Prince Edward Island Provincial Results: Mental Fitness, Physical Activity and Healthy Eating

www.upei.ca/cshr
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- The Centre for Behavioural Research and Program Evaluation (CBRPE) at the University of Waterloo
- The Population Health Research Group (PHR) at the University of Waterloo
- The Health & Education Research Group (HERG) at the University of New Brunswick
- The Comprehensive School Health Research Group at the University of Prince Edward Island

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Prince Edward Island’s Feedback Report

The SHAPES-PEI survey is a provincial survey of Prince Edward Island students in grades 5 through 12 conducted by the Comprehensive School Health Research Group at the University of Prince Edward Island in collaboration with the SHAPES Team at the University of Waterloo and the PEI Department of Education and Early Childhood Development. The survey asked students about their mental fitness, physical activity and eating behaviours.

We are pleased to provide this report of results for Prince Edward Island. A total of 4846 students at 58 schools participated in this survey during the 2008-2009 school year.

This Feedback Report is intended to help schools and school boards, together with students, parents and other community partners, to:

- increase awareness of trends in mental fitness/resilience, physical activity and healthy eating
- plan actions related to these issues
- co-ordinate these efforts with other groups

Schools and school boards are encouraged to create partnerships with local health and voluntary organizations, municipalities, businesses, etc., to take action on the results reported here. Ideas on what to do with the information contained in this report are listed on page 1. The PEI Department of Education and Early Childhood Development hopes to work with schools in the coming months to support the development of action plans based on the data in this report.

The data in this report has been grouped so that it is not possible to identify any particular school or individual student. In some cases, results in table columns or rows and charts may not add to 100% due to rounding.

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How to Use This Report

Use this report to identify areas of strength to build on or areas that can be addressed concerning student health and health promotional activities. As you review these results, consider how enhancing mental fitness can impact not only the emotional and psychological well-being of students, but also increase physical activity and healthy eating behaviours. Share the results with students, school staff, parents and community members to help identify challenges regarding the health and well-being of students. Involvement empowers and fosters relationships to deal with issues at hand (and future concerns). We encourage users of this report to find the initiative, creativity and resources for solutions. Overall, student wellness can be improved through contributions at many levels. For example:

**School and School Board Staff** can use the report data to:

- Support recommendations within school development plans.
- Plan and deliver health, physical education or other related curricula.
- Develop opportunities for staff to model healthy behaviours.
- Initiate new partnerships with parents/community resources to promote healthy living.
- Advocate for new community programs or resources and support requests for funding (e.g. grant programs).
- Enhance implementation of health policies.
- Enhance delivery of services or programs for students (e.g. counselling, school cafeteria).
- Share data with local public health units and/or healthy systems to identify potential areas for collective action among schools and/or follow-up and evaluate implemented actions.
- Look for opportunities to engage students, parents and communities in problem solving and planning.
- Advocate for increased emphasis on health as a priority in school activities and curricula.

**Students** can:

- Explore ways to take action on areas of concern through student government and other student-led groups.
- Engage teachers and administrators in dialogue about the results to better understand the issues, seek solutions and create student-driven action plans.
- Join a school-based action team or student club dedicated to healthy living.
- Organize new initiatives at school (e.g. intramural sports program, recognition/awards program for people who have made a difference in promoting healthy living, initiate student/staff healthy living challenge, organize a health fair).
- Share the data!
  - Write articles in student or local newspapers.
  - Feature highlights of data on bulletin boards, during morning announcements.
  - Talk to friends and family about the report’s results.
  - Use data in school projects.
- Connect with students from other schools in the district to share what has been done and explore partnership opportunities.
Parents/Families and the Community can:
- Plan activities with school council, Home and School committees, or parent council.
- Consider hosting a forum or approaching media to gain support for healthy living initiatives.
- Create opportunities to model healthy behaviours at home.
- Support the school! Share skills, talents or resources to help address the issues identified in the report.
- Participate in an open house where community groups can share health and wellness programs.

Provincial Departments, Alliances, and Community Organizations can:
- Support schools by providing expertise in the analysis and interpretation of data.
- Use the data to help inform strategic planning processes and priority setting activities.
- Develop, in partnership with schools, school boards, and school communities, programs to help address the identified needs.
- Engage in school health promotion by providing support (resources, funding, staff time, programs, materials) at the local, regional, and provincial levels.
- Partner/collaborate/coordinate with each other to provide support to schools and the school community.

Change is more likely to succeed when schools and boards...
- Engage all stakeholders. By genuinely considering various perspectives and voices in your planning, you can expect increased support for solutions. You will also build capacity and improve your ability to achieve your main objective. Consider adding parents, community and health organizations.
- Use a comprehensive school health approach to promote healthy behaviours. This includes activities that address all of the following: (1) a healthy social and physical environment, (2) effective teaching and learning, (3) healthy school policy and (4) effective partnerships and services. Communication through education is necessary but not sufficient for achieving change. To facilitate healthy behaviours, consider all components of a comprehensive school health approach. Promote environments that make the healthy choice the easy choice.
- Link with other resources (people and/or programs in the community).
- Communicate, coordinate, and collaborate.
- Evaluate results.
What is Mental Fitness?

Mental Fitness refers to a person’s capacity to be self-determined. Self-determination refers to a person’s capacity to think about, plan and act on personal decisions that contribute to emotional, social and physical development.

Mental Fitness impacts our capacity to make positive changes in our daily routines, whether eating healthily, being physically active, or living tobacco-free.

Mental fitness is fostered in environments and relationships that address important psychological needs. These include the interrelated needs for autonomy, relatedness, and competency.

What are Mental Fitness Needs?

