## SINGAPORE PHYSICAL ACTIVITY GUIDELINES FOR PRESCHOOL CHILDREN (0 - 6 YEARS)

Preschool children should meet all recommendations for physical activity, sedentary behaviour and sleep habits to reap health benefits associated with regular physical activity and reduced sedentary behaviour.





# **GUIDELINES BY SUB-POPULATION: PRESCHOOL, SCHOOL CHILDREN & YOUTHS**

#### UPDATES IN THE SINGAPORE PHYSICAL ACTIVITY GUIDELINES (SPAG) PRESCHOOL (0 - 6 YEARS)

Previous (2013)	What's New
Limit sedentary entertainment screen time to 2 hours.	Sedentary time limit revised to a maximum of 1 hour.
Engage in physical activity for 180 minutes daily regardless of age. Sleep recommendations not included.	Activity recommendations broken into 3 further sub-groups to reflect different developmental needs as preschool children grow. Introduction of sleep time recommendations.

#### UPDATES IN THE SINGAPORE PHYSICAL ACTIVITY GUIDELINES (SPAG) SCHOOL CHILDREN ADN YOUTHS (7 - 17 YEARS)

Previous (2013)	What's New
Limit sedentary entertainment screen time to 2 hours.	Removed time-specific recommendations.
Break up sedentary periods of 90+ minutes with 5-10 minutes of physical activity.	
Engage in physical activity for 60 minutes daily.	Engage in an average of 60 minutes of physical activity per day over the week.
Minimum bouts of 5 minutes.	No minimum duration.
Fundamental movement skills not emphasised in previous edition.	Greater emphasis on the importance of developing fundamental movement skills in school children and youths by engaging in different activities.

Preschool, school children and youths should limit the amount of time spent in sedentary behaviours, especially recreational screen time as it has been highlighted as the key factor. Instead, they should engage in a variety of physical activities regularly.

Infants below one years old should be encouraged to engage in at least 30 minutes of tummy time per day. Young school children should aim for at least 180 minutes of physical activity of any intensity spread throughout each day. It doesn't have to be all at once and every minute counts. Additionally, for all children aged three years and older, 60 minutes of the time spent actively should be of moderate- to vigorous-intensity.

Preschool, school children and youths should also engage in vigorous-intensity aerobic activities, muscle and bone strengthening exercises at least 3 days a week, where doing a variety of activities can help to build their Fundamental Movement Skills (FMS).

# EXAMPLES OF AEROBIC, MUSCLE & BONE STRENGTHENING ACTIVITIES FOR SCHOOL CHILDREN

\*Not an exhaustive list

	MODERATE-INTENSITY	VIGOROUS-INTENSITY
AEROBIC		
	• Games at the Playground (Hide and Seek)	• Games at the Playground (Tag/Catching)
	• Commute by cycling	• Mountain biking
MUSCLE STRENGTHENING*	• Casual racquet sports	• Competitive racquet sports
	• Games at the playground (e.g. tug-of-war)	• Circuit training
	• Climbing	<ul> <li>Hopping, jumping, and rope-skipping</li> </ul>
		• Playing a football match
BONE STRENGTHENING*		
	<ul> <li>Games at the playground (e.g. hopscotch)</li> </ul>	• Martial arts
	• Casual basketball or netball	<ul> <li>Competitive basketball or netball game</li> </ul>
	• Gymnastics	• Dancing

\* All muscle and bone strengthening activities of moderate- or vigorous-intensity are also considered as aerobic activities

# **EXAMPLES OF FUNDAMENTAL MOVEMENT SKILLS**

### LOCOMOTOR SKILLS

Enabling children to move through different environments, moving their bodies from one location to another. Examples of key locomotor skills:

- Walking
- Running
- Jumping
- Hopping
- Skipping
- Sliding

#### **OBJECT CONTROL SKILLS**

Making controlled contact with objects using parts of the body or using an implement.

Examples of object control skills:

- Rolling
- Throwing
- Catching
- Kicking
- Striking
- Dribbling

#### STABILITY SKILLS

Maintaining and acquiring balance in static and dynamic movements.

Examples of stability skills:

- Balancing
- Turning
- Twisting
- Stretching
- Transferring of weight

### EXERCISE INTENSITY



**Light** Can talk in full sentences and sing



#### Moderate Can talk in phrases of

Can talk in phrases or short sentences but cannot sing



#### Vigorous Have difficulty talking

# **CASE STUDIES: PRESCHOOL CHILDREN**

#### CASE STUDY #1



#### SHANTI, 3

Preschooler with two busy working parents

Shanti is a quiet girl who enjoys being at home with her parents. She sleeps for 12 hours each night and has been in preschool since she was six months old. Both her parents are office workers, and her dad usually picks her up from school at 7pm. Due to the busy schedules of her parents, Shanti relies on her school teachers to support her daily physical activity needs. This usually includes some dancing, games, and arts and craft tactile work.

On weekends, Shanti goes to the playground in the evening with her parents to meet her friends and she engages in a combination of running, jumping, and climbing for 60 minutes whilst socialising. Her busy parents who work on weekends tend to give her a handphone to keep her occupied. Recently, this has become more frequent and resulted in less active time for Shanti.

Shanti's parents are doing great by encouraging her to play at the playground on weekends for an average of 60 minutes per day as this gives her an opportunity to activate a variety of different muscle groups and energy systems in an unstructured play setting. However, on weekdays, it is tough for Shanti to meet her daily 60 minutes of physical activity due to the late pick-ups from school. For working parents with young children, it is important to:



Plan for some form of physical activity for young kids such as play time at the playground or at home.



Expose your kids to ball activities to develop their movement skills.



JIE YANG, 5 Energetic and active preschooler

At preschool, Jie Yang gets light to moderate physical activity time through class activities such as dancing and organised outdoor ball games. At home, Jie Yang is always on the move, particularly after dinner when his playtime includes moderate-intensity activities such as chasing, hide-and-seek, and pillow fights. Sometimes, evening playtime extends beyond his bedtime, and he goes to bed as late as 11.00pm. The early start to the day for school results in difficult mornings as Jie Yang struggles to wake up.

On weekends, Jie Yang goes swimming with his dad in the morning and his mother arranges for playground play dates with his preschool friends in the afternoon. This allows him to run, jump, and fall in a safe environment which supports the development of his movement skills in an unstructured way. The exposure to water and land-based activities also helps develop his movement competency in a range of environments.

Jie Yang is doing well by mixing up his activities across the week with unstructured and structured play. Parents should:



Encourage your child to sleep early, particularly on weekdays, to support recovery and rest.



Combine both structured and unstructured play in your child's routine to allow him/her to build physical competency in diverse environments like land and water.



# SUMMARY OF EVIDENCE: PRESCHOOL CHILDREN

#### CHILDHOOD OBESITY:

Regular physical activity has been linked to an increase of healthy weight children in this age group, with carry-over effects that can persist into adulthood.



### COGNITIVE DEVELOPMENT:

Lower levels and quality of sleep are associated with reduced cognitive function and poorer emotional regulation amongst young children.

#### HABITS OF PHYSICAL ACTIVITY:

Physical activity habits established during childhood are likely to be carried through into adolescence.

#### MUSCULOSKELETAL DEVELOPMENT:

Moderate-intensity physical activity has been proven to improve bone mineral density and muscular development, and promotes the development of motor skills.

