

# NEW BRUNSWICK ELEMENTARY STUDENT WELLNESS SURVEY 2013-2014



Dr. A. T. Leatherbarrow Primary School

## **The New Brunswick Student Wellness Survey: Feedback Report**

provides highlights of major school findings related to key provincial indicators that are considered crucial for monitoring student wellness behaviours and for developing a culture of wellness in our province.

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## NEW BRUNSWICK STUDENT WELLNESS SURVEY



**HEALTHY  
EATING**

**PHYSICAL  
ACTIVITY**

**TOBACCO-FREE  
LIVING**

**MENTAL  
FITNESS**

**THE NEW BRUNSWICK STUDENT WELLNESS SURVEY (NBSWS)** is a provincial initiative of the New Brunswick Department of Healthy and Inclusive Communities (HIC) in cooperation with the Department of Education and Early Childhood Development. Data collection and analysis is carried out by the New Brunswick Health Council (NBHC). The purpose of this survey is to examine the health and wellness attitudes and behaviours of students in kindergarten to grade 5 and of parents of students in kindergarten to grade 5.

## INTRODUCTION

### New Brunswick Student Wellness Survey 2013-2014

The NBSWS data collection within elementary schools involved:

- Student Survey (Grades 4-5)
- Family Wellness Survey (Parents of Kindergarten to Grade 5 students)

The questions on the surveys address four key areas of focus for the wellness branch in support of New Brunswick's wellness strategy: Healthy Eating, Physical Activity, Tobacco-free Living, and Mental Fitness.

In the 2013-2014 academic year, a provincial sample of 136 (62%) elementary schools completed student wellness surveys. In total, 8,243 students and 14,367 parents participated in the survey.

This report provides individual school results, unless the number of students responding is insufficient to ensure student confidentiality. Unless otherwise stated, all numbers listed in the report are presented as a percentage of total respondents in the school.

The organization of your Feedback Report recognizes the interrelatedness of the four key focus areas and the importance that family, peer relationships and the school environment play in influencing students' wellness attitudes and behaviours. Reports are organized according to the responses of students in grades 4-5, as well as the responses of parents of students in Kindergarten to Grade 5, in relation to both student and parent wellness attitudes and behaviours.

In many instances, schools share their feedback reports with other health and wellness stakeholders, such as parents, district-level personnel, departmental and community service providers, and business and civic leaders, who can be supportive partners in addressing priorities identified for action.

1-Due to possible variations and changes in methodology and/or definitions, caution needs to be exercised when attempting to compare the results of the Elementary Student Wellness Survey 2013-2014 with previous years' results.

2-Caution to be exercised in the interpretation of some results based on parents' responses due to the potential influence of shared custody on the values.

### Importance of Student Wellness to Academic Development

The Feedback Report provides a unique opportunity to reinforce the importance of healthy lifestyle behaviours to student learning. Current research provides evidence of positive associations among the key focus areas and measures of students' academic readiness, engagement and success. For example:

#### HEALTHY EATING

Eating breakfast every day can help improve concentration, and increase students' potential to learn (Wesnes, et al., 2012). Body mass is an important indicator of scholastic achievement, attendance, behaviour and physical fitness (Shore, et al., 2008).

#### PHYSICAL ACTIVITY

Active and healthy students have increased levels of concentration, relaxation and focus. Participation in physical activity is positively related to academic performance in young people (Singh, A. et al., 2012).

#### TOBACCO-FREE LIVING

There is an association between tobacco use and low academic achievement and motivation in students; students who use tobacco tend to have lower academic grades than their peers (Morrison and Peterson, 2010). "*Adolescents who do well in school are less likely to smoke.*" There is an association between academic achievement and rates of smoking initiation (Morin, et al., 2012).

#### MENTAL FITNESS

The satisfaction of mental fitness needs (competence, relatedness and autonomy) in the educational context has been associated with a range of positive personal and academic outcomes, including enhanced academic self-esteem and engagement, increased scholastic confidence and performance, and decreased likelihood of dropping out of school (Morrison and Peterson, 2010).

### A Comprehensive Approach to School Health

The Joint Consortium for School Health promotes the use of a Comprehensive School Health framework in addressing both the academic development and wellness of students. The framework emphasizes the need for planning and implementing whole school approaches that incorporate key wellness perspectives and practices across four domains:

- Social and physical environment
- Teaching and learning
- Healthy school policy
- Partnerships and services

To learn more about the Comprehensive School Health framework and the Joint Consortium for School Health, please visit [www.jcsh-cces.ca](http://www.jcsh-cces.ca).

Your Feedback Report is a valuable source of information for planning initiatives using a Comprehensive School Health framework. The survey outcomes detailed in the report may assist in identifying areas of strength on which to build, as well as priority wellness areas that require further attention or promotion.

It is critical that all stakeholders work together, including students, teachers, parents, administrators, service providers, and members of the wider community. The following provides some key ideas on how to use your Feedback Report.

#### Students can use the results to:

- Relate the results to curriculum concepts being taught in the classroom
- Engage in dialogue about the results to seek solutions and create student-driven action plans
- Participate in planning activities for programs
- Organize a school-based action team or student club in wellness
- Help organize new initiatives (e.g., start an intramural program, hold a health fair, create a video, develop a presentation, or explore health behaviours of another country)
- Share and use the data in class, at home and in the community

#### Parents and communities can use the results to:

- Plan activities with students, staff, community members and the Parent School Support Committee or Home and School Association
- Model healthy behaviours and support the adoption of healthy behaviours
- Share students' skills, talents and expertise to support the school and the community
- Work with community groups to help address identified issues

#### School staff can use the results to:

- Communicate outcomes with students and staff and the Parent School Support Committee (PSSC) or Home and School Association (HSA)
- Incorporate wellness objectives into School Improvement Plans
- Engage students in planning and delivering wellness activities
- Create opportunities for staff to model healthy behaviours
- Support requests for funding (e.g., Wellness Grant Programs)
- Support the development, monitoring and implementation of healthy school policies
- Enhance delivery of services or programs for students (e.g., counselling, breakfast program)
- Form new partnerships with parents and the wider community to take collective action
- Implement and evaluate actions to promote wellness ■

## HEALTHY EATING



In the past 25 years, there has been a dramatic increase in the percentage of children who are considered to be overweight or obese (Shields, 2006). Overweight and obesity rates in childhood often persist into adulthood. Fast food consumption and food portion sizes have increased significantly in the past decades (Piernas et al., 2011; St. Onge, et al., 2003). During the same period children have become less physically active.

The first section discusses healthy eating, while the second section discusses physical activity. The prevalence of overweight and obesity is discussed in the next section, as a healthy body weight depends on both healthy eating and physical activity.



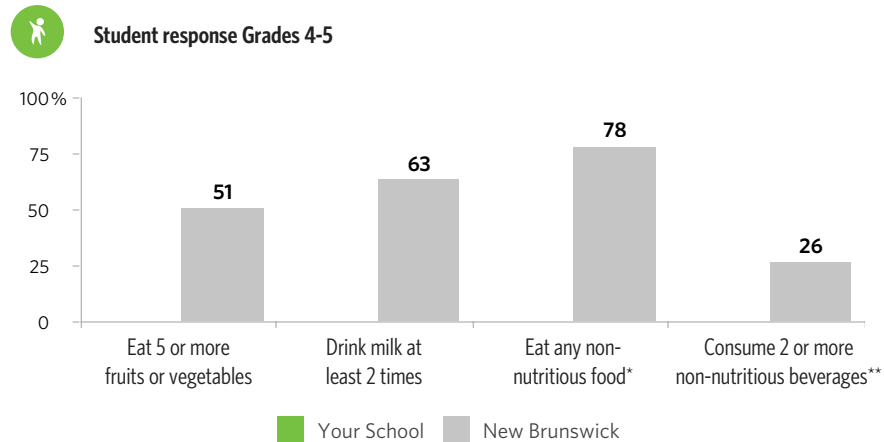
## HEALTHY EATING

### Food Intake

The amount of vegetables and fruits children eat is an especially important marker. Children who eat fruits and vegetables five or more times a day are substantially less likely to be overweight or obese than those whose fruit and vegetable consumption is less frequent (Shields, 2006). Consuming an adequate amount of milk and milk products is also important. According to Canada's Food Guide, children in the age group 4-8 require two servings of milk per day, whereas children in the age group of 9-13 require three to four servings per day (Health Canada, 2011).

