

# Physical Fitness

## AMONG BC YOUTH

### Survey Questions on Exercise

The 2003 Adolescent Health Survey (AHS) asked students several questions about their participation in exercise activities:

- **Exercise**

“On how many of the past seven days did you exercise or participate in physical activities for at least 20 minutes that made you sweat and breathe hard, such as soccer, jogging, dancing, swimming, tennis, bicycling, or similar aerobic activities?”

- **Supervised sports or aerobic activities**

- o “In the past 12 months, how often have you played sports WITH a coach or instructor, other than in gym class (school teams, swimming lessons, etc.)?”
- o “In the past 12 months, how often have you taken part in dance or aerobic classes or lessons, other than in gym class?”

- **Unsupervised sports**

“In the past 12 months, how often have you played sports WITHOUT a coach or instructor (biking, skateboarding, roller blading, road hockey, etc.)?”

This fact sheet is one of a series on various health issues among BC youth, and may be copied for use as a handout. Data for the fact sheets were collected in the 2003 Adolescent Health Survey III, a 140-question survey completed by over 30,500 students in grades seven to twelve, in schools throughout BC. In all, 45 of BC's 59 school districts agreed to take part in the survey. The first Adolescent Health Survey was conducted in 1992, and the second in 1998. In total, more than 72,400 BC students filled out the three surveys over a ten-year period.

The Adolescent Health Surveys were conducted by the McCreary Centre Society, a non-profit organization dedicated to improving the health of BC youth through research, information sharing, and community-based projects that address the unmet health needs of young people.

### Physical Activity Levels

- Physical activity levels among BC teens are similar to a decade ago. The percentage of adolescents who exercised on five to seven days in the previous week was not significantly different between 1992 (39%) and 2003 (41%).
- In 2003, a majority of youth participated in supervised (60%) and unsupervised (71%) sports and aerobic activities, at least once a week.
- The frequency of fitness activities varied by gender:
  - o Males were more likely than females to exercise five or more days a week (49% compared to 33%).
  - o Males and females were equally likely to participate in supervised sports or aerobic activities four or more times a week (30% and 28%). Males were twice as likely to take part in unsupervised sports activities this frequently (48% versus 24%).

#### Males' Participation in Exercise Each Week (2003)

	0 days	1-2 days	3-4 days	5-7 days
14 years and younger	6%	13%	26%	55%
15-16 years	7%	15%	30%	49%
17+ years	11%	22%	30%	38%

#### Females' Participation in Exercise Each Week (2003)

	0 days	1-2 days	3-4 days	5-7 days
14 years and younger	6%	20%	34%	40%
15-16 years	10%	25%	34%	31%
17+ years	20%	29%	28%	22%



### Participation in Sports or Aerobic Activities 1+ Times a Week (2003)

	MALES			FEMALES		
	14 years and younger	15-16 years	17+ years	14 years and younger	15-16 years	17+ years
Unsupervised	83%	80%	75%	67%	61%	56%
Supervised	64%	57%	46%	71%	63%	50%

- Physical activity declines with age: 47% of adolescents 14 and younger exercised five or more days a week, compared to 30% of those 17 and older.
- Activity levels also varied by region, from 37% of youth who exercised five to seven days a week in Greater Vancouver, to 49% in the Capital region and 48% in the Northwest.

### Exercise and Body Weight

- The 2003 AHS asked students to report their height and weight, which were used to calculate Body Mass Index (BMI). Using this measure, 79% of youth had a “normal” or healthy weight for their height, age and gender, 4% were underweight, 14% were overweight, and 3% were obese.
- Healthy weight and overweight teens reported the same levels of physical activity, with 43% exercising five or more days a week.
- Underweight and obese teens were the least active, with 35% and 37% exercising five or more days weekly.
- Healthy weight and overweight adolescents were the most involved in sports and aerobic activities:
  - o 64% of healthy weight teens participated in supervised sports and aerobic activities, and 73% in unsupervised sports, one or more times a week.
  - o Among overweight teens, 60% participated in supervised and 75% in unsupervised sports and aerobic activities each week.
- Among underweight teens, 50% participated in supervised and 64% in unsupervised sports and aerobic activities each week. Among obese teens, 53% were involved in supervised and 70% in unsupervised sports, one or more times a week.

### Exercise By Region (2003)

	0 days	1-2 days	3-4 days	5-7 days
Greater Vancouver	10%	22%	31%	37%
Capital	8%	16%	27%	49%
Interior	9%	19%	31%	42%
Kootenay	8%	17%	30%	45%
Upper Island	8%	18%	33%	41%
Northwest	9%	16%	27%	48%
Northeast	9%	19%	28%	45%

## Health of Exercisers and Non-Exercisers (2003)

	Exercise 0 days per week	Exercise 1-2 days per week	Exercise 3-4 days per week	Exercise 5-7 days per week
Excellent health status	20%	20%	26%	46%
Physical health problems <sup>†</sup>	39%	38%	35%	34%
Emotional distress in past month	13%	9%	7%	7%
Injured in past year	19%	23%	33%	44%

†=experienced headaches, stomachaches, backaches, or dizziness "a lot" in the past six months.

### Exercise and Physical and Mental Health

- Adolescents who exercise regularly are more likely to rate their health status as excellent than inactive teens:
  - o 46% of youth who exercised five or more days in the past week reported excellent health status, compared to 20% of those who did not exercise at all.
  - o Similarly, teens who exercised five or more times a week were less likely to experience physical health problems, such as headaches, stomachaches, backaches, or dizziness, "a lot" in the past six months, and less likely to experience severe emotional distress in the past month.
- Youth who exercised five or more days a week were more likely to always eat breakfast on school days (54%), than students who did not exercise (45%).
- However, youth who exercised five or more times a week were twice as likely to experience an injury that required medical attention (44%) as non-exercisers (19%).

### Exercise and Leisure Activities

- 23% of youth who don't exercise watched four or more hours of television on an average school day, compared to 18% of youth who exercise five to seven days a week.
- In addition, 20% of non-exercisers used a computer for email, games or Internet surfing for four or more hours each school day, versus 14% of those who exercise five to seven days a week.

### References

Note: BMI cut-offs were calculated according to Cole, Bellizzi, Flegal and Dietz (2000), and NHANES (2000).

Cole TJ, Bellizzi MC, Flegal KM, and Dietz WH. Establishing a standard definition for child overweight and obesity worldwide: international survey. *British Medical Journal* 2000; 320: 1-6.

National Health and Nutrition Examination Survey (NHANES). Retrieved December 2004, from <http://www.cdc.gov/nchs/data/nhanes/growthcharts/bmiage.txt>