**Autonomy:** “I am able to make choices about things that are important to me.”

We need personal freedom to make choices or decisions that affect our 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.”

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

**Competency:** “I have strengths and gifts that are recognized by myself and others.”

We need to recognize and use our personal gifts and strengths in achieving personal goals. Fulfillment of this need provides us with a sense of personal achievement and accomplishment.

Satisfaction of all three needs is associated with emotional well-being or resilience, as well as participation in healthy lifestyle choices and actions during childhood and adolescence. Meeting mental fitness needs may:

- **Increase prosocial attitudes and behaviours** – expressing a social interest in others, a willingness to help, or being generous.
- **Increase social responsiveness** – demonstrating respect and consideration for social boundaries, rules and routines.
- **Increase pleasant emotions** – expressing feelings such as contentment and optimism vs. discontentment and discouragement.

When mental fitness needs are not met, youth may be at higher risk for experiencing difficulties related to their emotional, social and physical development.

Quick Facts

Self-esteem and self-worth are higher in students when their teachers enable them to be more autonomous.\(^1\)
Mental Fitness and Student Functioning

Students’ responses to questions about the needs of autonomy, relatedness and competency were combined to produce an overall measure of mental fitness. The graph below shows the percentage of students considered to have “low”, “middle” and “high” mental fitness. Note: these mental fitness categories are based on New Brunswick population data collected in 2006-2007.

**Mental Fitness in Males and Females**

![Mental Fitness Graph]

* Data are based on student responses from participating schools

Students with high mental fitness tend to be more connected to school, exhibit more pro-social behaviours (e.g., sharing and helping others) and less oppositional behaviours (e.g. bullying, disruptive behaviour). In addition, they tend to be more physically active (page 10), and have a healthy weight (page 17). Students with low mental fitness are of concern, because they tend to be less connected to school, demonstrate fewer pro-social behaviours, be less physically active, be overweight and exhibit more oppositional behaviours.

It is important to note that researchers have not yet determined that increasing mental fitness causes improvements in these other behaviours. Although current research shows that mental fitness is associated with these other behaviours, the direction of these relationships is unknown. That is, what comes first? Does high mental fitness lead to stronger school connectedness or does increased school connectedness lead to higher mental fitness? Working to meet students’ mental fitness needs (autonomy, competency, relatedness) has the potential to positively impact these other behaviours, and likewise, improvements in physical activity, healthy body weight and school connectedness may positively impact students’ mental fitness. Either way, students benefit.

**School Communities Can Make a Difference...**

Schools can make a difference in their student’s mental fitness by establishing an inclusive classroom environment, creating opportunities for student participation in school life beyond the classroom, and implementing a curriculum that teaches interpersonal communication and emotional management.²
Students with higher levels of mental fitness tend to report higher levels of school connectedness (e.g., feeling part of and close to school relationships) and more pro-social behaviours such as helping people and sharing things without being asked. The graphs below show the outcomes from the survey.

Students with lower mental fitness scores tend to report more oppositional behaviours such as skipping classes, bullying, talking back to teachers, saying mean things or stealing. The graph below shows the results of the survey.

Quick Facts
Two important, related developmental tasks of adolescence are to assume greater autonomy and to exercise responsible decision-making. School is a natural setting for youth to practice these skills, and previous studies have shown that students who feel connected to school have exhibit more health promoting behaviours and fewer health compromising behaviours.3,4,5

School Communities Can Make a Difference...
Increasing school connectedness can help increase mental fitness among youth, which in turn makes students more likely to help others, and less likely to bully peers or disrupt the class. In addition, youth with high mental fitness are more likely to engage in health promoting behaviours like physical activity and healthy eating, and avoid health compromising behaviours like smoking. Students who are physically active and eat healthy foods are better prepared to learn.
Pleasant and Unpleasant Emotions

Students were asked to what extent they felt pleasant emotions (e.g. happy, lively) and unpleasant emotions (e.g. sad, upset). The graph to the right shows the extent to which students felt pleasant and unpleasant emotions during the week prior to being surveyed.

Help-Seeking Behaviour

We asked students who they seek assistance from most of the time when they have a school related problem (e.g. too much homework, trouble learning a subject, a poor grade). Students are most likely to seek help from a parent or guardian for school-related problems.

When students have a peer-related problem like an argument with a good friend or romantic partner, being bullied or excluded by other teens, or feeling pressured to do something, they seek help from a friend most of the time. When students have a personal problem (e.g. feeling stressed a lot, juggling school and other activities, feeling sad/depressed, worried or angry, using alcohol or drugs) they seek help from a friend most of the time. When students have a family problem like an argument with a parent, fight with a sibling, or parents who argue with each other, they seek help from a friend most of the time.

Who Students Seek Assistance From for School Related Problems

Students commonly seek help from friends when they have a problem related to school, family or other youths. Resources and programs should be dedicated to help peers learn how to support one another in an effective manner and provide sound advice. The Department of Education and Early Childhood Development is in the process of renewing the Peer-Helping curriculum. The new Health curriculum for Grades 1-9 has three foundational strands including Wellness Choices, Relationship Choices and Life Learning Choices. Within the Relationship Choices strand, students learn about support networks, mentors and developing healthy relationships and positive interdependence. It is also very important for youth to have positive adult relationships and adults that they can connect with.
How Can We Meet Mental Fitness Needs?

