

# Creating Supportive Environments



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Definition

Elements/Evidence

Population Based/Example

Community/School-based /Example

Reaching Individuals /Examples

# Definition

“The physical environment is defined as all objective structural factors external to the individual that both positively and negatively influences a persons behavior.” (US Dept of Health and Human Services, 1999)

# Elements

Three elements of the physical environment that influences physical activity:

Transportations Systems

Land use Patterns

Urban Design



# Statistics

“In Canada more than half of car trips are less than 5 km” – ideal distances to cover through means of active transportation (Canadian

Institute of Transportation engineers [www.cite7.org](http://www.cite7.org))

“Evidence clearly shows that people who live in spread out car dependent neighborhoods, are likely to walk less, weigh more and suffer from obesity ....as compared to people who live in more efficient higher density communities.” (Ewing et al 2003)

“The low-walkability of sprawling neighborhoods and the resulting increase in car use, contribute to the growing obesity epidemic, especially in children.” (Bray et al 2005)

# Research in Canada

A research team from the University of Alberta recently reported the following key findings:

Approximately 15% of children aged 4-6 years in Edmonton were overweight or obese and associations existed between aspects of the built environment and bodyweight status among girls but not boys.

The odds of a girl being overweight or obese were lower if she lived in a walkable neighbourhood with more intersections. These associations persisted even after controlling for measures of neighbourhood-level socioeconomic status (SES).

Review

Open Access

## Do attributes in the physical environment influence children's physical activity? A review of the literature

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### Abstract

**Background:** Many youth today are physically inactive. Recent attention linking the physical or built environment to physical activity in adults suggests an investigation into the relationship between the built environment and physical activity in children could guide appropriate intervention strategies.

**Method:** Thirty three quantitative studies that assessed associations between the physical environment (perceived or objectively measured) and physical activity among children (ages 3 to 18-years) and fulfilled selection criteria were reviewed. Findings were categorized and discussed according to three dimensions of the physical environment including recreational infrastructure, transport infrastructure, and local conditions.

**Results:** Results across the various studies showed that children's participation in physical activity is positively associated with publicly provided recreational infrastructure (access to recreational facilities and schools) and transport infrastructure (presence of sidewalks and controlled intersections, access to destinations and public transportation). At the same time, transport infrastructure (number of roads to cross and traffic density/speed) and local conditions (crime, area deprivation) are negatively associated with children's participation in physical activity.

**Conclusion:** Results highlight links between the physical environment and children's physical activity. Additional research using a transdisciplinary approach and assessing moderating and mediating variables is necessary to appropriately inform policy efforts.

### Background

Many youth today are physically inactive. Considerable evidence documents that nearly 35% of youth in the US fail to meet the minimum physical activity guidelines, and another 14% are completely inactive [1,2]. Low levels of physical activity and the failure to meet physical activity recommendations have notable health consequences among children including increased risk of obesity [3],

low bone density [4], and low physical fitness [5]. Furthermore, children who are not physically active are denied the positive social and emotional benefits of physical activity including higher self esteem, lower anxiety, and lower stress [6]. A comprehensive understanding of the determinants of physical activity among youth is essential for the identification of appropriate points of intervention to promote active lifestyles and their associated health

# EVIDENCE on RESIDENTIAL ENVIRONMENTS and PHYSICAL ACTIVITY

Children's participation in physical activity is positively associated with:

Access to indoor/outdoor facilities for sport and play, close to the home, e.g.

- parks, playgrounds
- green open space
- sports clubs
- sports facilities on schoolyards, kindergartens

Perceiving the neighbourhood surroundings as interesting, friendly

Being able to safely walk or cycle to school or other destinations

# Population Based Interventions

- Creating **sidewalks, cycling trails,**
- Providing opportunities for **active commuting + public transport,**
- Providing **access to PA facilities** all over the year (e.g. parks, open spaces, playgrounds, indoor/outdoor sports facilities),
- Increasing the **quality, aesthetical design of residential areas,**
- Facilitating **short travel distances** (e.g. through street connectivity, mixed land use, density of population and services).
- Reducing **crime or fear of crime** (e.g. through sufficient street lighting, pleasant neighbourhood surroundings free of graffiti, litter and incivilities; measures for crime prevention),
- Improving **road safety** (e.g. through traffic calming measures, speed limits, well-maintained sidewalks, street lighting).

