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

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Introduction

Childhood overweight and obesity are increasingly recognized as a major public health problem. Their prevalence rates have tripled in the past three decades (Tremblay & Willms, 2000) and, in 2004, 26% and 8% of Canadian children are overweight and obese respectively (Shields, 2006). Excess body weight in childhood has been linked to a spectrum of chronic diseases later in life including type 2 diabetes, cardiovascular disease and some cancers that result in reductions in quality of life and life expectancy and accounts for billions of health care costs (Manson & Bassuk, 2003; Visscher et al., 2001).

Overweight and obesity results from an imbalance between energy intake and energy expenditure (Fox, Dodd, Wilson, & Gleason, 2009). Prevention efforts therefore focus on promotion of Healthy Eating and Active Living (HEAL). Promotion of HEAL often occurs in schools where children spend 6-8 hours of their day (Story, Kaphingst, & French, 2006). During these hours they make numerous choices related to eating and activities that, as a school-age routine, may lead to lifelong behaviours (Winson, 2008). Student's choices at school are influenced by their school staff, their peers and school environments (Van Der Horst et al., 2007; Zeller, Reiter-Purtill, & Ramey, 2008) that, in turn, are influenced by school policies and programs.

Policy, in the broadest sense of the word, is a deliberate plan of action to guide decisions and achieve a set goal. A program is generally more localized and less formalized than a policy. Policies set out the expectations of the organization and governing body (Government of Alberta, 2005). Health policies aim to reduce exposure to health risks and unhealthy behaviors by guiding individual and collective behaviour (Schmid, Pratt, & Howze, 1995). Policies can apply at different levels: international, national, provincal school district and school level. At the international level, there is support for the development of a policy that supports healthy environments in schools (World Health Organization, 2004). In May 2004, the

Global Strategy on Diet, Physical Activity and Health from the World Health Organization (WHO) stated:

"School policies and programs should support the adoption of healthy diets and physical activity. Schools are encouraged to provide students with daily physical education and should be equipped with appropriate facilities and equipment. Governments are encouraged to adopt policies that support healthy diets at school and limit the availability of products high in salt, sugar and fats."

Canadian school policies are determined by provincial and territorial governments. Provinces and territories have distinct health and physical education curricula and related policies. An example of a provincial policy regarding Daily Physical Activity (DPA) can be found in Alberta:

"School authorities shall ensure that all students in grades 1-9 are physically active for a minimum of 30 minutes daily through activities that are organized by the school."

Although DPA is mandatory in Alberta, its implementation is left to the responsibility of the school and monitoring of implementation is the responsibility of the school authority. The Alberta Nutrition Guidelines for Children and



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Youth (Government of Alberta Health and Wellness, 2009) produced by Alberta Health and Wellness is an example of standards produced by a provincial government that are not deemed as policy. However, school authorities are encouraged to develop nutrition policy based on these guidelines. Examples of district level policies include the nutrition policy by the Holy Family Regional Catholic boards (Holy Family Catholic Regional Division, 2009), and those of the Red Deer Public (Red Deer Public Schools, 2009) and Battle River School Divisions (Battle River School Division, 2006) related to implementation of DPA through daily physical education.

Research has shown that without support, new policies are unlikely to be successfully implemented nor achieve their objectives (Gladwin, Church, & Plotnikoff, 2008). One key to successful implementation is the inclusion of intersectoral and multi-level stakeholders when developing these policies. These stakeholders include governments, teachers and other staff, students, parents and the community-at-large (McKenna, 2008; WorldHealthOrganization, 2008). Exclusion of affected stakeholders may hamper the policy implementation due to unrecognized relevance and lack of ownership (Gladwin et al., 2008).

Very few studies have reported on stakeholders' support for promotion of HEAL in schools. Existing and proposed policies across Canada are indicative of government and administrative support. However, there is no documentation on whether Canadian parents support promotion of HEAL in schools. In addition, no studies have reported on the support of students for promotion of HEAL or their values for HEAL and health. The purpose of the present study is to reveal parents' support for promotion of HEAL in schools and their children's values for health and health behaviors.

