#### Focus

A recent poll showed that many Canadians are not as healthy as they think they are. They eat too much of the wrong foods, they don't exercise enough, and a sizeable majority complain about being tired all the time. In this News in Review story we'll take a close look at these lifestyle problems and examine ways we can live healthier and more active lives.

"Fatter, sicker, weaker." This is a blunt but accurate description of fitness levels of Canadians according to a *Toronto Star* report (January 14, 2010). Canadians are less healthy today than they have been in previous decades. And it is not just older people who have health issues. Doctors see more cases of children and adolescents with high blood cholesterol, high blood pressure, and diabetes. An alarming rise in the incidence of childhood and youth obesity has also occurred in the last 25 years.

What are the reasons for this trend of poor health? People simply do not move their bodies as much as in previous generations. "Screen time" is largely to blame. Sitting for hours in front of a computer or television has become normal behaviour, whereas in previous decades, more time was spent being physically active. The eating habits of Canadians have also changed, with more high-fat, highcalorie, and highly salted processed foods being consumed. Low rates of physical activity combined with high caloric foods has resulted in higher body weights. Children with high body weights tend to become adults with high body weights. These adults face increased risk of heart disease, diabetes, problems with their bones, and other chronic diseases.

This trend of ill health is a major concern for individuals, families, and communities. An unhealthy population puts a strain on the human resources of families and on the financial resources of the Canadian health-care system. Ultimately, young people—in partnership with their families, communities, and schools—must face up to their risky health behaviours and make a combined effort to change for a healthier future.

#### **To Consider**

- 1. What do you think are the main reasons for young people not taking care of themselves?
- 2. Do you agree, disagree, or are you not sure about the statements below? Return to your answers after you have discussed the statements with a few classmates.

a) What I eat and the amount I exercise is a personal matter and doesn't affect anyone else.

b) I am very concerned about my health and well-being.

c) Young people are very concerned about their health and well-being.

d) Most of my role models of personal health and well-being are athletes.

e) Most of my role models of personal health and well-being are family, friends, and community members.

f) Most of my role models of personal health and well-being are celebrities.g) Young people are very well informed in schools about how to have healthy lifestyles.

h) Too much "screen time" is the main reason for unhealthy lifestyles in young people.

i) You can be overweight but still be physically fit.

j) Talking about my personal health and fitness level is a sensitive subject for me.

k) Being thin is more important to me than being physically fit.

#### Definition

Sleep apnea is a temporary suspension of breathing that occurs while sleeping. It can result in people waking up dozens of times a night.

### **Did you know** ... The two main causes

of death for teenagers are car accidents and suicide.

#### **Pre-viewing Activity**

Before you watch the video, complete the following with a partner or in a small group.

- 1. Create a mind map that summarizes what you think are the main components of healthy living.
- 2. Do you think you eat a healthy diet? Why or why not?
- 3. Do you think you get adequate physical activity? Why or why not?
- 4. Do you think you get enough sleep? Why or why not?
- 5. Do you think you are suffering from stress? Why or why not?
- 6. Do you think Canadians are more or less healthy than people who live in other countries? Explain.

#### **Video Questions**

Respond to the following questions while watching the video.

- 1. How many Canadians are obese?
- 2. How much time do most Canadians spend moving their bodies each day?
- 3. How much time should be spent in movement?

- 4. Why are people not getting enough activity?
- 5. On average, by what percentage do people underestimate their caloric intake?
- 6. How much exercise is required to burn off a meal's worth of calories?
- 7. List three food items (excluding candy) where sugar lurks.
- 8. How much sugar did the family consume in a week?
- 9. How much salt?
- 10. How many Canadians get fewer than eight hours of sleep?
- 11. Why are people getting less sleep today?
- 12. List three negative health effects due to lack of sleep.

#### **Post-viewing Activity**

After you have watched the video, discuss and respond to the following questions.

1. What were the major "surprises" for the family during their "eating audit?"

- 2. List three "simple" healthy changes that you could make to your eating habits.
- 3. List three "simple" changes that you could make to increase your physical activity level.
- 4. List two "simple" changes that you could make to improve your sleep habits.
- 5. Consider why it is difficult to break unhealthy habits.
- 6. Unhealthy habits are easier to change with the support of a friend or family members. Why do you think this is an important fact to consider?