# School /Community Based Interventions

- Bicycle racks at schools/preschools
- Designated bicycle lanes
- Public washrooms/drinking fountains in parks/playgrounds
- Skateboard/Basketball parks
- Markings on Playgrounds
- Support for Families with children with special needs
- Appropriate outdoor play/games equipment



Kids more active when playground has balls, jump ropes, UNC study shows

Children play harder and longer when their child-care centers provide

- Portable play equipment such as balls and jump ropes
- More opportunities for active play and physical activity
- Training and education for staff and students.



# Bringing the outdoors into early childhood education

- “Where outdoor space is concerned, the quality of the yards attached to centres is often poor in Canada, a country with much land space available”.



**“Countless communities have virtually outlawed unstructured, outdoor, nature play, often because of the threat of lawsuits, but also because of a growing obsession with order. Many parents and kids now believe outdoor play is verboten even when it is not; perception is nine-tenths of the law.”**



*(Excerpt reprinted from LAST CHILD IN THE WOODS by Richard Louv, courtesy of Algonquin Books)44*

# What Individuals Can Do?

- Role modeling
- Support/encouragement/praise
- Gross motor play/ loco-motor activities that are fun
- Spontaneous and intermittent play
- Outdoors
- Advocates
- Educators

# Early Child Development Nutrition Project

## **Your Kids Are Listening** *Social Marketing Campaign*

**Target:** Parents of young children (3-6 years old)

### **Messages**

Phase 1: When it comes to healthy weights, what parents say and do can have a direct and long-term impact on their child.

Phase 2: Parents can make simple changes to their family lives to help children achieve healthy weights.

# Your Kids Are Listening

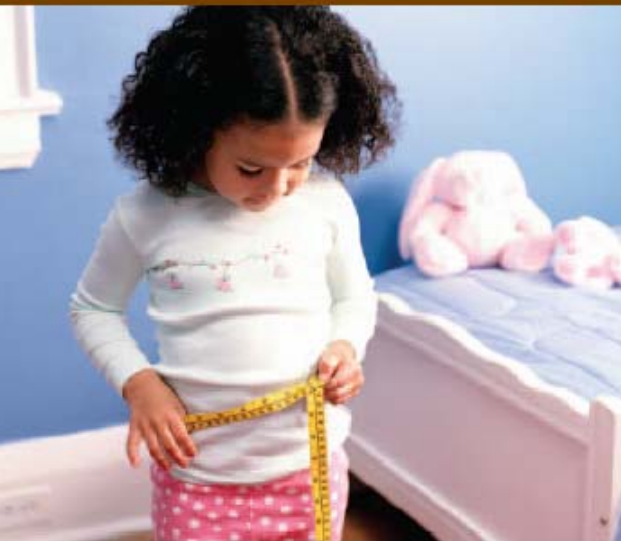
**“I COULD STAND TO LOSE A FEW POUNDS.”**

**YOUR KIDS ARE LISTENING**

What you say and do in front of your children can affect their attitudes about food. Eat well and set a healthy example when your children are young. Call Toronto Health Connection at 416-338-7600 or visit [www.toronto.ca/health](http://www.toronto.ca/health)

**Toronto Public Health**

Health provided by Health Canada and the Government of Ontario.



**“I NEVER SEEM TO FIND TIME TO EXERCISE.”**

**YOUR KIDS ARE LISTENING**

What you say and do in front of your children can affect their attitudes about exercise. Be active and set a healthy example when your children are young. Call Toronto Health Connection at 416-338-7600 or visit [www.toronto.ca/health](http://www.toronto.ca/health)

