



**2010-2011 SHAPES/YSS-PEI
PROFILE:**

**PRINCE EDWARD ISLAND
STUDENT HEALTH PROFILE**

MENTAL FITNESS
PHYSICAL ACTIVITY
HEALTHY EATING

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Prince Edward Island Student Health Profile

The School Health Action Planning and Evaluation System/Youth Smoking Survey – Prince Edward Island (SHAPES/YSS-PEI) is a provincial survey of students in grades 5 – 12 that combines the SHAPES survey with the local implementation of the national Youth Smoking Survey (YSS). The initiative is conducted by the Comprehensive School Health Research (CSHR) Group at the University of Prince Edward Island. The goal of the CSHR Group is to conduct high quality, policy-relevant school health research, while developing knowledge to help foster healthy school environments. As part of our activities, we work in partnership with local, provincial, and national collaborators, various levels of government, school boards, staff and students. SHAPES/YSS-PEI is conducted in collaboration with the Propel Centre for Population Health Impact at the University of Waterloo and is funded by the PEI Department of Education and Early Childhood Development (DEECD), the PEI Department of Health and Wellness, and Health Canada (YSS).

We are pleased to provide this profile of results for Prince Edward Island. The results are based on information collected from **6563** students at **54** schools during the 2010-2011 school year. In the survey, students were asked a variety of questions about mental fitness, physical activity, healthy eating and tobacco/drug use. This profile describes the provincial results for mental fitness, physical activity, and healthy eating. A complete report of provincial tobacco and drug use results will be available following Health Canada's release of the data in June 2012.

Individual school health profiles (complete with tobacco/drug use information, where applicable), were sent to all participating schools in the province. These profiles are intended to help schools, together with school boards, students, parents, and other community partners, to:

- Identify trends in mental fitness, physical activity, healthy eating and tobacco/drug use
- Plan actions related to issues identified throughout the profile
- Coordinate these efforts with the broader school community (local health and education organizations, municipalities, businesses, etc.)

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 how to use the information contained herein are listed at the beginning of the profile. In addition, staff from the CSHR Group and the DEECD is planning to work with schools—as well as provincial departments, alliances, and NGOs—to support their use of the data.

The data in this profile 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.

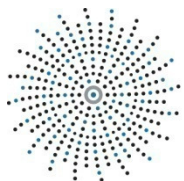
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The School Environment

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. 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”. Employing a CSH framework encourages us to think holistically and to focus on actions within four distinct but inter-related pillars:



A healthy social and physical environment is reflected in:	<ul style="list-style-type: none">• High quality relationships among and between staff and students in the school.• Emotional well-being of students.• Close relationships with families and the wider community.• Well-maintained buildings, grounds, play space, and equipment in and surrounding the school.• Basic amenities such as sanitation and air cleanliness.
Effective teaching and learning is reflected in:	<ul style="list-style-type: none">• 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.
Effective partnerships and services are reflected in:	<ul style="list-style-type: none">• Close connections between schools and students’ families.• Supportive working relationships within schools (staff and students), between schools, and between schools and other community organizations and representative groups.• Health, education and other sectors working together to advance school health.• Community and school-based services that support and promote student and staff health and well-being.
Healthy school policy is reflected in:	<ul style="list-style-type: none">• 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.

Tools and Resources

As a participant in SHAPES/YSS-PEI, school contacts were asked to complete one module of the Joint Consortium for School Health’s Healthy School Planner (HSP). The Healthy School Planner is a **free online tool** that helps schools assess how well their school environment promotes health. The tool is currently undergoing revisions; further information about the HSP can viewed at www.healthyschoolplanner.uwaterloo.ca.

How to Use This Profile

This profile can be used 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 their levels of physical activity and healthy eating. *We encourage these results to be shared with the broader school community, along with **students, parents, and staff, 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). Overall, student wellness can be improved through contributions at many levels.*** For example:

Provincial Departments, Alliances, and Community Organizations could:

- 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, staff time, funding, programs, materials) at the local, regional, and provincial levels.
- Partner/collaborate/coordinate with each other to provide support to schools and the school community.

School and School Board staff could:

- 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.
- 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 school boards 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.

Parents/Families and the Community could:

- 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 health issues.
- Participate in an open house where community groups can share health and wellness programs.

Students could:

- 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.

CHANGE IS MORE LIKELY TO SUCCEED WHEN WE ...

- Engage all stakeholders, especially students. 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.

PLEASE NOTE: This is the second cycle of SHAPES/YSS-PEI data collection. Where possible, this profile draws comparisons between the 2008-09 and the 2010-11 results. However, in cases where the sample size is small, comparisons by year or gender are unable to be reported.

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Mental Fitness: The Issue

What is Mental Fitness?

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

MENTAL FITNESS can impact a student's capacity to make positive changes in their daily routines, such as eating healthy, being physically active, and living tobacco-free.

Mental Fitness is fostered in environments and relationships that address important psychological needs, which include: autonomy, relatedness, and competency.

Autonomy: "I AM ABLE TO MAKE CHOICES ABOUT THINGS THAT ARE IMPORTANT TO ME."

Students need personal freedom to make choices and decisions that affect their lives. When this need is satisfied along with the other needs, freedom and choice are expressed in a way that respect for self and others is demonstrated.

Relatedness: "I FEEL INCLUDED, SUPPORTED AND ENCOURAGED BY OTHERS."

Students need connection to, and closeness with, family, peers, and other significant individuals. This need is met through student interaction with others, membership in groups (inside/outside school), and support and encouragement from others.

Competency: "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. Fulfilment of this need provides students with a sense of personal achievement and accomplishment.

Satisfaction of all three mental fitness needs is associated with emotional well-being or resiliency, as well as healthy lifestyle behaviours. Meeting mental fitness needs may:

- **Increase pro-social 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, physical, and academic development.

Quick Facts:

Self-esteem and self-worth are higher in students when their teachers enable them to be more autonomous.¹

Mental Fitness in Prince Edward Island

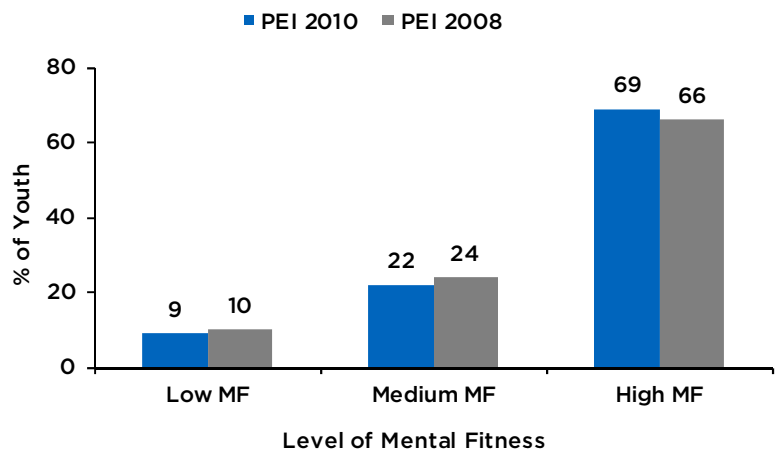
Youth responses to questions about the need for autonomy, relatedness and competency were combined to produce an overall measure of mental fitness. The graph to the right shows the percentage of youth considered to have “low”, “middle” and “high” mental fitness.

Categorizing mental fitness levels in this way helps us to understand possible influences behind students’ varying mental fitness scores. For example, it becomes possible to determine what characterizes students at the high versus low mental fitness levels. Can youth at the high mental fitness level act as peer leaders to help other youth? By identifying what factors are important in developing and maintaining high mental fitness levels in students (autonomy, relatedness, and competence), targeted programs, policies, curricula, and interventions can be developed to help foster positive emotional well-being.