Note to Teachers Teachers should be aware that the teaching of sensitive and controversial issues such as body image, disease, and other health issues may provoke emotional responses from students. A high degree of care should be taken before the lesson to ensure that the learning environment allows for conflicting sets of values to be processed analytically and with respect for differences in people and their identities, cultures, and world views.

#### **Before Reading**

Create a chart in your notes to record information as your read. The chart will summarize two or three significant points of information for each subheading question. Be prepared to share your chart with a partner after reading the information and discuss any similarities and differences in your summary charts.

### Who says young Canadians are unhealthy?

The Canadian Heart and Stroke's 2010 research report, "A Perfect Storm of Heart Disease Looming on Our Horizon," warned that thousands of young Canadians will suffer heart attacks, stroke, or die from cardiac disease prematurely. Dangerous risk factors such as unhealthy diet, inactivity, obesity, diabetes, and heart disease have increased by as much as 260 per cent among Canadians ages 12-34 between 1995 and 2005. The only health risk factor that has diminished overall is that of smoking. The study was a wake-up call to Canadians of all ages to learn about how lifestyles affect personal health. The Canadian government also predicts that it will not be able to afford the health-care costs demanded by this future wave of heart disease and diabetes

#### What is heart disease?

The Heart and Stroke Foundation defines *heart disease* as a term used to describe many conditions affecting the structure and functions of the heart and the many causes of these conditions. The heart is a muscle that gets energy from blood that carries oxygen and nutrients. A constant supply of blood keeps the heart working the way it should. When blood vessels in the heart become blocked or narrowed, blood cannot reach the heart. This heart condition is called coronary artery disease. It can cause chest pain or a heart attack.

#### What is type 2 diabetes?

After heart disease, diabetes is the second major disease threatening the health of young people in Canada. According to the Canadian Diabetes Association, one in every three Canadian children may be diagnosed with diabetes in their lifetime. This represents a shocking number of people who will require special medical assistance and lifestyle changes in order to cope with this disease and to prevent potential related complications and premature death.

Type 2 diabetes is a lifelong condition where the pancreas does not produce enough insulin. Insulin is required by the body to control the level of sugar (glucose) in the blood needed to make energy. Without the required insulin, glucose builds up in an unhealthy way. Complications that may occur in people with diabetes include heart disease, blindness, kidney problems, and nerve damage. The development of type 2 diabetes is closely related to obesity; about 95 per cent of children with type 2 diabetes are overweight. The number of obese children in Canada tripled from 1981 to 1996. This number is of concern to health-care experts, as obese children tend to become obese adults.

People with type 2 diabetes can live a healthy life by eating healthy food, maintaining regular physical activity, monitoring their blood glucose levels, and injecting insulin.

#### **Further Research**

A health-advocacv group found that popular foods such as cereal, hamburgers, and submarines in Canada had much higher amounts of salt than the same brand sold in different countries. Too much salt in food can lead to hypertension and heart disease. For the complete research report go to the World Action on Salt and Health Web site at www. worldactiononsalt. com.

#### **Further Research**

Poor and socially disadvantaged people in Canada and the world are more likely to be unhealthy and suffer from major preventable diseases. The World Health Organization (WHO) challenges all governments throughout the world to answer the question "Why treat people if you don't change what makes them sick?" Find out more about the social determinants of health at the WHO Web site.

#### How can you prevent heart disease?

The Heart and Stroke Foundation suggests the following heart-healthy behaviours to reduce the risk of heart disease:

- Do not smoke.
- Reduce the amount of salt you consume.
- Be physically active.
- Eat a healthy, low-fat diet.
- Achieve and maintain a healthy weight.
- If you have diabetes, get help to manage your condition.
- Do not drink alcohol.
- Reduce stress.
- Visit a doctor regularly (they will check your blood pressure) and follow their advice.

#### How can you prevent type 2 diabetes?

Many of the healthy lifestyle suggestions for a healthy heart will also reduce the risk of type 2 diabetes especially achieving and maintaining a healthy weight and regular physical activity.