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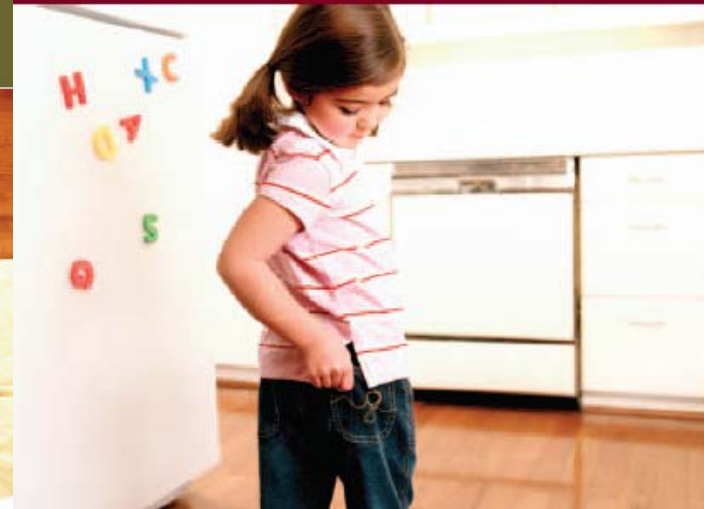
**“DOES MY BUTT LOOK FAT IN THESE JEANS?”**

**YOUR KIDS ARE LISTENING**

What you say and do in front of your children can affect their self-esteem. Set a healthy example when your children are young. Call Toronto Health Connection at 416-338-7600 or visit [www.toronto.ca/health](http://www.toronto.ca/health)

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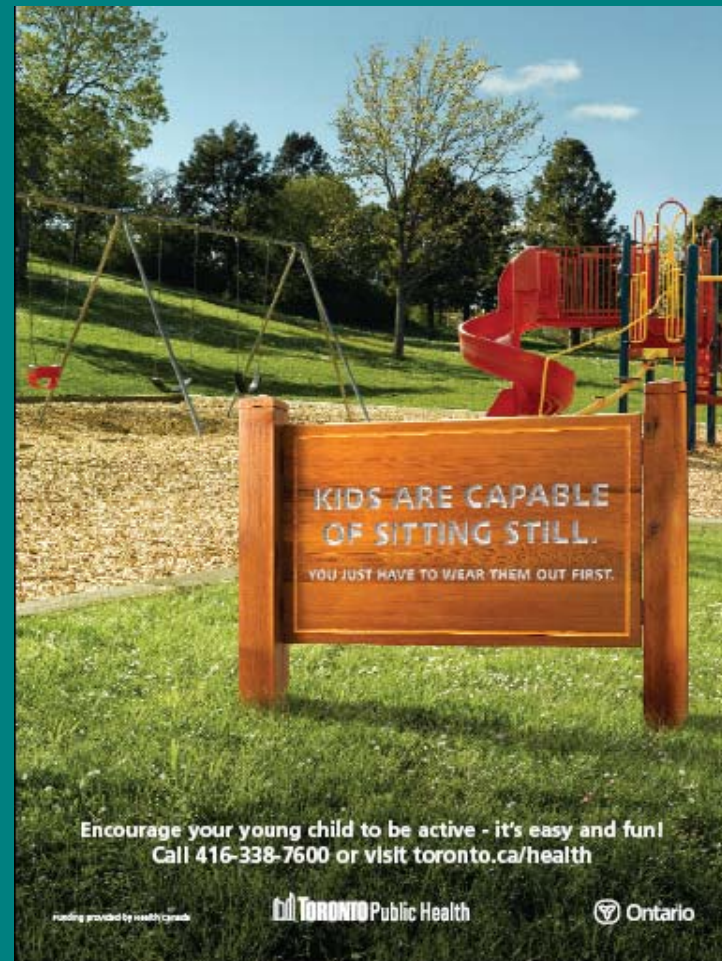
# Your Kids Are Listening



Kids can be picky eaters.  
So let them pick.



Let your child pick a favourite vegetable for dinner tonight - it will help build healthy eating habits. For simple meal ideas, call 416-338-7600 or visit [toronto.ca/health](http://toronto.ca/health)

funding provided by health canada  



KIDS ARE CAPABLE  
OF SITTING STILL.  
YOU JUST HAVE TO WEAR THEM OUT FIRST.

Encourage your young child to be active - it's easy and fun!  
Call 416-338-7600 or visit [toronto.ca/health](http://toronto.ca/health)

funding provided by health canada  

# Your Kids Are Listening

- 75% of parents recalled media messages on Healthy Weights with 45% recalling parents as important role models
- More than half of the parents surveyed changed their behaviours to promote healthy weights

What Can You Do To Make These  
Environments Supportive?

Thank-You