

Girls and Their Bodies

Striving for good health and a positive body image

Over half of young women in high school exercise regularly

- ◆ A nationally representative survey showed that 62% of young women in grades 9-12 reported engaging in vigorous physical activity for three or more days per week. This means that nearly 40% of young women in these grades were not vigorously active. The numbers for White (63%) and Latina young women (63%) were higher than for Black young women (53%).⁶ (See Figure 1)
- ◆ Girls' participation in high school sports has increased dramatically since Title IX was passed in 1972 (requiring schools receiving federal funds to treat boys and girls equally, including in athletics). In 2005, 10 times as many girls participated in high school sports (2,953,355) as participated in 1971 (294,015).¹⁴ (See also Figure 2.)

Eating well can be a challenge for today's girls and young women

- ◆ According to a nationally representative survey, only 19% of young women in grades 9-12 ate five or more servings of fruits and vegetables per day during the seven days preceding the survey (17% of White young women, 20% of Black young women, and 21% of young Latinas).⁶ (See figure 3.)
- ◆ According to a recent study, 30% of children and adolescents ages 4-19 eat at least one fast food meal during a typical day. Children who eat fast food, compared with those who do not, consume more total energy and more energy per gram of food, total fat, total carbohydrate, added sugars, sugar sweetened beverages, and less fiber, less milk, and fewer fruits and non-starchy vegetables. ⁴ According to a longitudinal study, increased fast food intake was directly associated with increased insulin resistance in both Black and White people.¹⁶

Figure 1: Percentage of young women in grades 9-12 who reported physical activity, 2005, by race/ethnicity.⁶

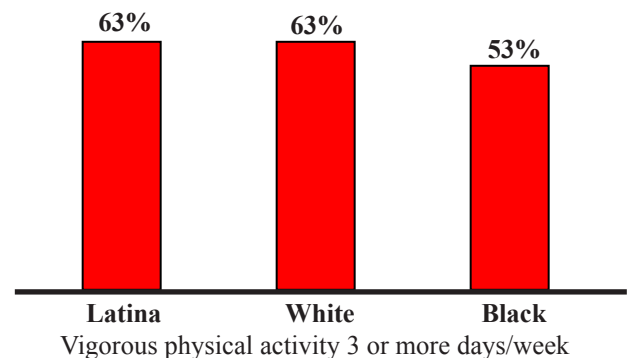


Figure 2: High school athletic participation, by gender, 1971-2006.¹⁴

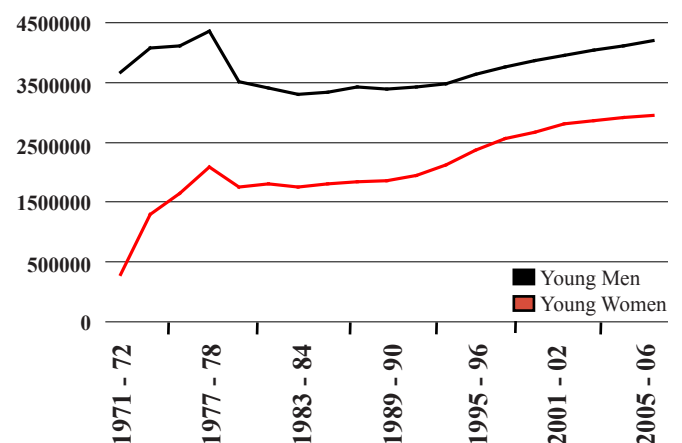
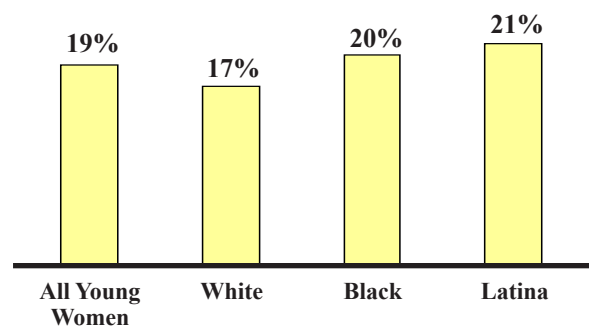