In addition, limiting food and beverages high in calories, fat, sugar and salt (sodium) is an important step toward better health and healthy body weight (Health Canada, 2011). Excessive regular consumption of non-nutritious beverages adversely affects the appropriate dietary balance of nutrients needed for optimal growth, development, body composition and health (Seifert, S.M. et al., 2009; Committee on Nutrition and the Council on Sports Medicine and Fitness, 2011).

Figure 1. KEY HEALTHY EATING INDICATORS THE DAY BEFORE THE SURVEY



**Student Response, Grades 4 and 5**

As reported by students in grades 4 and 5 about themselves



**Parent Response**

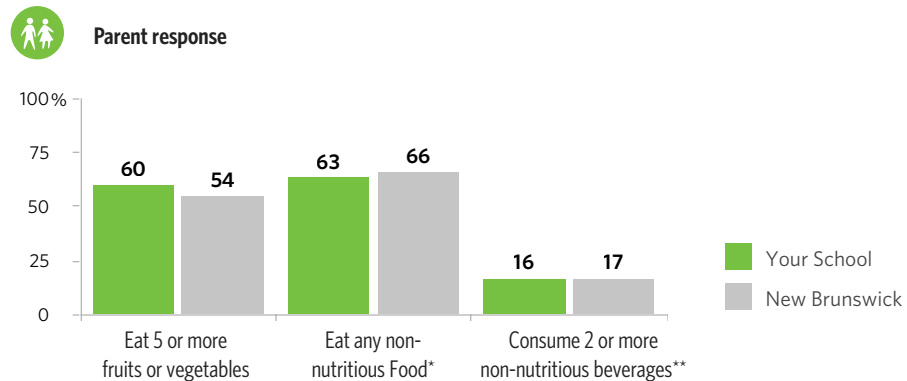
As reported by parents (of students in Kindergarten to Grade 5) about themselves



**Parent Perspective**

As reported by parents (of students in Kindergarten to Grade 5) about their children

Figure 2. KEY HEALTHY EATING INDICATORS THE DAY BEFORE THE SURVEY



\* candy, sweets, chips or fries

\*\* pop, flavoured water, sport drinks, slushies®, etc.

Figure 3. **BREAKFAST EATING HABITS**

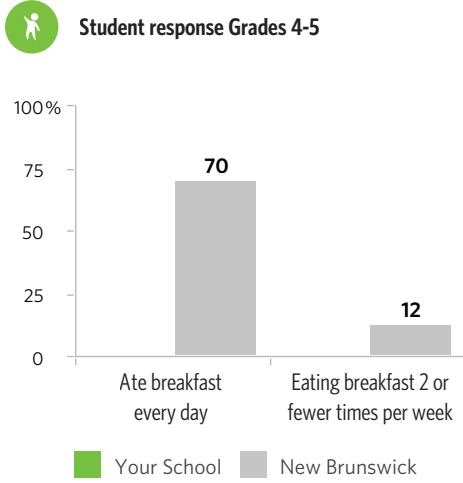


Figure 4. **BREAKFAST EATING HABITS**

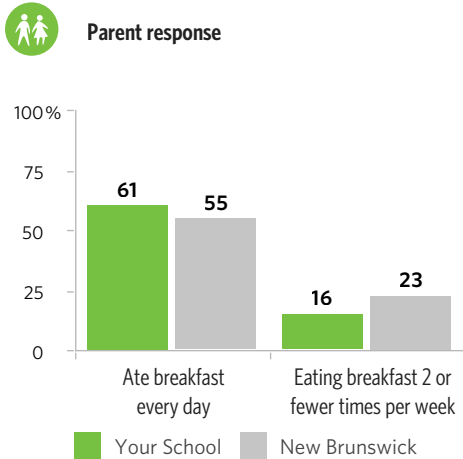
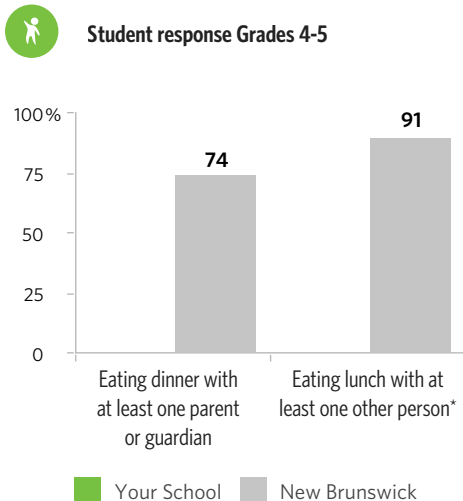


Figure 5. **EATING MEALS WITH OTHERS (THE DAY BEFORE THE SURVEY)**



\* parent, sibling, relative, friends or others

### Healthy Eating at Home

Healthy eating routines in both home and school settings play an important role in creating readiness for learning. For example, students who eat breakfast have improved memory, problem-solving skills and creative abilities (Health Canada, 2007).

Research has shown that those who eat a high-fiber cereal had the lowest body mass index (BMI), and those who skip breakfast had the highest BMI, and that eating breakfast can aid in weight loss or the prevention of weight gain. Eating breakfast tends to minimize impulsive snacking and overeating at other meals throughout the day. A healthy breakfast can provide the nutrients and energy needed to start the day with a combination of food groups (American Dietetic Association, 2010).

In New Brunswick, 70% of students in grades 4-5 ate breakfast every day in the week prior to the survey, while 12% ate breakfast only two times or less that week.

### Social Relations Influence Healthy Eating

Family members influence students' eating routines and choices. Parents can play an important role in helping students develop healthy attitudes toward food through establishing consistent meal-time routines and modeling healthy food choices. Having meals together as a family can help to reinforce positive eating habits and provide opportunities for adults and children to talk about the day's events (Health Canada, 2011).

Eating family meals is linked with improved food choices and nutrient intake and healthier weights in children. Children and adolescents who frequently eat together with at least one other family member present have better food and nutrient intake (Dietitians of Canada, 2007). Eating the evening meal with the family is particularly important.

Television viewing during dinner may negate the positive effects of family meals. Children who eat in front of the TV have lower intake of vegetables and fruit and higher intake of fatty foods and soft drinks. Eating in front of the TV is linked to being overweight (Dietitians of Canada, 2007).

Twenty-two percent of the average trans-fat intake of Canadians is provided by foods consumed away from home, often in fast food restaurants and other food service environments (Health Canada, 2006). Strong and consistent evidence indicates that children and adults who eat fast food are at increased risk of weight gain, overweight and obesity. The strongest documented relationship between fast food and obesity is when one or more fast food meals are consumed per week (USDA, 2012). ■

Figure 6. **EATING MEALS WITH OTHERS (THE DAY BEFORE THE SURVEY)**



Parent perspective

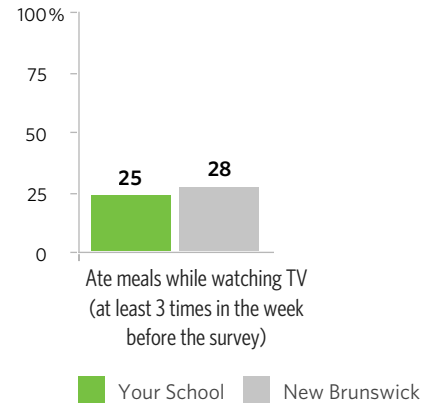
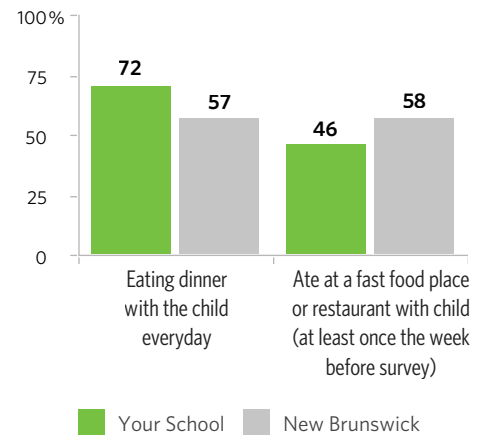


Figure 7. **FAMILY EATING HABITS (THE WEEK BEFORE SURVEY)**



Parent response



## PHYSICAL ACTIVITY



Physical Activity among children and youth declines with age. Almost twice as many 5-10 year olds meeting the Canadian guidelines for physical activity as 15-19 years old. Although studies show that boys are more active than girls, this age related decline in activity is evident with both boys and girls. Children who are physically active perform better in school than those who are not, and this holds true even when time is taken away from academic learning for physical education and other physical activity (Active Healthy Kids Canada, 2009). Physical activity doesn't just benefit children's physical health. Research shows physical activity can be associated with improved psychological well-being, reduced depression and anxiety levels, reduced bullying, and improved self-esteem (Biddle SJ, Asare M., 2011).