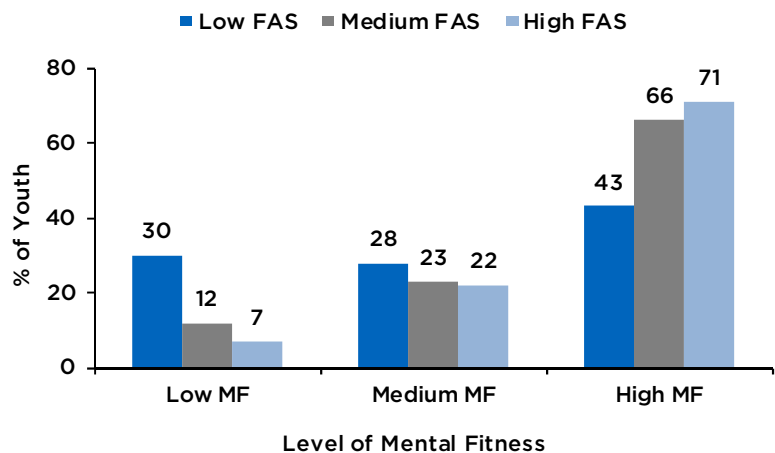
Socioeconomic inequalities play an important role in the patterning of health and health behaviours in the youth population. Health inequalities stemming from an unequal distribution of resources (creating different levels of socioeconomic status, or SES) are pervasive in many places, including here in PEI. In the past, the SES of the head of the household was the proxy for SES applied to children and youth. However, issues with obtaining parental SES information on self-reported adolescent surveys led to the development of a new measure, the Family Affluence Scale (FAS).² Using the concept of material conditions in the family as its base, the FAS provides a useful alternative indicator of SES, particularly for large-scale surveys which gather information directly from youth on their health behaviours.³

Rather than asking students to answer questions about their parent’s occupations or incomes, the FAS asks students about things they are likely to know, such as how many computers their family owns, or if they own a car, van, or truck. Possessing these items is considered to reflect affluence while lacking them suggests material deprivation.⁴ Studies have shown that poor mental well-being (e.g. not feeling happy or feeling helpless) is more prevalent among less affluent youth.¹ The graph above demonstrates that in PEI there is a relationship between levels of family affluence and the mental fitness of youth.

MENTAL FITNESS LEVELS IN PEI



MENTAL FITNESS LEVELS BY FAMILY AFFLUENCE IN PEI



School Communities Can Make a Difference

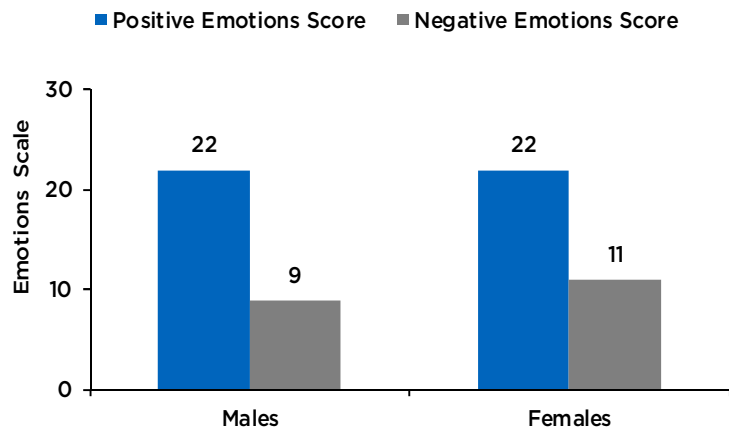
Schools, homes, and communities are all key settings for addressing mental fitness needs. Needs associated with relatedness, competency and autonomy can either be met or thwarted by social relationships or interactions with others. In any setting, everyone has a role to play in fostering mental fitness by giving children and youth the chance to make decisions, encouraging and supporting their actions, and recognizing their unique strengths.

Pleasant and Unpleasant Emotions

Students were asked to what extent they felt pleasant emotions or affect (e.g. happy, lively) and unpleasant emotions or affect (e.g. sad, upset) during the week prior to being surveyed. These responses were then combined and calculated to produce two overall scores reflecting how often youth feel positively versus negatively. The provincial results are shown in the graph to the right.

PLEASE NOTE: These results are not percentages, but are based on a scale from 6 to 30. A score of 6 would indicate that students experienced slight to no pleasant or unpleasant emotions, while a score of 30 would suggest that students experienced extreme pleasant or unpleasant emotions during the past week.

EMOTIONS YOUTH EXPERIENCE IN PEI, BY GENDER

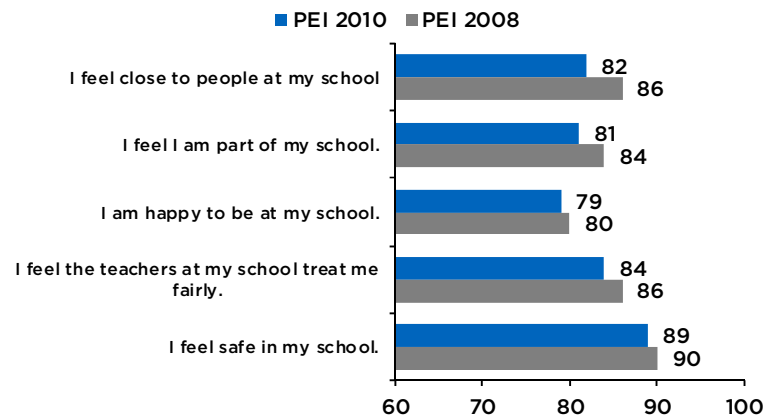


School Connectedness

A student's sense of connection to school can support healthy behaviour 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 risky behaviours.⁵ A series of five statements are used to measure school connectedness. The summary score can range from a low of 5 to a high of 20. This year, the provincial average was **15**, while the previous provincial average was **16** based on the 2008-2009 SHAPES/YSS-PEI results⁶.

The chart to the right shows responses of students to the individual statements that comprise the school connectedness scale. These are compared to responses from the 2008-2009 SHAPES/YSS-PEI provincial data.⁶

SCHOOL CONNECTEDNESS IN PEI



Help Seeking Behaviour

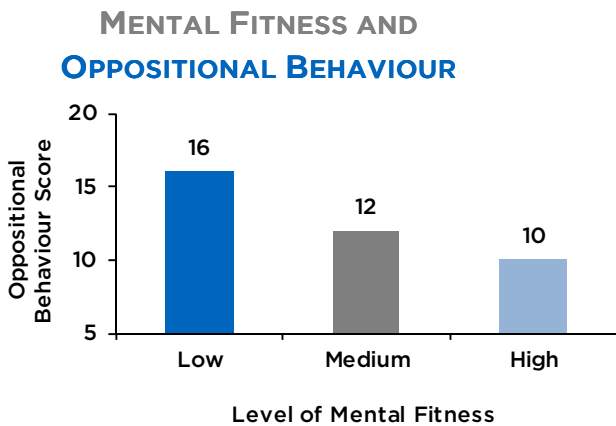
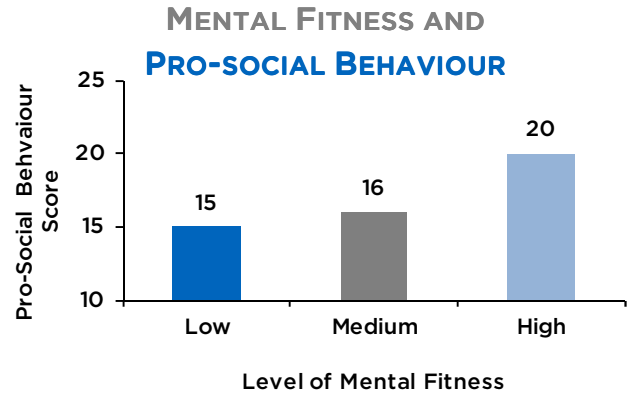
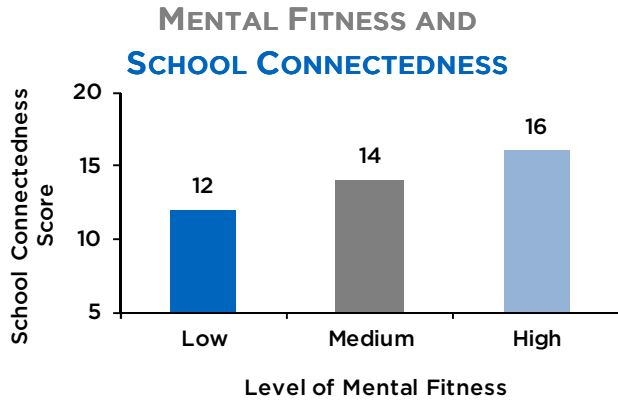
We asked students who they seek assistance from **often** and **most of the time** when they have a school-related problem (e.g., too much homework, trouble learning a subject, a poor grade). According to the results, students in PEI are most likely to seek help from a **parent or guardian** or **friend** for school-related problems. This is compared to the results from the 2008-09 SHAPES/YSS-PEI provincial data.⁶

WHO STUDENTS SEEK ASSISTANCE FROM FOR SCHOOL-RELATED PROBLEMS



Relationship between Mental Fitness and Other Behaviours

Students with higher levels of mental fitness tend to report higher levels of school connectedness (e.g., feeling part of and close to school) and exhibit more pro-social behaviours such as helping people and sharing things without being asked. Alternatively, students with lower mental fitness scores tend to report more oppositional behaviours such as skipping classes, bullying, talking back to teachers, or stealing.