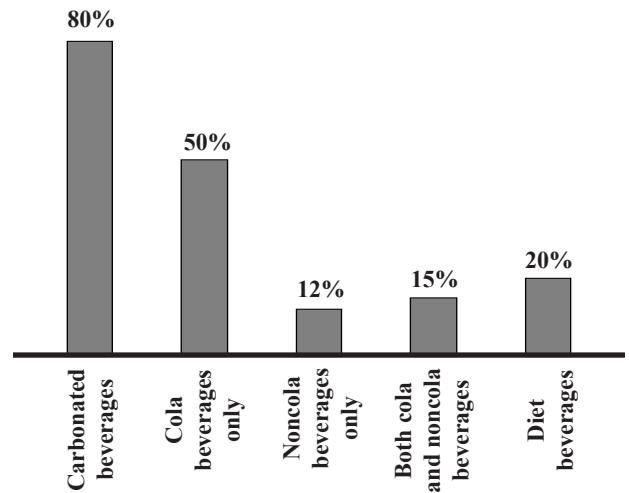
Figure 3: Percent of high school young women who ate five or more servings of fruit and vegetables a day, by race/ethnicity.⁶



Eating well a challenge...

- ◆ According to the U.S. Department of Agriculture (USDA), to maintain healthy body weight girls and young women should consume nutritious foods and beverages from across the basic food groups, while limiting the amount of saturated fats, trans fats, cholesterol, added sugars and salt. Calories “in” through food and beverages consumed should balance with calories “out” through body processes, movement, and exercise.²² (See Table 1 on page 6.)
- ◆ Many girls and young women do not get sufficient calcium for optimal bone growth. According to the latest USDA survey of food intake, on average, girls ages 6-11 get only 67% of their daily recommended intake for calcium (1300 mg). Girls and young women ages 12-19 consume even less (59%) of the recommended calcium intake.²⁰
- ◆ A Harvard Medical School study found an association between cola drinks and bone fractures in young women in grades 9-10. Among physically active young women, the risk was highest for those who consumed both cola and non-cola beverages, compared with those who did not drink carbonated beverages.²³ (See also Figure 4.)

Figure 4: Carbonated beverages consumption among 9th and 10th grade young women.²³



Girls experience pressure from the media to look a certain way

- ◆ One study of TV characters in 2003 found that 14% of female characters were overweight or obese; half the percentage in real life, and that one third were underweight, compared with 5% in reality.¹⁰
- ◆ In a study of teen consumers, 21% of young women responded that they depended heavily on advertising for fashion and style ideas.²⁴ (See also Figure 5.)
- ◆ According to a study conducted by media research firms, 3 of the top 10 Websites visited by girls and young women ages 12 to 17 were Websites associated with popular teen beauty magazines.¹² While on the internet, girls encounter Websites devoted not only to beauty and dieting, but to support groups for people with eating disorders, including potentially dangerous Websites termed “pro-ana” (pro anorexia) or “pro-mia” (pro bulimia).²
- ◆ Nationwide, in 2005 10% of young women in grades 9-12 were overweight and an additional 16% were at risk for becoming overweight. Yet 38% of young women reported that they thought they were overweight.⁶ (See Figure 6.)