Schools, homes and communities can contribute to the satisfaction of mental fitness needs by:

- empowering students to collaborate with their peers to develop their own solutions for specific problems (autonomy, competency, relatedness)
- suspending judgment and encouraging the expression of students’ thoughts and feelings in classroom discussions (autonomy)
- providing opportunities for students to identify and use their strengths in academic work or projects (autonomy, competency)
- encouraging students to be involved in a wide range of activities that include emphasizing their interests and preferences (competency, autonomy)
- emphasizing fairness and social inclusion in small group and school-wide learning activities (relatedness)
- reaching out and involving students or specific groups who do not feel part of the school (relatedness, autonomy)
- focusing on developing positive working relationships with parents and members of the community (relatedness)

How does Mental Fitness Relate to Other Lifestyle Behaviours?

Research suggests that satisfaction of all three mental fitness needs (autonomy, relatedness and competency) is associated with emotional well-being or resilience, as well as participation in healthy lifestyle choices and actions during childhood and adolescence. When mental fitness needs are met, people are more likely to be engaged in pursuing healthy lifestyle behaviours.

The next sections of this report describe factors related to physical activity and healthy eating among students. As you review these results, consider how enhancing mental fitness can impact not only the emotional and psychological well being of your students, but also increase physical activity and healthy eating behaviours.

Quick Facts

Students who get good grades, communicate with their parents about school, feel part of school decision-making, participate in after-school activities and volunteering, and feel that they “matter” in their community are more likely to engage in health promoting behaviours and less likely to engage in health compromising behaviours. The addition of even one or two of these “assets” makes a difference.6
Physical Activity: The Issue

Physical Activity is a School Issue

- Students who participate in school sports are less likely to drop out of school and tend to have higher educational aspirations.\(^7\)
- Increased participation in physical education is associated with improved classroom behaviour, as well as increased enthusiasm toward school and school work.\(^8\)
- Physical activity is associated with improved behaviour and cognitive functioning in youth with attention-deficit disorders and problems controlling impulsive actions.\(^9\)

Physical Activity is a Student Issue

- Over half of Canada’s youth are physically inactive; 79% of youth are not active enough for optimal growth and development.\(^10\)
- 91% of children and youth aged 5 to 19 do not accumulate the 16,500 daily steps associated with Canada’s guidelines.\(^11\)
- Physical activity strengthens the heart, bones and muscles, improves fitness and can help achieve a healthy body weight.\(^12\)
- Physical activity is associated with increased self-esteem and decreased depression and anxiety.\(^13\)

Children spend 40% less time being physically active than they did 15 years ago.

“If the trend isn’t reversed, today’s children could become the first generation that dies at a younger age than their parents.”\(^14\)

(Dr. Rick Bell, Physical Health & Education Canada)

Physical Activity is a Community Issue

- Behaviours started in childhood and adolescence tend to carry over to adulthood; 56% of Canadian adults 20 years and older are considered physically inactive.\(^15\)
- Physical inactivity is associated with an increased risk of type 2 diabetes, obesity, coronary heart disease, cancer and osteoporosis, which can lead to decreased quality of life and premature death.\(^16\)
- In 2001, the economic burden of physical inactivity in Canada was estimated at $5.3 billion. This represented 2.6% of all health care costs in Canada that year.\(^17\)

School Communities Can Make a Difference...

Effective action to increase youth physical activity will promote healthy lifestyles. Youth physical activity can be increased by letting students know that their school and community care, increasing awareness through education, creating a supportive school environment, as well as providing services and supports (facilities and programs that facilitate or promote and value physical activity). Schools in partnership with municipal, health and community agencies and businesses can work together to achieve common goals for physical activity.
According to Canada’s 2008 Report Card on Physical Activity for Children and Youth, Canada has received a failing grade (D) for the third year in a row, indicating that the progress toward improving physical activity among children and youth has slowed down. Levels of activity for youth in Canada are low. In fact, only 49% of Canadian youth are physically active, and according to international guidelines just 21% are considered to be active enough to meet recommendations for optimal growth and development.10

Based on student reports, 29% of students were physically active for at least 90 minutes every day of the previous week.

**Percent of Students who Meet Canada’s Physical Activity Guidelines, by Gender**

![Bar Chart]

Meet Physical Activity Guidelines (≥ 90 minutes of physical activity/day)

Do not meet Physical Activity Guidelines (< 90 minutes of physical activity/day)

Please use caution in assessing these results; our testing of the questionnaire indicates that students typically tend to over-estimate their time spent being physically active.

For example, time spent waiting in line for a ski lift or at lights to cross a street may be counted as active time on questionnaires.

**School Communities Can Make a Difference...**

Schools can help to increase the number of students who are physically active and who meet the activity guidelines for optimal growth and development by providing opportunities for physical activity at school, beyond physical education class, and by encouraging students to be active outside of school. For resource guides that teachers can use to lead discussions about the importance of physical activity to achieving health benefits go to: [www.phac-aspc.gc.ca/pau-uap/paguide/child_youth/resources.html](http://www.phac-aspc.gc.ca/pau-uap/paguide/child_youth/resources.html)
Boys who are physically inactive are more likely to be anxious, depressed, withdrawn, have social problems, thought problems and attention problems when compared to being physically active. Girls who are physically inactive are more likely to be withdrawn or depressed, complain about their body, have social problems and attention problems, and break the rules compared to those who are physically active. Increasing physical activity has the potential to enhance mental fitness, and vice versa.

The graph below shows the relationship between physical activity and mental fitness among responding students. Typically, students with higher mental fitness are more physically active. Satisfying mental fitness needs could be one way to help boost physical activity levels among youth. Likewise, increasing physical activity has the potential to help students achieve a higher level of mental fitness, especially if the opportunities for physical activity address the three mental fitness needs (see page 3 for details).

**Quick Facts**

Adolescents that believe they have limited capability to cope with negative emotions are less likely to engage in vigorous or moderate physical activity, strengthening or toning exercises, and play on sport teams. Participation in physical activity can also be low among adolescents who say that making friends is difficult, and adolescents who are less involved with friends.