Quick Facts:

Two important, related developmental tasks of youth are to assume greater autonomy and exercise responsible decision-making. School is a natural setting for youth to practice these skills. Students who feel connected to school exhibit more health promoting and fewer risky behaviours.⁷⁻⁹

It is important to note that researchers have not yet determined that increasing mental fitness causes improvements in school connectedness, pro-social behaviour, and oppositional behaviour. Although current research shows that mental fitness is associated with these other behaviours, the direction of the relationships is unknown. That is, it is still unclear which way the causal arrow points: does high mental fitness lead to school connectedness or do feelings of increased school connectedness lead to higher levels of 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

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.

Meeting Mental Fitness Needs

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

- empowering students to collaborate with their peers in development of 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 emphasis on 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)

School Communities Can Make a Difference

Social environments that contribute to the satisfaction of mental fitness needs:

- Are non-judgmental, understanding and provide opportunities to hear the voice and perspectives of youth
- Provide choices
- Encourage youth to take initiative and assume responsibility
- Provide reasons for the establishment of rules and limits
- Minimize pressure and avoid the use of coercive approaches

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.¹⁰



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 students, but can also increase physical activity and healthy eating.

Physical Activity: The Issue

According to Canada's 2010 Report Card on Physical Activity for Children and Youth, Canada has received a failing grade (F) for the fifth year in a row, indicating that the progress towards improving physical activity among children and youth has slowed down.¹¹ In fact in 2008-2009, only 29% of youth in PEI were meeting Canada's recommended physical activity guidelines.⁶

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.¹²
- Physical activity strengthens the heart, bones and muscles, improves fitness and can help achieve a healthy body weight.¹³
- Physical activity is associated with increased self-esteem and decreased depression and anxiety.¹⁴

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.¹⁵
- Increased participation in physical education is associated with improved classroom behaviour, as well as increased enthusiasm toward school and school work.¹⁶
- Physical activity is associated with improved behaviour and cognitive functioning in youth with attention-deficit disorders and problems controlling impulsive actions.¹⁷

Physical Activity is a **Community Issue**

- Lifestyle patterns begin in childhood/adolescence and tend to carry over to adulthood; research shows that as much as one half of the decline between the ages of 30 and 70 is due not to aging itself but to an inactive way of life.¹²
- 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.¹⁸
- In 2001, the economic burden of physical inactivity in Canada was estimated at \$5.3 billion.¹⁹

Quick Facts:

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."²⁰

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

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 and community activities increases youth autonomy 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).

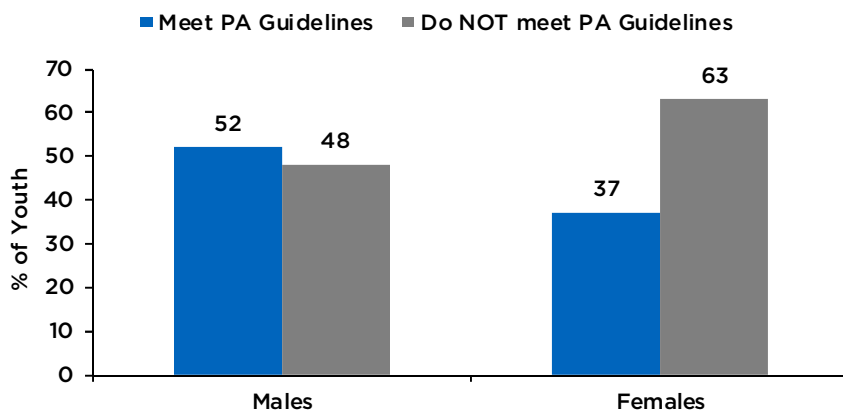
PLEASE NOTE: Canada's Physical Activity (PA) Guidelines changed in January 2011. When reporting 2010-11 PA data in this profile, we have used the new guidelines. For further information visit: www.phac-aspc.gc.ca/pau-uap/paguide/.

Physical Activity Levels

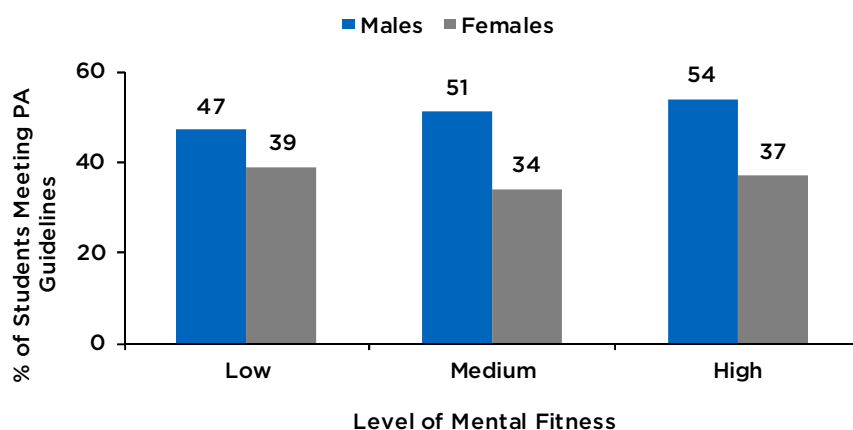
Based on student reports, **45%** of students were physically active for at least 60 minutes per day (52% of boys and 37% of girls). In 2008-09, **29%** of students reported being physically active for at least 90 minutes per day.⁶ Please note that, due to a recent change in Canada's Physical Activity Guidelines, these results are not comparable. In addition, *please use caution in assessing these results; our testing indicates that students typically over-estimate their time spent being physically active. For example, time spent at waiting for a ski lift, or at stoplights, may be counted as active time on surveys.*

The graph to the right shows the relationship between physical activity and mental fitness. Typically, students with higher mental fitness are more physically active. Satisfying mental fitness needs and increasing physical activity may be one way to see improvements in both areas.

YOUTH IN PEI MEETING PHYSICAL ACTIVITY GUIDELINES, BY GENDER



PHYSICAL ACTIVITY AND MENTAL FITNESS IN PEI, BY GENDER



Quick Facts:

Adolescents who 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.²¹ 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.²²

School Communities Can Make a Difference

The new Canadian Physical Activity Guidelines recommend that children and youth (aged 5-17) accumulate at least 60 minutes of physical activity daily. Of that time spent being active, the Guidelines suggest that youth engage in vigorous-intensity activities and activities that strengthen bone and muscle at least 3 days per week. For more information on these new Guidelines, visit the Public Health Agency of Canada's website: <http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/pa-ap/index-eng.php>.

Health Canada recommends:

- Posting *Canada's Physical Activity Guidelines and Food Guide* in cafeterias and other youth gathering locations
- Setting class, school, and community goals for physical fitness
- Providing and maintaining community facilities to encourage physical activity (bike-friendly areas, skateboard parks, etc.)

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.²³

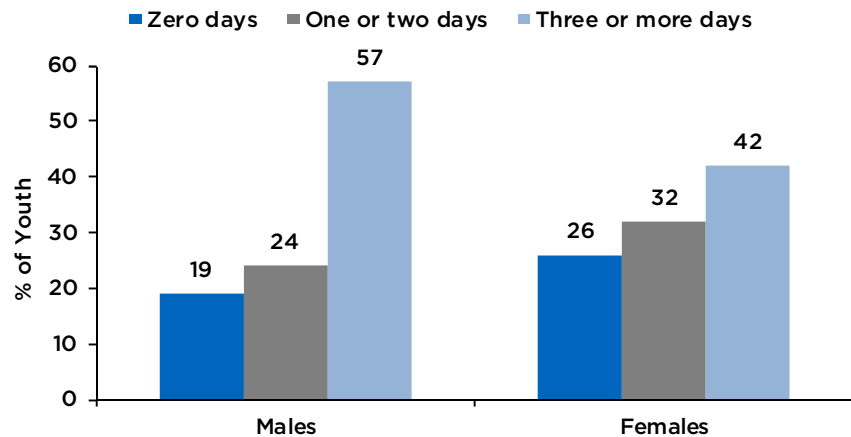
The **results show 77% of youth** reported participating in strength training activities such as push-ups, sit-ups, pilates and weight lifting in the week preceding the survey (please note that weight training is generally not recommended for students under age 15 years). This is compared to **76%** of youth in 2008-09.⁶ Of youth who reported participating in strength training, males reported that they strength trained an average of 3.8 days, and females reported that they strength trained an average of 3.1 days.