Figure 5: Young women’s source for fashion ideas.²⁴

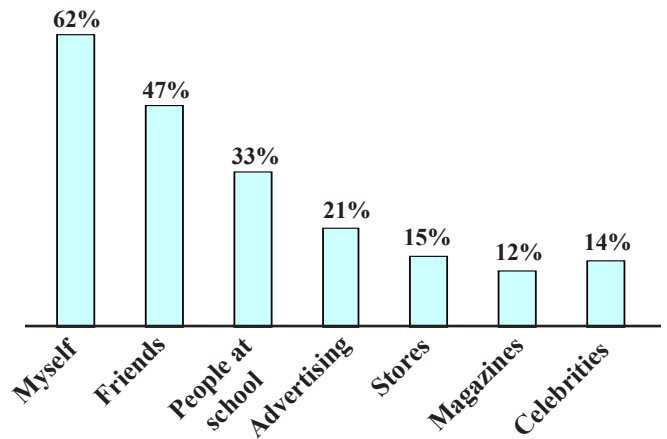
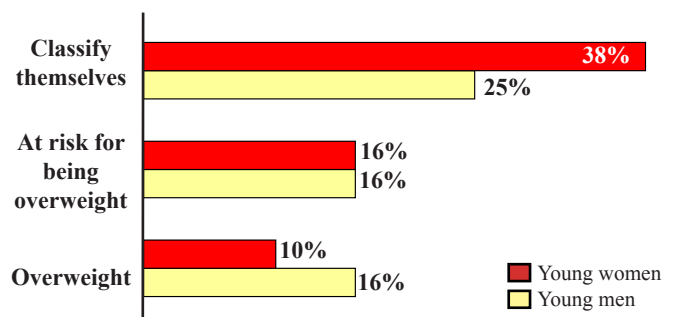


Figure 6: Percent of high school students who were overweight, at risk for becoming overweight, and classify themselves as overweight.⁶



Many girls and young women worry about being overweight

- ◆ According to a study of 13 northern California schools, 35% of third grade girls reported wanting to lose weight, and 24% reported dieting to lose weight.¹⁷
- ◆ Compared to White & Latina young women, Black young women in grades 9-12 in 2005 were more likely to be overweight (16%), but less likely to think they were overweight (36%) or to report attempting to lose weight (53%).⁶ (See also Figure 7 and Table 2 on page 6.)
- ◆ A nationally representative survey found that 6 in 10 young women in grades 9-12 (62%) were trying to lose weight using a range of methods during the 30 days preceding the survey.⁶ (See also Figure 8.)
- ◆ The use of diet pills, powders, or liquids is higher among young women than it is among young men. In 2005, 8% of young women – 9% of White, 5% of Black, and 8% of Latina young women - reported experience with these diet products within the last year, while only 5% of young men reported experience with them.⁶ (See also Figure 8.)
- ◆ The Growing Up Today study found that 4% of girls use a product weekly to increase muscle mass or definition (steroids, protein powder, protein shakes, creatine, amino acids, DHEA, or growth hormone) in an effort to try to look like females in the media.⁹
- ◆ Nationwide, 3% of young women in grades 9-12 reported lifetime steroid use in 2005. White (4%) and Latina (2%) young women were more likely than Black young women (1%) to report lifetime steroid use.⁶ (See Figure 9.) Steroids often are administered by injecting them directly into the muscle. Users who share needles while injecting steroids can be exposed to HIV and other infections.⁸

Figure 7: Percentage of young women in grades 9-12 who were overweight, thought they were overweight, or were attempting weight loss, by race/ethnicity.⁶

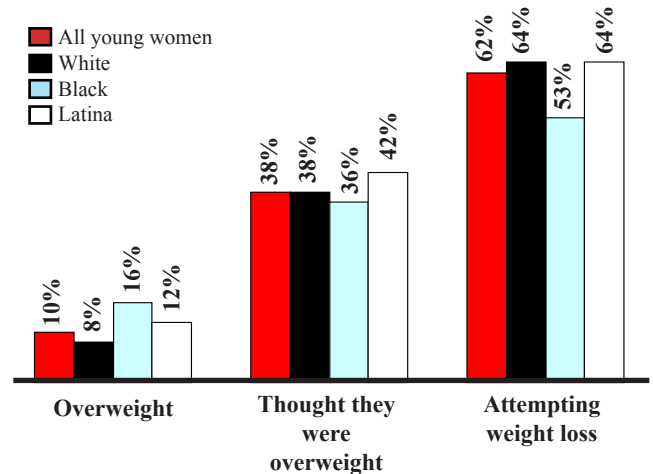


Figure 8: Percentage of young women in grades 9-12 who engaged in behaviors to lose weight or avoid gaining weight.⁶

