995

1995

No data  < 10%  10%–14%  15%–19%

* BMI ≥ 30, or ~ 30 pounds for 5’4” woman

Obesity Trends* among U.S. Adults: BRFSS, 1996

1996

Map of the United States showing obesity trends among adults in 1996 with different states shaded to indicate the percentage of adults with obesity. States are color-coded as follows:

- **No data**
- < 10%
- 10%–14%
- 15%–19%

* BMI ≥ 30, or ~ 30 pounds for 5’4” woman

Obesity Trends* among U.S. Adults: BRFSS, 1997

1997

* BMI ≥ 30, or ~ 30 pounds for 5’4” woman

Obesity Trends* among U.S. Adults: BRFSS, 1998

1998

No data  < 10%  10%–14%  15%–19%  20%–24%

* BMI ≥ 30, or ~ 30 pounds for 5’4” woman

Obesity Trends* among U.S. Adults: BRFSS, 1999

1999

No data  < 10%  10%–14%  15%–19%  20%–24%

* BMI ≥ 30, or ~ 30 pounds for 5’4” woman

Obesity Trends* among U.S. Adults: BRFSS, 2000

* BMI ≥ 30, or ~ 30 pounds for 5’4” woman

Obesity Trends* among U.S. Adults: BRFSS, 2001

2001

* BMI ≥ 30, or ~ 30 pounds for 5’4” woman

Obesity Trends* among U.S. Adults, BRFSS, 2002

* BMI ≥ 30, or ~ 30 pounds for 5’4” person
Obesity Trends* among U.S. Adults, BRFSS, 2003

* BMI ≥ 30, or ~ 30 pounds for 5’4” person
Obesity Trends* among U.S. Adults, BRFSS, 2004

* BMI ≥ 30, or ~ 30 pounds for 5’4” person
Obesity Trends* among U.S. Adults, BRFSS, 2005

* BMI ≥ 30, or ~ 30 pounds for 5’4” person
Obesity Trends* among U.S. Adults, BRFSS, 2006

* BMI ≥ 30, or ~30 pounds for 5’4” person
Obesity Trends* among U.S. Adults, BRFSS, 2007

* BMI ≥ 30, or ~ 30 pounds for 5’4” person
In 1990, among states participating in the Behavioral Risk Factor Surveillance System, 10 states had a prevalence of obesity less than 10% and no states had prevalence equal to or greater than 15%.

By 1998, no state had prevalence less than 10%, seven states had a prevalence of obesity between 20-24%, and no state had prevalence equal to or greater than 25%.

In 2007, only one state (Colorado) had a prevalence of obesity less than 20%.
- Thirty states had a prevalence equal to or greater than 25%.
- Three of these states (Alabama, Mississippi, and Tennessee) had a prevalence of obesity equal to or greater than 30%.
Too Cheap and too Plentiful

Spending on food as % of disposable income

Source: USDA Economic Research Service
Price of Food vs. Food Consumed

Too Cheap and too Plentiful

Kcal consumed per person per day

Source: USDA Economic Research Service
A Fast-Food Meal

- A quarter-pound cheeseburger, large fries, and a medium, 12-ounce soda provides:
  - 1,250 calories
  - 49 g fat
  - 95 mg cholesterol
  - 1,500 mg sodium

- A 110-pound child would have to bike for **one hour and 15 minutes** to burn off **just one** 20-ounce soda
Food and beverage advertising and marketing is aimed at children and adolescents.
**Food Intake**

- U.S. children and adolescents’ food intake compared with recommendations, USDA CSFII 1989–91
  - Only 1% of youth (12–19 years old) met all the national recommendations for food intake
  - 16% of youth did not meet any of the recommendations
  - *(Pediatrics, Sept., 1997)*
Obesity: A Growing Problem

- Obesity rates have doubled in children and tripled in teens since 1980
- 27% of youth are overweight
- More than 2/3 of obese children will become obese adults
- 60% of overweight youth have high blood pressure, high blood cholesterol, or high levels of insulin (precursor to diabetes)
- Poor diet and inactivity related to obesity may soon overtake tobacco as the leading cause of death in U.S. adults
Money Spent on U.S. Advertising

- Food, beverages, confectionery: $6,403,000,000
- Restaurants and fast food: $4,130,800,000

Source: Advertising Age, 6/28/04
U.S. 2003 Ad Spending in Millions

- McDonald’s $ 619 M
- Burger King $ 294 M
- Pepsi/diet Pepsi $ 207 M
- Coke/diet Coke $ 167 M
- Mountain Dew $ 60 M
- M&M candies $ 73 M
- Snickers candy bar $ 70 M
- Frito-Lay chips/snacks $ 57 M
- Pringles $ 35 M
- Kool-Aid $ 25 M
- Lunchables $ 23 M

Source: Advertising Age, June, 2004
Comparisons

- Annual National Cancer Institute (NCI) budget for “5-a-day” nutrition education
  - $1 million
- McDonald’s “We love to see you smile” campaign
  - $500 million
Comparisons

- U.S. government’s entire budget for nutrition education is one-fifth the advertising budget for Altoids mints
It is estimated that the advertising industry spends $2 billion a year on advertisements targeting children, a twenty-fold increase from 1990 (J. McNeal, 2003)
Why Youth Are Targeted

- They are a primary market—they spend their own money
- They are an influence market—they influence their parents’ spending
- They are a future market—they will spend money in the future
- Heavy marketing to children is driven by desire to build brand awareness, brand preference, and brand loyalty
Food Advertising and Marketing Channels

- Television advertising
- In-school marketing
- Product placements
- Kids clubs
- Internet
- Toys/products with brand logos
- Youth-targeted promotions (cross-selling, tie-ins)