Research team proves peer pressure can be used for good

October 29 2012

Using peer mentors to enhance school-day physical activity in elementary aged students has been given an A+ from Nova Scotia researchers.

And the increased physical activity levels got top grades for significantly improving both academic test scores and cardiovascular fitness levels.

Funded principally by the Nova Scotia Research Foundation and supported by community partners including the Heart and Stroke Foundation, research by principal investigator Dr. Camille Hancock Friesen and her team at the Maritime Heart Center (MHC) found that peer mentors can significantly influence the amount of physical activity kids have throughout the school day.

The MHC team created a Heart Healthy Kids (H2K) Lunch program, which included three games that peer mentors could lead during lunch time once every two weeks. At least one MHC staff or adult volunteer was present at each H2K Lunch to ensure that the peer mentors were adequately supported.

"Using positive influences on children to be physically active works," says Dr. Hancock Friesen. "It may be that social reasons for physical activity trump other influences for kids. Unlike adults, they are not as motivated by concern for weight control or long-term health."

Students selected as peer mentors, who were age mates with other team

members (grades 4, 5 and 6), received training in organization, positive feedback and team building.

Once the participants had eaten lunch, they participated in the games, including relays, tag and ball games. The peer mentors recognized participants who were particularly involved or helpful and participated in focus groups to evaluate the program.

"There was an average increase among peer-mentored students of over 1,000 steps a day," says Dr. Hancock Friesen. "It is clear that peer mentoring has a role to play in increasing school day activity levels among students."

The Heart Healthy Kids study tracked more than 800 students from 10 schools who used pedometers to track their daily steps. Both control and study schools participated in educational sessions that included basic heart anatomy and physiology, nutrition, smoking prevention and kid-friendly food label reading skills.

The intervention schools took part in the peer mentoring program. Pre- and post-study, all students were evaluated for waist circumference, height and weight and cardiovascular fitness.

While there were improvements in cardiovascular fitness and heart health knowledge in both groups, the intervention schools had significantly increased activity levels and cardiovascular fitness. "As in adults, if we can keep the activity levels high in kids over the long term, the ultimate result will be improved BMIs and waist circumference measurements," says Dr. Hancock Friesen.

The schools were selected by the Halifax Regional School Board based on which ones they believed would benefit most from the program, with a focus on urban schools with a lower than average socio-economic

status.

The equipment to run H2K Lunch, including team identifiers, cones, hula hoops and bean bags, cost only $200 per school and was provided for by MHC and its partners.

Dr. Hancock Friesen says the study fits into the groundswell of interventions aimed at stemming the tide of obesity and type 2 diabetes that is becoming all too common in our children and youth.

"When we started H2K, we knew that we would need data for us to be credible advocates for routine school-day physical activity," she says. "A scientific approach will allow us to grow the study into a sustainable program available across the Maritimes and help us advocate for daily physical activity to be reincorporated into every child's school day."

Parent and teacher surveys and interviews revealed adult support for the program was also very strong.

Heart and Stroke Foundation spokesperson Dr. Beth Abramson points to recent studies that show that Canadian children and youth are becoming less active.

"Almost one in three Canadian children is currently overweight or obese and only 10 per cent are meeting the recommended 60 minutes of physical activity daily," says Dr. Abramson "This research represents a proactive response to this growing epidemic that is putting our children at risk of developing heart disease, type 2 diabetes and other chronic diseases."

Hancock Friesen hopes that parents and school leaders will adopt new ways of encouraging children to be more active, based on these research results. "Physical activity doesn't need to mean traditional sports or

expensive equipment. Kids can participate in less structured activities – it can be as simple as encouraging them to take time away from their iPods and other electronic gadgets and go outside to play with their peers."

The Heart and Stroke Foundation places a high priority on students receiving at least 60 minutes of physical activity a day, based on Canada's physical activity guidelines. Healthy behaviours including regular physical activity beginning at a young age and continuing throughout life are important to reducing your risk of heart disease and achieving and maintaining a healthy weight.

The Foundation's efforts focused on children and youth aim to inspire individuals, families and communities to help children become more physically active, eat healthier foods and become and remain smoke-free.

Dr. Abramson commented, "Our schools are the logical environment to begin to influence levels of physical activity; this is where our children spend a significant part of their day. Results of this study support the Foundation's position that health, well-being and learning are intimately connected, and that schools have the potential to make a dramatic difference in the lives of Canadian children and youth."

Recommendations for the average Canadian family and educators

Parents and teachers, in both the school and non-school environments should:

Provided by Heart and Stroke Foundation of Canada