

## Girls and Sports

### Many girls and young women do not get enough physical activity to meet fitness guidelines.

- ◆ A nationally representative survey found that 61% of girls aged 9-13 did not engage in any organized physical activity outside of school, and 26% reported no free-time physical activity, classifying themselves as sedentary outside of school.<sup>3</sup>
- ◆ In 2005-06, only 28% of all young women in grades 9-12 met the current physical activity recommendations, while 62% met the previously recommended levels of physical activity<sup>a</sup>. White and Latina young women were more likely than Black young women to meet the current physical activity recommendations (30%, 27%, and 21% respectively).<sup>5</sup> (See also Figure 1.)
- ◆ There is no federal law that mandates physical education in the public educational system, and there are only 2 states (Illinois and Massachusetts) that require physical education in every grade from kindergarten through high school.<sup>11</sup>
- ◆ In 2005-06, 48% of all young women in grades 9-12 attended a physical education class on one or more days a week. Of these, 80% exercised or played sports for more than 20 minutes during an average physical education class.<sup>5</sup>

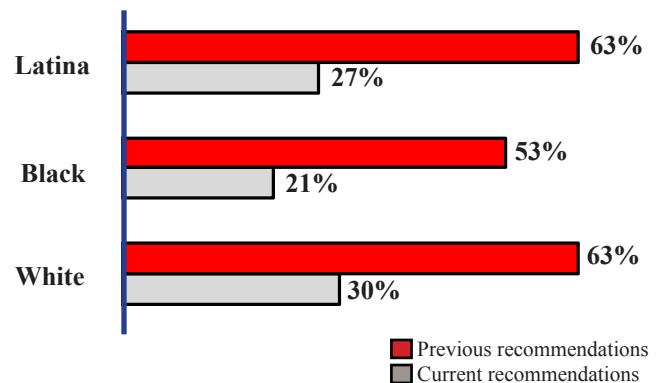
### Many girls and young women play sports.

- ◆ In 1971—before the passage of Title IX<sup>b</sup>—young women accounted for 7% of all high school athletes. In 2005-06, young women were 41% of high school athletes. In 1971-72 there were 294,015 female athletes in school, compared to 2,953,355 in 2005-06—a 1,000% increase.<sup>13</sup> (See Figure 2.)
- ◆ In 2005-06, 56% of all students in grades 9-12 played on at least one sports team during the 12 months prior to the survey; 50% of young women in these grades played on one or more sports teams.<sup>5</sup>
- ◆ During their senior year in high school, 41% of young women reported being athletes; down from 56% in grade 9.<sup>5</sup> (See Figure 3.)

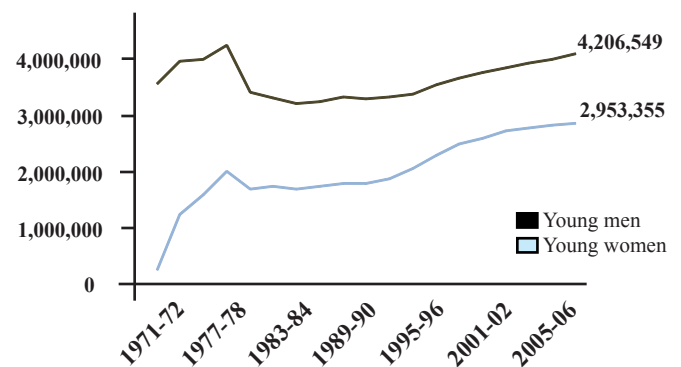
a--The current physical activity recommendations are “any kind of physical activity that increased their heart rate and made them breathe hard some of the time for a total of at least 60 minutes/day > 5 or more of the 7 days preceding the survey.” The previously recommended levels of physical activity are “participation in at least 20 minutes of vigorous physical activity” (sweat and breathe hard) “on >3 of the 7 days preceding the survey and/or 30 minutes of moderate physical activity” (did not make them sweat or breathe hard) “on >5 of the 7 days preceding the survey.” (YRBS)

b--Title IX is federal legislation requiring schools receiving federal funds to treat boys and girls equally, including in athletics.