Methods

The Raising health Eating and Active Living Kids in Alberta (REAL Kids

The authors identify childhood overweight and obesity as major public health problems and argue that while prevention efforts focus on the promotion of Healthy Eating and Active Living (HEAL), very few studies have reported on stakeholders' support for the promotion of this approach in schools. The authors show that parents and students overwhelmingly support the promotion of both healthy eating and active living in schools. It is argued that this support can be exploited to strengthen the link between education and health sectors, including the commitment of both the health and education ministries. They conclude that this support will facilitate the successful implementation of existing policies and programs, and should inspire the further development of policies and programs to the benefit of learning and the future health of students. Les auteurs ont déterminé que la surcharge pondérale et l'obésité juvéniles constituent d'importants problèmes de santé publique. Ils précisent que même si les efforts de prévention mettent l'accent sur la promotion d'une saine alimentation et de modes de vie actifs, très peu d'études examinent le degré d'appui que les intervenants accordent à la promotion d'une telle approche dans les écoles. Les auteurs indiquent que parents et élèves soutiennent fortement la promotion d'une saine alimentation et de modes de vie actifs à l'école et que cela peut aider à renforcer les liens entre les secteurs de l'éducation et de la santé, y compris l'engagement conjoint des ministères de la Santé et de l'Éducation. Ils concluent qu'un tel appui devrait favoriser la mise en œuvre des politiques et programmes actuels et inspirer l'élaboration d'autres politiques et programmes au profit de l'apprentissage et de la santé des élèves dans les années à venir. Parents had been asked to what extent they agreed with HEAL policy options and students had been asked their values towards physical education, health and health behaviour.

Alberta) is a large population-based evaluation of health, nutrition, physical activity and lifestyle factors among grade five students and their parents in the province of Alberta, Canada. The objective is to evaluate the impact of a provincial government initiative implemented by Alberta Health and Wellness to promote healthy weights among children and youth (REAL Kids Alberta, 2008), through surveys in the spring of 2008 and 2010. The present paper is based on data collected in 2008. The survey employed a one-stage stratified random sampling design. The sampling frame include all elementary schools with the exception of private schools (4.7% of all Alberta children attend these schools), Francophone schools (0.6%), on-reserve federal schools (2.0%), charter schools (1.7%), and colony schools (0.8%). Schools were stratified into three geographies: 1) urban: Calgary and Edmonton;

2) other municipalities with more than 40,000 residents; and 3) municipalities with less than 40,000 residents. Schools were randomly selected within each of these strata to achieve a balanced number of students in each stratum. Of the 184 invited schools, 148 (80.4%) participated in the study. These schools were attended by 5594 grade five students who received an envelope with a parent consent form and survey to take home. A total of 3758 (67.2%) envelopes were returned: 3665 parents (97.5%) had completed their survey and 3645 (97.0%) consented their child's participation. Of the children with parental consent, 3407 were present when the survey was conducted, six students declined to participate, and 20 students who were absent, completed and mailed their surveys, providing a total of 3421 participating students (61.2% of total Grade 5 student population in those schools).

Parents had been asked to what extent they agreed with HEAL policy options and students had been asked their values towards physical education, health and health behavior. We weighted their responses to accommodate the sampling design so that the presented figures represent provincial averages.

Results

Table I shows the extent that parents agree with policy options for the promotion of healthy eating and active living in schools. Parents overwhelmingly support that school should limit the availability of unhealthy foods. Of all parents of grade five students in Alberta, 1.9% strongly disagree and 4.4% disagree with limiting the availability of unhealthy foods in school, whereas 38.2% agree and 55.5% strongly agree (Table 1). Similarly, a substantial majority of parents support that schools ban the serving of unhealthy foods and should discourage students from bringing unhealthy foods to schools. Of all parents, 28.5% agree and 10.5% strongly agree with the statement that schools should not allow students to bring unhealthy foods to school. Parents further overwhelmingly (98%) support the province's DPA policy.

	% strongly disagree	% disagree	% agree	% strongly agree
Limit the availability of unhealthy foods such as chocolate, candy, French Fries, potato, chips and pop in schools	1.9	4.4	38.2	55.5
Ban the serving of these unhealthy foods at school	4.0	26.9	33.9	35.2
Only serve meals with foods that come from the four food groups	1.4	18.9	53.9	25.8
Discourage students from bringing unhealthy foods to school	2.6	17.3	56.3	23.8
Not allow students to bring unhealthy foods to school	11.5	49.5	28.5	10.5
Adhere to the provincially mandated daily physical activity (DPA) initiative requiring students to be physically active for 30 minutes each day	0.7	1.5	33.0	64.8

Table I – Responses of parents of grade five students	s in Alberta related to policy optic	ons for the promotion
of healthy eating and active living in schools		

Table II - Response of grade five students in Alberta related to health, nutrition and physical activity

	% Not at all	% A little bit	% Quite a lot	% Very much
Care about being healthy	0.8	5.9	24.8	68.5
Care about eating healthy foods	1.5	14.6	42.0	41.8
Care about being physical active	1.0	9.0	34.4	55.7
Enjoy Physical Education	0.6	8.8	33.7	56.9

Table II shows that the vast majority of grade five students in Alberta care about being healthy and healthy eating and that these students care about and enjoy physical activity.

