

## Provincial Fact Sheets 2012-2013 New Brunswick Student Wellness Survey Grades 6 to 12 Healthy Weights and Lifestyle



### Introduction

Childhood obesity is perceived as a growing epidemic and has become a public health priority in developed countries<sup>1</sup>. Unhealthy behaviours, including physical inactivity and unhealthy eating during adolescence contribute to obesity and consequently to chronic health conditions in adulthood which in turn lead to significant adverse effects on quality of life and productivity<sup>2</sup>.

In addition to its contribution to overall health status, body weight has been shown to be an indicator of scholastic achievement, attendance, behaviour and physical fitness among middle school students highlighting the need for healthy lifestyle intervention and prevention measures<sup>3</sup>.

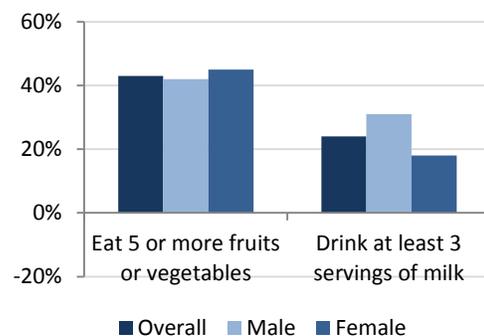
### Food and Beverage Consumption

Children and adolescents who eat fruit and vegetables five or more times a day are substantially less likely to be overweight or obese than those whose fruit and vegetable consumption is less frequent<sup>4</sup>.

A study published in 2012 showed there was an increase in the proportion of adolescents consuming sufficient amounts of fruits and vegetables daily; however, in 2007-2008, around half did not meet the recommended amount<sup>5</sup>.

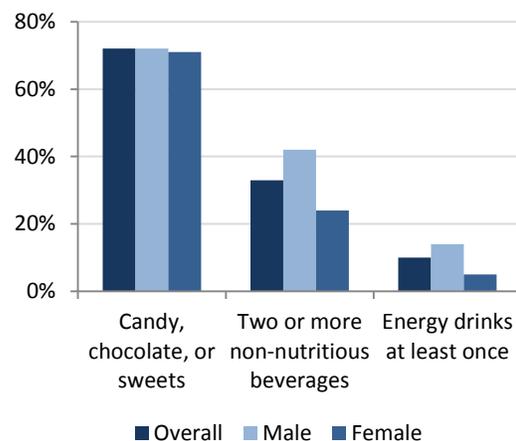
#### Healthy eating on the day before the survey

- 43% ate fruit and vegetables at least five times
- 24% consumed milk at least three times



#### Unhealthy eating on the day before the survey

- 72% ate candy, chocolate, or sweets
- 33% drank sweetened non-nutritious beverages two times or more.