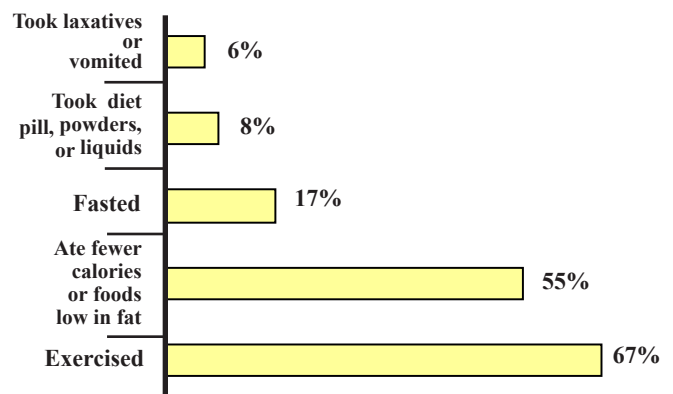
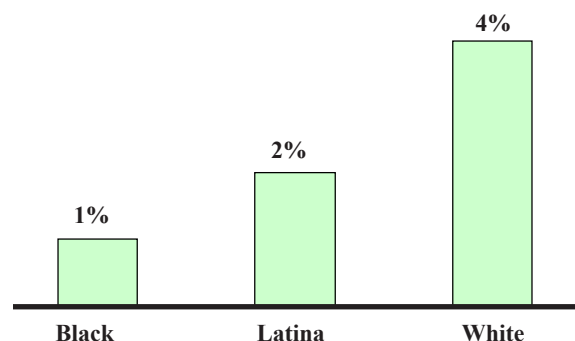


Figure 9: Percentage of young women in grades 9-12 who reported lifetime steroid use, 2005, by race/ethnicity.⁶



Physical inactivity and poverty are risk factors for obesity

- ◆ Obesity in girls and young women is caused by taking in more calories than are expended. A sedentary lifestyle and sustained physical inactivity are thus risk factors for obesity in youth.²⁰ About 25-30% of obesity in U.S. adults begins during childhood or adolescence. Early childhood obesity that persists into adulthood is associated with increased risks for obesity-related diseases such as dyslipidemia, high blood pressure, diabetes, high cholesterol, and heart disease.⁷
- ◆ The prevalence of overweight status among adolescents in the U.S. has more than doubled during the last 3 decades. The proportion of girls (and boys) who were overweight increased between 1999 and 2004 from 11.2 to 12.6% of girls ages 2-5 years, from 14.3 to 17.6% among girls ages 6-11, and from 14.8 to 16.4% among girls and young women ages 12-19 years.¹⁵ (See Figure 10.)
- ◆ In 1999-2004 the prevalence of overweight was 50% higher among adolescents of poor versus non-poor families. The link to poverty appeared for older (15-17 years old) but not younger (12-14 years old) adolescents.¹³ (See Figure 11.)
- ◆ Approximately 60% of overweight children and adolescents have at least one additional risk factor for heart disease, such as high blood pressure, high cholesterol, or Type II Diabetes; more than 25% have two or more of these risk factors.⁷

Eating disorders are more rare than dieting, but are very dangerous

- ◆ It is a myth that eating disorders are restricted to middle and upper-class White young women. Young women of color are affected by eating disorders as well. In a three-year study of young women in grades 6-9, 3% developed some form of eating disorder by the end of the study. Latina young women in this study were found to have a particular preoccupation with having thin bodies.¹⁹