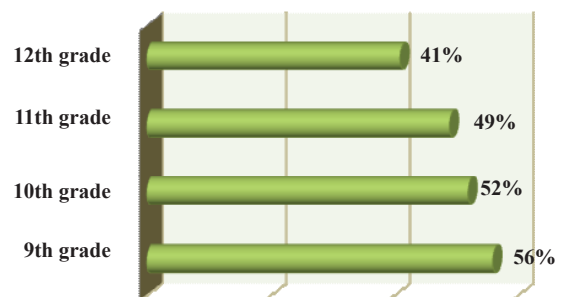
**Figure 1:** Percentage of young women in grades 9-12 who met the current and previous recommendations for physical activity, by race/ethnicity.<sup>5</sup>



**Figure 2:** High school athletic participation, by gender, 1971-2006.<sup>13</sup>



**Figure 3:** Percentage of high school young women who are athletes, by grade.<sup>5</sup>



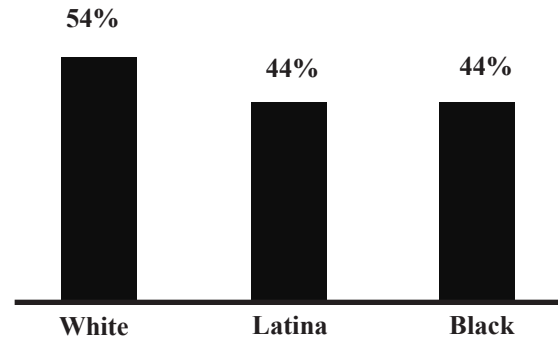
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**Playing sports...**

- ◆ White young women were more likely than Latina and Black young women to participate in sports (54%, 44%, and 44% respectively).<sup>5</sup> (See Figure 4.)
- ◆ In the 2005-06 school year, the five most popular girls' sports programs, by number of participants, were basketball (452,929), outdoor track and field (439,200), volleyball (390,034), fast pitch softball (369,094), and soccer (321,555).<sup>13</sup> (See Figure 5.)
- ◆ The proportion of female athletes in the Olympics continues to increase, representing 48% of all US athletes in the 2004 Olympics compared to just 42% in 1996. In the 2006 Paralympic Winter Games only 21% of the athletes were women.<sup>18</sup>

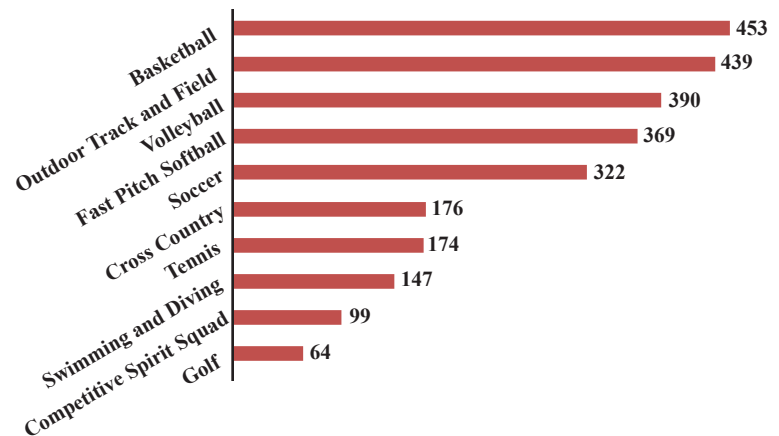
**Figure 4:** Percentage of high school young women who are athletes, by race/ethnicity.<sup>5</sup>



**Participation in sports generates positive benefits for girls and young women.**

- ◆ In 2005-06, 38% of all girls in grades 9-12 described themselves as overweight, when only 10% were actually considered overweight.<sup>5</sup> When comparing female athletes to female nonathletes, 35% of athletes described themselves as overweight compared to 41% of nonathletes, and 7% of female athletes compared to 13% of female nonathletes were classified as overweight.<sup>17</sup>
- ◆ Results of a nationally representative survey showed that girls who participated in high school athletics were less likely to consider or plan suicide than nonathletes—25% and 29% respectively.<sup>15</sup>
- ◆ Of 401 executive businesswomen surveyed in 2002, 82% reported playing organized sports during youth, including school teams, intramurals, and recreational leagues.<sup>10</sup>

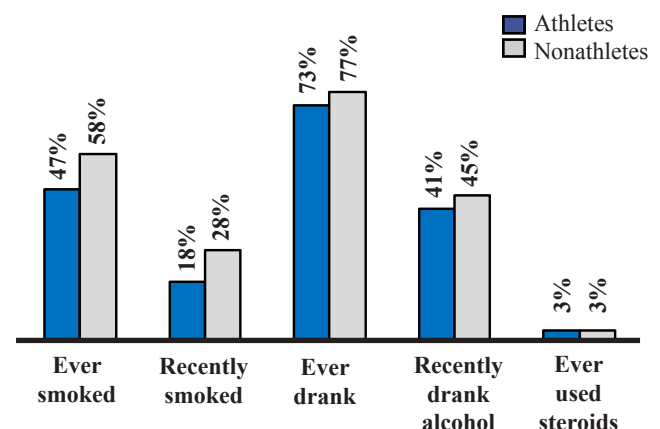
**Figure 5:** Top high school girls' sports, by number of participants (in thousands), 2005-2006.<sup>13</sup>



