

Encouraging active play and participation in sports is vital for our children. Why? Because there are fewer opportunities for active play than in the past – fewer urban play spaces, less school time devoted to play and sport, fewer playmates at home to play with. This contributes to the sedentary lifestyle of young people and the problems, such as obesity, that may accompany it.

# Active play and health

Physical play begins in infancy, with rhythmic repetitive movements. It develops into active play during the preschool years and rough-and-tumble play during middle childhood. Sport begins in middle childhood and may continue throughout life. Physically active play improves muscle control and co-ordination, strength and endurance, and may promote fat reduction and body temperature regulation. Rough-and-tumble play usually involves playing with others and is related to social skills, status and emotional control.

Given the space and resources, children enhance their physical development through play that draws upon bodily movement and control. They build muscle strength and can develop habits and interests that form the basis for a healthy lifestyle. Children only become “couch potatoes” when adults have restricted their activity, limited their access to outdoor play and allowed children to spend excessive time on “screen play” with a television or computer.

Obesity is more than just a cosmetic concern. Short- and long-term physical and psychological problems can result from childhood obesity, which has been linked to shorter life spans and a number of health factors including diabetes, cardiovascular disease, high blood pressure, stress on bones and lungs, high cholesterol, joint disease, irregular menstrual cycles and stroke. Furthermore, obese children are often teased and psychological effects can include feelings of inadequacy, low self-esteem and embarrassment. When these children become obese adults, they are often discriminated against and have difficulties in finding jobs and establishing relationships.

Safety in play if obesity is the problem, play may be the solution

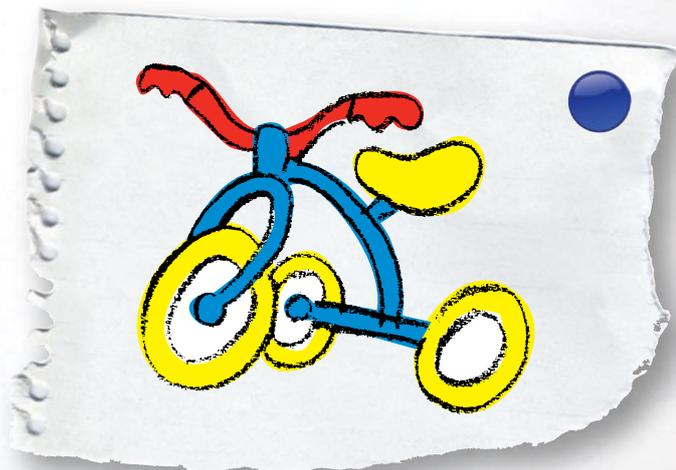
Young animals living in an environment with a surplus of food rarely develop obesity – they simply play more. ‘Animals play so that they burn up energy that might otherwise be stored as fat... By engaging in energy-burning play, animals remain lean and fit, making them less susceptible to predators. If excess calories were not burnt off in play, then the resulting obesity might increase the risk of predation by impeding escape ability through increasing balance problems, fatigue, muscle strain, inability to enter narrow spaces... Moreover, because play activity raises basal body temperature, it could decrease the young animal’s susceptibility to cold stress and pathogens.’

Childhood obesity results from genetics, the environment, including parental example, emotional instability, hormone levels and also intake-activity relationships. For the majority of people involved with children, the intake-activity relationship is the only factor they can reasonably influence. This leaflet looks at the activity side of the equation, namely active play in the home, garden, playground and open spaces. Increasing the physical activity level among children is complicated. Schools, under pressure to increase test scores, are decreasing children’s opportunities to participate in break periods and physical education.

Recent studies suggest one solution to childhood obesity is to encourage children to participate in active free play outdoors. Children burning calories in play on a playground are more likely to maintain a healthy weight. Cardiologists recommend that children get 30 minutes of vigorous cardiorespiratory exercise at least three times a week. Outdoor play areas are excellent places to promote active and healthy recreational habits.

Play spaces should provide challenging activities for children who are not as physically adept as their non-obese peers, so that they will have opportunities to be physically active during play times.

Active free play can lead to improved academic performance. One study shows that providing children with play breaks during the school day maximizes their attention to cognitive tasks. Without play, self control does not develop adequately. ‘The idea that all types of play – from fantasy to rough-and-tumble – have an important, if not critical, role in child development has not received much attention from mainstream child development researchers’, says child psychologist Anthony Pellegrini.



# Active play and health



## ROUGH-&-TUMBLE PLAY

Active play, especially outdoors, burns more calories than other forms of play 8. 'Professionals need to be careful not to equate play-fighting with serious fighting and not to label a child as "aggressive" simply because he or she prefers a particular kind of play. Given many children's interest and enjoyment in active, locomotor (physical) play, children should be given numerous opportunities for this type of play as well. Such activities likely contribute to motor development, overall physical fitness and possibly cognitive development.'

Girls who engage in active play as children are more likely later to be involved in sport.

Fathers are more likely than mothers to initiate physically active play with their children. About one-third of fathers engage in rough-and-tumble with their children on a daily basis and only 4% to 16% of fathers never do.

Adults benefit as well from active play. In one study, participation in leisure activities was associated with reduced risk of dementia. And in another, elderly people who played video games had faster reaction times and felt better than a comparable group of elderly who did not play video games.

## Encouraging active play

Children who are shy, obese, or not well-coordinated will need encouragement for physical play. Toys, playground and sports equipment should be chosen so that they are easily accessible to physically challenged children but still be exciting.

## Toys, not candy

One study investigated whether children in the U.S. would choose toys over candy when offered a choice on Halloween. The 284 boys and girls, age 3 to 14 who were part of this study were just as likely to choose toys as candy. There were no gender differences. According to this research, children will not be disappointed by toy treats rather than sweets.

The health benefits of rhythmic movement have been well documented. Electronic games that require bodily activity are a beneficial tool for weight loss. Games that require dancing, for example, are used at schools to promote fitness. The possible health benefits are clear: one dance-along song, 'Max 300' is 88 seconds long and, set on 'maniac' speed requires 578 steps. That works out to an average of 6 steps per second.

## Design guidelines for play areas should:

- provide different play opportunities to complete the social, intellectual and physical growth of children
- contain diverse activity spaces for structured games, creative play, play with natural elements, water and sand play, quiet play and shared open space
- allow the children to create their own environment to some degree to allow for adventure and creative play
- provide ambiguity to stimulate fantasy play, loose parts for creative and cognitive play, balls and games to foster social play
- provide stages of difficulty so that children can choose goals which they can accomplish

## Just some of the toys that encourage physical, active play

Toys marked with an asterisk\* are suitable for indoor play

balls	cycles
push-pull-alongs*	pogo sticks
hobby horse*	in-line skates
building blocks and construction	trampolines, climbing apparatus
toys*	garden tools
stacking toys	stilts
ride-ons*, scooters	sports equipment
swings, climbing frames	simulated sports games connected to TV or VCR
remote control vehicles	karoke*
yo-yo's*, frisbee, hula hoop	balance beam*
super soaker	interactive football*, with motion
sliding boards	sensors attached to leg
dance mats*	active games such as 'Twister'*
skates	

For further information:  
Australian Toy Association  
PO Box 7061, St Kilda Road, Melbourne VIC 8004  
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Also visit [www.austoy.com.au](http://www.austoy.com.au)

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This leaflet is available for download from the Parents Section at [www.austoy.com.au](http://www.austoy.com.au)