## Healthy Eating, Dieting and Dental Hygiene

Healthy eating contributes to physical and emotional well-being which, in turn, significantly affects many other areas of students' lives. Adolescents are particularly susceptible to poor eating habits as they assert themselves and become more independent from parents and teachers. While healthy eating has been recognized in Canadian elementary school curricula for decades, it receives little attention in secondary schools. As our society continues the practice of dining out and using convenience foods at home, it is particularly important to monitor student eating and body image trends.

The specific food items mentioned in the survey were not intended to provide a comprehensive picture of young people's eating patterns, but to provide information on some specific foods that are more or less nutritious. Food items were selected as being more nutritious because they provide fibre, vitamins or other important nutrients (fruit, vegetables, low fat milk, wholewheat breads) or less nutritious if eaten frequently because they are high in fat, salt and sugar (potato chips, hamburgers, hot dogs, whole milk).

The questionnaire items on food habits were selected to address frequency of consumption, rather than food quantity; it was assumed that students ate average portions on most occasions. Students were asked how often they eat or drink several foods and drinks. They responded using the categories "never", "rarely", "at least once a week, but not every day", "once a day" and "more than once a day".

A second major nutritional issue concerns dieting. There is widespread concern about excessive dieting, especially among young females, in Canadian society. At the same time, there are concerns about the effects of obesity on long-term health.

Figure 7.1
Students who ate fruit and vegetables daily (\%)


The chapter begins with a focus on healthy eating habits. The consumption of less-nutritious foods, having breakfast regularly and dieting patterns are then addressed. Finally, the dental hygiene habits and oral health of Canadian youth are considered.

## Nutritious Foods

Psychosocial correlates of low intake of fruit and vegetables among adolescents include low family connectedness, dissatisfaction with weight, poor academic achievement and health-compromising behaviours such as binge eating, substance abuse and past suicide attempts (Neumark-Sztainer et al., 1998). Although advertising nutritious foods has increased, the popular media gives less attention to them than to snack foods. For this section of the report the response alternatives "once a day" and "more than once a day" have been combined in the figures under "daily".

Figure 7.1 shows that a greater proportion of females ate fruits and vegetables daily. In each of Grades 6,8 and 10 , the proportions of both males and females eating fruit daily declined slightly from 1994 to 1998. Generally, females ate more nutritious foods than males, except for whole-wheat breads and low fat milk.

In the 1998 study, students were asked how frequently they eat cooked vegetables. Daily consumption generally increased across Grades 6 to 10 and higher proportions of females ate cooked vegetables daily. Daily consumption of raw vegetables has declined over time for all groups. There is no consistent pattern across the grades, and in most cases differences across the grades were quite small.

Students were asked about their consumption of whole-wheat or rye bread in the 1994 and 1998 studies. Slightly more males than females ate wholewheat breads daily (Figure 7.2). For the Grade 6 students, there was a decline in the proportions eating whole-wheat or rye bread daily from 1994 to 1998. There was also a slight decline for both males and females from Grade 6 to Grade 10.

Between two-thirds and three-quarters of each of the grade groups responded that they drink low fat milk daily. Where gender differences occurred, proportionally more males were daily low fat milk drinkers. For Grade 6 and Grade 10, low fat milk consumption increased in 1994, but dropped again in 1998.

Figure 7.2
Students who ate whole-wheat or rye bread and drank low fat milk daily (\%)


## Figure 7.3

Students who ate/drank foods high in fats/sodium daily (\%)



HAMBURGERS/HOT DOGS/SAUSAGES


POTATO CHIPS



Grade 8


## Less Nutritious Foods

Daily intake of food with little nutritional value by youth can be harmful to their physical development (Williams, 1995). Figure 7.3 shows that a greater proportion of males ate higher salt and high fat/sodium foods than females. Differences in the proportions of students eating french fries daily were small across both the three years and the three grades.

There was a decline as grade level increased in the proportion of students who ate hamburgers, hot dogs or sausages daily. Almost a quarter of the males in the two younger grades ate potato chips daily and were considerably more likely to do so than females. Differences across the three survey years were small. Fewer of the students in Grade 10 ate potato chips daily than in the earlier two grades.

More males than females in all grades across the three survey years drank whole milk, with the magnitude of difference between genders increasing by grade. There has been a sharp decline in the proportion, by about half, of young people drinking whole milk daily
over the three surveys. This may indicate that the public health message to eat lower fat foods is being attended to, at least with regard to milk.

Soft drinks and candy/chocolate bars were included as examples of high sugar foods in young people's diets. Foods containing sugar and caffeine, such as soft drinks and chocolate, are often taken to increase energy temporarily. Caffeine is also addictive and affects alertness states. Across all three grades and all three surveys, higher proportions of boys than of girls ate candy and drank soft drinks (Figure 7.4). Differences across surveys in the proportions of boys and girls consuming soft drinks daily were small and did not change significantly over time. For boys, there was a steady increase from grade to grade but for girls, daily drinking of soft drinks increased from Grade 6 to 8 but levelled off from Grades 8 to 10 .

The proportion of students eating candy or chocolate bars was similar across grades and the three surveys for both males and females.

Approximately one in ten Grade 10 students drank coffee daily. Where gender differences occurred, males drank more coffee than females. Daily coffee consumption generally increased as students got older.

Figure 7.4
Students who ate/drank foods high in sugar/caffeine daily (\%)



COFFEE


## Figure 7.5

Thirteen year olds who ate chocolate or candy daily by country, 1998 (\%)

*France and Germany are represented by regions: see Chapter 1 for details.