Flexibility Training

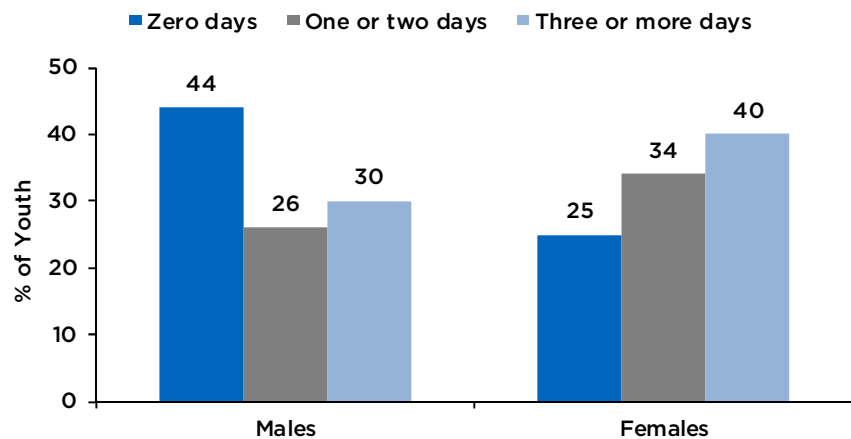
Flexibility training ("stretching") helps to maintain the ability to use joints through the full range of motion. It is an important component of living a healthy, active lifestyle, but is often overlooked in physical activity programming. Canada's Physical Activity Guide recommends that youth stretch their muscles every day and that adults do flexibility activities 4 to 7 days a week as part of a regular physical activity program.²⁴

The **results show 65% of youth** reported doing exercises for flexibility such as stretching and yoga in the week preceding the survey. Of youth who reported participating in flexibility training, males reported that on average they exercised for flexibility 3.1 days, and females reported that they averaged 3.2 days of flexibility training. This is compared to **63%** of youth in 2008-09.⁶

FREQUENCY OF STRENGTH TRAINING IN THE PAST 7 DAYS, BY GENDER



FREQUENCY OF FLEXIBILITY TRAINING IN THE PAST 7 DAYS, BY GENDER



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 exposed to and encouraged to do these activities both in school (through physical education classes, intramurals, etc) and out of school (community activity programs or sports teams, etc). Strength training clubs organized through the school could be particularly useful for high school students. A range of activities, such as weight lifting, pilates, yoga, circuit training and plyometrics could be offered. Regardless of the activity, 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.

When Students are Active

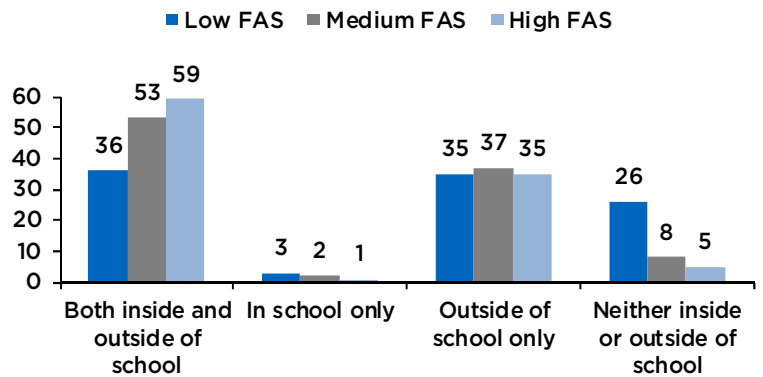
There are various times and ways that students can be physically active. We asked students questions about different opportunities they have for physical activity, such as extracurricular activities - at school and outside of school.

The top graph to the right shows the percentage of students who participate in physical activity in school only (for example: intramurals, after-school sports, school sports teams, etc.), outside of school only (for example: sports not organized by the school, individual activities such as jogging or biking, etc.), both inside and outside of school, or neither. These results have been broken down by levels of family affluence. Research has shown that high levels of affluence are a predictor of participation in moderate or vigorous physical activity.² The **results show that, overall, 58% of students in PEI** participate in physical activity in school. On the other hand, **26%** of less affluent students do not participate in physical activity at all, as compared to only **5%** of more highly affluent students.

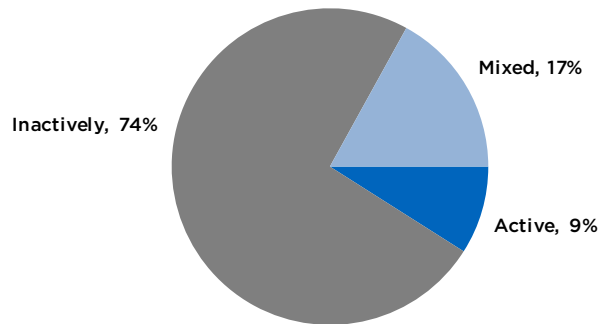
Active commuting to school is one way for children and youth to increase their daily level of physical activity. Research has shown that youth who actively commute to school tend to be more physically active overall, have greater cardio-respiratory fitness and have healthier body weight.²⁵⁻²⁶ The bottom graph to the right shows the percentage of youth in PEI who usually get to school actively (e.g. walk, bike, skateboard), inactively (e.g., car, bus, public transit) or mixed (actively and inactively).



PARTICIPATION IN EXTRACURRICULAR ACTIVITY BY FAMILY AFFLUENCE



HOW YOUTH COMMUTE TO SCHOOL



School Communities Can Make a Difference

Schools have the potential to influence youth activity levels through Physical Education classes. Decreasing wait times (by using small groups) is a good way to increase activity levels during class time. Both in and out of school, research suggests that physical activity should not be forced or taken away as punishment, since this deters youth participation.²⁷

Communities also play a role in encouraging active transportation by providing bike lanes, sidewalks, and crossing guards to ensure students can get to and from school safely. Schools can further encourage active transportation by providing bike racks/locks and secure areas where students can leave equipment. *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 organizations like Recreation PEI (www.recreationpei.ca) or Go! PEI (www.gopei.ca) for additional resources to promote active living. Go! PEI promotes physical activity and healthy eating through free classes and activities for all ages in communities across PEI.

Sedentary Behaviour

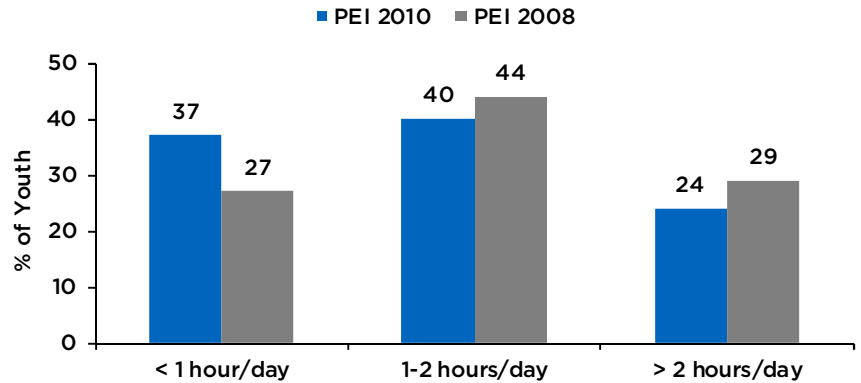
By definition, sedentary behaviours tend to be counterproductive to physical activity; however, learning activities (e.g. reading and doing homework) help students achieve other goals. In Prince Edward Island, **48% of youth** reported doing 1-6 hours per week of homework.

Watching a lot of TV has been linked to increases in smoking uptake in youth.²⁸ TV is also incompatible with healthier, more active choices for leisure time activities. Results show that **24% of students** reported that they typically watch more than 2 hours of TV per day, with **24% of males** compared to **24% of females** exceeding the two hour recommended guidelines.²⁹ The chart to the right shows the amount of time PEI students reported watching TV in 2010-2011 as compared to 2008-09.⁶

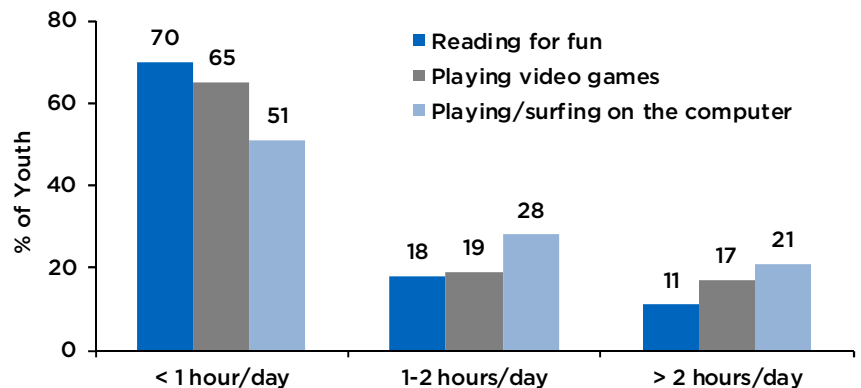
Besides the number of hours watching TV, youth also spend time playing video games and playing/surfing on the computer in their leisure time. We asked youth about the amount of time they spend engaged in these activities as well as time spent reading for fun (not for school). The chart to the right shows the average number of hours per day youth reported doing these activities.