**Not all young women who participate in sports are substance free.**

- ◆ In 2005-06, 47% of female athletes in grades 9-12 reported they had ever smoked a cigarette compared to 58% of female nonathletes. Eighteen percent of female athletes reported that they smoked one or more cigarettes in the previous 30 days, compared to 28% of female nonathletes.<sup>17</sup> (See also Figure 6.)
- ◆ Seventy three percent of all young women in grades 9-12 who played on one or more sports teams reported ever drinking alcohol, compared to 77% of girls who did not participate in sports. A lower percentage of female athletes reported they drank at least one alcoholic beverage in the previous 30 days, compared to female nonathletes, 41% and 45% respectively.<sup>17</sup> (See also Figure 6.)

**Figure 6:** Substance use among high school young women athletes and nonathletes, by percentage.<sup>17</sup>



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**Substance free...**

- ◆ In 2005-06, 97% of young women in grades 9-12 reported they had never used illegal steroids.<sup>5</sup> There was no difference in percentages of young women who were athletes versus nonathletes.<sup>17</sup> (See also Figure 6.)
- ◆ Young women who played college sports were more likely to engage in binge drinking<sup>c</sup> than those who were nonathletes (39% and 29% respectively). Among all the women's sports, soccer was associated with the highest levels of binge drinking, and cross country/track was associated with the lowest levels of binge drinking.<sup>8</sup> (See Figure 7.)

**Female athletes are more likely than nonathletes to postpone sexual intercourse.**

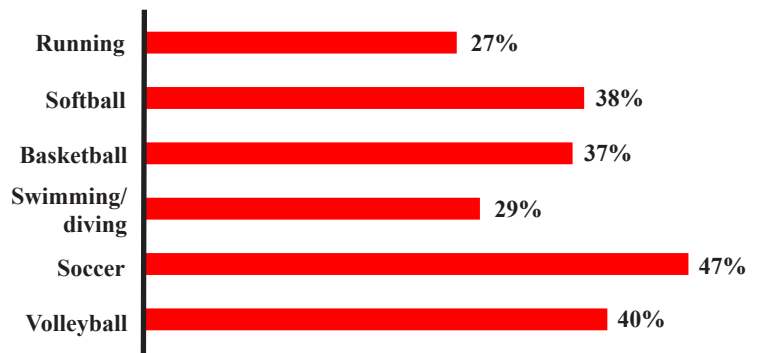
- ◆ In 2005-06, 40% of young women in grades 9-12 who played on one or more sports teams reported they had ever had sexual intercourse, compared to 50% of their nonathlete peers. Thirty percent of female athletes reported that they were currently sexually active compared to 39% of female nonathletes.<sup>17</sup> (See also Figure 8.)
- ◆ A higher percentage of high school young women who do not play sports reported no condom use or any form of birth control during their last sexual intercourse compared to athletes, 9% and 5% respectively.<sup>17</sup>

**Musculoskeletal injuries are a risk for girls and young women who play sports.**

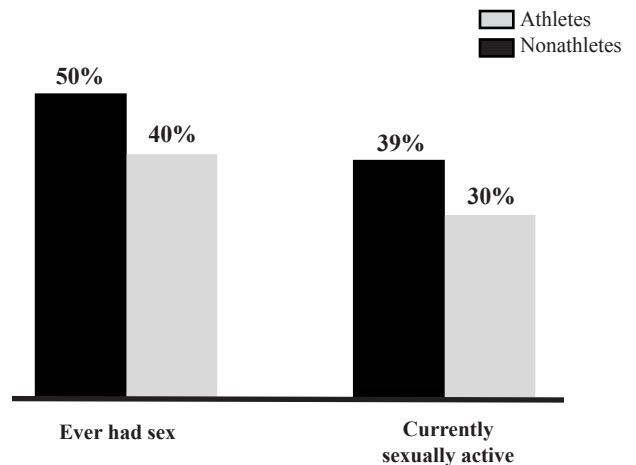
- ◆ Injury rates during exercise and sports were lower for high school female athletes compared to high school male athletes, 20% and 24%, respectively. Of all female athletes, 20% of White young women, 18% of Black young women, and 20% of Latina young women experienced an injury.<sup>5</sup>
- ◆ In 2005-06, the high school girls' sport with the highest reported rate of injury in practice and competitions was soccer (2.4/1,000), followed by basketball (2/1,000), volleyball (1.6/1,000), and softball (1/1,000).<sup>4</sup> (See also Figure 9.)
- ◆ Female athletes are 4-6 times more likely to experience anterior cruciate ligament (ACL) (*a ligament that stabilizes the knee joint*) injuries compared to male athletes. Research has proposed several theories to explain the increased risk including anatomical, hormonal, neuromuscular, and biomechanical differences between sexes.<sup>9</sup>

