

Manitoba's *Healthy Buddies*[™] Pilot Project

Background

In 2009-2010, Manitoba's Healthy Schools Initiative introduced the *Healthy Buddies*[™] Program as a pilot project in 20 elementary schools across the province. The purpose of the pilot was to see if the *Healthy Buddies*[™] Program improved the health of elementary school-aged children. To evaluate the pilot's effectiveness in improving health, Manitoba Healthy Living, Youth and Seniors, Manitoba Education and Healthy Child Manitoba partnered with the Manitoba Institute of Child Health (MICH). The Manitoba Institute of Child Health looked for two key results:

- 1) Is *Healthy Buddies*[™] effective in increasing physical activity and fitness levels in elementary school children?
- 2) Is *Healthy Buddies*[™] effective in preventing unhealthy weight gain in elementary school children?

Children and youth need daily physical activity for healthy growth and development. The *Canadian Physical Activity Guidelines* recommend that children and youth get at least 60 minutes of moderate-to-vigorous intensity physical activity every day.¹ Yet research shows that only nine per cent of boys and four per cent of girls get the recommended levels of physical activity per day.² The *Healthy Buddies*[™] Program is one way to encourage Manitoba children and youth to become more active.

Healthy Schools is Manitoba's provincial school health initiative promoting the physical, emotional and social health of school communities. The Healthy Schools Initiative recognizes that good health is important for learning and that schools can have a positive influence on the health of children, youth and their families. The initiative supports progress towards positive health and education outcomes for all students.

For more information about Healthy Schools, visit: www.gov.mb.ca/healthyschools

¹ Canadian Society for Exercise Physiology, *Canadian Physical Activity Guidelines*, 2011.

² Statistics Canada, *Physical activity of Canadian children and youth: Accelerometer results from the 2007 to 2009 Canadian Health Measures Survey*, January 2011.



Healthy Child Manitoba
Putting children and families first

Manitoba 

The Manitoba Institute of Child Health (MICH) is the research division of the Children's Hospital Foundation of Manitoba. It is the only research institute dedicated exclusively to pediatric research in the Prairie provinces. At the institute, over 220 world-class pediatric medical researchers, technical staff, students and support staff are involved in research and clinical trials each year. MICH brings together researchers from a variety of health disciplines who share a common goal of improving the health of children and youth. MICH is committed to enhancing the quality of children's lives within our community and around the globe.

For more information about MICH, visit: www.mich.ca

What is *Healthy Buddies*™?

The *Healthy Buddies*™ Program was started in British Columbia (BC) by the BC Children's Hospital to promote community health and prevent chronic disease. It is a school-based health promotion program that works to empower elementary school children to live healthier lives. *Healthy Buddies*™ focuses on encouraging healthy attitudes and behaviours in three key areas of health:

1. Physical activity (or *Go Move!*)
2. Eating healthy (or *Go Fuel!*)
3. Feeling good about yourself (or *Go Feel Good!*)

The program uses a peer teaching model by partnering younger students with older "buddies" who serve as mentors and healthy role models. Together students learn to make healthy choices that will help them lead healthier lives.

The *Healthy Buddies*™ Program is delivered through 21 lesson plans that can address a number of curriculum learning outcomes. In the first half of the school year, students learn how to be positive buddies and learn about the three key areas of health (physical activity, eating healthy and feeling good). In the second half of the year, students identify challenges to living a healthy life and learn how to overcome some of these obstacles.

Each week, participating students receive the same *Healthy Buddies*™ classroom lesson. The older buddies (grades 4, 5 or 6) receive instruction first. Then, with guidance from their teachers, they deliver the lesson plan to their younger buddies (grades 1, 2 or 3). Throughout the 21 *Healthy Buddies*™ lesson plans, students deliver presentations, practice relaxation techniques, interview each other, play card games and create art displays.

In addition to classroom lessons, *Healthy Buddies*™ includes a physical activity component known as *Fitness Loops*. Teachers lead the *Fitness Loop* activities and each class participates with their buddies twice a week. This provides a real opportunity for the older buddies to encourage their younger buddies.