In comparison to young people in other countries, Canadian and Scandinavian youth are far less likely to eat sweets daily. While these differences may reflect greater attention given to healthy eating habits, they may also reflect cultural differences in the dietary role of candies and chocolate. Having a "sweet" for dessert after meals, for example, is more common in some cultures than others.

## Figure 7.6

Students who ate breakfast-at least juice and toast or cereal-daily, 1998 (\%)


## Figure 7.7

Students responses to "Are you on a diet to lose weight?" 1994, 1998 (\%)


Grade 10


## Breakfast

Breakfast is believed to be a key meal for young people as it prepares the body and mind for daily activities (Williams, 1995). However, as children get older they have greater control over what they eat for breakfast and over whether they eat it at all. A question was asked in 1998 regarding frequency of eating breakfast each week.

More of the males than the females ate breakfast of at least juice and toast/cereal daily in each of the five grades with the difference reaching as high as 17 percent among Grade 9 students (Figure 7.6). In Grade 6 , almost 70 percent of all students ate breakfast daily. For males, there was a consistent decline in the proportion who ate breakfast daily as the grade level increased. For females, there was a much steeper decline that levelled off in Grades 9 and 10 at 40 percent. The gap between the proportion of boys and girls who start the day with breakfast tends to widen with age.

## Dieting

Youth who develop unhealthy eating practices due to distorted perceptions of body weight are at increased risk of developing nutritional deficiencies (Page, 1991). The respondents were asked if they were on a diet or if they thought they needed to lose weight and their responses are summarized in Figure 7.7. More girls than boys thought they needed to lose weight and this proportion increased over grade levels. Many more females were on a diet, with almost half of the Grade 10 girls indicating they were either on a diet or needed to lose weight. For boys, there was little change, as grade increased, in the proportions of those on a diet or feeling that they should be dieting. However, the proportion of females on a diet and those feeling they needed to lose weight increased with grade level. Differences between the 1994 and 1998 surveys were small with few observable trends.

Figure 7.8 shows that, for males, the proportion dieting or feeling that they need to lose weight increased from Grade 6 to 7 and then gradually decreased from Grade 7 to 10 . For females, the increase was much greater from Grade 6 to Grade 9 with a levelling off between Grades 9 and 10 .

Figure 7.8
Students who were on a diet or felt they needed to lose weight, 1998 (\%)


Figure 7.9
Fifteen year olds who were on a diet by country, 1998 (\%)

*France and Germany are represented by regions: see Chapter 1 for details.

While the proportion of Canadian 15-year-old girls who are dieting may seem high, it can be readily seen that the proportion is higher in many of the comparison countries. Gender differences in dieting behaviour were pronounced in all countries.

## Figure 7.10

Students who brushed their teeth two or more times a day (\%)


Figure 7.11
Students who flossed their teeth at least weekly (\%)


## Dental Hygiene

Students are often motivated by social reasons rather than dental health reasons to observe good dental hygiene (MacGregor, 1994). Dental hygiene was addressed by asking how frequently the respondents brushed and flossed their teeth.

Girls were much more likely than boys to practise regular dental hygiene (Figure 7.10). More females (approximately 80\%) than males (approximately 60\%) at each grade level across the three surveys brushed their teeth two or more times a day. More of the girls also flossed their teeth at least weekly (Figure 7.11). Across the three surveys, there was a substantial increase in the proportions of boys and girls flossing weekly at each of the three grade levels. Flossing appears to be becoming a more common practice, although it decreases as grade increases.

## Figure 7.12

Eleven year olds who brushed their teeth two or more times a day by country, 1998 (\%)


[^0]Canadian youth were less likely to brush their teeth twice a day or more than youth in most other countries. Even though a significant proportion of Canadian girls brushed twice daily, their peers were ahead in all countries except Greece.

## Summary

It was difficult to measure dietary practices accurately because it was necessary to use frequency of consumption rather than actual quantities, but the findings have general relevance. Over three-quarters of the respondents indicated they ate fruits and vegetables daily in Grade 6, but this was down to less than 70 percent by Grade 10 . There was a worrisome decline in daily fruit and vegetable eating over the three surveys. This pattern was also evident in the intake of raw vegetables. Girls were slightly more likely to eat vegetables and fruits than boys, and boys were more likely to eat hamburgers, hot dogs, french fries and potato chips. Over two-thirds of the respondents were found to drink low fat milk daily.

A surprisingly high proportion of students by Grade 10 indicated they did not have breakfast every day. Just under half the boys and over three-fifths of the girls were in this category.

Far more girls than boys indicated they thought they needed to lose weight with the proportion increasing from grade to grade. There was little difference between the 1994 and 1998 surveys, but the substantial number of young women on a diet suggests a real concern.

Canadian youth rank behind those in other countries in terms of the proportion who brush their teeth twice or more daily. Girls are more likely than boys to brush their teeth twice or more per day and to floss weekly. Most brush at least once a day, but just over half of the boys brush twice a day. There is little difference from grade to grade and over the three surveys.

Overall, eating patterns have changed slightly with reduced consumption of more nutritious foods and increased intake of less nutritious foods. Dieting, although still particularly high among girls, did not change over the three surveys. Finally, the proportion of youth who floss at least weekly has increased sharply through the 1990s to over 50 percent, but Canadian youth are well behind other countries in the proportion who brush their teeth at least twice a day.


[^0]:    *France and Germany are represented by regions: see Chapter 1 for details.