The Canadian Diabetes Association also suggests the following changes to your lifestyle in particular:

### • Drink water, not pop, juice, or energy drinks.

- Drink low-fat milk and eat low-fat dairy products.
- Eat lots of fruits and vegetables.
- Walk or bike whenever possible.
- Reduce "screen time" and do something fun and active instead.

#### Who is more at risk?

There are certain racial groups that are at greater risk of heart disease, stroke, and diabetes than the general population. Research has shown that First Nations, Métis, and Inuit people, people of South Asian descent, and people of African descent are more likely to have high blood pressure and type 2 diabetes. The 2010 Heart and Stroke research on the health of Canadians warned that aboriginal people in particular, "are experiencing a full-blown cardiovascular crisis." Type 2 diabetes is being found in aboriginal children as young as eight years of age. A drastic intervention is required to improve the health of aboriginal peoples in Canada, and all young Canadians in general.

#### **Follow-up**

- 1. Take the Heart and Stroke Foundation's risk assessment at www. heartandstroke.on.ca to find out how your age, family history, and medical conditions affect the health of your heart.
- 2. Research the health of your province or territory as reported in the Canadian Heart and Stroke Foundation's "2010 Annual Report of Canadians' Health" at www.heartandstroke.on.ca.
- 3. Note the discrepancies between the health of certain provinces and territories. Speculate as to why these discrepancies exist.

#### **Before Reading**

- 1. How many hours a day do you listen to music/videos with earphones? How loud do you set the volume?
- 2. List the "high risk" behaviours—behaviours that can lead to serious consequences like injury and death—that you think more teenagers engage in versus adults.
- 3. Why do you think teenagers engage in "high risk" behaviours?
- 4. What specific mental health issues do you think arise in the teenage years?

While good nutrition and adequate amounts of physical activity are important to the overall health of all teenagers, there are some health risks that are more prominent to the lives of teenagers—more so than for children and adults. These health concerns involve hearing loss, "high risk" behaviours, and specific mental health issues.

#### **Premature Hearing Loss**

The popularity of earphones and personal entertainment devices has led to a growing percentage of teenagers being diagnosed with hearing loss. Often a person does not realize that they are losing their hearing, because the loss is gradual and may not be noticed until adulthood. In 2008, the Hearing Foundation of Canada conducted a survey that found that 30 per cent of teens in their study listened to music at levels that were hazardous (above 90 decibels).

The prevalence of ear buds also appears to be part of the problem. Earphones that sit outside the ear are farther away from the ear canal and therefore may be less dangerous. What is important to keep in mind is the level of volume (experts recommend keeping it down to below the halfway point of personal music players), the number of hours you are exposed to noise, and the fact that hearing loss is cumulative and irreversible.

#### "High Risk" Behaviours

Part of being a teenager is trying out new things and behaving in ways that test new freedoms and abilities. Sometimes teenagers don't think through the consequences of their actions, resulting in impulsive behaviour. This tendency is partially due to the adolescent brain, which does not have the same capabilities as the adult brain to control behaviour and voluntarily suppress impulses. Some of the more common teenage high-risk behaviours are excessive drinking and drug use, committing violent acts and property crimes, drinking and driving, having unprotected sex, trying extreme sport stunts, texting and driving, and compulsive gambling.

#### **Mental Health Issues**

Every person strives to feel good about themselves and their interactions with others in the world. When working, going to school, or having down time becomes difficult, often a mental health issue is at play.

Many mental health disorders are episodic in nature. That means that symptoms develop, worsen, get

**Did you know** ... If you cannot hear what someone says to you when you are listening to your iPod, then the volume is high enough that it will lead to hearing loss. Further Research The American Heart Association's Statement of Exercise (1996) revealed a connection between mental health and regular exercise. Find out more about the link between exercise and mental health. better, disappear, and then recur. The teenage years are a time when many mental disorders first develop. Some of the mental disorders that impact teenagers are ADHD (attention deficit hyperactivity disorder), bipolar disorder, generalized anxiety disorder, depression, obsessive-compulsive disorder, panic disorder, and schizophrenia.