For more information about *Healthy Buddies*™, visit: www.healthybuddies.ca



The Pilot

Selecting the Pilot Schools

In January 2009, all Manitoba elementary schools were sent a letter and invited to participate in the Manitoba *Healthy Buddies*™ Pilot Project. Schools were asked to express their interest in participating. Twenty schools were then randomly selected to participate in the pilot and again randomly assigned to one of two groups:

1. Intervention Schools

- Ten schools were selected to be intervention schools. These schools did the *Healthy Buddies*™ Program in the 2009-2010 school year and participated in the evaluation exercises.

2. Control/Wait List Schools

- Ten schools were selected to be control schools. These schools did not do the *Healthy Buddies*™ Program in the 2009-2010 school year, but did participate in evaluation exercises.
- Control/wait list schools had the opportunity to do the *Healthy Buddies*™ Program in the 2010-2011 school year.

The 20 schools selected included rural, urban, inner city and First Nations schools.

To deliver the *Healthy Buddies™* Program, intervention schools received:

Curriculum Linkages

- Healthy Schools, in partnership with Manitoba Education, identified linkages between the *Healthy Buddies™* Program lesson plans and the K-12 (K-S4) *Physical Education/Health Education: Manitoba Curriculum Framework of Outcomes for Active Healthy Lifestyles*.

Healthy Buddies™ Classroom Bins

- *Healthy Buddies™* program binders (lessons, overheads, posters, etc.)
- DVDs containing lesson presentations
- card games
- children's yoga video
- CD containing all print materials

Fitness Loop Bin

- Fitness Loop guide
- music CDs
- posters
- card games
- stretching book

"The kids absolutely loved, loved their Healthy Buddies™ activities. They couldn't wait to get to the gym and I think that anything you can do over and above the two minimum Phys Ed classes per week is great."

• **Teacher, Carpathia School, Winnipeg, MB**

"I really loved the gym times because we got to play with our older buddies."

• **Grade 2 student, Warren Elementary School, Warren, MB**

"Healthy Buddies taught me that it doesn't matter what you look like as long as you live a healthy lifestyle."

• **Grade 6 student, Warren Elementary School, Warren, MB**

How the Pilot Worked

Using the supplied *Healthy Buddies™* teaching materials, intervention schools delivered the 21 *Healthy Buddies™* lesson plans in two buddy classrooms between mid-October 2009 and early May 2010. The lesson plans included information about the key themes of healthy eating, being physically active and building self-esteem.

Healthy Buddies™ Pilot Project Teacher Training Workshop

In September 2009, Healthy Schools hosted a *Healthy Buddies™* Pilot Project Teacher Training Workshop to prepare intervention school teachers to deliver the *Healthy Buddies™* Program. The teacher training took place prior to any data collection.

The Evaluation

What We Looked For

The purpose of the pilot project was to see if the *Healthy Buddies™* Program improved the health of elementary school-aged children. To evaluate the pilot's effectiveness in improving health, researchers looked for two key results:

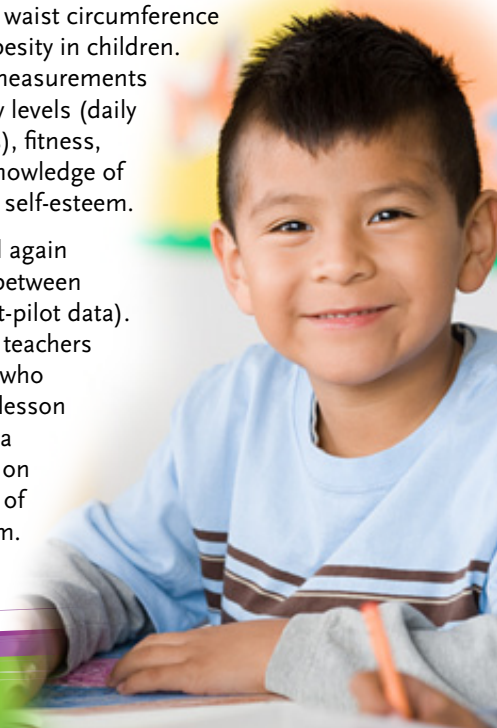
- 1) Is *Healthy Buddies™* effective in increasing physical activity and fitness levels in elementary school children?
- 2) Is *Healthy Buddies™* effective in preventing unhealthy weight gain in elementary school children?

