



衛生防護中心
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Health Tips

For comprehensive health benefits, children and adolescents should aim for at least 60 minutes of moderate to vigorous physical activity a day and incorporate appropriate amount of aerobic exercises, bone and muscle strengthening activities into their overall physical activity pattern.

Nurturing Healthy 'Free-range Kids'

For children and adolescents, physical activity can enhance fitness, fosters growth and bodily development. Studies showed that active kids would have better cardio-respiratory fitness, stronger bones and muscles, improved metabolic control, healthier body fat composition, and reduced symptoms of anxiety and depression.¹

The most recent physical activity recommendations for school-aged children and adolescents in the US and Australia call for at least 60 minutes of moderate to vigorous physical activity per day.^{1, 2} Besides, they should not spend more than 2 hours a day using electronic media for entertainment (e.g. television, computer games and Internet), particularly during daylight hours.² However, it was estimated that less than one-third of young people around the world were sufficiently active to benefit their present and future health.³

Level of Physical Activity among Local Children and Adolescents

Local children and adolescents spend most of their time at school; therefore, many parents may assume that their children meet the daily requirements for physical activity at school alone through physical education classes, daily recess periods and lunch breaks. However, surveys show that many school-aged children and adolescents are not active enough to reap the full benefits of physical activity. A survey aimed to collect information pertaining to the participation patterns of Hong Kong people in physical activity reported that if including physical education lessons at schools, 34.1% of children and adolescents aged 7-12 had at least 60 minutes of moderate or vigorous physical activity 5 days a week in the 3 months before enumeration. When physical education lessons were excluded, the corresponding proportion dropped to 21.0%.⁴

Owing to homework engagement, no companion, lack of either space or convenient facilities, opportunities for participating in physical exercise outside the structured school environment may be relatively limited for many children and their parents. The Child Health Survey (CHS) 2005-2006 of the Department of Health, which face-to-face interviewed parents of over 3 200 children aged 5-10 and more than 2 600 children aged 11-14, found that 68.1% and 74.4% of children aged 5-14 had participated in moderate and vigorous physical activities outside school hours in the 4 weeks preceding the survey respectively.⁵

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Among those children who had participated in moderate physical activities outside school hours in the 4 weeks preceding the survey, 18.0% reported that they did so for 5 or more days per week, with median frequency of 2 days per week and median duration of 45 minutes per day (Table 1)⁵.

Table 1: Frequency and duration of participating in moderate physical activities outside school hours among children aged 5-14 who had participated in such physical activities in the 4 weeks preceding the survey by age group

	Proportion		
	Aged 5-9	Aged 10-14	Overall
Frequency (days per week)			
1	33.3%	32.9%	33.1%
2	28.2%	23.8%	25.7%
3	16.9%	13.5%	14.9%
4	4.4%	6.4%	5.5%
5	6.1%	9.4%	8.0%
6	1.1%	1.3%	1.2%
7	8.0%	9.4%	8.8%
Unknown/Missing	2.0%	3.4%	2.8%
Total	100.0%	100.0%	100.0%
Median (days)	2.0	2.0	2.0
Duration (minutes per day)			
Less than 60	52.3%	46.9%	49.2%
60 – 119.9	36.1%	38.6%	37.5%
120.0 – 179.9	6.8%	7.2%	7.0%
180 or more	2.2%	2.7%	2.5%
Unknown/Missing	2.6%	4.5%	3.7%
Total	100.0%	100.0%	100.0%
Median (minutes)	35.0	60.0	45.0

Base: Children aged 5-14 who had participated in moderate physical activities outside school hours in the 4 weeks preceding the survey.

Source: Child Health Survey 2005-2006.

Among those children who had participated in vigorous physical activities outside school hours in the 4 weeks preceding the survey, 11.1% reported that they did so for 5 or more days per week, with median frequency of 2 days per week and the median duration of 60 minutes per day (Table 2)⁵.