It is important for teenagers who feel that life is becoming difficult and who are having difficulty coping seek help. Having a mental disorder should be viewed as no different than having a physical ailment. It requires professional diagnosis, a treatment plan, and the support of family and friends. Unfortunately, stigmas still exist and people often wait too long to ask for help and are unwilling to disclose a mental health diagnosis to other people.

#### Activity

Have a "mental health for teens" symposium in your classroom. Different groups select a specific mental health issue to present to the class. The focus of your research should be to answer the following questions:

- 1. What are the symptoms?
- 2. What types of treatment are available?
- 3. What are the common myths, stereotypes, and types of misinformation regarding this issue?

The Teen Mental Health Web site, at http://teenmentalhealth.org, is a good place to begin your research.

Ask Yourself

How many of the guidelines suggested by the National Eating Disorder Information Centre does your school meet?

#### **Before Reading**

- 1. There are considerable differences in attitudes toward body weight, depending on historical, cultural, and geographic factors. Discuss with a partner some of these differences in attitudes that you are aware of and attempt to account for the differences.
- 2. Discuss current points of view or stereotypes toward body weight in Canadian society as depicted in the media, through medical research, or in societal attitudes.
- 3. Discuss the following statement: "Addressing obesity requires the same widespread effort that society made on smoking."

#### Body Image: A Sensitive Issue

Young people in Canada realize that bullying, discrimination, and stereotyping are wrong. However, there is one group in Canadian society-those who are overweight-who continue to face bigotry without the same degree of moral outrage that other types of bigotry meet. It seems that "fat" people are easy targets for hate. They are seen as lacking self-control and motivation. Young people's self-esteem can be largely based on their perceptions of their bodies and whether they accept or reject the body they live in. Overweight children often suffer from low self-esteem (exhibited as feelings of loneliness, sadness, and anxiety) that continues into their adolescent years. The media perpetuate the negativity with countless images and products that declare that obesity is undesirable

Merryl Bear, the Director of the National Eating Disorder Information Centre, suggests the following guidelines for schools to promote healthy attitudes and behaviours related to physical activity and to prevent negative attitudes and behaviours related to physical activity.

• Create a climate where students understand that healthy bodies come in a range of sizes.

- Model healthy attitudes and behaviours.
- Develop non-competitive forms of physical activities.
- Consider single-sex activities in order to create a safe and comfortable environment for exercise.
- Disapprove of any weight prejudice or disapproval of anyone's body.

#### **Obesity: The Medical Definition**

The medical community has linked obesity as a risk factor in many major diseases. The Body Mass Index (BMI) is a measurement accepted by health-care providers as the indicator of categories of weight. It is important to keep in mind that the BMI is a statistical measurement developed for sedentary people of average build of European descent. There are different BMIs in different countries. The calculation of the BMI is weight divided by height squared.

BMI range Body classification		
Less than 14.9	Anorexic	
15 to 18.4	Underweight	
18.5 to 22.9	Normal	
23 to 27.5	Overweight	
27.6 to 40	Obese	
40+	Morbidly obese	

#### Quote

"Stop spending money on public service announcements that everybody is ignoring anyway, and give Canadians themselves the cash to develop their own weightloss plans." — Erin Anderssen (*The Globe and Mail*, January 15, 2011)

Statistics Canada and the Canadian Fitness and Lifestyle Research Institute used the BMI to conclude that 58.6 per cent of adult Canadian men are overweight, 43.5 per cent of adult Canadian women are overweight, and 17.2 per cent of Canadians are considered obese. They also found that the proportion of teenage boys aged 15-19 years old who are classified as overweight or obese rose from 14 per cent in 1981 to 31 per cent in 2009. Among teenage girls the number rose from 14 to 25 per cent. The Canadian health-care community finds these trends disturbing and is grappling with ways to deal with this risk factor.

#### The Controversy over Obesity

Most Canadians are concerned with the statistical information that details our "fattening" as a country, because we equate our thickening waistlines with illness, additional health-care costs, reduced physical attractiveness, and premature death. What are the causes of the obesity epidemic? Are sedentary lifestyles and overeating to blame? Do hereditary factors play a role? Are overweight people solely to blame for lack of will power? Should the government have a role to play in this health issue? What should that role be? These questions do not lead to easy answers; in fact each question has alternative and competing answers.