Figure 10: Percent of overweight girls and young women, 1999 and 2004.¹⁵

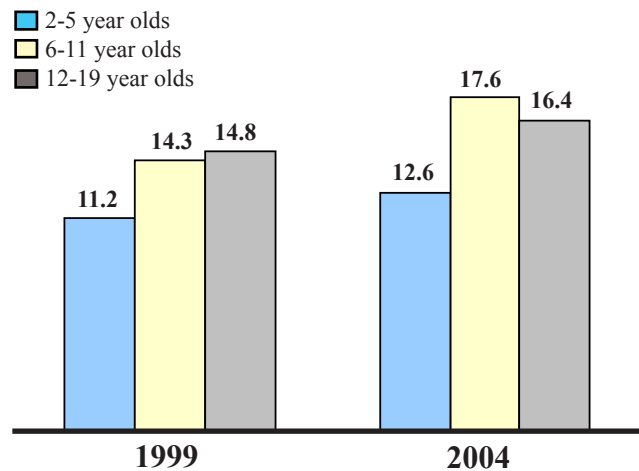
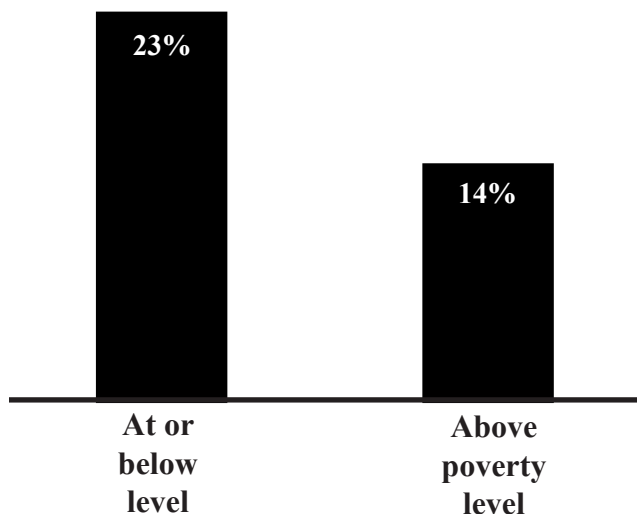


Figure 11: Percent of 15-17 year old adolescents who were overweight, 1999-2004, by poverty status.¹³



Eating disorders rare but dangerous...

- ◆ Young women with anorexia nervosa see themselves as overweight even though they are dangerously thin. Young women with anorexia experience numerous health problems.¹ (See also Table 3)

Girls are pressured in many ways to alter their bodies

- ◆ Mass communication, which both reflects and reinforces our culture, urges girls to adopt a false self. In 2003, \$893 million was spent in consumer magazines on cosmetics advertising alone.²¹
- ◆ One study found that 10-13% of adolescents ages 12 to 18 have either an amateur or professional tattoo. The same study found that 55% of adolescents with a piercing had their first piercing before the age of 17. Tattooing and body piercing were found to be more common in young women than young men, 17% versus 8% for tattoos and 37% versus 10% for body piercing, respectively.⁵ (See figure 12.)
- ◆ The main difference between extreme body art such as scarification or unusual piercings, and self-injury is a young woman’s reasons for choosing to alter her body. Most people make a conscious decision about extreme body art; however, people who intentionally injure themselves are often unable to control their impulses. Recent estimates indicate that approximately 4% of the general population engages in self-injurious behavior.¹¹
- ◆ Much of the research on girls’ and women’s self-injury has focused on White middle-class young women. Some recent studies, however, have documented self-injury in communities of women of color and across class lines, and current research suggests that self-injury may be on the rise.¹⁸