In general, screen time tends to be higher among males when compared to females, and playing video games appears to be responsible for this difference.³⁰ **65% of males** and **34% of females** reported playing video games or surfing on the computer for more than 2 hours per day.

HOURS SPENT PER DAY WATCHING TV/VIDEOS



HOURS SPENT READING FOR FUN, PLAYING VIDEO GAMES & PLAYING/SURFING ON THE COMPUTER



School Communities Can Make a Difference

The Canadian Sedentary Behaviour Guidelines (www.csep.ca/english/view.asp?x=804) recommend that children and youth (ages 5-17) limit their leisure-related sedentary behaviour and screen time to no more than two hours per day. Specifically, the Guidelines recommend three areas in which sedentary time can be swapped for active time:

- 1) **Active transportation** - rather than driving or taking the bus, encourage students to walk, bike, board, or blade to school where possible.
- 2) **Active play** - the after school time period is a great time to get youth up and moving! After school should be a fun, regular time for physical activity, and a time to build important physical and social skills; and
- 3) **Active family time** - parents are often a child's best role model for active living. Be smart about screen time - swap video games or TV in the evening for a new active game with the family.

Quick Facts:

The Canadian Paediatric Society recommends restricting television (TV) or leisure-related screen time to no more than two hours per day.²⁹ Children with higher screen time tend to be obese, have low fitness levels, and lower levels of self-efficacy for physical activity.¹¹

Physical Activity at School

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

- **47% participate** in non-competitive activities (e.g. intramurals) at school (males 49%, females 45%). This is compared to **46%** of students in 2008-09.⁶
- **44% participate** in competitive sports at school (males 45%, females 43%), This is compared to **44%** of students in 2008-09.⁶
- **68% reported** participating in other physical activities outside of school. This is compared to **70%** of students in 2008-09.⁶

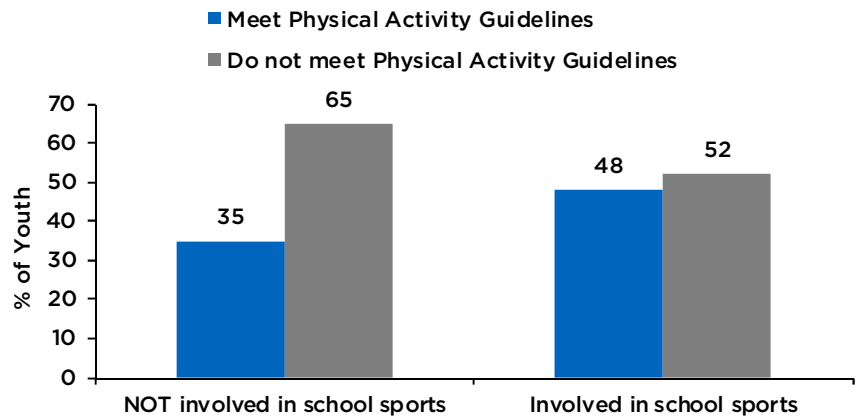
Overall, **58% of students** participated in at least one competitive or non-competitive school sport/club (males 60%, females 56%); in this group, **52% of students** did not meet the physical activity guidelines (60 min/day). Compare this to the **42% of students** who do not take part in competitive or non-competitive school sports/clubs (males 40%, females 44%); **65% of these students** did not meet the physical activity guidelines (60 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.³¹ The graph to the right shows the relationship between mental fitness and youth involvement in competitive or non-competitive school-organized physical activities.

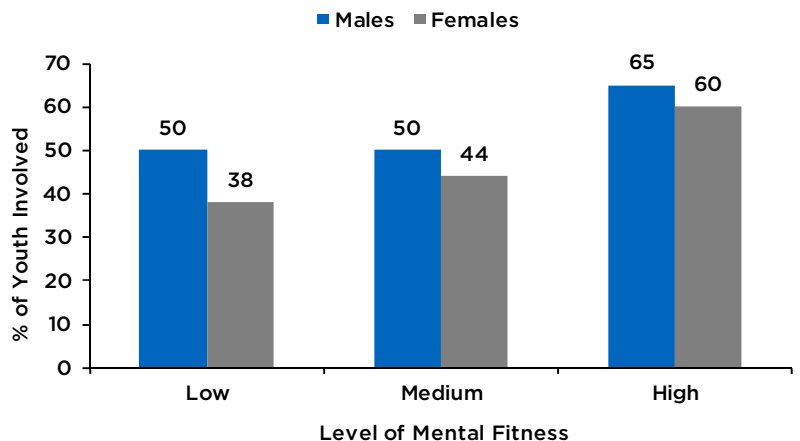
Students were asked what they thought about the number of competitive and non-competitive sports/clubs offered at their school:

- 18% said there are too few sports/clubs offered
- 50% 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

STUDENT PHYSICAL ACTIVITY LEVELS WHEN INVOLVED IN SCHOOL-ORGANIZED



RELATIONSHIP BETWEEN MENTAL FITNESS AND INVOLVEMENT IN SCHOOL-ORGANIZED PHYSICAL ACTIVITIES, BY GENDER



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.³²

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.³³ The results show:

- **72% of students** felt that emphasis is placed on developing positive attitudes about physical activity and **66% 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).
- **74% of students** felt that emphasis is placed on student participation in competitive sports, and **58% felt** the same about recreational sports.

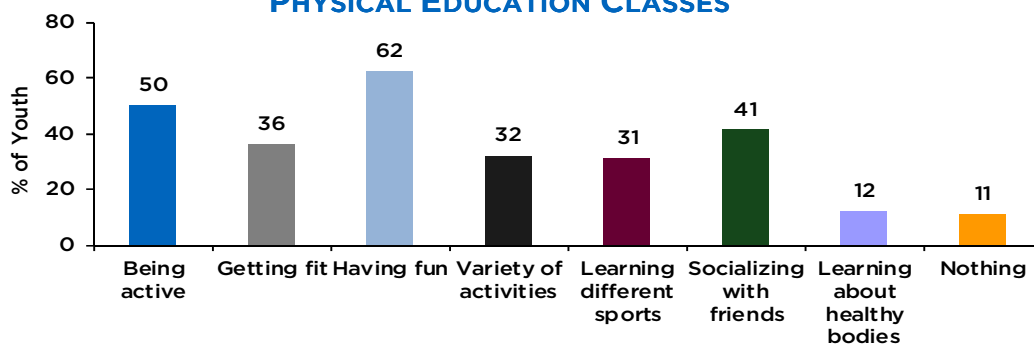
Quick Facts:

The education system should not bear sole responsibility for students' activity. Parents and communities 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.³⁴

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; **students** in PEI reported an average of 1.8 PE classes in the last 7 days. The graph below shows which aspects of their physical education class students enjoyed. Students could mark more than one item.

DO THE FACILITIES AT YOUR SCHOOL MEET THE PHYSICAL ACTIVITY NEEDS OF STUDENTS?	% WHO SAID YES 2010	% WHO SAID YES 2008 ⁶
INDOOR FACILITIES	88%	84%
OUTDOOR FACILITIES	75%	76%

WHAT STUDENTS ENJOY ABOUT PHYSICAL EDUCATION CLASSES



School Communities Can Make a Difference

Schools can help youth get involved with physical activity at school by:

- Providing opportunities for extracurricular physical activities before and after school.
- Organizing a physical activity challenge/competition between youth, teachers and parents.
- Using reminders (announcements, signs, etc.) to increase student awareness about activities.

A great way for community members to support physical activities at school is through volunteering.

Schools cannot do it alone; they depend on the help of many dedicated volunteers to coach, referee, and supervise the many extracurricular activities that are offered!

Social Influences on Physical Activity

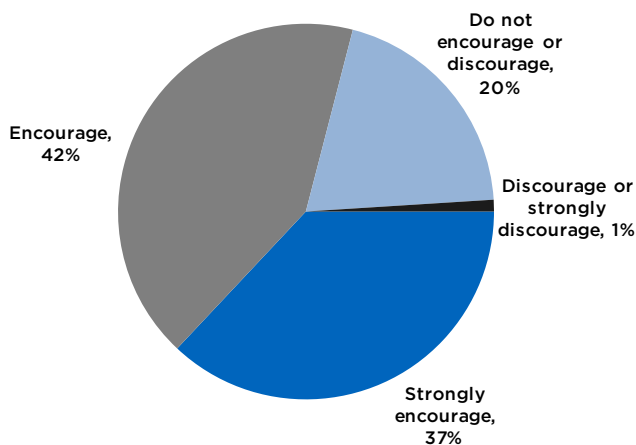
Peers and family members can influence students' behaviours directly (peer pressure) or indirectly (modelling).³⁵ Active youth are more likely to report that they have friends who are active compared to inactive youth. All youth were asked, "How many of your closest friends are physically active?" The results are shown in the table to the right.