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**School Communities Can Make a Difference...**

Encouraging students to play a leadership role in the development, organization and administration of special events involving physical activity will promote student interest and participation in physical activity as well as enhance student leadership and organizational skills. Involving students in the development and implementation of school activities increases youth autonomy at school and provides an opportunity to increase relatedness and competency. When these three mental fitness needs are met, students are more likely to be connected to school, exhibit more pro-social behaviours (e.g. sharing and helping) and fewer oppositional behaviours (e.g. bullying and disruptive behaviour).
Strength and Flexibility Training

Strength Training

Strength training involves resistance training to enhance one’s ability to exert or resist force, and helps develop and maintain strong muscles, healthy bones and healthy body weight and image. It is recommended that youth train 2-3 days per week to achieve gains in strength.22

The results show 76% of students reported participating in strength training activities such as push-ups, sit-ups, Pilates and weight lifting in the week preceding the survey (please note that weight training is generally not recommended for students under age 15 years). Of students that reported participating in strength training, males reported that they strength trained an average of 3.1 days, and females reported that they strength trained an average of 2.3 days.

Flexibility Training

Flexibility training (“stretching”) helps to maintain the ability to use joints through the full range of motion. It is an important component of living a healthy active lifestyle, but is often overlooked in physical activity programming. Canada’s Physical Activity Guide recommends that youth stretch their muscles every day and that adults do flexibility activities 4 to 7 days a week as part of a regular physical activity program.23

The results show 63% of students reported doing exercises for flexibility such as stretching and yoga in the week preceding the survey. Of students that reported participating in flexibility training, males reported that on average they exercised for flexibility 1.8 days, and females reported that they averaged 2.3 days of flexibility training.

School Communities Can Make a Difference...

Strength and flexibility are important components of being physically fit. As with any activity, students should know how to do these activities safely and properly. Students can be encouraged to do strength and flexibility training through exposure to these activities in physical education classes and through participation in clubs or teams. Strength training clubs organized through the school can also be useful for high school students. Consider a range of activities, such as weight lifting, Pilates, yoga, circuit training and plyometrics (explosive activities usually involving jumping). Clubs should emphasize participation and proper technique (rather than amount of weight lifted). Students should use appropriate individual exercises and workloads, and regularly monitor their progress. It may be beneficial to start a gender-specific club; this can allow girls or boys to train without feeling self-conscious of their abilities.
When Students are Active

There are various times and ways that students can be physically active. We asked students questions about different opportunities they have for physical activity – at school and outside of school.

Extracurricular activities - both those offered at school and outside of school - are important opportunities for physical activity.

This graph compares the percentage of students who participate in physical activity only in school, only outside of school, both inside and outside of school, or neither. The results show that 56% of students participate in physical activity in school and for 1% of students, school is the only place they engage in physical activity.

School Communities Can Make a Difference...

Schools have the potential to influence kids through physical education classes and extra-curricular activities. Increasing active time in Physical Education classes is a good way for schools to increase students’ activity levels. One way to increase active time is using small groups to decrease wait times during activities. Physical activity should not be forced or taken away as a form of punishment, since this deters youth from participating in physical activity.24

Schools can also encourage students to be active outside of school. Remind students that active transportation can help them to achieve their daily physical activity requirements, and is also environmentally friendly. Active transportation includes walking, cycling, in-line skating, skiing, skating, skateboarding, wheel chairing, etc. Schools can encourage active transportation by providing a safe bike lock area for students and providing secure areas where students can leave equipment (e.g. in-line skates, skateboards, helmets). Active & Safe Routes to School (www.saferoutestoschool.ca) is a national program that encourages students to use active modes of transportation both to and from school.

Check out local websites like the Prince Edward Island Active Living Alliance (www.peiactiveliving.com) for more ideas on how to promote active living. The Active Schools section of the website contains some ready-to-use teacher resources.
Sedentary Behaviour

Sedentary behaviour includes things such as watching television, using the computer, reading and doing homework. By definition, these behaviours tend to be counterproductive to physical activity; however, learning activities (e.g. reading and doing homework) help students achieve other goals. Therefore, to promote overall health, students should decrease the total amount of time they are inactive while maintaining homework and reading time.

Leisure time reading has well known benefits to students. We asked students how much time they spend reading (not including for school or work) and doing homework per week. Results are shown in the first graph.

Sedentary behaviour, like watching television, is incompatible with healthier, more active choices for leisure time activities. Also, watching a lot of television has been linked to increases in smoking uptake in youth. Students should aim to decrease their “screen time”, which is time spent in front of the television, playing video games, or on the internet. The graphs below show (by gender) the amount of time per day that students spend watching TV/movies, or playing video/computer games and talking on the phone, surfing the internet, or texting. Results show that 20% of students report they typically spend more than 3 hours per day watching TV/movies or playing video/computer games and 19% spend more than 3 hours per day on the phone, internet or texting.

School Communities Can Make a Difference...

Help students build awareness of the time they spend inactively by having them keep track of their activities for a period of time. Students can set goals for reducing inactive time and record their progress. Consider running a personal challenge where students commit to being active in place of one half-hour TV program for one or two weeks. Offer in-class discussion so students can share their activities with peers to encourage and provide new ideas.
Physical Activity at School

We asked students about their involvement in sports or clubs at school, and whether they were physically active “outside of classes” at school. The results show:

- 46% participate in school-organized non-competitive activities (e.g. intramurals) (males 49%, females 44%)
- 44% participate in school-organized competitive (e.g. Varsity) sports (males 45%, females 44%)
- 70% reported participating in other physical activities at school

Overall, 57% of students participated in at least one competitive or non-competitive school sport/club (males 59%, females 55%); in this group, 65% of students did not meet the physical activity guidelines (90 min/day). Compare this to the 43% of students who do not take part in competitive or non-competitive school sports/clubs (males 41%, females 45%); 79% of these students did not meet the physical activity guidelines (90 min/day).