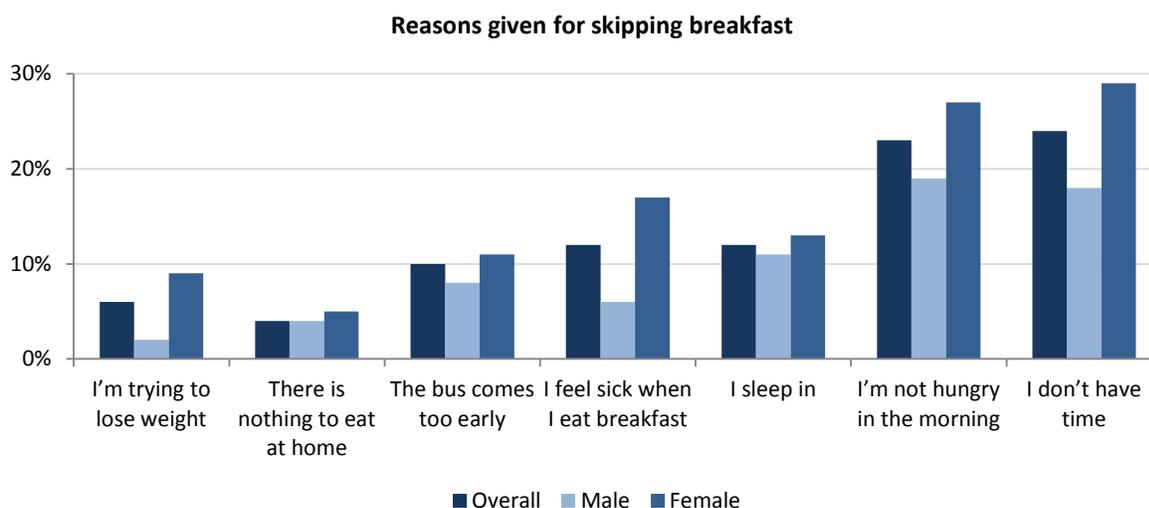


## Eating Breakfast

Students who eat breakfast have improved memory, problem-solving skills and creative abilities<sup>6</sup>. Teenagers who eat breakfast regularly eat a healthier diet and are more physically active throughout their adolescence than those who skip breakfast. Years later, they also gained less weight and had a lower body mass index (BMI). Children should never be encouraged to skip eating breakfast as it may result in poorer dietary nutritional quality and may have adverse impacts on school performance<sup>7</sup>. Emphasis needs to be

placed on breakfast habits, especially among adolescents and young adults, when behavioural patterns are developing and stabilizing<sup>8</sup>.

- 42% of students reported eating breakfast every day
- 27% of students reported eating breakfast 2 or fewer times in the week before the survey



## Physical activity

Physical activity has positive impacts on several physical and mental health outcomes, including health-related quality of life and better mood states<sup>9</sup>. Physical activity is an important component of health and well-being for all age groups. Youth who are physically active may benefit in the short term as well as in the long term through improved mental health status and self-esteem, physical fitness, weight control, and prevention of cardiovascular risk factors. Physical activity habits and patterns established during childhood and adolescence are generally sustained into adulthood, establishing healthier choices over the entire lifespan<sup>10</sup>. As per the Canadian guidelines for physical activity, for health benefits, youth (aged 12–17 years) should accumulate at least 60 minutes of moderate- to vigorous-intensity physical activity daily. This should include: vigorous-intensity activities at least three days per week and activities that strengthen muscle and bone at least three days per week.

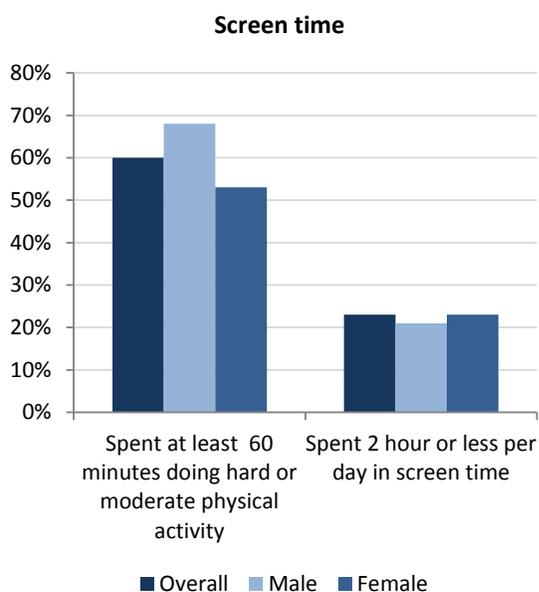
More daily physical activity provides greater health benefits<sup>11</sup>.

In New Brunswick, 60% of students reported being active at least 60 minutes daily (68% of males and 53% of females). In general, more students participated in physical activities not organized by school than in activities organized in school.

Organized by school		
	Competitive	Non-competitive
<b>Overall</b>	<b>40%</b>	<b>38%</b>
Male	41%	41%
Female	39%	36%
Not organized by school		
	Competitive	Non-competitive
<b>Overall</b>	<b>57%</b>	<b>63%</b>
Male	62%	62%
Female	53%	63%

## Screen Time

The increase in “screen time” among children and youth is contributing to the overweight and obesity epidemic<sup>12</sup>. Students should be encouraged during after-school hours to reduce sedentary routines (e.g. screen time), and to engage in more physically active pass-times or leisure activities. Among New Brunswick students, screen time seems to be more commonly reported among those who sleep less than eight hours/night, with only 20% of those students meeting the guidelines of two hours or less in front of screens, in comparison to 28% of students who sleep eight hours or more.