#### Activity

Consider the following quotes, which offer different perspectives on the issue, before returning to answer the previous questions.

"Public health efforts should focus less on trying to return Canadians to the strongand-slender utopia of 1981, which is a losing battle, than on trying to encourage people to improve their cardiovascular health at any weight, short of mega-obesity, which has the strongest connection to chronic health problems and early death, and has a more pressing need for intervention." — "Canada's alleged obesity epidemic," *The Globe and Mail*, January 15, 2011

"The report of children and youth states that children are taller, heavier, fatter and weaker than in 1981 . . . [and] should bring home the message once and for all that society needs to eat better, move more, and spend less time on the couch." — "Fatter, sicker, weaker," *Toronto Star*, January 14, 2011

"To lose weight, it has long been assumed, you simply burn more calories than you eat. But researchers now know that genes can predispose even the most active to weight gain, that mental health issues such as depression make a difference, and that the environment may trump willpower—a complexity consistently absent from public messaging." — "This government makes me look fat," *The Globe and Mail*, January 15, 2011

"Governments have to reach for every weapon at hand to combat the crisis. Have schoolchildren start the morning with an hour of physical activity . . . Put big health warnings on junk food, just as we do cigarette packs. Limit or ban advertising for dangerously fatty foods. Subsidize gym memberships and sports clubs. Costly yes, but recent U.S. studies suggest that every \$1 spent fighting heart disease yields \$5 in health-care savings." — "Obesity crisis," *The Globe and Mail*, February 22, 2011

#### Analysis

- 1. Return to the questions that were written in the paragraph preceding the quotations. Take a few minutes to jot down your responses to the questions in your notebook. Discuss your notes with a partner or in a small group.
- 2. a) Calculate your Body Mass Index at the National Heart Lung and Blood Institute at www.nhlbisupport.com/bmi/.

b) At the same Web site learn how portions served in restaurants have increased in the last two decades by reading the results of their research in "Portion Distortion."

- 3. Rank the following ideas for reducing obesity after developing two or three criteria for judging the ideas (e.g., economic costs; motivational):
  - mandatory physical activity (minimum one hour) in the school day
  - health warnings on junk food
  - limit/ban advertising for unhealthy food
  - subsidize gym memberships and sports clubs
  - allow employees with desk jobs to exercise as part of their work day
  - require restaurants to put calorie values on their menus
  - build more bike paths
  - subsidize healthy food choices in the cafeteria
- 4. Analyze the CBC Web site Live Right Now at www.cbc.ca/liverightnow/ by considering the following questions based on the Media Literacy "triangle:"



Source: Ontario Ministry of Education. (1989). *Media Literacy Resource Guide.* Toronto: Queen's Printer

This activity involves you taking account of three components of your health: what you eat, how you move, and how you sleep. Keep a journal for three days using the model below.

	Day 1	Day 2	Day 3	
List All Physical Activity				
Time:				
Туре:				
How did you feel while physically active (e.g., tired, excited, embarrassed, exhilarated)?				
l <del></del>				
List All Food and Beverages				
Food:				
Beverages:				
Time:				
How did you feel when eating these foods/meals? (e.g., hungry, bored, stressed, happy)				
List Hours of Sleep				
How did you feel after sleeping (e.g., alert, exhausted, tired but OK, energized)?				

#### **Post-journal Activities**

- 1. Analyze your journal findings using these guidelines:
  - The Canadian Food Guide at www.hc-sc.gc.ca/fn-an/food-guide-aliment/ index-eng.php.
  - Canada's Physical Activity Guide to Healthy Living at www.phac-aspc. gc.ca/hp-ps/hl-mvs/pa-ap/index-eng.php.
- 2. Reflect on the findings using the following prompts:
  - What surprised me was . . . What I expected was . . . What I think I'm doing well is . . .
  - What I would like to chappe is ...
  - What I would like to change is . . . because . . .
- 3. With a partner or in a small group, debrief your journals and create charts or graphs that purposefully illustrate four statistical results for the group (e.g., hours of sleep).