HOW MANY OF YOUR 5 CLOSEST FRIENDS ARE PHYSICALLY ACTIVE?	PERCENT OF STUDENTS RESPONDING	
	DO NOT MEET PA GUIDELINES	MEET PA GUIDELINES
0	6	3
1 OR 2	23	13
3 OR MORE	71	84

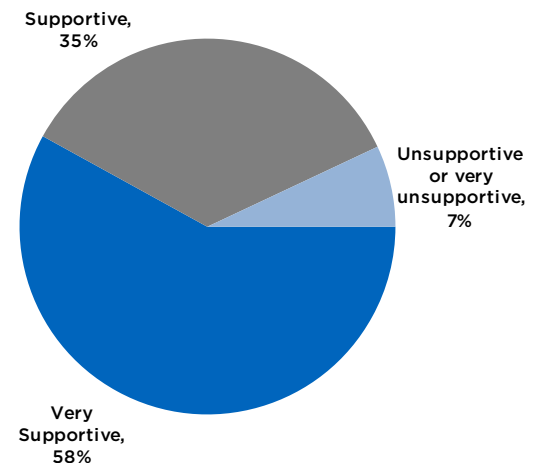
Youth reported that **80%** of their mothers were active, while **82%** of their fathers were active. Generally, active youth are more likely to report that they have active parents. However, the results may not show inactive students reporting fewer active friends or inactive parents. This may point 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 also asked how much their parents encouraged and supported them to be physically active. The results show **77%** of students had parents who both encouraged and supported them.

PARENTAL ENCOURAGEMENT OF PHYSICAL ACTIVITY



PARENTAL SUPPORT FOR PHYSICAL ACTIVITY



School Communities Can Make a Difference

Physical activity is often defined by leisure activity with peers. Supporting students to develop skills to promote positive social influences can be helpful. Direct instruction, modelling, and rehearsal are most effective for learning these skills.³⁶ 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.¹⁴ 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.³⁷

Healthy Body Weight

Physical activity and healthy eating determine a person's body weight. A healthy body weight is a key component of a well-balanced lifestyle. According to the 2008-2009 SHAPES-PEI data, **30%** of PEI youth aged 11-18 were considered overweight or obese.⁶ Using student self-reported data, the results show that **69% of students in PEI currently** fall within the recommended healthy weight category for their age.

For populations, we can use body mass index (BMI) to determine whether body weight is healthy.³⁸⁻³⁹ BMI compares a person's weight to their height.

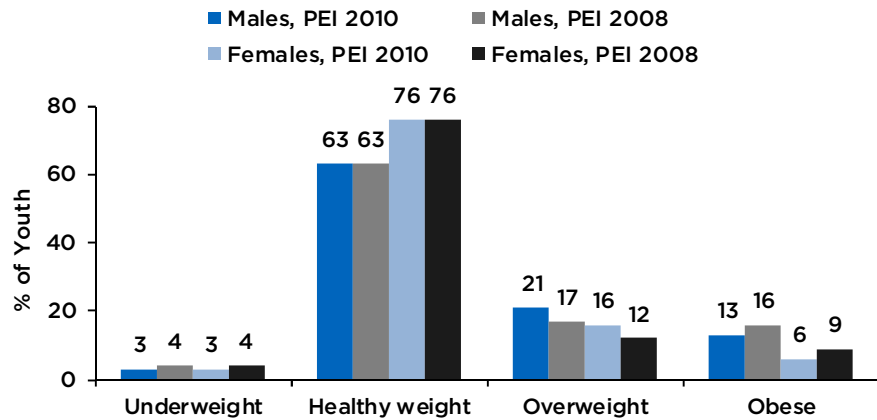
$$\text{BMI} = \frac{\text{weight(kg)}}{\text{height(m)}^2}$$

In this survey, BMI has been calculated using self-reported height and weight.

At low levels of mental fitness, BMI tends to be relatively high for both males and females. As mental fitness increases there is a decrease in BMI scores. This decrease levels off as mental fitness increases to high levels.

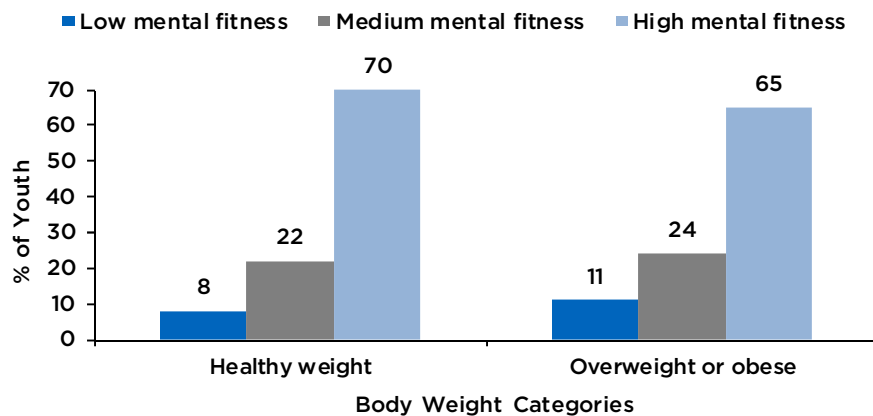
Being overweight during childhood can lead to increased illness and risk of chronic diseases such as heart disease, cancer and type-2 diabetes.³⁷ Overweight and obese youth are often stigmatized by peers and adults.³⁸ These youth may experience psychological stress, and have a poor body image, as well as poor self-esteem.¹⁴

CATEGORIES OF SELF-REPORTED HEIGHT AND WEIGHT, BY GENDER



PLEASE NOTE: Caution should be used in interpreting these figures as they may have been under- or over-estimated.

BODY WEIGHT AND MENTAL FITNESS IN PEI



PLEASE NOTE: The BMI categories used in this report are based on the World Health Organization (WHO) Child Growth Standards as these guidelines have been widely adopted throughout Canada.³⁹

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. Schools support student education about healthy weights through formal Health and Physical Education outcomes and adherence to School Nutrition Policies. Parents and communities also play an important role in supporting healthy weights by creating an environment outside of school that is conducive to making healthy food choices. In PEI, such community-based efforts have included food skills development classes, offering healthy options at recreation facilities, and providing support for children's summer camp programs that teach healthy snack and lunch preparation.

Healthy Eating: The Issue

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 2008-2009, 58% of PEI youth ate less than 6 servings of vegetables and fruit per day.⁶
- 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.⁴¹
- During adolescence, youth become more responsible for making choices about what they eat.

Healthy Eating is a **School Issue**

- Schools are an ideal setting to establish and promote healthy eating amongst children and youth.⁴²
- Well-nourished children and adolescents are more likely to be better prepared to learn, be active, and maintain their health as adults.⁴³
- 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.⁴⁴

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 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.⁴⁵
- 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.⁴⁶

Eating Well with Canada's Food Guide

Eating Well with 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 visit: www.healthcanada.gc.ca/foodguide.

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. Currently, school communities in PEI are involved in promoting healthy eating through activities such as:

- Hosting student forums to discuss healthy eating.
- Inviting chefs to teach about healthy cooking.
- Implementing breakfast and/or healthy snack programs.
- Promoting a fruit or vegetable of the month.
- Partnering with local food producers to help youth learn about locally-grown foods.
- Replacing "pizza day" or class pizza parties with healthy alternatives.
- Removing the sale of junk food and soda at the school.
- Implementing school nutrition policies.
- Supporting Student Nutrition Action Committees (SNAC) - student groups at the intermediate/senior level helping to improve healthy eating in their own schools.

Many of these initiatives would not be possible without the support of parent volunteers and other community members.

Check out the PEI Healthy Eating Alliance website (www.healthyeatingpei.ca/pei-school-nutrition-policy.php) to view the current PEI School Nutrition Policies and get some great ideas on how to promote healthy eating!

Also, there is a new Federal healthy eating/active living resource, which can be found at <http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/educ-comm/toolkit-trousse/index-eng.php>.

Food Intake

Fruit & Vegetables

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 drinks. Please use caution in comparing these results to Canada's Food Guide as *times* do not necessarily equal *servings*.

When vegetables, fruit and 100% fruit/vegetable juice are added together, **38% of girls** and **39% of boys** report eating vegetables and fruit at least 6 times the day before the survey.

PLEASE NOTE: Times are not equal to servings. Times do not take into account serving size.