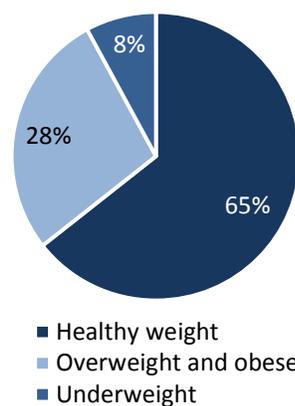


## Overweight and Obesity

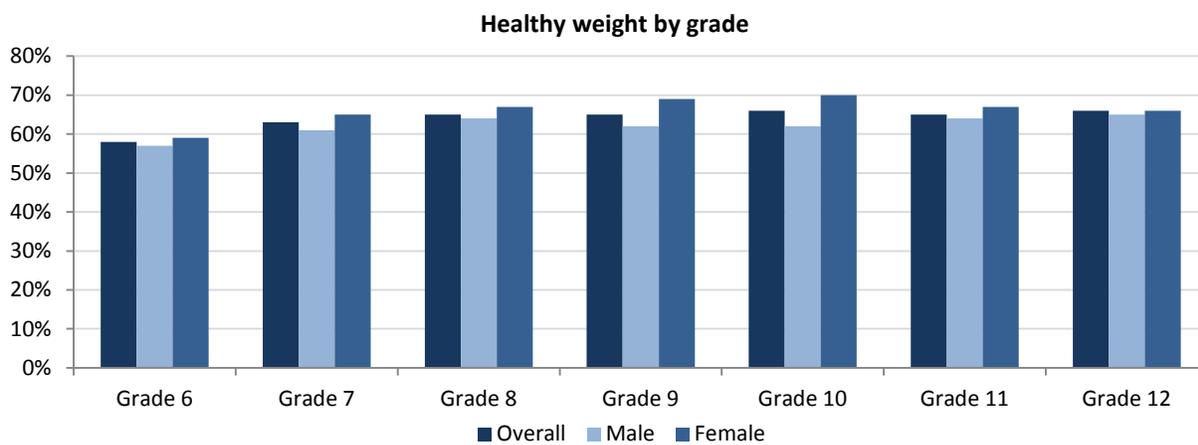
Healthy body weight can be determined using the body mass index (BMI), which is a measure of a person’s weight in comparison to their height. International definitions for overweight and obesity based on the distribution of BMI for males and females at each age have been established<sup>13</sup>. In addition to its association with adverse health outcomes, obesity seems to expose youth to an increased risk of social consequences attributable to their appearance, including bullying<sup>14</sup>.

New Brunswick students in grades 6 to 12 were asked to provide their height and weight, resulting in the following results for BMI groups, and healthy weight by grade and sex\*:

**BMI groups - Grades 6 to 12**



\*In general, self-reported data underestimate the prevalence of obesity as people tend to under-report their weight and over-report their height<sup>15</sup>.



## Comparison of Results

The following provides a comparison of 2009-2010 and 2012-2013 outcomes of selected New Brunswick Wellness Strategy indicators and targets related to healthy weights and lifestyle:

Wellness indicator	2009-2010	2012-2013	Progress
Youth who eat vegetables and fruit at least 5 times each day	40%*	43%	
Youth who regularly consume sweetened non-nutritional beverages	62%	59%	
Youth who eat breakfast daily	41%	42%	
Youth who spend at least 60 minutes each day in a combination of moderate and hard physical activity	57%*	60%	
Youth who spend 2 hours or less per day in screen time activities such as watching TV and using computers	25%*	23%	

\* Previous values recalculated due to methodology change

The New Brunswick Student Wellness Survey (NBSWS) is a provincial initiative of the Department of Healthy and Inclusive Communities in cooperation with the Department of Education and Early Childhood Development. Data collection and analysis is conducted by the New Brunswick Health Council. The purpose of the survey is to examine the health and wellness attitudes and behaviours of students in grades 6 to 12, and to share data to promote action around wellness. The data was collected from 35,954 students across 177 schools in New Brunswick. The fact sheets are available at <http://www2.gnb.ca/content/gnb/en/departments/dhlc/wellness/content/research.html>