Table 3: Diagnostic criteria and risks associated with eating disorders.¹

Anorexia Nervosa
◆ Restricting Type: Severely restricting food without regularly binge eating or purging
◆ Binge eating/Purging Type: Inducing vomiting; misusing laxatives, diuretics, or enemas.
Bulimia Nervosa
◆ Purging Type: Severely restricting food without regularly binge eating or purging
◆ Non-Purging Type: Exercising excessively, fasting, not regularly engaging in purging.
Risks of Eating Disorders
◆ Severe Emotional and Psychological Changes
◆ Anemia
◆ Stomach Cramping
◆ Tooth Decay
◆ Bone Fractures
◆ Stunted Growth
◆ Cardiac Arrhythmias
◆ Amenorrhea (no menstruation)
◆ Kidney Damage
◆ Death

Figure 12: Percent of body piercing and tattoos among adolescents.⁵

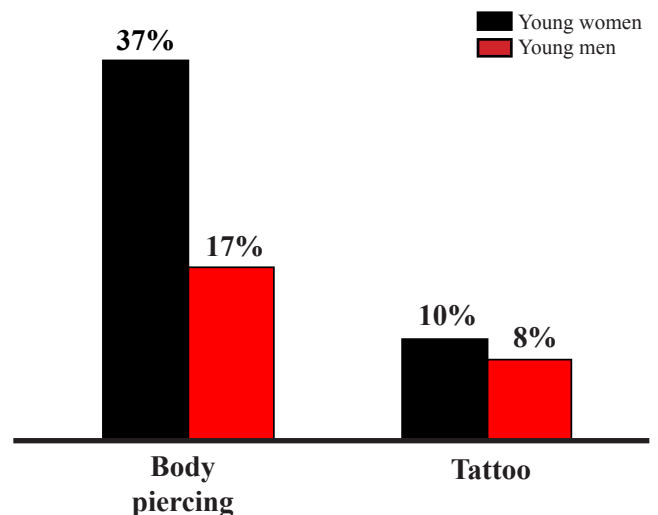


Table 1:
Compare your serving sizes to the recommendations of the Food Guide Pyramid (U.S. Department of Agriculture).²²

Food Groups Recommended Serving Size
<p>Bread, Cereal, Rice, Pasta</p> <p>1 slice of bread 1 oz. of ready-to-eat cereal ½ cup cooked cereal, rice, pasta</p>
<p>Vegetable</p> <p>1 cup raw leafy vegetables ½ cup cooked or raw vegetables ¾ cup vegetable juice</p>
<p>Fruit</p> <p>1 medium apple, banana, orange ½ cup fresh, frozen, canned fruit ¾ cup fruit juice ¼ cup dried fruit</p>
<p>Milk, Yogurt, and Cheese</p> <p>1 cup milk or yogurt 1 ½ oz. natural cheese 2 oz. processed cheese</p>
<p>Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts</p> <p>2-3 oz. cooked lean meet, poultry, or fish ½ cup cooked dry beans or 1 egg counts as 1 oz. of lean meat 2 tbsp of peanut butter or 1/3 cup of nuts counts as 1 oz. of lean meat</p>

Table 2:
The shift from a weight centered to a balanced health approach.³

Dieting	Healthy Eating
<ul style="list-style-type: none"> ◆ Restrictive eating ◆ Counting calories, prescriptive diets ◆ Weight cycling (yo-yo diets) 	<ul style="list-style-type: none"> ◆ Taking pleasure in eating a variety of foods ◆ Meets body’s energy and nutrient needs through healthy eating ◆ Listen to your hunger cues
Dissatisfaction with Self	Positive Self/ Body Image
<ul style="list-style-type: none"> ◆ Unrealistic goals for body size and shape. ◆ Obsession and preoccupation with weight. ◆ Striving to maintain an impossible “ideal” body size. ◆ Accepting the fashion, diet and tobacco industries’ emphasis on slimness. 	<ul style="list-style-type: none"> ◆ Accept and recognize that healthy bodies come in a range of shapes and sizes. ◆ Appreciate your strengths and abilities. ◆ Be tolerant of a wide range of body types. ◆ Be critical of messages that focus on unrealistic thinness as a symbol of success and happiness.