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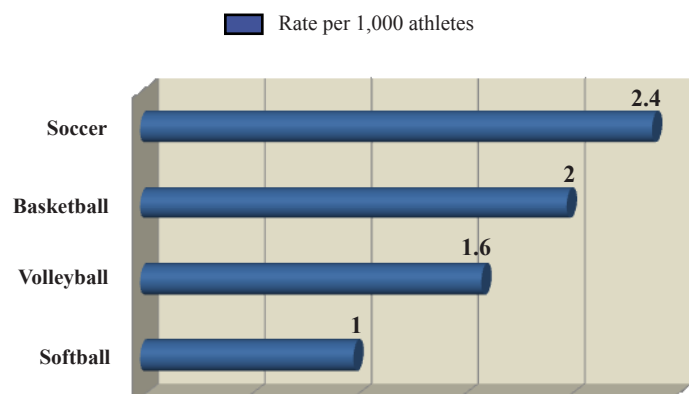
**Figure 7:** Percentage of female collegiate athletes who reported binge drinking, by sport.<sup>8</sup>



**Figure 8:** Sexual activity among high school female athletes and nonathletes.<sup>17</sup>



**Figure 9:** Injury rates among female athletes, by sport.<sup>4</sup>



c--Five or more drinks of alcohol at one period of time.

### Girls and young women who train for sports must take care to sustain their overall health.

- ◆ High-intensity training has been shown to cause low body weight that may lead to menstrual dysfunction in some young women. A review of several studies shows an average of 30% occurrence of menstrual dysfunction in young women athletes, with a range of 3-60% based on the intensity of training and the age at which training began.<sup>2</sup>
- ◆ The Female Athlete Triad is a syndrome comprising disordered eating, menstrual dysfunctions and low bone mineral density.<sup>16</sup> Two studies found the prevalence of having the complete Triad to be low for both high school (1.2%) and college (0.9%) female athletes. However, the prevalence of having at least one of the components was much higher, increasing the risk for developing the complete Triad.<sup>1,14</sup> (See Tables 1 and 2.)
- ◆ A nationally representative study found that girls in stereotypically “feminine” sports (i.e. dance, cheerleading & tennis) were 55% more likely to consider themselves overweight and 65% more likely to report trying to lose weight, when compared to nonathletes.<sup>6</sup>

**Table 1:** The Female Athlete Triad.<sup>16</sup>

<b>Disordered Eating</b>
Excessive restriction of food intake Self-induced vomiting Laxative abuse
<b>Menstrual Dysfunctions</b>
Oligomenorrhea: abnormally infrequent or scant menstruation Primary amenorrhea: absence of menarche* beyond age 18 Secondary amenorrhea: cessation of menstruation
<b>Bone Mineral Disorders</b>
Loss of calcium from bones Low bone mineral density Can lead to osteoporosis
*the beginning of menstruation

### Gender inequity in athletics still exists today—35 years after Title IX.

- ◆ Female student-athletes received 42% of scholarship money in Division I-A colleges and universities, 44% in Division I-AA, 55% in Division I-AAA, and 43% in Division II. Division III does not offer athletic scholarships.<sup>12</sup>
- ◆ In 2003-2004, female college athletes in Division I-AAA<sup>d</sup> represented 51% of student-athletes in this division—the first time that an NCAA division has more female participants than male participants. In all other divisions, female athletes comprised 41% or more of all student-athletes.<sup>12</sup>
- ◆ A recent study revealed that newspaper articles in the sports section feature individual female athletes only 5% of the time compared to 35% for males, and articles featured female teams only 3% of the time compared to 33% for male teams.<sup>7</sup>

**Table 2:** Prevalance of the ‘Female Athlete Triad’ in high school and collegiate female athletes.<sup>1,14</sup>

	<b>High School</b>	<b>College</b>
<b>Disordered Eating</b>	18.20%	25%
<b>Menstrual Irregularities</b>	23.50%	25.80%
<b>Low Bone Mineral Density</b>	4.10%	1.80%
<b>Complete Triad Syndrome</b>	1.20%	0.90%

<sup>d</sup>--NCAA Division I-AAA schools do not have a football program.

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

- ◆ **Girls and Their Bodies**
- ◆ **Girls and HIV, AIDS, and STDs**
- ◆ **Girls and Sexual Activity**
- ◆ **Girls and Tobacco**

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**Girls Inc.** Project BOLD® strengthens girls' ability to lead safer lives by developing strategies for self-defense, seeking out caring adults to help with personal violence, and advocating on violence.

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**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.

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