



Part 3 Online version



Part 3

Principles of Physical Activity

- I. Physical activity
- II. Sedentary behaviour
- III. Sleeping time




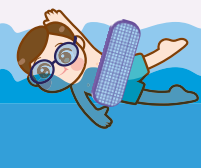




I. Physical activity

1. Physical activity for young children

“Physical activity” refers to any bodily movement supported by our joints and muscles that results in energy expenditure. For young children, physical activity may mean running, jumping, climbing, throwing, walking, singing and dancing, and playing in the park.













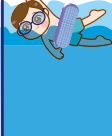


“Physical activity” does not only refer to “exercise”. In fact, “exercise” is a kind of physical activity (Figure 6) and refers to planned and sustained physical activities which require relevant skills to perform. The aim of doing exercise is to strengthen our health-related physical fitness (including body composition, cardiorespiratory endurance, muscular endurance, muscular strength and flexibility).

Figure 6 Physical activity and exercise

Physical Activity		Exercise	
Any bodily movements supported by our joints and muscles that results in energy expenditure		A kind of physical activity	
Including but not limited to running or playing basketball in a full set of sport gear		Planned and sustained	
Examples		Examples	
Climbing stairs 	Playing with sand 	Playing football 	Swimming 
Climbing 	Playing with toys 	Dancing 	Rope skipping 

“Physical activity” can be classified by the level of intensity: light, moderate and vigorous intensity. When young children engage in physical activity, parents can discern the level of intensity of physical activity by observing the changes in heart rate and breathing rate and whether they can talk normally (Figure 7).

Figure 7 Physiological signs and common examples of physical activities by intensities

Know more about intensity levels of physical activities for young children						
Intensity	Physiological signs	Examples*				
Light	<ul style="list-style-type: none">Breathing rate and heart rate normalAble to talk normally	Playing toys 	Putting on clothes 	Doing household chores 	Packing school bag 	Slow walking 
Moderate	<ul style="list-style-type: none">Noticeable increase in heart rate and breathing rateAble to talk in short sentences or single words	Playing slides 	Cycling 	Playing in water 	Swinging 	Brisk walking 
Vigorous	<ul style="list-style-type: none">Significant increase in heart rate and breathing rateUnable to talk normally	Dancing 	Rope skipping 	Swimming 	Playing football 	Running 

* Activities should be appropriate for the young children’s age and physical developmental needs.

2. Benefits of physical activity

Physical activity is essential to the whole-person development of young children. For young children, regular physical activity is an important step to achieve physical fitness and an effective way to develop motor skills. It promotes the growth of muscles and bones in preparation for engagement in sports activities in later years. Physical activity can even improve young children's cardiovascular and metabolic health and reduce the accumulation of fat, thereby preventing chronic diseases.

Through physical activity, young children can also learn to relax and handle pressure even at a young age and build self-confidence and self-esteem. These will have positive impact on their learning ability. According to studies, physical activity not only promotes physical health, but is also beneficial for the cognitive development, learning, memory, concentration, language ability and psychological and social development of young children (Figure 8).