Table 2: Frequency and duration of participating in vigorous physical activities outside school hours among children aged 5-14 who had participated in such physical activities in the 4 weeks preceding the survey by age group

	Proportion		
	Aged 5-9	Aged 10-14	Overall
Frequency (days per week)			
1	36.7%	29.0%	32.1%
2	34.7%	33.5%	34.0%
3	13.0%	17.4%	15.6%
4	3.2%	6.2%	5.0%
5	2.6%	5.9%	4.6%
6	0.7%	0.8%	0.8%
7	7.2%	4.8%	5.7%
Unknown/Missing	1.9%	2.4%	2.2%
Total	100.0%	100.0%	100.0%
Median (days)	2.0	2.0	2.0
Duration (minutes per day)			
Less than 60	29.3%	17.9%	22.5%
60 – 119.9	52.0%	51.0%	51.4%
120.0 – 179.9	12.1%	20.4%	17.1%
180 or more	4.3%	7.3%	6.1%
Unknown/Missing	2.3%	3.3%	2.9%
Total	100.0%	100.0%	100.0%
Median (minutes)	60.0	60.0	60.0

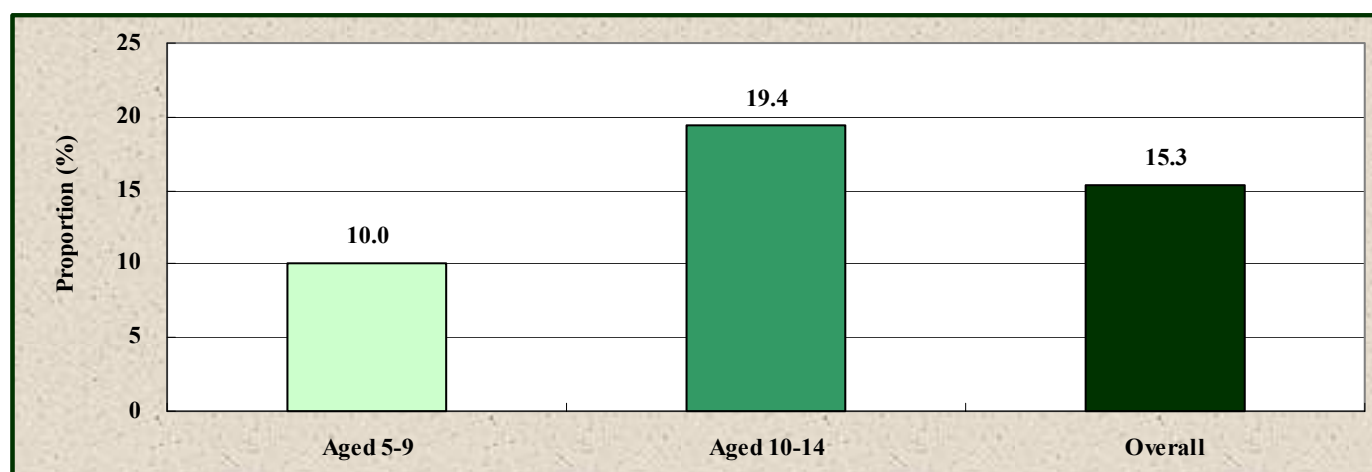
Base: Children aged 5-14 who had participated in vigorous physical activities outside school hours in the 4 weeks preceding the survey.

Source: Child Health Survey 2005-2006.

Overall, less than one-sixth (15.3%) of children aged 5-14 had participated in moderate to vigorous physical activities outside school hours for at least 60 minutes per day (Figure 1). Regarding the time spent on screens, the CHS found that 58.4% of children aged 5-14 spent 2 or more hours per day watching television or video, using computer or playing computer games (Figure 2).⁵