References

1. American Psychiatric Association Work Group on Eating Disorders. (2000). Practice guideline for the treatment of patients with eating disorders (revision). *American Journal of Psychiatry*, 157(1 Suppl), 1-39.
2. Andrist, L. C. (2003). Media images, body dissatisfaction, and disordered eating in adolescent women. *American Journal of Maternal Child Nursing*, 28(2), 119-123.
3. Berg, F. M. (2001). *Children and teens afraid to eat: Helping youth in today's weight-obsessed world*. Hettinger, ND: Healthy Weight Network.
4. Bowman, S. A., Gortmaker, S. L., Ebbeling, C. B., Pereira, M. A., & Ludwig, D. S. (2004). Effects of fast-food consumption on energy intake and diet quality among children in a national household survey. *Pediatrics*, 113(1), 112-118.
5. Carroll, S. T., Riffenburgh, R. H., Roberts, T. A., & Myhre, E. B. (2002). Tattoos and body piercings as indicators of adolescent risk-taking behaviors. *Pediatrics*, 109(6), 1021-1027.
6. Centers for Disease Control and Prevention. (2006). Youth risk behavior surveillance-United States, 2005. *MMWR*, 55(No. SS-5).
7. Dietz, W. H. (2004). Overweight in childhood and adolescence. *New England Journal of Medicine*, 350(9), 855-857.
8. Evans, N. (2004). Current concepts in anabolic-androgenic steroids. *The American Journal of Sports Medicine*, 32(2), 534-542.
9. Field, A. E., Austin, S. B., Camargo, C. A., Taylor, C. B., Striegel-Moore, R. H., Loud, K. J., & Colditz, G. A. (2005). Exposure to the mass media, body shape concerns, and use of supplements to improve weight and shape among male and female adolescents. *Pediatrics*, 116(2), e214-e220.
10. Kaiser Family Foundation. (2004). *The role of media in childhood obesity*. Washington, D.C.: Henry J. Kaiser Family Foundation Issue Brief, February 2004, 1-9.
11. Kress, V. E. W. (2003). Self-injurious behaviors: Assessment and diagnosis. *Journal of Counseling and Development*, 81, 490-496.
12. Labre, M. P., & Walsh-Childers, K. (2003). Friendly advice? Beauty messages in web sites of teen magazines. *Mass Communication & Society*, 6(4), 379-396.
13. Miech, R. A., Kumanyika, S. K., Stettler, N., Link, B. G., Phelan, J. C., & Chang, V. W. (2006). Trends in the association of poverty with overweight among US adolescents, 1971-2004. *Journal of the American Medical Association*, 295(20), 2385-2393.
14. National Federation of State High School Associations. (2006). *2005-06 NFHS high school athletics participation survey*. Indianapolis, IN: Author.
15. Ogden, C. L., Carroll, M. D., Curtin L. R., McDowell, M. A., Tabak, Tabak, C. J., & Flegal, K. M. (2006). Prevalence of overweight and obesity in the United States, 1999-2004. *Journal of the American Medical Association*, 295(13), 1549-1555.
16. Pereira, M., et al. (2005). Fast-food habits, weight gain, and insulin resistance (the CARDIA study): 15-year prospective analysis. *Lancet*, 365, 36-42.
17. Robinson, T. N., Chang, J. Y., Haydel K. F., & Killen, J. D. (2001). Overweight concerns and body dissatisfaction among third-grade children: The impacts of ethnicity and socioeconomic status. *Journal of Pediatrics*, 138(2), 181-187.
18. Shaw, S. N. (2002). Shifting conversations on girls' and women's self-injury: An analysis of the clinical literature in historical context. *Feminism & Psychology*, 12(2), 191-219.
19. The McKnight Investigators. (2003). Risk factors for the onset of eating disorders in adolescent girls: Results of the McKnight longitudinal risk factor study. *American Journal of Psychiatry*, 160(2), 248-254.
20. U.S. Department of Agriculture, Agricultural Research Service. (1999). *Food and nutrient intakes by children 1994-96, 1998*. [Electronic version]. Retrieved June 15, 2006, from http://ars.usda.gov/SP2UserFiles/Place/12355000/pdf/scs_all.PDF
21. U.S. Department of Commerce. (2004.) *Statistical abstract of the United States: 2004-2005* (124th ed.). Washington, DC: Author.
22. U.S. Department of Health and Human Services, U.S. Department of Agriculture. (2005). *Dietary guidelines for Americans*. Washington, DC: Author.
23. Wyshak, G. (2000). Teenaged girls, carbonated beverage consumption, and bone fractures. *Archives of Pediatrics and Adolescent Medicine*, 154, 610-613.
24. Zollo, P. (2004). *Getting wiser to teens: More insights into marketing to teenagers*. Ithaca, NY: New Strategist Publications, Inc.