<sup>1</sup> Fung, C., Kuhle, S., Lu, C., Purcell, M., Schwartz, M., Storey, K. & Veugelers, P.J. (2012). From “best practice” to “next practice”: the effectiveness of school-based health promotion in improving healthy eating and physical activity and preventing childhood obesity. *International Journal of Behavioral Nutrition and Physical Activity*, Vol 9: 27. Retrieved from <http://www.biomedcentral.com/content/pdf/1479-5868-9-27.pdf>

<sup>2</sup> Gadalla, T. M. (2012). Unhealthy behaviours among Canadian adolescents: prevalence, trends and correlates. *Chronic Diseases and Injuries in Canada*. Vol 32 (3): 156-163

<sup>3</sup> Shore, S. M., Sachs, M. L., Lidicker, J. R., Brett, S. N., Wright, A. R., and Libonati, J. R. (2008). Decreased Scholastic achievement in overweight middle school students. *Obesity*, Vol 16 (7): 1535-1538

<sup>4</sup> Shields, M. (2005). Measured obesity: Overweight Canadian children and adolescents. *Statistics Canada Cat. No. 82-620-MWE2005001*

<sup>5</sup> Gadalla, T. M. (2012). Unhealthy behaviours among Canadian adolescents: prevalence, trends and correlates. *Chronic Diseases and Injuries in Canada*. Vol 32 (3): 156-163

<sup>6</sup> Health Canada. (2007a). Eating Well with Canada’s Food Guide. Retrieved from [http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/order-commander/eating\\_well\\_bien\\_manger-eng.php](http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/order-commander/eating_well_bien_manger-eng.php)

<sup>7</sup> Kerbs, N.F., Himes, J. H., Jacobson, D., Nicklas, T.A., Guilday, P. & Styne, D. (2007). Assessment of child and adolescent overweight and obesity. *Pediatrics*, Vol 120 (S4): S193-S228

<sup>8</sup> Timlin, M. T., Pereira, M. A., Story, M. & Neumark-Sztainer, D. (2008) Breakfast Eating and Weight Change in a 5-Year Prospective Analysis of Adolescents: Project EAT (Eating Among Teens). *Pediatrics*, Vol 121: e638 <http://www.pediatricsdigest.mobi/content/121/3/e638.full.pdf+html>

<sup>9</sup> Singh, A., Uijtewilligen, L., Twisk, J. W. R., van Mechelen, W. & Chinapaw, M.J.M. (2012). Physical activity and performance at school. *Archiv Pediatr Adolesc Med*. Vol 166 (1): 49-55

<sup>10</sup> Kerbs, N.F., Himes, J. H., Jacobson, D., Nicklas, T.A., Guilday, P. & Styne, D. (2007). Assessment of child and adolescent overweight and obesity. *Pediatrics*, Vol 120 (S4): S193-S228

<sup>11</sup> Canadian Society for Exercise Physiology. (2012). Canadian Physical Activity Guidelines. Canadian Sedentary Behaviour Guidelines. Retrieved from: [http://www.csep.ca/CMFiles/Guidelines/CSEP\\_Guidelines\\_Handbook.pdf](http://www.csep.ca/CMFiles/Guidelines/CSEP_Guidelines_Handbook.pdf)

<sup>12</sup> Health Canada. (2007b). Reaching for the Top: A Report by the Advisor for Healthy Children and Youth. Retrieved from <http://www.hc-sc.gc.ca/hl-vs/pubs/child-enfant/advisor-conseillere/index-eng.php>

<sup>13</sup> Cole T.J., Bellizzi, M.C., Flegal, K.M. & Dietz, W.H. (2000). Establishing a standard definition for child overweight and obesity worldwide: International survey. *British Medical Journal*, 320:1-6

<sup>14</sup> Kukaswadia, A., Craig, W., Janssen, I. & Pickett, W. (2011). Obesity as a determinant of two forms of bullying in Ontario youth: A short report. *Obesity Facts*. Vol 4: 469-472

<sup>15</sup> Statistics Canada (2014). Study: Adjusting the scales: Obesity in the Canadian population after correcting for respondent bias, 2011-2012