## PHYSICAL ACTIVITY

Canadian Physical Activity Guidelines recommend that children accumulate 60 minutes a day doing moderate-to vigorous-intensity physical activity. The Guide also calls for children to spend less than two hours per day in screen time such as watching TV or using a computer (Canadian Society for Exercise Physiology, 2012).

It is also recommended to be very physically active (vigorous-intensity activities) at least three days per week, such as running or swimming that causes one to sweat and be “out of breath” (Canadian Society for Exercise Physiology, 2012).

In New Brunswick, 35% of students (Grades 4-5) reported being physically active for at least one hour everyday.

Figure 8. MEETING GUIDELINES FOR PHYSICAL ACTIVITY

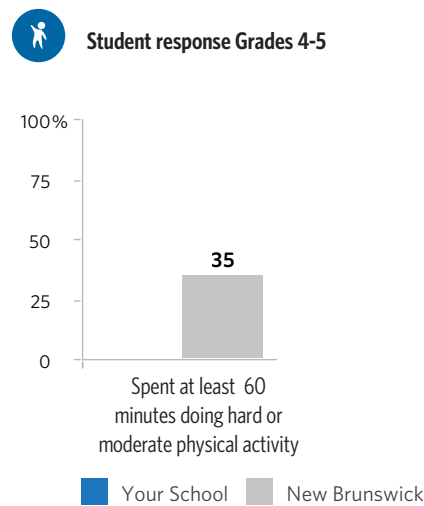
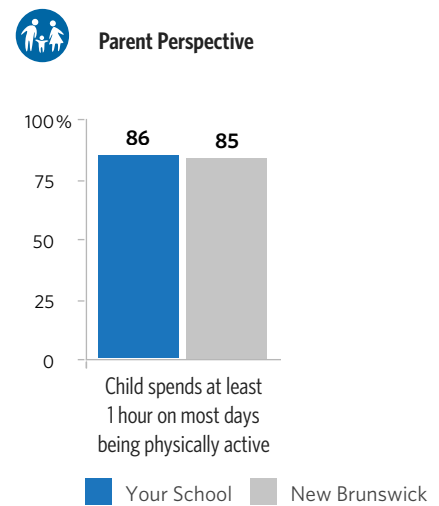


Figure 9. MEETING GUIDELINES FOR PHYSICAL ACTIVITY



### Student Response, Grades 4 and 5

As reported by students in grades 4 and 5 about themselves



### Parent Response

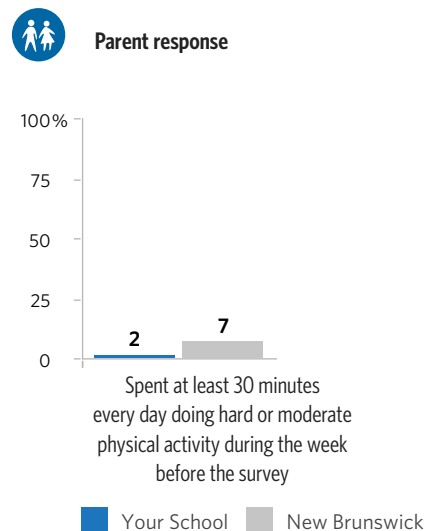
As reported by parents (of students in Kindergarten to Grade 5) about themselves



### Parent Perspective

As reported by parents (of students in Kindergarten to Grade 5) about their children

Figure 10. MEETING GUIDELINES FOR PHYSICAL ACTIVITY



**MODERATE-INTENSITY** physical activities will cause children to sweat a little and to breathe harder. Such activities include:

- Bike riding
- Playground activities

**VIGOROUS-INTENSITY** physical activities will cause children to sweat and be “out of breath.” Such activities include:

- Running
- Swimming

Figure 11. **STUDENT PARTICIPATION IN PHYSICAL ACTIVITY AT SCHOOL**

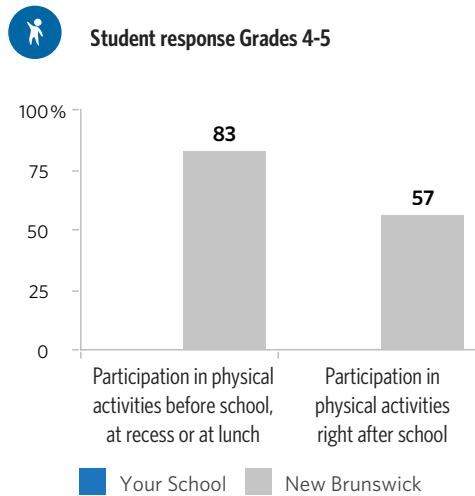


Figure 13. **SCREEN TIME (ON MOST DAYS)**

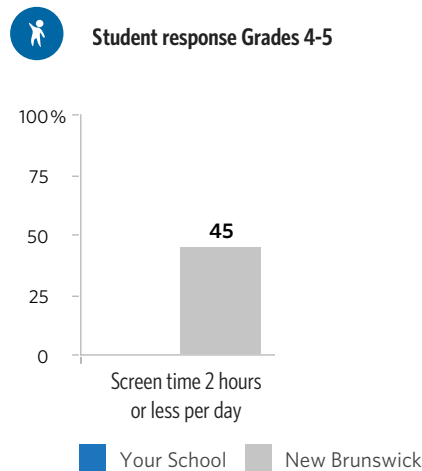
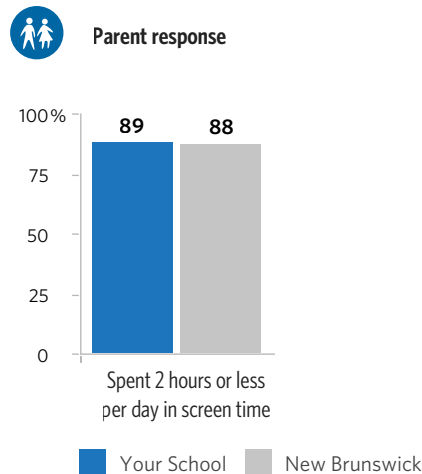


Figure 14. **SCREEN TIME (ON MOST DAYS)**



## Physical Activity at School

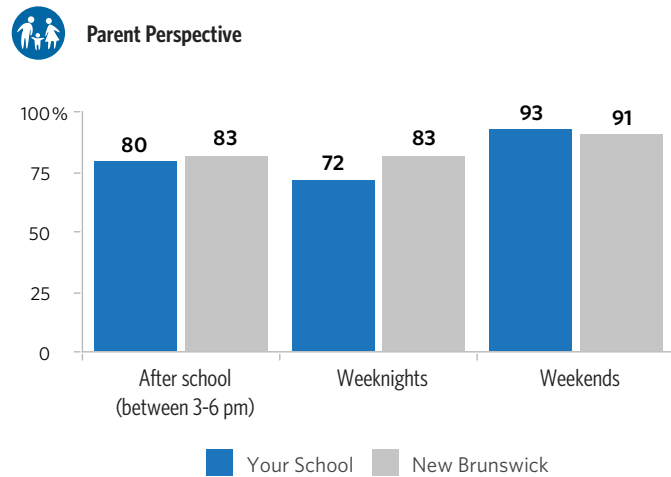
School environments that support and encourage physical activity have been shown to be effective in increasing student activity levels (Active Healthy Kids Canada, 2013). Physical activities at school provide opportunities for students to be active and to form relationships that reinforce healthy lifestyle attitudes and behaviours.

## After School Period

The after school period is a perfect time to introduce change from sedentary screen-related activities to those that will get students moving.

Watching TV or playing computer games takes away from time that could be spent being physically active. If you are inactive, you are more likely to gain weight. You may also be more likely to snack on higher fat, sweet and salty foods while watching TV (Health Canada, 2011).

Figure 12. **STUDENT PARTICIPATION IN PHYSICAL ACTIVITIES NOT ORGANIZED BY SCHOOL**



## Family Influences

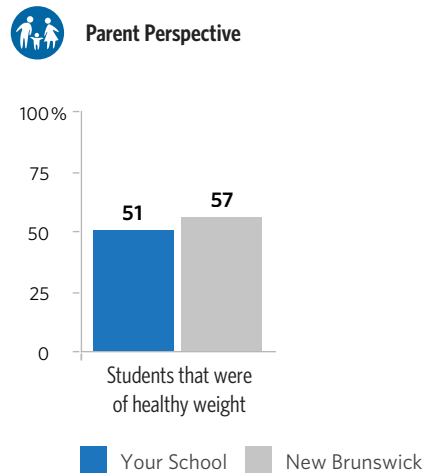
Parents are important role models, and encourage healthy behaviours in their children through participation in regular physical activity and using active modes of transportation, such as cycling or walking. When parents have greater physical activity orientation, their children are more attracted to physical activity (Lau, P.W.C. et al., 2007; Zecevic, C.A. et al., 2010). In the 2013-2014 New Brunswick survey, 37% of the students who reported seeing their parents/guardians physically active were actually physically active, in comparison to only 29% of the students who reported having inactive parents being physically active.

