

# **Research Publications**

#### 2019

• The association between the cost and quality of diets of children in Canada

Diets of better quality are more expensive. For low-income households, this may lead to a genuine barrier to healthy eating. However, reducing the purchase of unhealthy foods may create the financial space for households to purchase pricier healthier options. Such initiatives may also alleviate future health care costs.

• <u>Translation of school-learned health behaviours into the home: student insights through photovoice</u>

An exciting new study stating that students in APPLE Schools are driving change to create a healthy home culture. It illustrates students' abilities to positively impact the home environment as a result of their involvement with the comprehensive school health approach to health promotion.

• Lifestyle Behavior and Mental Health in Early Adolescence

Mental health in adolescence is directly linked with childhood lifestyle. A new study by Kara Loewen at the University of Alberta, School of Public health examined the associations of meeting established recommendations for diet, physical activity, sleep, and sedentary behavior in childhood with mental illness in adolescence. Check out the video to get the details.

• <u>Associations of friendship and children's physical activity during and outside of school: A social</u> <u>network study</u>

Children spend a lot of time with their friends in and out of school. As a result, friends may influence the behaviour and choices of one another. This study was undertaken in elementary schools within Edmonton and Fort McMurray to understand how friendships may influence the physical activity participation of children.

• <u>Stay in or play out? The influence of weather condition on physical activity of grade 5 children in</u> <u>Canada.</u>

This research conducted in APPLE schools suggest that daily weather condition can affect physical activity (PA) in school children, particularly outside school hours, and should be considered when



evaluating PA levels or designing interventions to promote PA. Findings provide support for increased investment toward creating weather-appropriate physical activity opportunities.

## 2017

• <u>Cost-effectiveness of a school-based health promotion program in Canada: A life-course</u> <u>modeling approach</u>

This research examines APPLE Schools as a cost-effective intervention for preventing obesity and reducing chronic disease risk over the lifetime. Allocating resources towards school-based programs like APPLE Schools, is likely to reduce the public health burden of obesity and chronic diseases.

### 2016

• Essential conditions for the implementation of comprehensive school health to achieve changes in school culture and improvements in health behaviours of students

This research contributes to the evidence base of CSH implementation, ultimately helping to shape its optimization by providing school communities with a set of understandable essential conditions for CSH implementation. This is important as it helps to support and bolster the CSH framework that has been shown to improve the education, health, and well-being of school-aged children.

• The Role of the Comprehensive School Health Principal in Knowledge Sharing and Use

This study compares the extent of knowledge-sharing and use of evaluation data by principals in CSH schools and other randomly selected schools in Alberta. Results showed that CSH principals had statistically significant higher odds of both sharing and using the data in general, including outside of the school and with parents.

#### 2015

• Does School-Based Health Promotion Affect Physical Activity on Weekends?

Exposure to health promotion projects in schools such as those implementing APPLE Schools may reduce physical activity inequalities for overweight/obese and socioeconomically disadvantaged children outside of school hours. Investments in school-based health promotion lead to behaviour modification beyond the school environment.

• <u>Preparing School Health Facilitators: Competence and Confidence Building for a New Role</u>

The development and evaluation of a training program for school health facilitators working with school communities to implement Comprehensive School Health (CSH) has resulted in recommendations



outlined in this article. Analyses revealed that the implementation and processes used in training were equally as important as the content, and that training positively affected confidence.

• Implementing Comprehensive School Health in Alberta, Canada: The Principal's Role

The role of the principal in the implementation of CSH is key to implementation of APPLE Schools. This research provides recommendations to help establish effective leadership practices in schools, conducive to creating a healthy school culture.

#### 2014

• Do school-based physical activity interventions increase or reduce inequalities in health?

This study compared the two-year change in physical activity among 10 to11 year-old children attending schools with APPLE Schools and schools without health promotion programs. CSH programs implemented in socioeconomically disadvantaged neighbourhoods reduced inequalities in physical activity.

• <u>School-based health promotion and physical activity during and after school hours</u>

The two-year change in physical activity during and after-school among students in APPLE Schools is examined here. The findings provide evidence of the effectiveness of APPLE Schools to affect children's physical activity during and outside of school.

• Life Course Impact of School-Based Promotion of Healthy Eating and Active Living to Prevent Childhood Obesity

To support decision making on expanding the APPLE Schools program, evidence on its long-term health and economic impacts is critical. Throughout the life course, the prevalence of overweight (including obesity) was less among students attending APPLE Schools relative to their peers attending control schools. If the APPLE Schools program were to expand, the potential cost savings would be \$33 to \$82 million per year for the province of Alberta, or \$150 to \$330 million per year for Canada.

#### 2012

• The Sustainability of APPLE Schools: Teachers' Perceptions

There is a lack of understanding of teachers' perceptions of school-based health promotion, specifically on the sustainability of these programs. Teachers' perceptions on the sustainability of CSH programs were not previously well understood. This study provides insight on ways to improve the likelihood of project sustainability and future programming.



• From "best practice" to "next practice": school-based health promotion Improves healthy eating and physical activity

In 2010 relative to 2008, students attending APPLE Schools were eating more fruits and vegetables, consuming fewer calories, were more physically active and were less likely to be obese. These changes contrasted changes observed among students elsewhere in the province. These findings provide evidence on the effectiveness of CSH in improving health behaviours. The findings show that an example of "best practice" may lead to success in another setting. This study provides the evidence that investments in the broader implementation of health promotion in schools are justified.

• Physical Activity among Canadian Children on School Days and Non-School Days

The average daily step count of grade five students in APPLE Schools was higher on school days than non-school days. More steps were also taken during school hours than non-school hours. Activity levels of children are below Canadian recommended levels for optimal growth and health. Health promotion should emphasize physical activity particularly among girls, outside school hours, and weekends.

#### 2011

• Implementing Comprehensive School Health. Teachers' perceptions of APPLE Schools

The purpose of this study was to examine teachers' perceptions of the implementation of CSH in APPLE Schools. Themes that affected implementation included: a) building support; b) defining roles; c) leadership; d) embedding in school culture; and e) engaging stakeholders. Teachers were very supportive of APPLE Schools and had a clear sense of facilitating factors, barriers and solutions to enhance implementation.

• Parent and Student support for school policies that promote healthy eating and active living

Parents overwhelmingly support schools limiting the availability of unhealthy foods. Of all parents of grade five students in Alberta, 93.7% agree or strongly agree with limiting the availability of unhealthy foods in school. The present study shows that parents overwhelmingly support school policies that promote healthy eating and active living.

#### 2010

• Tailoring and Implementing Comprehensive School Health: APPLE Schools

School Health Facilitators tailored strategies in ten elementary schools to successfully implement customized health promotion strategies that acknowledge the unique needs and barriers to healthy living in schools.