Typically, students who participate in school-organized physical activities are more likely to be active.

As mental fitness increases, students are more likely to engage in competitive or non-competitive physical activity sports/clubs organized by schools. The graph below shows the relationship between mental fitness and student involvement in competitive or non-competitive school-organized physical activities. Please see page 3 for more information about mental fitness.

Students were asked what they thought about the number of competitive and non-competitive sports/clubs offered at their school:

- 21% said there are too few sports/clubs offered
- 48% said the number of sports/clubs offered is just right
- 2% said there are too many sports/clubs offered
- 30% said it did not matter to them

Quick Facts

Students involved in both physical and non-physical extracurricular activities are more likely to be connected to school, practice healthy behaviours, and avoid unhealthy behaviours.
Students’ Perceptions of Physical Activity Support at School

We asked students for their opinions about physical activity and their perceptions of how, and if, physical activity is supported or encouraged at school. Research has shown that a student’s attitude towards activity affects activity levels. The results show:

- 65% of students felt that emphasis is placed on developing positive attitudes about physical activity and 61% felt that emphasis is placed on developing self-esteem.
- 66% felt that emphasis is placed on informing students about opportunities to be physically active (e.g. bulletin boards, announcements).
- 65% of students felt that emphasis is placed on student participation in competitive sports, and 52% felt the same about recreational sports.

The education system (i.e. school boards/districts, schools and staff), should not bear sole responsibility for students’ activity. Parents and community play key roles in motivating students to pursue an active lifestyle and provide an environment that enables an active lifestyle. Still, given the large blocks of time students spend at school, and education’s role to establish lifelong learning, it is important to ensure students have ample opportunity to learn and grow.

We asked students to give us their opinions about opportunities for physical activity and access to physical activity facilities at their school. Results are shown in the table on the right. Physical education classes offer many benefits. The graph below shows which aspects of their physical education class students enjoyed.

<table>
<thead>
<tr>
<th>Do the facilities at your school meet the physical activity needs of students?</th>
<th>% who said yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indoor facilities</td>
<td>84</td>
</tr>
<tr>
<td>Outdoor facilities</td>
<td>76</td>
</tr>
</tbody>
</table>

What Students Enjoy About Physical Education Classes

School Communities Can Make a Difference...

Schools can help make students aware of physical activity opportunities and benefits in many ways. Participation in physical activity can be increased through developing supportive environments that demonstrate that all types of physical activity are valued and supported. Reminders (announcements, bulletin board notices, etc.) about extracurricular activities and programs can increase students’ awareness of the facilities available at your school. Recognizing accomplishments, rewarding increased participation rather than competition, encouraging student involvement in deciding which opportunities should be offered, and planning programs are all important strategies. Physical education and health classes are not the only subjects where influences on activity can be taught. Consider opportunities to include physical activity issues in other courses (e.g., media awareness, social influences, etc.).

Prince Edward Island, 2008-2009
Social Influences for Physical Activity

Peers and family members can influence students’ behaviours directly (peer pressure) or indirectly (modelling). We asked students a series of questions relating to peer and family physical activity.

All students were asked, “How many of your closest friends are physically active?” Active youth are more likely to report that they have friends who are active compared to inactive students.

Students were asked about how often their parents were physically active. Generally, active youth are more likely to report that they have active parents.

Your results may not show inactive students reporting fewer active friends or inactive parents. This may point to a need to correct perceptions as to what “active” actually is. Our previous studies have found that students may over-report time spent being physically active.

Students were asked how much their parents encouraged and supported them to be physically active. The results show 74% of students had parents who both encouraged and supported them.

Parental Encouragement of Physical Activity

Parental Support for Physical Activity

Since physical activity is often defined by leisure activity with peers, helping students develop skills to promote positive social influences can make a big difference. Direct instruction, modelling, and rehearsal are most effective for learning these skills. Making school physical activity facilities available to community groups promotes physical activity among parents and families, and encourages communities to support future construction of school facilities predominantly for student use. Similar to school staff, parents are also powerful role models for young people. Parental support for, and direct involvement in, physical activity is related to active lifestyles among adolescents.
Healthy Body Weight

Physical activity and healthy eating are both important components in determining a person’s body weight. A healthy body weight is only one component of a well-balanced lifestyle. One of the ways of determining healthy body weight is the body mass index (BMI). BMI is a measure of a person’s weight in comparison to their height.

\[
\text{BMI} = \frac{\text{weight (kg)}}{\text{height (m)}^2}
\]

In this survey, BMI has been calculated using student self-reported height and weight. Caution should be used in interpreting these figures as we know these figures may be under- or over-estimated.

According to the 2004 Canadian Community Health Survey, 27% of PEI youth aged 9-13 and 32% of PEI youth aged 14-17 are considered overweight or obese using measured BMI. Being overweight during childhood can lead to increased illness and risk of chronic diseases such as heart disease, cancer and type-2 diabetes. Overweight and obese youth are often stigmatized by peers and adults. These youth may experience psychological stress, and have a poor body image, as well as poor self-esteem.

Using student self reported data, the results show that 69% of students fall within the recommended healthy weight category for their age (upper graph).

At low levels of mental fitness, BMI tends to be relatively high for both males and females (graph to right). As mental fitness increases there is typically a decrease in BMI scores, which levels off as mental fitness increases to high levels. Please see page 3 for more information about mental fitness.