### Overweight and Obesity

Overweight and obesity in childhood and adolescence have been associated with negative socioeconomic outcomes, elevated health risks and morbidities, and increased mortality rates in adulthood (Reilly, et al., 2003). They are risk factors for a large number of chronic health conditions like high blood pressure, heart disease, diabetes, and stroke (Li, Z. et al., 2005). In addition to direct health implications, unhealthy weights and obesity are associated with reduced academic achievement (Shore, et al., 2008) and bullying (as both victims and perpetrators) for teen girls (Kukaswadia, et al., 2011).

Healthy body weight can be determined using the body mass index (BMI). BMI is a measure of a person’s weight in comparison to their height. International definitions for overweight and obesity based on the distribution of BMI for males and females at each age have been established (Cole, et al., 2000). Parents of New Brunswick students in grades K-5 were asked to provide their child’s age, height and weight, resulting in the following BMI calculations. ■

Figure 17. **BODY MASS INDEX**



\*The 2007 to 2009 Canadian Health Measures Survey found that parents underestimated the height and weight of children aged 6 to 11, which resulted in an overestimate of BMI among children aged 6 to 8. Use of parent-reported height and weight resulted in substantial misclassification errors in prevalence estimates by BMI category (Shields, Connor Gorber, Janssen, and Tremblay, 2011).

Figure 15. **ACTIVE MODE OF TRANSPORTATION**

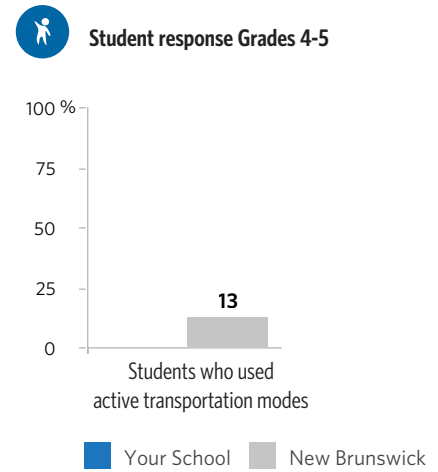
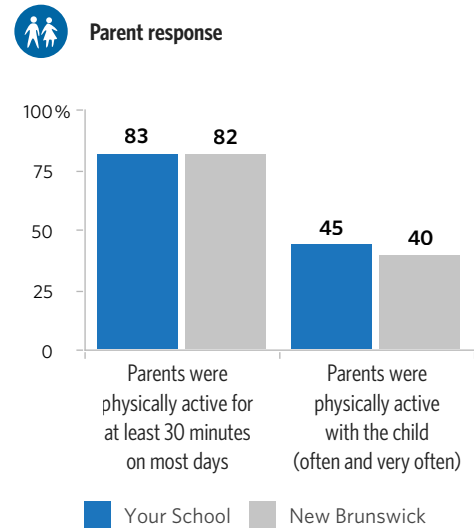


Figure 16. **PHYSICAL ACTIVITY IN THE FAMILY**



## TOBACCO-FREE LIVING



Most smokers start to smoke when they are 13 years old (Health Canada, 2013). The younger people start smoking, the more likely they will become addicted to smoking. Children begin to form their attitudes and beliefs about tobacco at an early age, and the people the child sees on a daily basis can influence their perception and shape their attitudes and beliefs about smoking (Health Canada, 2010). Smoking within the home is related to student uptake of smoking behaviours—the greater the number of smokers inside the home, the more likely a student is to smoke (Health Canada, 2002).



## TOBACCO-FREE LIVING

According to the New Brunswick Student Wellness Survey 2012-2013 for students in grade 6 to grade 12, susceptibility to smoking (risk of future smoking) starts to increase in grade 6 and reaches a peak in grade 9. Students susceptible to future smoking were more likely to have pro-smoking attitudes as compared to non-susceptible students. Therefore, changing pro-smoking attitudes at an earlier stage (i.e. in elementary school) is essential to preventing the trend of higher susceptibility in middle school.

Children are vulnerable to the negative effects of exposure to second-hand smoke due to the fact that their lungs and immune system are in the development phase (Been, et al., 2014). In addition, exposure to smokers in the environment around children influences their risk of future smoking.

Smoking bans reduce exposure to second-hand smoke and reduce smoking prevalence (Callinan et al., 2010). ■

Figure 18. **EXPOSURE TO SECOND-HAND SMOKE AT HOME OR IN FAMILY VEHICLES**

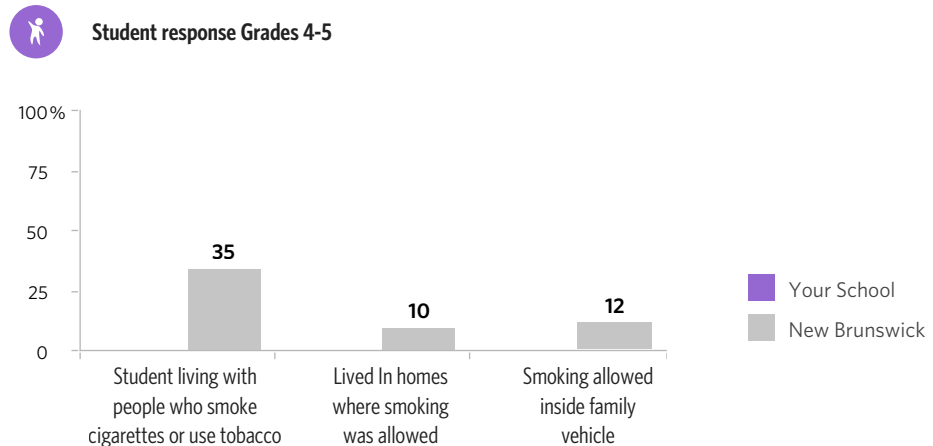
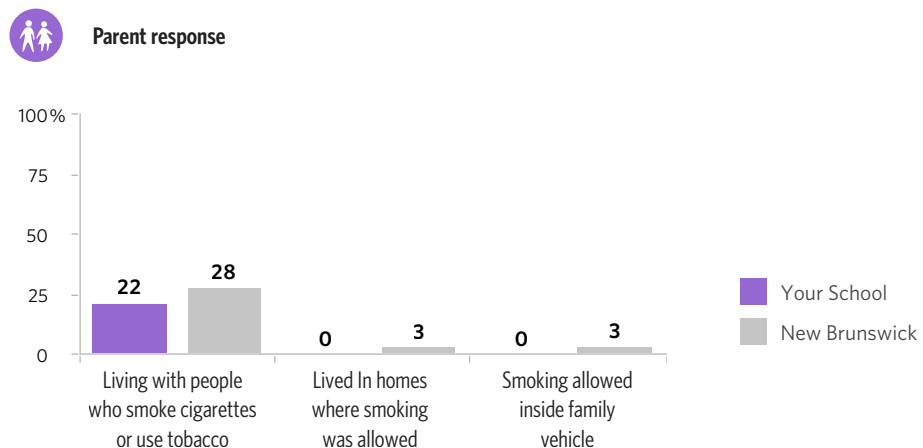


Figure 19. **EXPOSURE TO SECOND-HAND SMOKE AT HOME OR IN FAMILY VEHICLES**



**Student Response, Grades 4 and 5**

As reported by students in grades 4 and 5 about themselves



**Parent Response**

As reported by parents (of students in Kindergarten to Grade 5) about themselves



**Parent Perspective**

As reported by parents (of students in Kindergarten to Grade 5) about their children

## MENTAL FITNESS



Mental fitness refers to our personal sense of psychological wellness (positive thoughts and feelings). It means having a positive sense of how we feel, think and act, which improves our ability to enjoy life. It also implies the ability to efficiently respond to life's challenges, and to effectively restore and sustain a state of balance. Having a higher level of mental fitness enables us to more fully enjoy and appreciate our environment and the people in it. When mental fitness needs are sufficiently met, people adopt behaviours that contribute to their own personal wellness and that of others, and they make healthier choices (Province of New Brunswick, 2009).