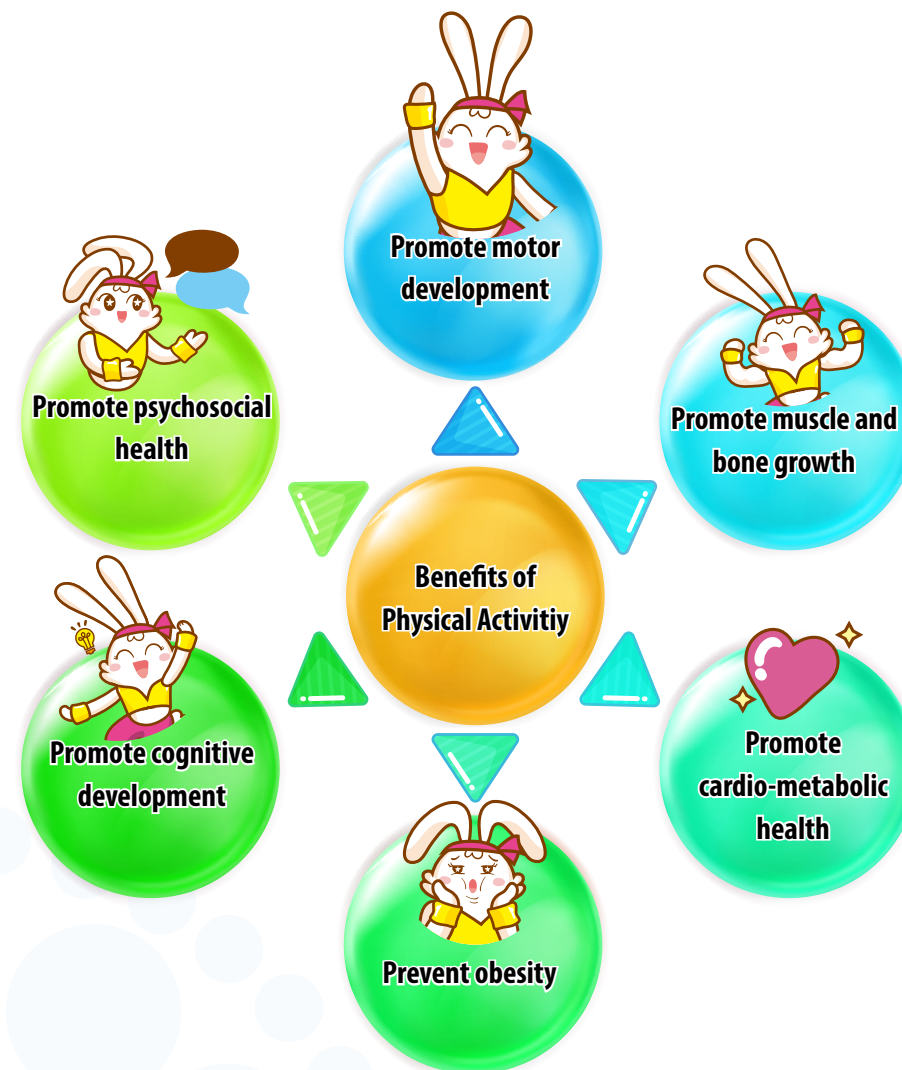
Quiz

- My kid is very awkward with walking, running and climbing. He stumbles and falls all the time. What should I do?
- Does gymnastics promote all-round physical development for young children?
- Is muscle training important for young children?
- When children sweat heavily, does it mean that they are exercising too vigorously and that they should stop immediately?
- When children play with toys, does it count as physical activity?



Healthy Tips

Figure 8 Benefits of physical activity



3. Recommendations on physical activity for young children

To enable young children to enjoy the overall benefits of regular physical activity, parents should encourage young children to develop the habit of regular physical activity since early childhood.

The Department of Health recommends that:

- Young children of 2 years of age: should spend at least 180 minutes in a variety of physical activities of different intensity levels, including moderate- to vigorous-intensity physical activity spread throughout the day; more is better.
- Young children of 3 to 6 years of age: should spend at least 180 minutes in a variety of physical activities of different intensity levels, including at least 60 minutes of moderate- to vigorous-intensity physical activity spread throughout the day; more is better.



Smart Tips

As young children grow, it is necessary for them to engage in more physical activities of higher intensity levels so as to promote cardiorespiratory fitness and bone growth. The more physical activity they do, the better it is for their health.

To ensure children's healthy growth and development, parents should arrange an adequate amount of physical activities every day in accordance with their age and developmental needs.



Tips on raising active kids

Parents are encouraged to find out their children’s physical activity arrangement in kindergartens and child care centres so that they can provide more physical activity opportunities after-school.

To raise an active child, parents may take note of the following tips:

- Parents have to set good examples whilst doing exercise together with their child.
- Reduce the use of strollers. Encourage young children to develop the habit of walking.
- Try to replace motor vehicle travel by walking as much as possible. Encourage older children to walk to school or the park and walk back home. But beware of road safety.
- Encourage children to complete some simple household chores, like tidying up rooms, toys or clothes.
- Schedule extra physical games or activities as a reward for children when they behave well.
- Take children outdoors (e.g. to a park or beach) during holidays.
- Explore and make the best use of facilities and resources in the community. Choose suitable physical activities for children in accordance with their interests and development needs.

Arrangement of physical activity

It is worth noting that the recommended amount of physical activity is accumulated on a daily basis. In fact, it is not difficult to accumulate the daily recommended amount of physical activity as long as physical activity is incorporated into daily life. Parents can refer to the following example.