Please note that the BMI categories used in this report are based on guidelines for children and youth from the U.S. Centers for Disease Control and Prevention (CDC). Canada currently does not have any guidelines for classifying weight in Canadians younger than 18 years, and has no standards for tracking growth in children. The CDC cautions against using BMI in children and youth for any purposes beyond monitoring.

School Communities Can Make a Difference...

In addition to achieving a healthy body weight, proper nutrition and healthy eating habits are important to the growth, development and cognitive function of adolescents. A Physical Education unit on nutrition and weight should include teaching students about proper weight and false perceptions. Having students keep a food diary for a few days can help them become aware of what foods they are eating and where they can improve their dietary habits. The recently updated Canada’s Food Guide and additional resources for promoting healthy eating can be found on Health Canada’s website: www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php.
Healthy Eating: The Issue

Healthy Eating is a School Issue

- Schools are an ideal setting to establish and promote healthy eating amongst children and youth.37
- Well-nourished children and adolescents are more likely to be better prepared to learn, to be active, and to maintain their health as adults.38
- There is a growing body of evidence demonstrating that children who eat poorly do not perform as well as they could academically, and that improvements in nutrition can result in improvements in academic performance.39

Healthy Eating is a Student Issue

- In the past 25 years there has been a dramatic increase in the percentage of Canadian adolescents who are overweight or obese. Overweight/obesity in adolescence often persists into adulthood.40
- In 2004, 79% of Atlantic Canadians aged 4–18 ate less than 5 servings of vegetables and fruit per day.41
- During adolescence, youth become more responsible for making choices about what they eat.

Healthy Eating is a Community Issue

- Home, family and community environments have a significant impact on a child’s nutrition and health. Children who eat home-prepared meals are more likely to include more milk and milk-alternatives, vegetables, fruits and other fibre- and nutrient-dense foods. Of equal importance, they also eat fewer fried foods and soft drinks than children who eat out.42
- Both fast food consumption and food portion sizes have increased significantly in the past 20 years, coinciding with increases in the incidence of childhood overweight and obesity.43

Healthy Eating with Canada’s Food Guide

Canada’s Food Guide provides a practical pattern of eating to help Canadians make healthy food choices and reduce their risk of obesity and chronic diseases. For more information on the food guide go to: www.healthcanada.gc.ca/foodguide. The recommended number of servings per day for each food group for children aged 9-18 years are:

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Servings per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetables &amp; Fruit</td>
<td>6 – 8 servings</td>
</tr>
<tr>
<td>Grain Products</td>
<td>6 – 7 servings</td>
</tr>
<tr>
<td>Milk and Alternatives</td>
<td>3 – 4 servings</td>
</tr>
<tr>
<td>Meat and Alternatives</td>
<td>2 – 3 servings</td>
</tr>
</tbody>
</table>

School Communities Can Make a Difference...

Health and learning go hand in hand. When schools, families and the broader community work together to make healthy choices easy, student health and academic achievement improve.44 Currently, schools in Canada are involved in promoting healthy eating through activities such as providing breakfast, lunch and snack programs; hosting student forums to discuss healthy eating; inviting chefs to teach about healthy cooking; promoting a fruit or vegetable of the month; and partnering with local food producers to help students learn about locally-grown foods. Check out local websites like the Prince Edward Island Healthy Eating Alliance (www.healthyeatingpei.ca) for ideas on how to promote healthy eating. The School Nutrition Polices on PEI are currently within Elementary and Consolidated Schools. It is anticipated that they will be in all schools, including Intermediate and Senior High, by the Fall of 2009.
Food Intake

The results presented in this section capture largely weekday eating. The questions asked students the number of *times* they consumed a list of food and the number of *servings* they drank of various liquids. Please use caution in comparing the food results to Canada’s Food Guide as times do not necessarily equal servings.

**Fruit & Vegetables**

When vegetables, fruit and 100% fruit/vegetable juice are added together, 40% of girls and 43% of boys report consuming vegetables and fruit at least 6 times the day before the survey (where a serving of juice would be counted as one time). The graph to the left shows the number of times students reported eating vegetables and fruit and the number of servings of 100% fruit or vegetable juice students’ said they drank the day before the survey. Each category is reported separately in the graph.

*Please note: Times are not equal to servings. Serving size is not accounted for.*

**Quick Facts**

Canada’s Food Guide recommends: 1) eating at least one dark green and one orange vegetable each day and 2) having vegetables and fruit more often than juice.

**Milk**

Students were asked how many servings of white or chocolate milk, or soy beverage they drank the previous day (one serving = one cup or one small carton). The results show 62% of respondents consumed at least 2 servings of milk in the day before the survey.

Of concern are the 38% of students who drank one serving or less of milk the previous day.

Milk is the primary source of calcium and vitamin D in the diets of children and adolescents. Both are important during adolescence, a time of critical bone growth.

*Please note that the question did not ask about milk products like cheese, yogurt or cottage cheese.*

**PEI Quick Fact**

The PEI School Milk Foundation’s purpose is to ensure that milk is provided (with white milk at the lowest possible price) to PEI students in kindergarten to grade 12, and to provide material and programs for nutrition education.
Other Foods

Students were asked about their consumption of foods that provide few nutrients and are generally high in fat, sugar and salt (sodium). The results show 78% of students report eating candy, baked sweets or frozen desserts at least one time and 77% report drinking at least one serving of sweetened non-nutritious beverage the previous day.