What We Measured

To determine the effectiveness of *Healthy Buddies™* in Manitoba, researchers needed to compare students who actually took part in *Healthy Buddies™* (intervention schools) with students who did not take part (control/wait list schools). Initial measurements were taken before the pilot started (baseline data) between Sept. 21 and Nov. 2, 2009.

The two measurements of particular interest in this evaluation were related to body weight: body mass index Z score (BMI Z score) and waist circumference. BMI Z score is a measure that can reflect whether a child's growth is on track for their age and gender. Waist circumference is a simple measurement of the waist. BMI Z score and waist circumference are known determinants of obesity in children. Researchers looked at other measurements too, including physical activity levels (daily pedometer-based step counts), fitness, self-reported dietary intake, knowledge of healthy eating, behaviour and self-esteem.

Students were then measured again at the end of the school year between May 1 and June 16, 2010 (post-pilot data). At the end of the pilot project, teachers from the intervention schools who taught the *Healthy Buddies™* lesson plans were asked to complete a survey to share their thoughts on the strengths and weaknesses of the *Healthy Buddies™* program.



Participating Pilot Schools

Anola School	Sunrise School Division	Joe A. Ross School	Opaskwayak Cree Nation
Balmoral School	Interlake School Division	King Edward Community School	Winnipeg School Division
Carpathia School	Winnipeg School Division	Lord Roberts School	Winnipeg School Division
Cecil Rhodes School	Winnipeg School Division	Miskoosepi School	Bloodvein First Nation
Champlain School	Winnipeg School Division	Onanole Elementary School	Rolling River School Division
Clifton School	Winnipeg School Division	Riverview School	Brandon School Division
Elmwood Elementary/ Westpark School	Borderland School Division	Shoal Lake School	Park West School Division
Heritage School	St. James Assiniboia School Division	Victory School	Seven Oaks School Division
James Nisbett School	Seven Oaks School Division	Warren Elementary School	Interlake School Division
		Waywayseecappo Community School	Waywayseecappo First Nation

What We Found Out

These are the major findings from Manitoba's *Healthy Buddies™* Pilot Project:

- *Healthy Buddies™* was effective in preventing unhealthy weight gain. Compared to students in the control/wait list schools, students from the intervention schools who participated in the *Healthy Buddies™* Program experienced healthy declines in BMI Z score and significant reductions in waist circumference.
- *Healthy Buddies™* was not effective in increasing physical activity and fitness levels. There were no differences observed in fitness or physical activity levels of students in either the intervention schools or the control/wait list schools.
- Although *Healthy Buddies™* did not significantly increase students' physical activity levels, it appears that the program prevented unhealthy weight gain by influencing what students ate (energy intake).
- Compared to students from control schools, the younger buddies (grade 1, 2 or 3) who participated from the intervention schools experienced significantly greater improvements in self-esteem, healthy living knowledge and behaviours. However, there were no differences in healthy behaviours seen in older buddies (grade 4, 5 or 6 students) at these same schools.
- Based on completed teacher surveys, teachers who delivered the *Healthy Buddies™* program in their classrooms felt the program had a positive effect on student behaviour and knowledge. However, teachers offered recommendations to improve the program and its delivery, including (but not limited to):
 - o decreasing the time requirement to implement the *Healthy Buddies™* program
 - o examining using even older "buddies" to act as peer leaders. Some teachers found that the grade 4, 5 or 6 students were too young to peer-lead effectively
 - o build in more parental involvement in program planning and delivery



**For more information
about Manitoba's Healthy
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