For more information on girls and health issues, see these **Girls Incorporated® Fact Sheets**:

- ◆ **Girls and HIV, AIDS, and STDs**
- ◆ **Girls and Sexual Activity**
- ◆ **Girls and Tobacco**
- ◆ **Girls and Substance Use**

Girls Inc. Preventing Adolescent Pregnancy® bolsters girls' communication and skills as well as their motivation and resources for being in charge of their sexual health and avoiding teen pregnancy.

Girls Inc. Friendly PEERsuasion® builds girls' skills for resisting pressure to use harmful substances such as alcohol, tobacco, household chemicals, and other drugs.

Girls Inc. is a nonprofit organization in the United States and Canada that inspires all girls to be strong, smart, and boldSM. With local roots dating to 1864 and national status in the U.S. since 1945, Girls Inc. has responded to the changing needs of girls and their communities through research-based programs and advocacy that empower girls to reach their full potential and to understand, value, and assert their rights.

Girls Inc. programs focus on science, math, and technology, health and sexuality, economic and financial literacy, sports skills, leadership and advocacy, and media literacy for girls ages 6 to 18 throughout the United States and in Canada. While our goal is to reach all girls, we recognize that girls in at-risk communities have an even greater need for our programs. Of those we serve, 70% are girls of color and 66% come from families earning \$25,000 or less; 49% are from single-parent households, most of which are headed by women.

Girls Inc. in 2006 reached nearly 800,000 girls through Girls Inc. affiliates, our website, and educational products. Guided by our vision of empowered girls and an equitable society, Girls Inc. is committed to reaching millions more girls through its programs and public education efforts.

The National Resource Center (NRC) is the organization's research, program development, national services, and training site. Research and evaluation conducted by the NRC provide the foundation for Girls Inc. programs. The NRC also responds to requests for information on girls' issues and distributes Girls Inc. publications.

Girls Inc. informs policy makers about girls' needs locally and nationally. The organization educates the media about critical issues facing girls. In addition, the organization teaches girls how to advocate for themselves and their communities, using their voices to promote positive change.

Girls Inc. leadership focuses on developing innovative ways to leverage our most valuable asset – acknowledged expertise as the nation's premiere program provider and advocate for girls. Our leaders include Janice L. Warne, Chair of the National Board; Joyce M. Roché, President and CEO; and Donna Brace Ogilvie, Distinguished Chair.

Girls Inc. Headquarters

120 Wall Street
New York, NY 10005-3902
(212) 509-2000 • Fax: (212) 509-8708
<http://www.girlsinc.org>

National Resource Center

441 West Michigan Street
Indianapolis, IN 46202-3233
(317) 634-7546 • Fax: (317) 634-3024

Washington Office

1001 Connecticut Avenue
Suite 740
Washington, DC 20036-5514
(202) 463-1881 • Fax: (202) 463-8994

**girls
inc.®**
Inspiring all
girls to be
strong, smart
and boldSM