**Student Response,  
Grades 4 and 5**

As reported by students  
in grades 4 and 5  
about themselves



**Parent Response**

As reported by parents  
(of students in Kindergarten  
to Grade 5) about  
themselves



**Parent Perspective**

As reported by parents  
(of students in Kindergarten  
to Grade 5) about  
their children

## MENTAL FITNESS

The Joint Consortium for School Health has recently published a resource document for schools. The publication outlines key perspectives and practices for applying comprehensive positive mental health approaches in the school context. This resource document can be accessed at <http://www.jcsh-cces.ca/>, by selecting *Schools as a Setting for Promoting Positive Mental Health: Better Practices and Perspectives*.

A recent review of 17 studies involving positive mental health promotion in schools reported that comprehensive school health approaches that were sustained beyond one year were more likely to be effective than singular interventions that were carried out for shorter periods of time (Stewart-Brown, 2006; Morrison & Peterson, 2010).

Analyses of data from the 2013-2014 wellness survey confirm that high levels of mental fitness were associated with:

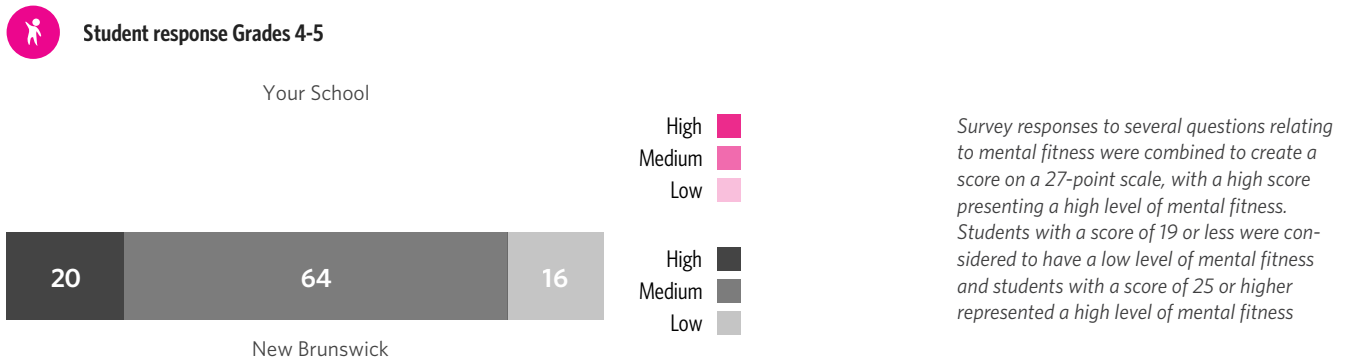
- higher levels of pro-social behaviours and fewer oppositional behaviours
- engagement in physical activities
- higher levels of school connectedness (Morrison & Peterson, 2010)

As part of school routines, providing positive opportunities for students to interact with one another (**relatedness**), to use their strengths (**competence**), and to exercise choice (**autonomy**) is important for promoting mental fitness. In this regard, providing an array of diverse activities that reflect students' interests is beneficial.

## Mental Fitness at Your School

Having a higher level of mental fitness enables us to more fully enjoy and appreciate our environment and the people in it. Students were asked nine questions corresponding to each of the three aspects of mental fitness. The figure below shows the results for mental fitness at your school compared with the provincial results.

Figure 20. **PERCENTAGE OF STUDENTS BY LEVELS OF MENTAL FITNESS**



## Mental Fitness Needs

Mental fitness is fostered in environments and relationships that address three interrelated psychological needs: autonomy, relatedness, and competence.

### AUTONOMY.

*"I am able to make choices about things that are important to me."*

Students need personal freedom to make choices or decisions that affect their lives. When this need is satisfied in conjunction with other need areas, freedom and choice are expressed in ways in which respect is demonstrated for self and others.

### RELATEDNESS.

*"I feel included, supported and encouraged by others."*

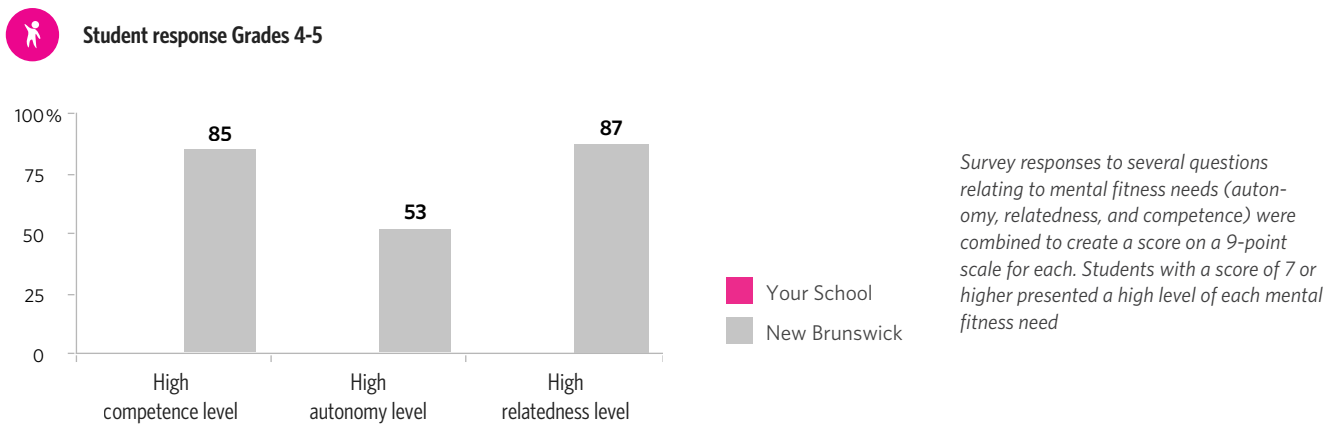
Students need connection to and closeness with family, peers, teachers and other significant individuals. This need is met through interaction with others, membership in groups, and the support and encouragement students receive from others.

### COMPETENCE.

*"I have strengths and gifts that are recognized by myself and others."*

Students need to recognize and use their personal gifts and strengths in achieving personal goals. Fulfillment of this need provides them with a sense of personal achievement and accomplishment.

Figure 21. **PERCENTAGE OF STUDENTS WITH HIGH LEVEL OF AUTONOMY, COMPETENCE AND RELATEDNESS**



## School Connectedness

A sense of school connectedness can support students in making healthy choices. Students who feel an attachment to their school, and who consider their teachers to be supportive, are less likely to engage in unhealthy or high-risk behaviours. Students were asked about the extent to which they agreed or disagreed with five statements concerning their sense of connectedness to school.

Table 1. **SCHOOL CONNECTEDNESS: STATEMENTS ON SCHOOL CONNECTEDNESS**

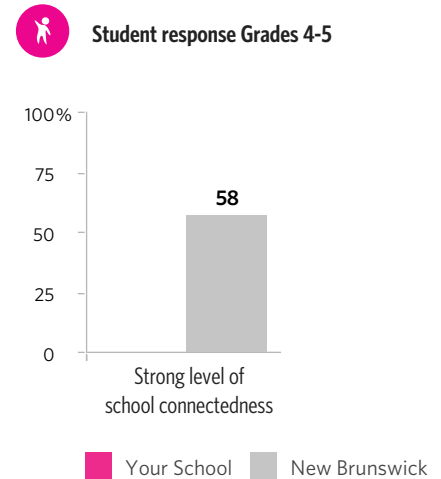
**Student response Grades 4-5**

What best describes your feelings and ideas?	Percentage of students responding		
	A lot like me	A little like me	Not like me
I feel close to people at my school	n/a	n/a	n/a
I feel I am part of my school	n/a	n/a	n/a
I am happy to be at my school	n/a	n/a	n/a
I feel the teachers at my school treat me fairly	n/a	n/a	n/a
I feel safe in my school	n/a	n/a	n/a

## Pro-Social Behaviours

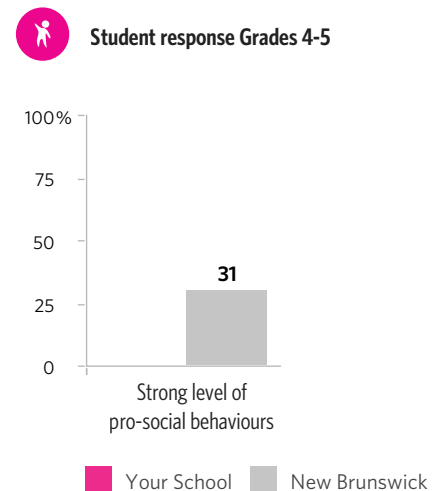
Students with higher levels of mental fitness tend to report more pro-social behaviours such as helping people and sharing things without being asked. Students were asked about the extent to which they engaged in five pro-social behaviours.