Research suggests there is a relationship between family affluence and food choices. For example, youth from less affluent families have been found to consume more soft drinks/high-sugar foods compared to youth from more affluent families.² The graph to the right shows the relationship between levels of family affluence and meeting daily guidelines for fruit and vegetable consumption.

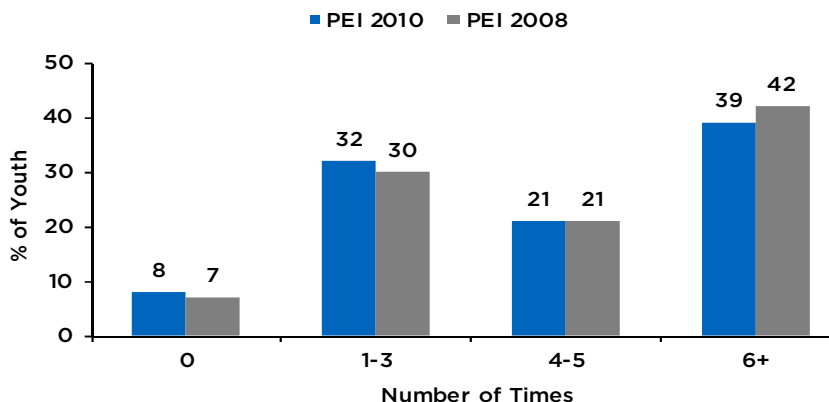
Milk

Students were asked how many servings of white/chocolate milk or soy beverage they drank the previous day (one serving = one cup or one small carton). The results show **60% of students** consumed at least 2 servings of milk on the day before the survey, which is the daily recommended serving.

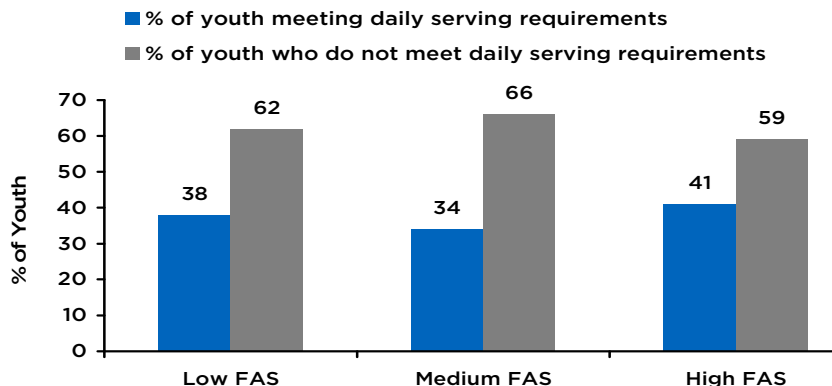
Of concern are the **41% of students** who drank one serving or less of milk *the previous day*. Milk is the primary source of calcium and vitamin D in the diets of children and adolescents. Both of these nutrients are important during adolescence, a time of critical bone growth.

PLEASE NOTE: The question did not ask about milk products like cheese, yogurt or cottage cheese.

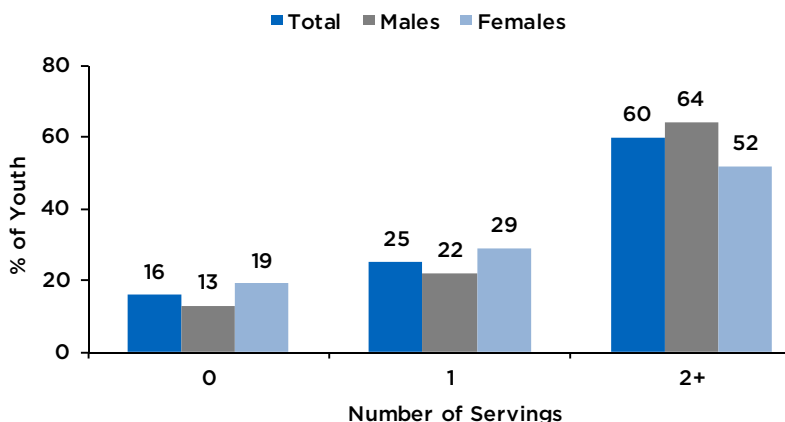
COMBINED NUMBER OF TIMES YOUTH CONSUMED FRUIT, VEGETABLES AND JUICES YESTERDAY



RECOMMENDED DAILY SERVINGS OF FRUIT AND VEGETABLES BY FAMILY AFFLUENCE



NUMBER OF SERVINGS OF MILK YESTERDAY, BY GENDER



Other Foods

Youth were asked about their consumption of foods that provide few nutrients and are generally high in fat, sugar, and salt (sodium). The results show **75% of students** reported eating candy, baked sweets, or frozen desserts and **72% reported** drinking sweetened non-nutritious beverages at least once the previous day.

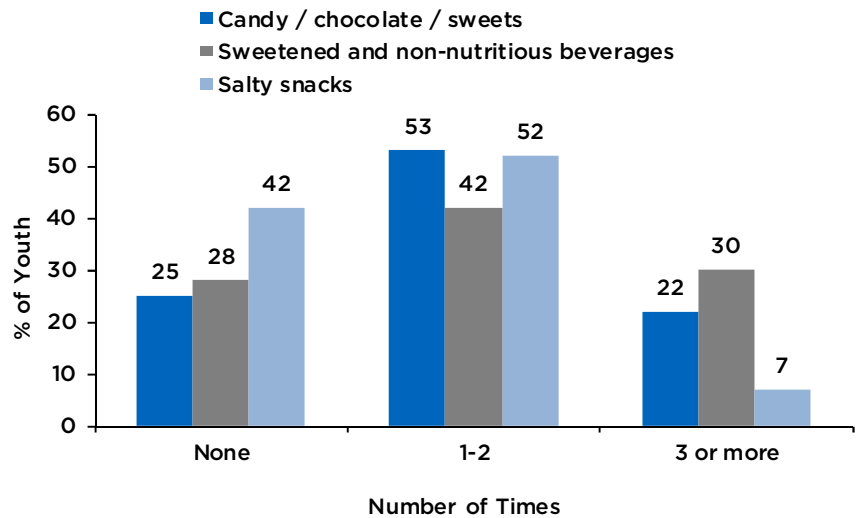
Quick Facts:

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

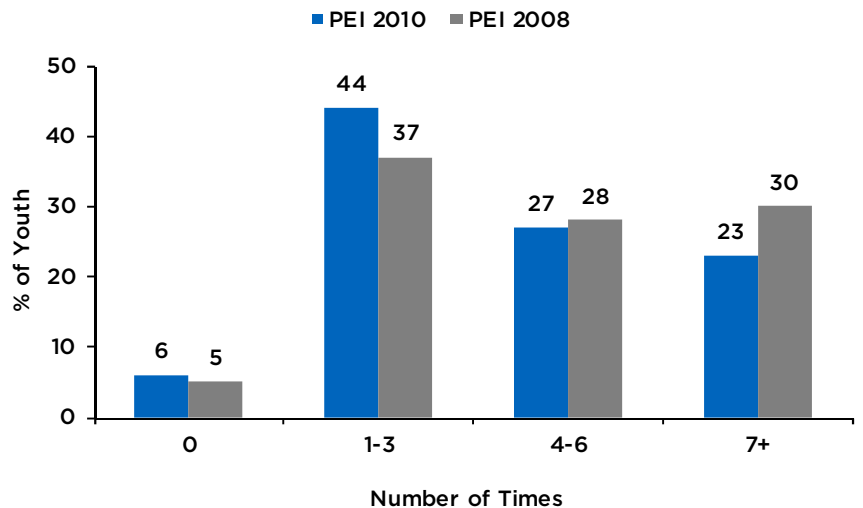
The number of times youth ate any of the above foods during the previous day was summed to provide a picture of their total daily frequency of consumption of non-food-group foods*, shown in the chart to the right.

***PLEASE NOTE:** 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.)

NUMBER OF TIMES YOUTH CONSUMED HIGH FAT, SALTY OR SUGAR SNACKS AND DRINKS



COMBINED NUMBER OF TIMES YOUTH CONSUMED HIGH FAT, SALTY OR SUGAR SNACKS OR DRINKS YESTERDAY



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.⁴⁷ The PEI School Nutrition Policies focus on 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 and encouraging healthier alternatives. Parents can reinforce these guidelines by making healthier choices for meals at home and packed lunches. Consistency between classroom learning and the types of food available both at school and at home sends a strong message to students about appropriate food choices.