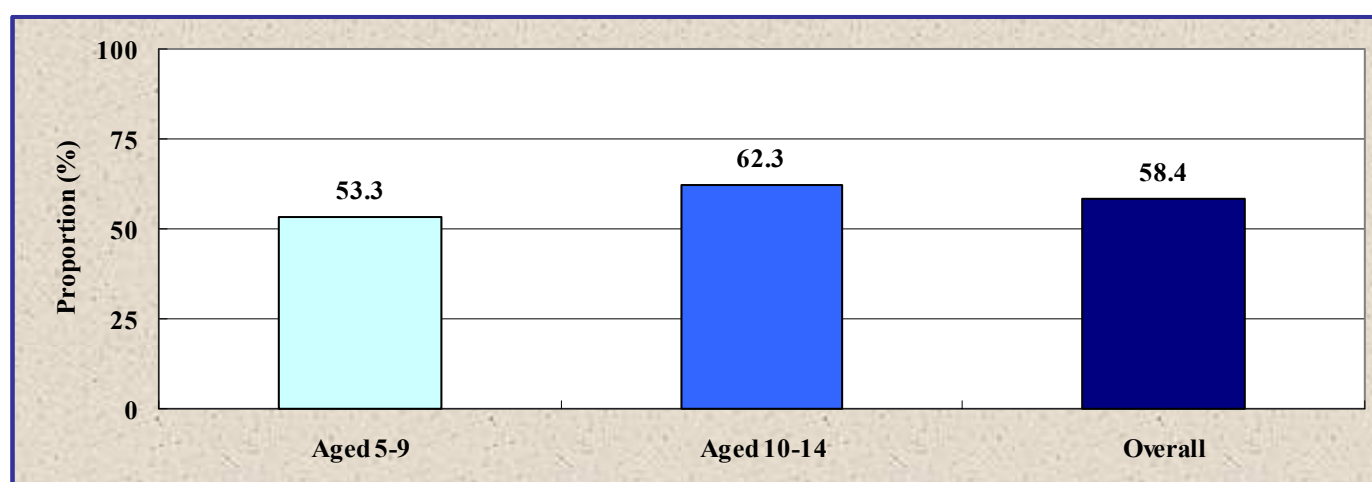
There is concern about the low level of physical activity among preschool children too. An earlier study on the activity level of 148 preschool children in Hong Kong observed that most young girls had a relative low level of physical activity, whereas young boys generally showed a low to moderate level of physical activity.⁶

Figure 1: Proportion of children aged 5-14 who had participated in moderate to vigorous physical activities outside school hours for at least 60 minutes per day by age group



Source: Child Health Survey 2005-2006.

Figure 2: Proportion of children aged 5-14 who spent 2 or more hours on screen per day by age group



Source: Child Health Survey 2005-2006.



Activating Kids' Every Single Day

Physical activity is important for all children. For healthy growth and development, even infants should be given adequate opportunities to move freely (including kicking, pushing up, rolling over, crawling and standing) in a safe setting. For toddlers and preschoolers, they need plenty of time to learn and practise gross motor skills, such as throwing, catching, jumping and running by participating in a variety of free plays. Playgrounds, parks and beaches are great places for them to have some unstructured outdoor activities (such as pushing toy cars or doll strollers, chasing bubbles, throwing or

kicking balls, flapping like a bird, hopping like a bunny, galloping like a horse, riding tricycles, playing 'red light, green light' or 'what time is it, Mr Fox?' with them) that can boost their balance and motor coordination. With physical growth and maturation of the brain, school-age children and adolescents (aged 5-17 or 18 years old) can integrate more structured and complex activities (such as sports) into daily life. As recommended by health experts, they should aim for at least 60 minutes of moderate to vigorous physical activity a day. For comprehensive health benefits, certain specific

types of exercise or activity should be incorporated into an overall physical activity pattern. These include doing some aerobic exercises to improve cardio-respiratory fitness, as well as bone and muscle strengthening activities at least 3 days per week (Table 3).^{1,2} Let children and adolescents try a variety of physical activities that are enjoyable and developmentally appropriate for their age. This can help them stay interested, get enough exercise and learn different motor skill sets that they will use for a lifetime.

Table 3: Examples of physical activity that are appropriate for school-age children and adolescents

Type of physical activity	Examples
Aerobic moderate-intensity activities	<ul style="list-style-type: none"> ※ Active recreation such as hiking, rollerblading, skateboarding ※ Bicycle riding ※ Brisk walking
Aerobic vigorous-intensity activities	<ul style="list-style-type: none"> ※ Active games or sports involving running and chasing, such as football, basketball and tennis ※ Rope jumping ※ Vigorous dancing ※ Fast swimming
Bone and muscle strengthening activities	<ul style="list-style-type: none"> ※ Rope jumping ※ Running ※ Gymnastics ※ Sports such as football, basketball, tennis and volleyball ※ Push-ups or sit-ups



Shaping Kids' Behaviours for More Physical Activities

Childhood is considered an important age period for establishing habit of regular physical activity which may persist into adulthood. As adults can help shape children's attitudes and behaviours towards physical activity, to nurture healthy 'free-range kids', here are some ways that parents and carers can do:

- ◆ Act as a good role model by being active;
- ◆ Provide children with guidance about how to start and educate them on how much physical activity they need each day;
- ◆ Give children toys or gifts that promote physical activity, such as balls, skipping ropes, hula hoops, bikes or pedometers (which is a portable device for monitoring the accumulation of daily steps and can support the users to achieve the daily step count target through walking);
- ◆ Help children select community physical activity programmes that meet their interests and developmental needs;
- ◆ Walk children to and from schools;
- ◆ Take children for a walk after dinner;
- ◆ Bring children to parks or beaches more often;
- ◆ Motivate children to be physically active with praises or small rewards;
- ◆ Play ball games with children. Show interest in the sports that they like;
- ◆ Set time limits on television watching, playing computer games and surfing the internet;
- ◆ Encourage children to be active while watching television or during commercial breaks, such as to stand up and pace around or do some stretching exercise;
- ◆ Get children helping with some family chores, such as sweeping floor, washing dishes, shopping grocery and carrying bags or waxing car.

Active kids are healthy kids that they should avoid leading a sedentary life. For children and adolescents with disabilities or chronic diseases, it is best to consult a doctor for a customized exercise prescription. Of note, parents and carers should always pay attention to safety with appropriate supervision to minimise the risk of injury when children play sports or are active.

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News Bites

A study which included 72 845 schoolchildren aged 13-15 found that most students did not engage in a sufficient amount of physical activity.

The surveyed schoolchildren were randomly selected from 34 countries across 5 WHO Regions (African, Americas, Eastern Mediterranean, South-East Asia, and Western Pacific) and surveyed between 2003 and 2007. The questionnaire included questions pertaining to their overall physical activity, walking or biking to school, and time spent on sitting. While adequate physical activity was defined as at least an hour of physical activity (excluding physical education class) per day on at least 5 days a week, children who spent 3 or more hours a day sitting and watching TV, playing computer games, or chatting with friends (in addition to sitting at school and during homework) were classified as sedentary. Results showed that across all countries, 23.8% of boys and 15.4% of girls had adequate physical activity by definition. While 32.7% of boys engaged in sedentary activities for 3 or more hours per day, the corresponding prevalence for girls was 34.5%. Overall, 23.9% of the boys and 28.7% of the girls were not sufficiently active and sedentary.

The findings implied that lack of physical activity among schoolchildren is truly a global public health problem.

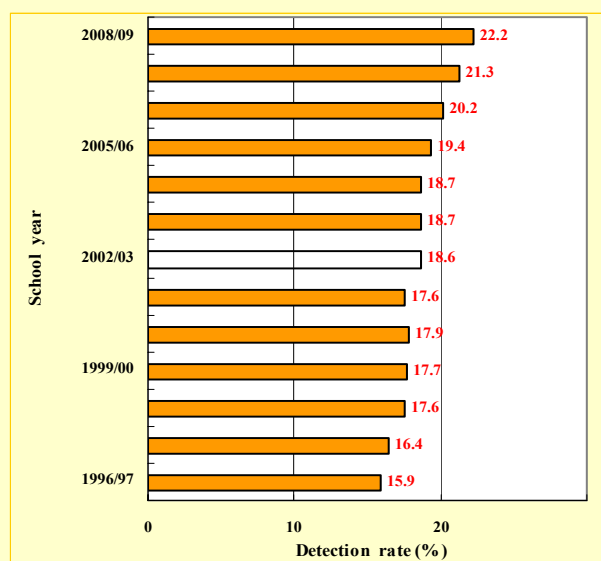
[Source: Guthold R, Cowan MJ, Autenrieth CS, et al. Physical activity and sedentary behaviour among schoolchildren: A 34-country comparison. J Pediatr 2010; 157(1): 43-49.e1.]



Data Brief

Childhood obesity is getting increasing attention in many countries and regions, and Hong Kong is no exception. With obesity defined as body weight exceeding 120% of the sex-adjusted median weight for height, data from the Student Health Service of the Department of Health showed that the detection rate for obesity among primary school students increased from 15.9% in 1996/97 to 22.2% in 2008/09. Of note, the Hong Kong Government has launched a Strategic Framework for Prevention and Control of Non-communicable Diseases and set up a Working Group to recommend actions (including anti-obesity measures) in the coming few years. With everyone in the community working hand in hand, Hong Kong can reverse the rising obesity trend among children and its adverse health consequences.

Detection rate for obesity in primary school students who attended the Student Health Service for health assessment



Source: Student Health Service, Department of Health.

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