Figure 22. **STRONG LEVEL OF SCHOOL CONNECTEDNESS**



Survey responses to several questions relating to school connectedness were combined to create a score on a 15-point scale. Students with a score of 13 or higher presented a strong level of school connectedness

Figure 23. **STRONG LEVEL OF PRO-SOCIAL BEHAVIOURS**

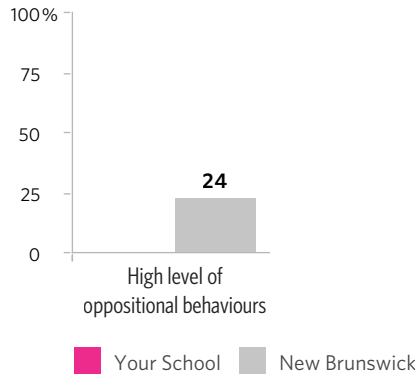


Survey responses to several questions relating to pro-social behaviour were combined to create a score on a 15-point scale. Students with a score of 13 or higher presented a strong level of pro-social behaviours

Figure 24. **HIGH LEVEL OF OPPOSITIONAL BEHAVIOURS**



Student response Grades 4-5

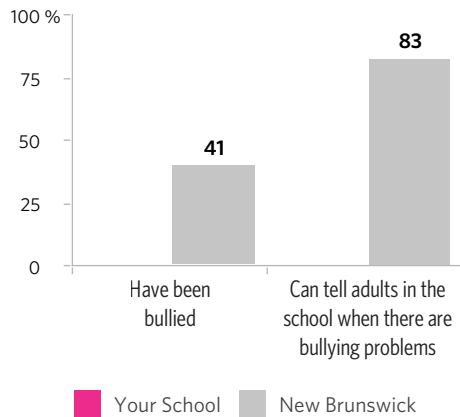


Survey responses to several questions relating to oppositional behaviour were combined to create a score on a 18-point scale. Students with a score of 9 or higher presented a high level of oppositional behaviour

Figure 25. **BULLYING**



Student response Grades 4-5



## Oppositional Behaviours

Oppositional behaviours in childhood have been linked to a variety of negative outcomes later in life, including risk of academic challenges and school drop-out; unhealthy social relationships; problem substance use; conflict with the law; and increased risk of mental health issues (van Lier, M., et al., 2004). Positive mental health approaches and practices have been correlated with healthy and enhanced physical and emotional developmental outcomes, and have been associated with decreases in oppositional behaviours (Juvonen, 2007).

Students were asked about the extent to which they agreed or disagreed with statements concerning their oppositional behaviours, such as disobedience, defiance and fighting.

## Behaviour Related to Bullying

Literature continues to provide evidence confirming that being victims of bullying in childhood compromises young victims' well-being and increases their risk of mental health problems early in life. In addition, exposure to bullying in childhood was also associated with poor social relationships, economic difficulties, and lower perceived quality of life (Arsenault, et al. 2010). Children who are bullied may experience emotional and behavioural problems, including feeling hurt, embarrassed, lonely and depressed (Hawker and Boulton, 2000; Sharp, et al., 2000). Among children who engage in bullying, studies show evidence of poorer academic skills and grades than the majority of their classmates, low empathy, distorted perceptions of the impact and its role in social problem-solving, and increased risks for substance use and conflict with the law (Beran, et al., 2008).

## ANNEX TABLES

The following section summarizes all the indicators listed in your feedback report. It also provides additional data about relevant indicators that can help you identify areas of strength to build on, as well as areas of improvement that can be targeted to help empower students to adopt healthy life styles. The tables cover the following themes:

- Context
- Healthy Eating
- Physical Activity
- Tobacco-Free Living
- Mental Fitness

Please refer to the legend to determine the source of the result.

Figure Legend:



**Student Response, Grades 4 and 5**

As reported by students in grades 4 and 5 about themselves



**Parent Response**


As reported by parents (of students in Kindergarten to Grade 5) about themselves





**Parent Perspective**


As reported by parents (of students in Kindergarten to Grade 5) about their children


ANNEX TABLES: CONTEXT


 My Child is	Your School %	New Brunswick %
Number of students	-	2,510
Number of parents	103	5,742
Girl	36	50
Boy	64	50

 My child's age is	Your School %	New Brunswick %
4	0	0
5	21	10
6	34	17
7	33	16
8	11	16
9	1	16
10	0	17
11	0	8
12 or older	0	0

 My child is in grade	Your School %	New Brunswick %
K	34	17
1	33	17
2	33	17
3	0	16
4	0	16
5	0	17

 Cultural and racial background: My child is	Your School %	New Brunswick %
Number of students	-	2,510
Number of parents	103	5,742
White	99	94
Aboriginal	1	3
Black	1	2
Asian	2	5
Other	8	3

 How many years has your child lived in Canada	Your School %	New Brunswick %
My child was born in Canada	92	88
1-2 years	2	1
3-5 years	1	1
More than 5 years	5	9

 Children with a learning exceptionality or special education need	Your School %	New Brunswick %
None	91.0	87.5
Autism/Asperger syndrome	0.9	2.4
Behaviour	0.9	1.0
Blind and low vision	0.0	0.3
Deaf and hard-of-hearing	0.0	0.4
Attention Deficit Hyperactivity Disorder (ADHD)	4.2	4.7
Intellectual disability	0.0	0.2
Language/ Speech impairment	1.8	2.4
Learning disability	0.0	2.9
Physical disability	0.0	0.2
Mental health disability	0.0	0.2
Gifted	1.1	0.6
Other	0.0	2.2

Number of students: Number of surveyed students grades 4-5  
 Number of parents: Number of surveyed parents of students in grades K-5



Student Response, Grades 4 and 5



Parent Response



Parent Perspective



ANNEX TABLES: HEALTHY EATING

Key healthy eating indicators (the day before the survey)		Your School %	New Brunswick %
	Number of students	-	2,510
	Number of parents	103	5,742
	Eat 5 or more fruits or vegetables	n/a	51
	Eat 5 or more fruits or vegetables	61	49
	Eat 5 or more fruits or vegetables	60	54
	Drink milk at least 2 times	n/a	63
	Eat any non-nutritious food (candy, sweets, chips or fries)	n/a	78
	Eat any non-nutritious food (candy, sweets, chips or fries)	63	66
	Consume 2 or more non-nutritious beverages (pop, flavoured water, sport drinks, slushies, etc.)	n/a	26
	Consume 2 or more non-nutritious beverages (pop, flavoured water, sport drinks, slushies, etc.)	16	17
Breakfast eating habits		Your School %	New Brunswick %
	Ate breakfast every day	n/a	70
	Ate breakfast every day	61	55

Number of students: Number of surveyed students grades 4-5  
 Number of parents: Number of surveyed parents of students in grades K-5



Student Response, Grades 4 and 5












Parent Response



Parent Perspective

ANNEX TABLES: HEALTHY EATING

Eating Meals With Parent/s or guardian (day before survey)		Your School %	New Brunswick %
		Number of students	-
		Number of parents	103
	Breakfast	n/a	42
	Dinner	n/a	74
	At least one meal	n/a	81
	Eating dinner with the child	72	57
	Eating lunch with at least one other person (parent, sibling, relative, friends or others)	n/a	91

Eating habits		Your School %	New Brunswick %
	Ate 3 main meals † the day before the survey	n/a	91
	Ate meals while watching TV (at least 3 times in the week before the survey)	25	28
	Ate at a fast food place or restaurant with child (at least once the week before survey)	46	58
	Eating at a breakfast or snack program at school (week before survey)	n/a	35

† breakfast, lunch and dinner

Number of students: Number of surveyed students grades 4-5  
 Number of parents: Number of surveyed parents of students in grades K-5



Student Response, Grades 4 and 5
















Parent Response



Parent Perspective

ANNEX TABLES: PHYSICAL ACTIVITY

Participation in physical activity		Your School %	New Brunswick %
		<b>Number of students</b>	- 2,510
		<b>Number of parents</b>	103 5,742
	Not physically active in the week prior to the survey	n/a	65
	Spent at least 60 minutes doing hard or moderate physical activity every day	n/a	35
	Child spends at least 1 hour on most days being physically active	86	85
	Spent at least 30 minutes everyday doing hard or moderate physical activity during the week before the survey	2	7
	Being physically active for at least one hour at school (walking/biking to school, open gyms in the morning or lunch time, intramurals, physical education class, fitness breaks, Yoga, Mornings in Motion, school-sports team or clubs.)	n/a	61
	Being physically active for at least one hour outside school (running, walking, swimming, sports, yard work, etc.)	n/a	71
	Participation in physical activities before school at recess or at lunch	n/a	83
	Participation in physical activities right after school	n/a	57
	Parents were physically active for at least 30 minutes on most days	83	82
	Parents who were physically active with their children (% often and very often)	45	40
Participation in physical activities not organized by school		Your School %	New Brunswick %
	After school (between 3-6 pm)	80	83
	Weeknights	72	83
	Weekends	93	91