Discussion

To our knowledge, this study is the first in Canada to document the support of two important stakeholders, parents and students, for policy options for the promotion of healthy eating and active living. The present study shows that parents overwhelmingly support school policies that promote healthy eating and active living. The exception is a policy that goes as far as forbidding students to bring unhealthy foods to school, though a notable 39% would still support this. The support observed in the present study is similar to that in a United States (US) study that reported that a majority of parents supported policies to disallow students to have access to unhealthy foods at school and to offer DPA on a regular basis (Murnan, Price, Telljohann, Dake, & Boardley, 2006). Further, the vast majority of students in the present study reported to care about health and healthy eating and to care about and enjoy physical activity and thus seem to understand the causes and health consequences of being overweight. This comprehension was also observed among students in the US (Vecchiarelli, Takayanagi, & Neumann, 2006).

The health consequences of poor nutrition and sedentary lifestyles for overweight and risk for chronic diseases are generally well understood and are in fact the primary reason to implement policies to promote HEAL. However, less well known are the benefits of HEAL for learning and self-esteem. Physical activity for students has been demonstrated to have a positive effect on academic achievement (Fishburne, 2005; Tremblay, Inman, & Willms, 2000; Trudeau & Shephard, 2008), to lower stress levels (Fishburne, 2005; Trudeau & Shephard, 2008), to enable students to exhibit positive attitudes toward themselves, peers and school (Fishburne, 2005) and to increase selfesteem (Wang & Veugelers, 2008). Healthy eating has also been shown to have a positive effect on academic achievement and self-esteem (Alaimo, Olson, & Frongillo, 2001; Florence, a strengthening of the link between education and health sectors with the commitment of both health and education ministries will facilitate this (Gladwin et al., 2008). School boards and schools, however, do not have to wait for governmental policies and programs. They may decide to take direct action and, for example, consider a Comprehensive School Health approach as a method to promote HEAL in schools (Stewart-Brown, 2006; World Health Organization, 2008). Comprehensive

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Asbridge, & Veugelers, 2008; Powell, Walker, Chang, & Grantham-McGregor, 1998; Symons, Cinelli, James, & Groff, 1997; Tremblay et al., 2000; Trudeau & Shephard, 2008; Wang & Veugelers, 2008). Activities related to promotion of HEAL are herewith further justified to take place in schools as they improve learning and developmental outcomes among students.

The overwhelming support for promotion of HEAL by parents and students may inspire governments to expand policies and programs. In this respect, School Health is an approach that involves parents, community and stakeholders, and includes supportive policies, programs and environments. Canada based research has suggested that Comprehensive School Health is effective in promoting HEAL and reducing overweight among students (Veugelers & Fitzgerald, 2005). Successful implementation, however, is contingent on stakeholders support (Stewart-Brown, 2006; World Health Organization, 2008). Where these stakeholders involve parents and students, it is reassuring to know that they strongly support the promotion of HEAL in schools. In summary, we have shown that promotion of both healthy eating and active living in schools is overwhelmingly supported by parents and students. This support will facilitate the successful implementation of existing policies and programs, and should inspire the further development of policies and programs to the benefit of learning and future health of students.

Acknowledgments

The Raising healthy Eating Active Living Kids Alberta (REAL Kids Alberta)

evaluation is a joint project of the School of Public Health of the University of Alberta and Alberta Health and Wellness (AHW); for more info see www.healthyalberta.ca. The intent of REAL Kids Alberta is to help evaluate the impact of the Healthy Weights Initiative from Alberta Health and Wellness and provide some measurable behavioural and health outcomes for children in Alberta. Baseline data was collected in the first phase of the REAL Kids Alberta evaluation in the spring of 2008 with the next phase of the evaluation to be repeated in 2010. The opinions expressed in the present study are solely those of the authors who are all affiliated with the School of Public Health.

The authors thank all grade five students, their parents, schools and school boards for their participation in the REAL Kids Alberta survey. We thank all regional health promotion coordinators and evaluation assistants who assisted in the data collection, and Connie Lu and Dr. Stefan Kuhle for data management and processing.

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