**Number of Times Students Consumed High Fat, Salty or Sugar Snacks and Drinks* Yesterday**

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>1-2 times</th>
<th>3 or more times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candy/Chocolate/Sweets</td>
<td>22</td>
<td>53</td>
<td>25</td>
</tr>
<tr>
<td>Salty snacks</td>
<td>41</td>
<td>52</td>
<td>7</td>
</tr>
<tr>
<td>Sweetened non-nutritious beverages*</td>
<td>23</td>
<td>38</td>
<td>39</td>
</tr>
</tbody>
</table>

* Please note: one serving is reported as one time.

**Combined Number of Times Students Consumed High Fat, Salty or Sugar Snacks or Drinks**

- 7 or more times, 30%
- 4-6 times, 28%
- 2-3 times, 27%
- 1 time, 10%
- 0 times, 5%

**Quick Facts**

A snack of a 600 ml bottle of pop and a chocolate bar provides almost 25 tsp of sugar and 600 calories!

The number of times students consumed any of the above items during the previous day was summed to provide a picture of their total daily frequency of consumption of non food-group foods†.

According to the 2004 Canadian Community Health Survey, 25% of all calories consumed by teens come from non-food group foods, which include high fat, sugary and/or salty foods.34

†The following non-food group foods are included in the total: candy and chocolate, cake, pie, cookies, doughnuts, brownies and other baked sweets, ice cream, ice cream bars, frozen yogurt, popsicles®, sweetened non-nutritious beverages (including; fruit-flavoured drinks, regular pop, sports drinks, high energy drinks, hot chocolate, cappuccinos, frappaccinos, slurpees, slushies, snow cones) and salty snacks (including; chips, cheesies, nachos etc.)

**School Communities Can Make a Difference...**

Limiting foods and beverages high in calories, fat, sugar and salt (sodium) is an important step towards better health and a healthy body weight.45 The PEI School Nutrition Policies focus on the frequency of how often foods and beverages are served at school. These policies aim to limit students’ access to unhealthy food choices by only allowing foods with minimum nutritional value to be served at school up to twice a month. Consistency between classroom learning and the types of foods available in the school sends a strong message to students and helps them apply skills acquired in the classroom.
Breakfast Consumption

The results show 61% of boys and 52% of girls report eating breakfast every day in a usual school week (Monday to Friday). Breakfast eating is associated with improved academic performance and has been shown to be associated with lower rates of obesity.

Breakfast eating usually declines with age. A number of factors including concerns with body weight, and decreases in shared family meals appear to influence the decline in breakfast consumption in adolescents.

The chart below shows students who eat breakfast every day. In contrast, 7% of boys and 8% of girls reported they do not eat breakfast at all in a usual school week.

Students who reported they do not eat breakfast every day gave the following reasons for skipping breakfast:

<table>
<thead>
<tr>
<th>Reason</th>
<th>% responding “yes”</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don’t have time for breakfast</td>
<td>43%</td>
</tr>
<tr>
<td>The bus comes too early</td>
<td>19%</td>
</tr>
<tr>
<td>I sleep in</td>
<td>25%</td>
</tr>
<tr>
<td>I’m not hungry in the morning</td>
<td>42%</td>
</tr>
<tr>
<td>I feel sick when I eat breakfast</td>
<td>18%</td>
</tr>
<tr>
<td>I’m trying to lose weight</td>
<td>8%</td>
</tr>
<tr>
<td>There is nothing to eat at home</td>
<td>9%</td>
</tr>
</tbody>
</table>

School Communities Can Make a Difference...

Schools and community groups wishing to offer or improve student breakfast, snack or lunch programs should contact the PEI Healthy Eating Alliance (www.healthyeatingpei.ca). This group coordinates funding sources for breakfast and snack programs, including funding from the PEI Department of Education and Early Childhood Development, as well as Breakfast for Learning (www.breakfastforlearning.ca).
Eating Out

Away from home foods are higher in fat and energy compared with foods eaten at home.\textsuperscript{48} Frequency of fast food restaurant use has been associated with a significantly lower intake of fruits, vegetables, grains and servings of milk.\textsuperscript{49}

The results show that 44\% of students reported eating foods purchased at a fast food place or restaurant at least once in a usual school week, while 23\% reported eating these foods less than once per week, and 33\% reported not eating these foods at all in a usual school week.

### Number of Times Students Eat Foods Purchased at a Fast Food Place or Restaurant during a Usual School Week and Usual Weekend

<table>
<thead>
<tr>
<th>Number of times</th>
<th>School week</th>
<th>Weekend</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 times</td>
<td>33</td>
<td>48</td>
</tr>
<tr>
<td>1-2 times</td>
<td>30</td>
<td>48</td>
</tr>
<tr>
<td>3+ times</td>
<td>14</td>
<td>4</td>
</tr>
</tbody>
</table>

In addition, 40\% of students reported eating snacks purchased from vending machines, corner stores, snack bars or canteens at least once in a usual school week, while 18\% reported eating these foods less than once per week, and 41\% reported not eating these foods at all in a usual school week.

### Number of Times Students Eat Snacks purchased from a Vending Machine, Corner Store or Snack Bar during a Usual School Week and Usual Weekend

<table>
<thead>
<tr>
<th>Number of times</th>
<th>School week</th>
<th>Weekend</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 times</td>
<td>41</td>
<td>64</td>
</tr>
<tr>
<td>1-2 times</td>
<td>28</td>
<td>32</td>
</tr>
<tr>
<td>3+ times</td>
<td>12</td>
<td>5</td>
</tr>
</tbody>
</table>

School Communities Can Make a Difference...

The PEI School Nutrition Policy aims to enhance healthy eating at school by providing healthy food and beverage choices in vending machines, canteens and school food programs.
Dietary patterns of children and youth develop largely within the family environment. Some of the familial factors influencing youth include food exposure and availability, parental modeling, meal structure and family meals, parenting style and parental attitudes and knowledge about nutrition. Family meals are perceived positively by both children and parents. In a usual seven-day week, 76% of students report eating meals with at least one adult family member four or more times.