Number of students: Number of surveyed students grades 4-5  
 Number of parents: Number of surveyed parents of students in grades K-5



Student Response, Grades 4 and 5










Parent Response



Parent Perspective

ANNEX TABLES: PHYSICAL ACTIVITY

Screen time (on most days)		Your School %	New Brunswick %
		Number of students	- 2,510
		Number of parents	103 5,742
	Screen time 2 hours or less per day (on most days)	n/a	45
	Screen time 2 hour or less per day (on most days)	89	88
Mode of USUAL transportation to school		Your School %	New Brunswick %
	I walk or bike or ride my scooter or skateboard	n/a	13
	I take the bus, or ride in a car or truck or van	n/a	87
Homework or reading		Your School %	New Brunswick %
	Reading (not for school) or doing homework for 2 hours or more (on most days)	n/a	18
Body Mass Index		Your School %	New Brunswick %
	Students that were of healthy weight	51	57
	Students that are underweight	9	7
	Students that are overweight or obese	40	36

Number of students: Number of surveyed students grades 4-5  
 Number of parents: Number of surveyed parents of students in grades K-5



Student Response, Grades 4 and 5









Parent Response



Parent Perspective

ANNEX TABLES: TOBACCO-FREE LIVING

Exposure to second-hand smoke		Your School %	New Brunswick %
	Number of students	-	2,510
	Number of parents	103	5,742
	Student living with people who smoke cigarettes or use tobacco	0	35
	Living with people who smoke cigarettes or use tobacco	22	28
	Smoking is allowed inside home	n/a	10
	Smoking is allowed inside family vehicle	n/a	12
	Smoking is allowed inside home	0	3
	Smoking allowed inside family vehicle	0	3

Number of students: Number of surveyed students grades 4-5  
 Number of parents: Number of surveyed parents of students in grades K-5



Student Response, Grades 4 and 5



Parent Response



Parent Perspective

ANNEX TABLES: MENTAL FITNESS

 Level of pro-social behaviours	Your School %	New Brunswick %
	Number of students	-
	Number of parents	103
High	n/a	31
Medium	n/a	48
Low	n/a	22

Pro-social behaviours	Your School %	New Brunswick %
 I do favours for people without being asked †	n/a	37
 I lend things to people without being asked †	n/a	28
 I help people without being asked †	n/a	45
 I compliment people without being asked †	n/a	46
 I share things with people without being asked †	n/a	38
† A lot like me		

 Level of oppositional behaviours	Your School %	New Brunswick %
High	n/a	24
Medium	n/a	40
Low	n/a	36

Oppositional behaviours	Your School %	New Brunswick %
 I make other people do what I want †	n/a	5
 I disobey my parents †	n/a	6
 I talk back to my teachers †	n/a	6
 I get into fights †	n/a	8
 I often say mean things to people to get what I want †	n/a	3
 I take things that are not mine from home, school, or elsewhere †	n/a	2
† A lot like me		

Number of students: Number of surveyed students grades 4-5  
 Number of parents: Number of surveyed parents of students in grades K-5



Student Response, Grades 4 and 5




Parent Response




Parent Perspective


ANNEX TABLES: MENTAL FITNESS

 <b>Bullying</b>	<b>Your School %</b>	<b>New Brunswick %</b>
<b>Number of students</b>	-	2,510
<b>Number of parents</b>	103	5,742
Have been bullied	n/a	41
Can tell adults in the school when there are bullying problems	n/a	83


  

 <b>Percentage of students by level of mental fitness</b>	<b>Your School %</b>	<b>New Brunswick %</b>
High	n/a	20
Medium	n/a	64
Low	n/a	16


  

 <b>Percentage of students by level of competence</b>	<b>Your School %</b>	<b>New Brunswick %</b>
High	n/a	85
Low	n/a	15


  

 <b>Percentage of students by level of autonomy</b>	<b>Your School %</b>	<b>New Brunswick %</b>
High	n/a	53
Low	n/a	47

 <b>Percentage of students by level of relatedness</b>	<b>Your School %</b>	<b>New Brunswick %</b>
High	n/a	87
Low	n/a	13

 <b>Satisfaction of mental fitness needs</b>	<b>Your School %</b>	<b>New Brunswick %</b>
High level of family-related mental fitness	n/a	75
High level of school-related mental fitness	n/a	63
High level of friends-related mental fitness	n/a	90

Number of students: Number of surveyed students grades 4-5  
 Number of parents: Number of surveyed parents of students in grades K-5



Student Response, Grades 4 and 5




Parent Response




Parent Perspective


ANNEX TABLES: MENTAL FITNESS

 Level of school connectedness	Your School %	New Brunswick %
Number of students	-	2,510
Number of parents	103	5,742
High	n/a	58
Medium	n/a	30
Low	n/a	13


  

 I feel close to people at my school	Your School %	New Brunswick %
A lot like me	n/a	50
A little like me	n/a	40
Not like me	n/a	11


  

 I feel I am part of my school	Your School %	New Brunswick %
A lot like me	n/a	59
A little like me	n/a	29
Not like me	n/a	12


  

 I am happy to be at my school	Your School %	New Brunswick %
A lot like me	n/a	58
A little like me	n/a	30
Not like me	n/a	12

 I feel the teachers at my school treat me fairly	Your School %	New Brunswick %
A lot like me	n/a	62
A little like me	n/a	28
Not like me	n/a	10

 I feel safe in my school	Your School %	New Brunswick %
A lot like me	n/a	69
A little like me	n/a	24
Not like me	n/a	8

Number of students: Number of surveyed students grades 4-5  
 Number of parents: Number of surveyed parents of students in grades K-5