Before School	<ul style="list-style-type: none">• Let your children take care of their personal hygiene (bathing, brushing their teeth, washing their faces, etc.)• Ask them to dress themselves and put on their own shoes and socks• Do morning exercise together	
After School	<ul style="list-style-type: none">• Take your children to the park and play freely• Go grocery shopping together• Teach them to tidy up their toys• Let them help with simple household chores	
Night	<ul style="list-style-type: none">• Let your children to tidy up tableware• Go out for a walk with them after dinner• Let them pack their own schoolbags	
Holiday	<ul style="list-style-type: none">• Take your children to a country park• Do any kind of exercise together, such as ball games, swimming and cycling	

Parents can refer to the above example to adjust children's daily habits to increase their amount of physical activity, or they can arrange various physical activities for their children according to their family schedule.

Active children love interesting and "game-based" physical activities. Parents can add game elements to physical activities or engage in physical activities with their children, such as "Play and Dance", so that children can enjoy the fun. It is also a good way to get young children to actively participate in physical activities and establish a healthy lifestyle.



Play and Dance

Physical Activity for Young Children
(video)Physical Activity for Young Children
(infographic factsheet)

Quiz

- Young children sweat a lot when exercising. Should I give them sports drinks to replenish fluids?
- Some children always play by themselves and refuse to take part in group games. What should parents do?
- How should we arrange physical activity for overweight or obese preschool children?
- Should children with asthma avoid doing exercise?
- Should physical activity be used as a form of punishment if children have behavioural and disciplinary problems?



Healthy Tips

II. Sedentary behaviour

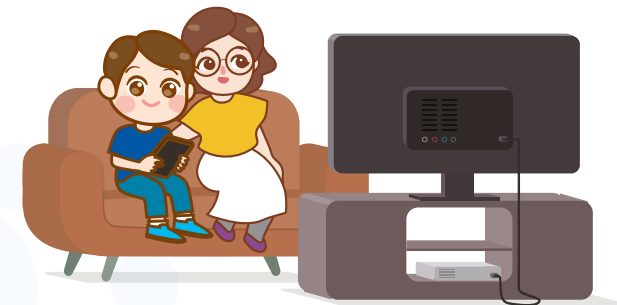
1. Sedentary behaviour of young children

Sedentary behaviour refers to the time spent being physically inactive which is any waking behaviour while in a sitting, reclining or lying posture.

Sedentary time can be divided into "sedentary screen time" (Figure 9) and "non-screen-based sedentary time". "Sedentary screen time" refers to time spent passively watching screen-based entertainment such as watching TV or using a computer, tablet or smartphone. It does not include active screen-based games where physical activity or movement is required.

Excessive "sedentary screen time" not only undermines young children's motivations to explore the outside environments and learn new things, but also takes up the time for physical activity and sleep, which may in turn lead to obesity, inadequate sleep, thereby affecting the development of social skills, visual symptoms and other health problems.

Figure 9 Sedentary screen time



Interactive and education screen activities can be arranged for children. However, such activities should be limited to 1 hour per day and carried out under the guidance of parents.

As for “non-screen-based sedentary time”, it usually refers to time spent sitting but not using screen-based entertainment. For young children, it includes lying on a mat, sitting in a car seat, high chair, pram or stroller with little movement, sitting and listening to a story, reading a book or playing a sedate game.

Figure 10 Non-screen-based sedentary time (examples)



“Interactive non-screen-based activities” are important for young children’s social and cognitive development as well as recreation and relaxation. Examples include reading, storytelling, singing, playing musical instruments, colouring, block building, cutting out, puzzles and games together with parents or caregivers. Thus, parents should pay attention to the quality of sedentary time of young children, and try to accompany their children to participate in activities and give appropriate guidance.

2. Benefits of less sedentary activities

Spending less time restrained (such as in prams/strollers, car seats/high chairs or strapped on a caregiver’s back) and not sitting for extended periods of time are beneficial to the health of young children, including lowering the risks of becoming overweight or obese and promoting the growth of muscles.

Some common examples of screen-based sedentary activities among young children are watching TV and videos and playing computer games. Reducing such activities helps not only reduce the risks of fat accumulation and adiposity, but also improve motor and cognitive development and maintain psychosocial health.