Generally, family presence at the evening meal is positively associated with children’s higher consumption of vegetables, fruits and dairy foods. Recognizing and supporting family connectedness is critical to the success of programs aimed at improving the nutrition of children and youth.

*Please note: this table contains the number of times students ate vegetables & fruit which may be different than the number of servings. In this table, one serving of juice is counted as one time.

<table>
<thead>
<tr>
<th>Meals with adult family member in a usual seven-day week</th>
<th>Percentage of Students Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ate vegetables &amp; fruit &lt; 6 times* yesterday</td>
</tr>
<tr>
<td>Eats 4 or more meals/week with adult family member</td>
<td>56</td>
</tr>
<tr>
<td>Eats less than 4 meals/week with adult family member</td>
<td>69</td>
</tr>
</tbody>
</table>

Quick Facts

Adolescents who watch television during family meals have been found to have lower intakes of vegetables, calcium-rich foods and grains and higher intakes of soft drinks compared with those not watching television during meals.

In addition, 13% of students reported eating meals while watching television less than once per week during a usual school week.

School Communities Can Make a Difference...

Teaching about healthy eating extends beyond the classroom health curriculum into the school environment and the community. Schools can help students learn about the many factors that contribute to food choices, including advertising, media, friends and family. The more students are aware of these influences the better prepared they will be to make healthy choices.
The School Environment

The school environment plays an important role in helping students live healthy lives. Schools are uniquely positioned to influence the health and well-being of students, ideally in partnership with home and community.

### Comprehensive School Health

*Comprehensive School Health (CSH)* is an international framework that helps us understand school health in “a planned, integrated and holistic” way. The health of students is affected not just by what happens in the classroom, but also by the whole school environment and beyond. Schools influence and are influenced by their broader community and cultural environments.

Using the four pillars from the CSH framework can support and enhance educational outcomes and the long-term health of youth. Employing a CSH framework encourages us to think holistically and to focus on actions within four distinct but inter-related pillars:

<table>
<thead>
<tr>
<th>Area</th>
<th>Reflections</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A healthy social and physical environment</strong> is reflected in:</td>
<td>• High quality relationships among and between staff and students in the school.</td>
</tr>
<tr>
<td></td>
<td>• Emotional well-being of students.</td>
</tr>
<tr>
<td></td>
<td>• Close relationships with families and the wider community.</td>
</tr>
<tr>
<td></td>
<td>• Well-maintained buildings, grounds, play space and equipment in and around the school.</td>
</tr>
<tr>
<td></td>
<td>• Basic amenities such as sanitation and air cleanliness.</td>
</tr>
<tr>
<td><strong>Effective teaching and learning is reflected in:</strong></td>
<td>• Resources, activities and provincial/territorial curriculum where students gain age-appropriate knowledge and experiences, helping to build the skills to improve their health and well-being.</td>
</tr>
<tr>
<td><strong>Healthy school policy is reflected in:</strong></td>
<td>• Management practices, decision-making processes, rules, procedures and policies at all levels that promote health and well-being, and shape a respectful, welcoming and caring school environment.</td>
</tr>
<tr>
<td><strong>Effective partnerships and services:</strong></td>
<td>• Build close connections between schools and students’ families.</td>
</tr>
<tr>
<td></td>
<td>• Build supportive working relationships within schools (staff and students), between schools and between schools and other community organizations and representative groups.</td>
</tr>
<tr>
<td></td>
<td>• Encourage health, education and other sectors to work together to advance school health.</td>
</tr>
<tr>
<td></td>
<td>• Community and school- based services that support and promote student and staff health and well-being.</td>
</tr>
</tbody>
</table>

Attention to each of these areas helps to ensure that students are better able to “realize their full potential as learners – and as healthy, productive members of society.”

### Tools and Resources

Canada’s Joint Consortium for School Health free online Healthy School Planner can help schools determine their health status and develop an action plan for making improvements. After completing an assessment, the action planning portion of the tool helps schools develop a feasible work plan by setting goals and prioritizing these goals based on cost, time and effort, importance, achievability, and school community support. Visit the Healthy School Planner at [http://eng.jcsh-cces.ca/](http://eng.jcsh-cces.ca/).
The School Health Action, Planning and Evaluation System (SHAPES) is a data collection and feedback system designed to support population-based intervention planning, evaluation, and field research related to youth. SHAPES is developed by the Centre for Behavioural Research & Program Evaluation (CBRPE) at the University of Waterloo with colleagues from across Canada.

The development of report content was a collaborative effort between several groups including:

- The Population Health Research Group (PHR) at the University of Waterloo
- The Centre for Behavioural Research and Program Evaluation (CBRPE) at the University of Waterloo
- The Health & Education Research Group (HERG) at the University of New Brunswick
- The Comprehensive School Health Research Group at the University of Prince Edward Island

SHAPES generates individual school reports from survey data. This year, through partnership with all of the above groups as well as the PEI Department of Education and Early Childhood Development, each of the schools participating in the SHAPES/YSS-PEI survey are receiving two Feedback Reports: one report details smoking and other related behaviours, while the other report combines physical activity and healthy eating with mental fitness. Through a largely automated system with quality control and editing procedures we can ensure that the data you receive are accurate and can be returned in a timely manner.

We value your input and would welcome your feedback on this report and/or on your participation in this initiative. Please feel free to contact the Comprehensive School Health Research Group toll-free at 1-888-297-8333.

THANK YOU FOR YOUR PARTICIPATION.
References