Student Response, Grades 4 and 5



Parent Response



Parent Perspective



## REFERENCES

- Active Healthy Kids Canada (2013). Are We Driving Our Kids to Unhealthy Habits? The 2013 Active Healthy Kids Canada Report Card on Physical Activity for Children and Youth. Toronto: Active Healthy Kids Canada. Retrieved from: <http://www.activehealthykids.ca/2013ReportCard/en/>
- American Dietetic Association. (2010). Childhood Obesity: How to Achieve and Maintain a Healthy Weight in Children and Teens. Chicago: ADA Evidence Analysis Library.
- Arsenault, L., Bowes, L., and Shakoor, S. (2010). Bullying victimization in youths and mental health problems: "much ado about nothing"? Psychol. Med, 40: 717-729. Retrieved from: <http://www.ncbi.nlm.nih.gov/pubmed/19785920>
- Been, J.V., Nurmatov, U.B., Cox, B., van Schayck, C. P., and Sheikh, A. (2014). Effect of smoke-free legislation on perinatal and child health: a systematic review and meta-analysis. The Lancet. S0140-6736(14): 60082-9. Retrieved from: [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(14\)60082-9/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(14)60082-9/fulltext)
- Beran, T. N., Hughes, G., and Lupart, J. (2008). Quality and Bullying Behaviour in School- Aged Youth. Canadian Journal of School Psychology, (25), 5-18.
- Callinan, J.E., Clarke, A., Doherty, K., and Kelleher, C. (2010). Legislative smoking bans for reducing secondhand smoke exposure, smoking prevalence and tobacco consumption. Cochrane Database of Systematic Reviews 2010, Issue 4. Retrieved from: <http://summaries.cochrane.org/CD005992/does-legislation-to-ban-smoking-reduce-exposure-to-second-hand-smoke-and-smoking-behaviour>
- Cole TJ, Bellizzi MC, Flegal KM, and Dietz WH. (2000). Establishing a standard definition for child overweight and obesity worldwide: international survey. Br Med J 320:1-6. Retrieved from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC27365/pdf/1240.pdf>
- Committee on Nutrition and the Council on Sports Medicine and Fitness (USA). (2011). Sports drinks and energy drinks for children and adolescents: Are they appropriate? Pediatrics. 127(6):1182-1189. Retrieved from: <http://pediatrics.aappublications.org/content/127/6/1182.full.pdf+html>
- Dietitians of Canada. (2007). What is the evidence supporting family meals and the avoidance of television viewing at meals to improve children's food choices and to prevent childhood obesity? In: Practice-based Evidence in Nutrition [PEN]. Available online: <http://www.pennutrition.com> . Access only by subscription
- Hawker, D. S. J., and Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. Journal of Child Psychology and Psychiatry, 41, 441-455. Retrieved from: <http://onlinelibrary.wiley.com/doi/10.1111/1469-7610.00629/abstract>
- Health Canada. (2002). Youth Smoking Survey Technical Report. Ottawa: Publications Health Canada.
- Health Canada (2006). TRANSforming the food supply. Report of the Trans Fat Task Force submitted to the Minister of Health. Retrieved from: [http://hc-sc.gc.ca/fn-an/alt\\_formats/hpfb-dgpsa/pdf/nutrition/tf-gt\\_rep-rap-eng.pdf](http://hc-sc.gc.ca/fn-an/alt_formats/hpfb-dgpsa/pdf/nutrition/tf-gt_rep-rap-eng.pdf)
- Health Canada (2007). Reaching for the Top: A Report by the Advisor for Healthy Children and Youth. (Cat.: H21-296/2007E, ISBN: 978-0-662-46455-6). Ottawa: Publications Health Canada. Retrieved from: <http://www.hc-sc.gc.ca/hl-vs/pubs/child-enfant/advisor-conseillere/index-eng.php>
- Health Canada (2008). Health Concerns - The Scoop. Retrieved from: <http://www.hc-sc.gc.ca/hc-ps/tobac-tabac/youth-jeunes/scoop-primeur/index-eng.php>
- Health Canada (2010). Health Concerns - Keep Your Kids Smoke-free. Retrieved from: <http://www.hc-sc.gc.ca/hc-ps/tobac-tabac/quit-cesser/kids-enfants/index-eng.php>
- Health Canada. (2011). Eating Well with Canada's Food Guide: A Resource for Educators and Communicators (Cat.: H164-38/1-2011E-PDF ISBN: 978-1-100-19255-0). Retrieved from: <http://www.hc-sc.gc.ca/fn-an/pubs/res-educat/res-educat-eng.php>
- Health Canada (2013). Healthy Living, Just for You – Children: Smoking and drugs. Retrieved from: <http://www.hc-sc.gc.ca/hl-vs/jfy-spv/children-enfants-eng.php>
- Juvonen, J. (2007). Reforming middle schools: focus on continuity, social connectedness, and engagement. The Educational Psychologist, 42(4), 197-208. Retrieved from: <http://eric.ed.gov/?id=EJ780916>
- Kukawadia, A., Craig, W., Janssen, I., and Pickett, W. (2011). Obesity as a determinant of two forms of bullying in Ontario youth: A short report. Obesity Facts. 4:469-472. Retrieved from: <http://www.ncbi.nlm.nih.gov/pubmed/22248998>
- Lau, P.W.C., Lee, A. and Ransdell, L. (2007). Parenting Style and Cultural Influences on Overweight Children's Attraction to Physical Activity. Obesity. 15(9): 2293-2302. Retrieved from: <http://onlinelibrary.wiley.com/doi/10.1038/oby.2007.272/pdf>
- Li, Z., Bowerman, S., and Herber, D. (2005). Health ramifications of the obesity epidemic. Surg Clin North Am., 85: 681-701. Retrieved from: <http://www.ncbi.nlm.nih.gov/pubmed/16061080>

- Morin, A.J.S., Rodriguez, D., Fallu, J.-S., Maiano, C. and Janosz, M. (2012). Academic achievement and smoking initiation in adolescence: a general mixture analysis. *Addiction*, 107: 819-828
- Morrison, W. and Peterson, P. (2010). Schools as a setting for positive mental health: Better practices and perspectives. Joint Consortium for School Health, January 2010. Retrieved from: <http://www.jcsh-cces.ca/upload/PMH%20July10%202011%20WebReady.pdf>
- Piernas, C. and Popkin, B.M. (2011). Food Portion Patterns and Trends among U.S. Children and the Relationship to Total Eating Occasion Size, 1977-2006. *The Journal of Nutrition*, 141(6): 1159-1164
- Province of New Brunswick. (2009). Live Well, Be Well: New Brunswick's Wellness Strategy 2009-2013. Department of Healthy and Inclusive Communities. Retrieved from: <http://www2.gnb.ca/content/dam/gnb/Departments/hic-csi/pdf/Wellness-MieuxEtre/NewBrunswickWellnessStrategy2009-2013.pdf>
- Reilly, J.J., Methven, E., McDowell, Z.C., Hacking, B., Alexander, D., Stewart, L., and Kelnar, C.J.H (2003). Health consequences of obesity. *Arch Dis Child*. 88:748-752. Retrieved from: <http://adc.bmj.com/content/88/9/748.full.pdf+html>
- Seifert, S.M., Schaechter, J.L., Hershshorin, E.R. and Lipshultz, S.E. (2009). Health effects of energy drinks on children, adolescents, and young adults. *Pediatrics*. 127(3): 511-528. Retrieved from: <http://pediatrics.aappublications.org/content/early/2011/02/14/peds.2009-3592.full.pdf+html>
- Sharp, S., Thompson, D., and Arora, T. (2000). How long before it hurts? An investigation into long-term bullying. *School Psychology International*, 21(1), 37-46. Retrieved from: <http://spi.sagepub.com/content/21/1/37.abstract>
- Shields, M. (2006). Overweight and obesity among children and youth. *Health Reports*, 17(3): 27-42. Retrieved from: <http://www.geog.ubc.ca/courses/geob370/students/class10/ddchan/www/images/docs/Shields.pdf>
- Shields, M., Connor Gorber, S., Janssen, I. and Tremblay, M.S. (2011). Obesity estimates for children based on parent-reported versus direct measures. *Statistics Canada, Catalogue no. 82-003-XPE . Health Reports*, Vol. 22, no. 3. Retrieved from: <http://www.statcan.gc.ca/pub/82-003-x/2011003/article/11534-eng.pdf>
- Shore, S.M., Sachs, M.L., Lidicker, J.R., Brett, S.N., Wright, A.R. and Libonati, J.R. (2008). Decreased scholastic achievement in overweight middle school students. *Obesity*, 16(7), 1535-1538. Retrieved from: <http://onlinelibrary.wiley.com/doi/10.1038/oby.2008.254/pdf>
- Singh, A., Uijtdewilligen, L., Twisk, J.W.R., van Mechelen, W. and Chinapaw, M.J.M. (2012). Physical activity and performance at school. A systematic review of the literature including a methodological quality assessment. *Arch Pediatr Adolesc Med*. 166(1): 49-55. Retrieved from: <http://archpedi.jamanetwork.com/article.aspx?articleid=1107683>
- St-Onge, M.P., Keller, K.L., and Heymsfield, S.B. (2003). Changes in childhood food consumption patterns: a cause for concern in light of increased body weights. *Am J Clin Nutr*. 78:1068-1073
- Stewart-Brown, S. (2006). What is the evidence on school health promotion in improving health or preventing disease and, specifically, what is the effectiveness of the health promoting schools approach? Copenhagen: WHO Regional Office for Europe. Retrieved from: [http://www.euro.who.int/\\_data/assets/pdf\\_file/0007/74653/E88185.pdf](http://www.euro.who.int/_data/assets/pdf_file/0007/74653/E88185.pdf)
- U.S. Department of Agriculture. Center for Nutrition Policy and Promotion. (2012). The Food Environment, Eating Out, and Body Weight: A Review of the Evidence. *Food Insight*, 49. Retrieved from: <http://www.cnpp.usda.gov/Publications/NutritionInsights/Insight49.pdf>
- van Lier, P. A. C., Muthén, B. O., van der Sar, R. M., and Crijnen, A. A. M. (2004). Preventing disruptive behavior in elementary school children: Impact of a universal, classroom based intervention. *Journal of Consulting and Clinical Psychology*, 72, 467-478. Retrieved from: <http://www.statmodel.com/download/lcapaper.pdf>
- Wesnes, K.A., Pincock, C., and Scholey A. (2012). Breakfast is associated with enhanced cognitive function in schoolchildren. An internet based study. , 59(3): 646-9
- Zecevic, C.A., Tremblay, L., Lovsin, T. and Michel, L. (2010). Parental Influence on Young Children's Physical Activity. *International Journal of Pediatrics*. 2010. Retrieved from: <http://downloads.hindawi.com/journals/ijpedi/2010/468526.pdf>