Smart Tips

When young children have to engage in sedentary activities, parents may choose those that could be favourable to their language, cognitive or psychosocial development, such as reading, storytelling, or playing a sedate game with their children.

Figure 11 Interactive non-screen-based activities (example)



3. Recommendations on sedentary time

Parents should encourage young children to avoid excessive sedentary activities or sitting time, as well as to develop healthy lifestyle habits since early childhood.

The Department of Health recommends that young children of 2 to 6 years of age:


- **should not be restrained for more than 1 hour at a time** (e.g. in prams/strollers, high chairs, or strapped on a caregiver's back) or sit for extended periods of time.
- engage in reading and storytelling with a parent/caregiver when sedentary.
- **have no more than 1 hour of sedentary screen time a day** (e.g. watching TV or using a computer, tablet computer or smartphone); less is better.
- choose interactive and educative screen activities, which should be carried out under the guidance of parents.

Figure 12 Recommendations on sedentary time



4. Tips on cutting down on sedentary screen time

Over-indulging in the use of electronic screen products could pose adverse effects on children's development in many ways. Parents should guide their children to spend time wisely in front of the screen. Here are some tips for reference:

Do	<ul style="list-style-type: none"> ✓ Be a role model for your children and cut down on screen time. ✓ Engage your children in other activities if they ask for screen activities. Try to use "quality time" to replace screen time. Talking, reading, playing and doing physical activities with children can better facilitate their intellectual, language, motor and emotional development. ✓ Set up rules and consequences in regulating your children's screen time. Be consistent in carrying out them. ✓ Choose the content of the screen activities carefully. Avoid those overloaded with visual images or background audio which may distract children from focusing on the content. ✓ Let adults keep electronic screen products.
<div style="text-align: center; font-weight: bold; font-size: 1.2em;">Don't</div> 	<ul style="list-style-type: none"> ✗ Reward your children with extra screen time or punish them by cutting it down. ✗ Leave the electronic screen on frequently. This could affect children's engagement in other activities. ✗ Turn on electronic screen during mealtime. This could affect communication among family members. ✗ Keep electronic screen products at a place easily accessible by children.

Tips on using electronic screen products:

- Adults should accompany children and give guidance and explanation on the content so as to bring out the educational function of the product.
- Ensure proper posture and keep proper distance: keep a viewing distance of at least 50 cm from the computer, 40 cm from the tablet and 30 cm from the smartphone.
- Have breaks at times. Look at distant objects to relax the eye muscles.
- Often change postures to relax muscles of different body parts, such as doing some simple stretching exercises while watching TV.
- When using an earphone, set the sound volume to no more than 60% of the maximum volume. Listen for less than a total of 60 minutes a day.

III. Sleeping time

1. Sleep for young children

Adequate and good quality sleep is essential for young children's growth and development. The total amount of sleep (including daytime naps) that young children need each day varies with age.

To ensure adequate and good quality sleep, it is necessary to have regular sleep and wake-up times. In addition, excessive "screen time" will take up the time for physical activity and sleep, so it is also important to limit screen time.

2. Benefits of adequate sleep

Adequate sleep is crucial for young children's cognitive development and emotional regulation. Besides, shorter sleep duration is associated with higher adiposity, poorer emotional regulation, impaired growth, more screen time and higher risk of injuries.

3. Recommendations on sleeping time

Young children should have adequate and quality sleep every day.

The Department of Health recommends that:

- Young children of 2 years of age:
should have **11 to 14 hours of good quality sleep**, including naps, with regular sleep and wake-up times.
- Young children of 3 to 6 years of age:
should have **10 to 13 hours of good quality sleep**, which may include a nap, with regular sleep and wake-up times.

4. Tips on sleep for young children

Apart from ensuring adequate sleep time, it is also crucial to set up a stimulation-free and comfortable sleeping environment. Parents can take reference from the following tips:

- Keep young children's sleeping area quiet, dim and comfortable.
- Before bedtime, turn off the computer and keep other electronic screen products out of reach.
- Help young children establish a soothing pre-sleep routine with a period of relaxing activities an hour or so before bed, e.g. taking a bath and reading a book. Avoid stressful and stimulating activities such as playing video games and having vigorous exercises.



Part 4 Online version



Part 4

TipsonPhysicalActivity

- I. Motor development and unique characteristics of young children
- II. Parent-child physical games
- III. Safety measures
- IV. Home-school co-operation