Student Eating Behaviour

Breakfast Consumption

The results show **65% of boys** and **53% of girls** in PEI 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.⁴⁸⁻⁴⁹

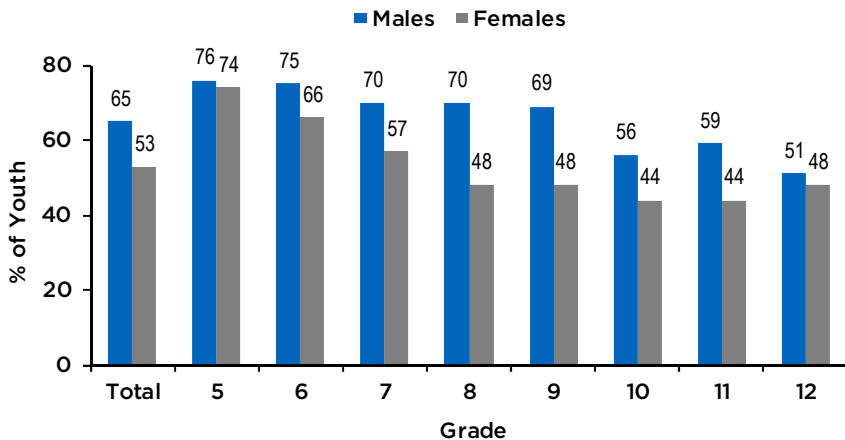
Breakfast eating usually declines with age.⁵⁰ A number of factors including concerns with body weight and decreases in shared family meals appear to influence the decline in breakfast consumption in adolescents.⁵¹

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.

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 DEECD and Breakfast for Learning (www.breakfastforlearning.ca). Community support, through donations of money and time, is crucial to the success and longevity of these programs.

PERCENTAGE OF STUDENTS WHO EAT BREAKFAST EVERY DAY IN A USUAL SCHOOL WEEK, BY GENDER



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

IF YOU DO NOT EAT BREAKFAST EVERY DAY, WHY DO YOU SKIP BREAKFAST?	% RESPONDING "YES"
I DON'T HAVE TIME FOR BREAKFAST	46%
THE BUS COMES TOO EARLY	20%
I SLEEP IN	24%
I'M NOT HUNGRY IN THE MORNING	43%
I FEEL SICK WHEN I EAT BREAKFAST	21%
I'M TRYING TO LOSE WEIGHT	9%
THERE IS NOTHING TO EAT AT HOME	8%

Eating Out

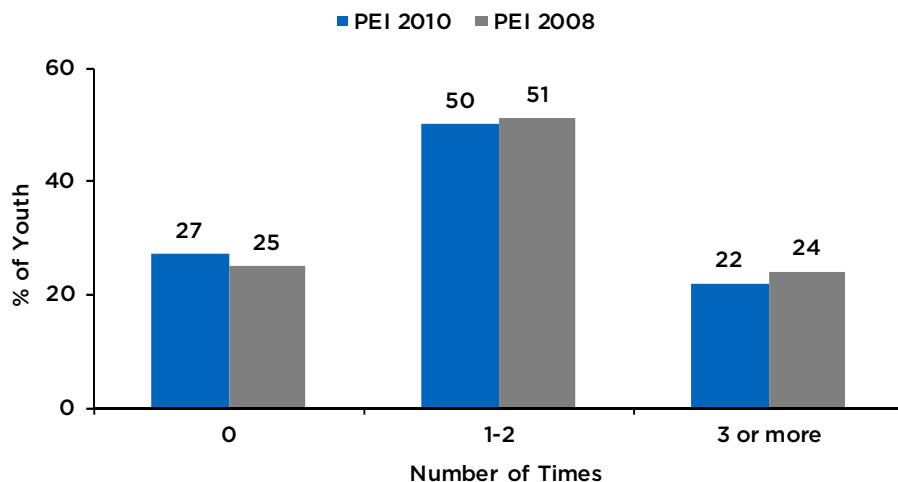
Typically, away from home foods are higher in fat and energy compared with foods eaten at home.⁴⁵ Frequency of fast food restaurant use has been associated with a significantly lower intake of fruits, vegetables, grains and servings of milk.⁴⁵

In PEI, **72% of students** reported eating foods purchased at a fast food place or restaurant at least once in the previous week. This is compared to **75%** of students in 2008-09.⁶

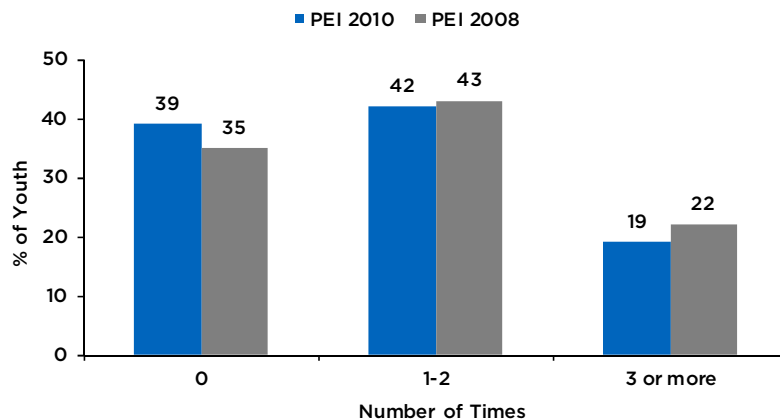
In addition, **61% of students** reported eating snacks purchased from vending machines, corner stores, snack bars or canteens at least once in the previous week. This is compared to **65%** of students in 2008-09.⁶



NUMBER OF TIMES STUDENTS EAT FOOD PURCHASED AT A FAST FOOD PLACE OR RESTAURANT



NUMBER OF TIMES STUDENTS EAT SNACKS PURCHASED FROM A VENDING MACHINE, CORNER STORE OR SNACK BAR



School Communities Can Make a Difference

The PEI School Nutrition Policy has made some changes to the school environment by providing healthy food and beverage choices in vending machines, canteens and school food programs. However, communities have an important role to play in creating an environment outside of school in which students can make healthy choices. One example is the recent PEI 'Healthy Rinks Initiative'

(http://www.recreationpei.ca/programs_healthyrink.php).

Recreation PEI worked with the PEI Healthy Eating Alliance to provide patrons with food and beverage choices that were higher in nutritional value than traditional rink canteens.

Initiatives like these help to create a 'culture' of healthy living that extends well beyond the school walls.

Social Influences on Healthy Eating

Dietary patterns of children and youth develop largely within the family environment.⁵² Some of the familial factors influencing youth include food exposure and availability, parental modelling, meal structure and family meals, parenting style and parental attitudes and knowledge about nutrition.⁵³

Family meals are perceived positively by both children and parents.⁵⁴ In a usual week, **78% of students** reported 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.⁵⁵

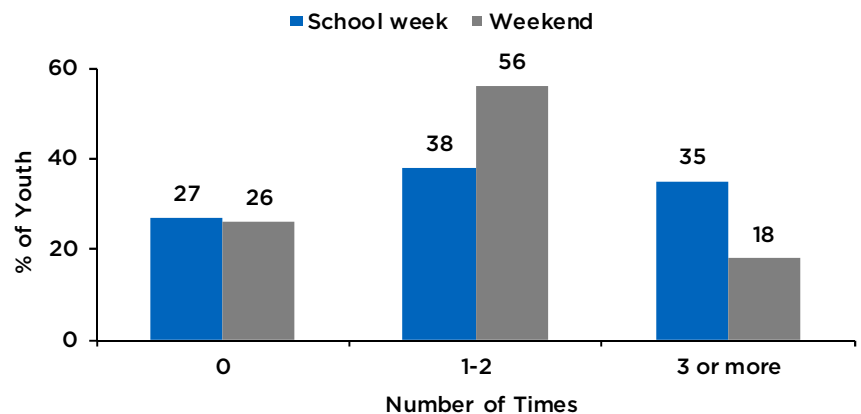
MEALS WITH ADULT FAMILY MEMBER IN A USUAL WEEK	PERCENT OF STUDENTS	
	ATE VEGETABLES & FRUIT < 6 TIMES YESTERDAY	ATE VEGETABLES & FRUIT ≥ 6 TIMES YESTERDAY
EATS 4 OR MORE MEALS/WEEK WITH ADULT FAMILY MEMBER	59	42
EATS LESS THAN 4 MEALS/WEEK WITH ADULT FAMILY MEMBER	69	31

PLEASE NOTE: This table contains the number of *times* students ate vegetables & fruit which may be different than the number of *servings*.

NUMBER OF TIMES STUDENTS EAT MEALS WHILE WATCHING TELEVISION

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.⁵⁶



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. Recognizing and supporting family connectedness is critical to successful programs aimed at improving the nutrition of children and youth.⁵⁷

Acknowledgements

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- The Propel Centre for Population Health Impact at the University of Waterloo
- The Comprehensive School Health Research Group at the University of Prince Edward Island
- The Health & Education Research Group at the University of New Brunswick
- PEI Department of Education & Early Childhood Development

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

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